

Series A Junior

CATAJ04

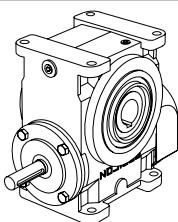


TEXTRON POWER TRANSMISSION

ALL PRODUCTS IN THE RADICON RANGE

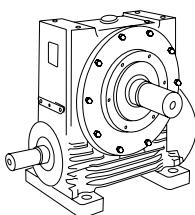
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SERIES A - JUNIOR



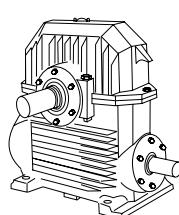
Power capacity to 18 HP
Sizes 280, 410, 510, 610, 730
and 860
Foot, flange and shaft mounting

SERIES A - MID RANGE



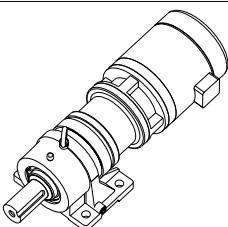
Power capacity to 100 HP
Sizes 1002, 1252, 1602 and 2002
Foot, flange and shaft mounting

SERIES A - HEAVY DUTY



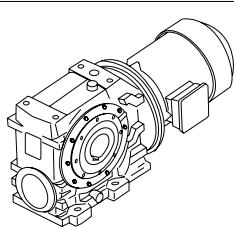
Power capacity to 1220 HP
Sizes 400, 500, 600, 700, 800,
10, 12, 14, 17, 20 and 24
Foot, flange and shaft mounting

SERIES Q



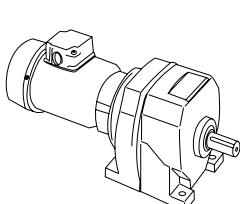
Power capacity to 50 HP
Sizes 07, 08, 09, 10 and 13
Foot mounting

SERIES C



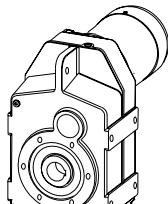
Power capacity to 87 HP
Sizes 03, 04, 05, 06, 07, 08, 09
and 10
Foot, flange and shaft mounting

SERIES M



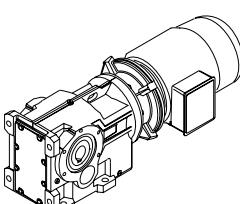
Power capacity to 230 HP
Sizes 03, 04, 06, 07, 08, 09, 10,
13 and 14
Foot and flange mounting

SERIES F



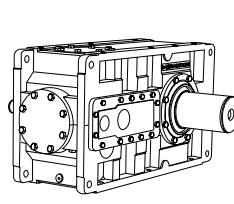
Power capacity to 50 HP
Sizes 04, 06, 07, 08, 09 and 10
Foot, flange and shaft mounting

SERIES K



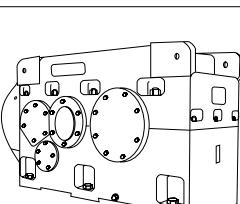
Power capacity to 100 HP
Sizes 08, 09, 10 and 12
Foot, flange and shaft mounting

SERIES G



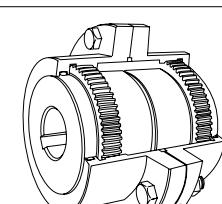
Power capacity to 1680 HP
Sizes 14, 15, 16, 17, 18 & 19
double, triple and quadruple
parallel and right angle shaft
Foot, flange and shaft mounting

SERIES H



Power capacity to 9020 HP
Sizes 140 through 800
Single, double, triple and quadruple
parallel and right angle shaft
Foot and shaft mounting

SERIES X



Nylcon low cost couplings to
2.25" dia. bore
610 Series Cone-Ring type to
14" dia. bore
620 Series Gear type to
21" dia. bore
Sadiguard Torque limiters for
overload protection, to 4.5" dia. bore



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9607

Single Reduction Units (worm)

Series A Junior is offered in unit sizes 280, 410, 510, 610, 730 and 860 based on a single universal case for each size, giving a high degree of common parts and interchangeability. Units can be mounted in the underdriven, over driven and vertical mounting positions and provide a choice of shaft arrangements for either motorised or reducer versions. Motors can be close coupled in frame sizes 56C to 215TC in powers from 0.25 HP to 10 HP.

All units are designed with hollow output bores, output shafts can be fitted allowing handing to be changed without dismantling the unit. Double extended output shafts are also available.

Series A Junior gives a choice of 12 standard ratios from 5/1 to 70/1 and important features include high efficiencies and load carrying capacities combined with long life and reliability.

All units are lubricated for life to reduce maintenance to a minimum.

Double Reduction Units (worm/worm)

These units consist of a standard single reduction unit with a smaller shaft mounted Radicon fitted to the input shaft. The range extends the ratios available up to the maximum of 4200/1 making them ideal for fitting to slow moving machinery.

As with the single reduction units they are available in under-driven, over-driven and vertical types, foot mounting and shaft mounting. All lubricated for life.

Motorized Units

Units are designed to be close coupled with standard dimension NEMA motors. Units are also available to accept standard dimension IEC motors (consult David Brown Radicon).

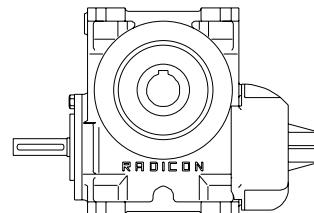
Lubricated for life - fit and forget

Series A Junior units are factory filled with synthetic lubricant which means.

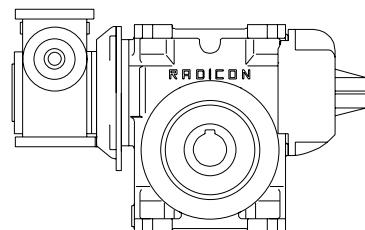
- no oil level checks, topping up, draining or re-filling
- no routine maintenance or danger of starting up without lubricant
- they will mount in any location, however inaccessible
- they are particularly suitable for locations where non contamination through leakage is essential.

For units running at input speeds below 500 rev/min with either the input or output shaft vertical, also for the second stage of all double reduction units irrespective of shaft disposition the lubricant level is simply increased - see lubrication instructions.

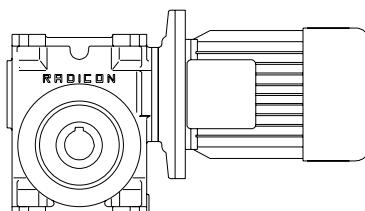
As improvements in design are being made continually this specification is not to be regarded as binding in detail and drawings and capacities are subject to alteration without notice. Certified drawings will be sent on request.



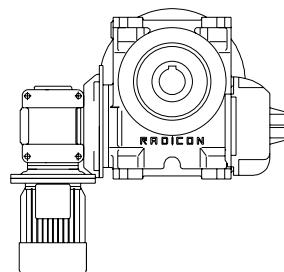
Single Reduction Units (worm)



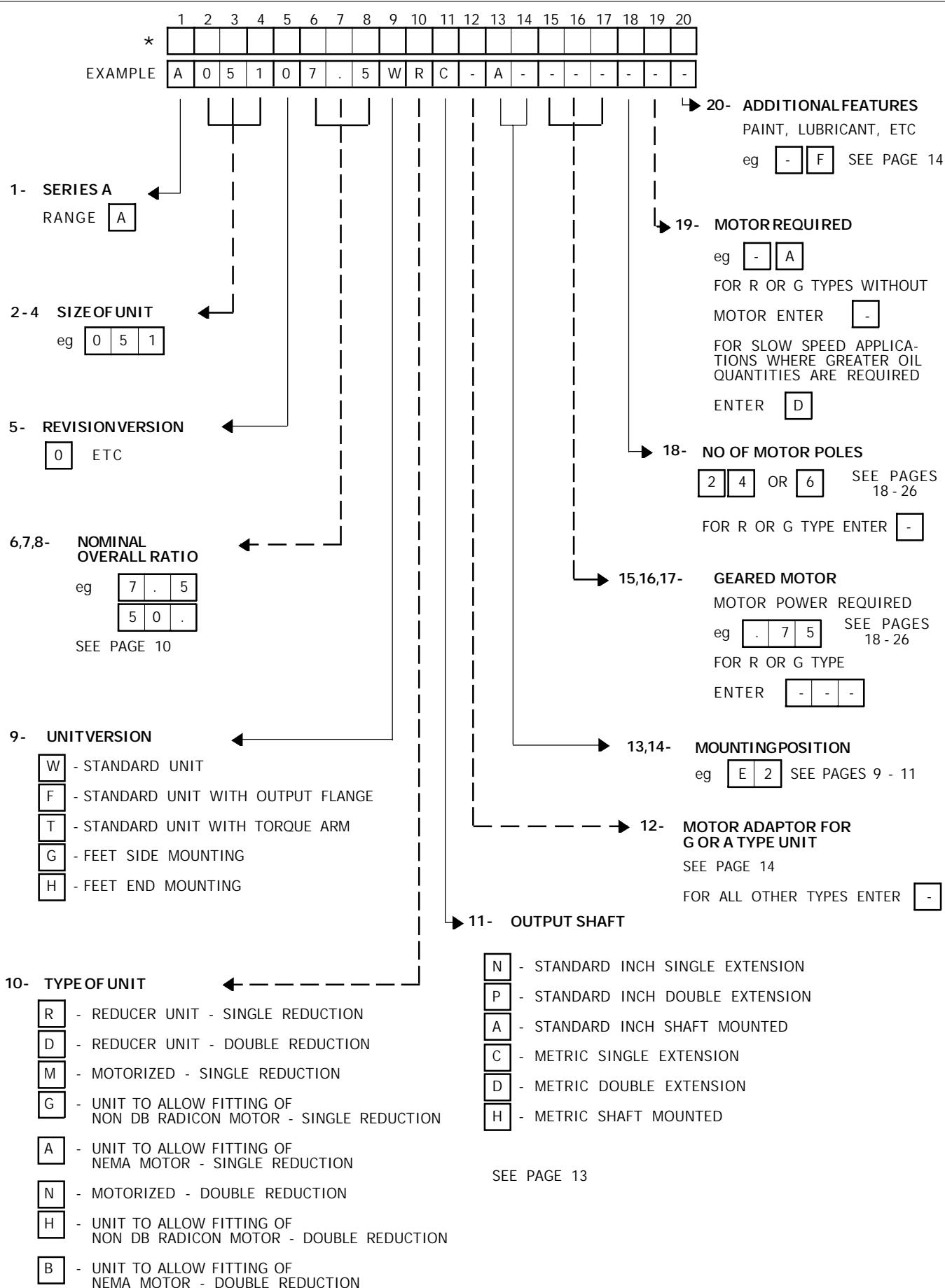
Double Reduction Units (worm/worm)



Motorized Single Reduction Units (worm)



Motorized Double Reduction Units (worm/worm)



* THIS PAGE MAY BE PHOTOCOPIED ALLOWING THE CUSTOMER TO ENTER THEIR ORDER



9611

EXPLANATION & USE OF RATINGS & SERVICE FACTORS

Gear unit selection is made by comparing actual loads with catalogue ratings. Catalogue ratings are based on a standard set of loading conditions, whereas actual load conditions vary according to type of application. Service Factors are therefore used to calculate an equivalent load to compare with catalogue ratings. i.e. Equivalent Load = Actual Load x Service Factor

Two types of Service Factor must be considered:-

Mechanical Service Factor Fm and Thermal Service Factors Ft, Fp and Fd

Mechanical ratings and service factor Fm

Mechanical ratings measure capacity in terms of life and/or strength, assuming 10 hr/day continuous running under uniform load conditions.

Catalogue ratings allow for an 100% overload at starting, braking or momentarily during operation on aggregate once per hour for each hour of operation.

The unit selected must therefore have a catalogue rating at least equal to half maximum overload.

Mechanical Service Factor Fm (Table 1) is used to modify the actual load according to daily operating time, and type of loading.

Load characteristics for a wide range of applications are detailed in Table 5 opposite, which are used in deciding the appropriate Service Factor Fm from Table 1.

If overloads can be calculated, or accurately assessed, actual loads should be used instead of Fm.

For units subject to frequent stop/start overloads in excess of 10 times per day, refer to David Brown Radicon.

For applications where high inertia loads are involved e.g. crane travel drives, slewing motion etc., unit selection should be referred to David Brown engineers.

Thermal ratings and service factors

The Thermal ratings are a measure of the gear units ability to dissipate heat. If they are exceeded the lubricant may overheat and breakdown, resulting in gear failure.

Thermal factors are for units with fans fitted, un-fanned units to be referred to DB Radicon Applications department.

Catalogue thermal limitations are based on the unit operating continuously in an environment with an ambient temperature equal to 68°F and in mounting position A, B or C. The thermal rating is affected by ambient temperature, duration of running per hour and mounting position. To account for these varying conditions, the service factors given in tables 2,3 and 4 should be applied to the catalogue thermal ratings as follows:-

$$P_{therm} = (P_t \times F_t \times F_p \times F_d \times \text{efficiency}) / 100$$

Pt = Catalogue input power thermal rating (HP)

Ptherm = Allowable output power thermal rating (HP)

Ft = Service factor for ambient temperature (see Table 2)

Fp = Service factor for different mounting positions (see Table 3)

Fd = Thermal service factor for duration of running (see Table 4)

Double Reduction Units

For double reduction units the factors given in tables 2 and 4 apply. The input shaft speed referred to in table 4 should now be the input speed of the primary unit. New factors should be applied for mounting position (Fp), which refer to the position of the primary unit.

- i Inputshaft horizontal and wheel-line horizontal Fp = 1.0
- ii Inputshaft horizontal and wheel-line vertical Fp = 0.88
- iii Inputshaft vertical and wheel-line horizontal Fp = 0.68

General

When selecting units, use actual load required to be transmitted, not rating of prime mover. Wherever possible use required output torque (lb-in). Catalogue also gives input power rating (HP), being the power required from prime mover allowing for gear unit efficiency. When units transmit less than rated output torque, required input power may be reduced pro-rata to decide capacity of prime mover.

Table 1. Mechanical service factor Fm

Prime mover	Duration of service-hrs per day	Load classification-driven machine		
		Uniform	Moderate Shock	Heavy Shock
Electric motor, steam turbine or hydraulic motor	Under 3	0.80	1.00	1.50
	3 to 10	1.00	1.25	1.75
	Over 10	1.25	1.50	2.00
Multi-cylinder internal combustion engine	Under 3	1.00	1.25	1.75
	3 to 10	1.25	1.50	2.00
	Over 10	1.50	1.75	2.25
Single cylinder internal combustion engine	Under 3	1.25	1.50	2.00
	3 to 10	1.50	1.75	2.25
	Over 10	1.75	2.00	2.50

Table 2. Thermal service factor Ft

Ambient temperature °F	-20	0	20	40	60	68	80	100	120
Factor Ft	1.64	1.50	1.36	1.22	1.07	1.00	0.92	0.77	0.63

Table 3. Thermal service factor Fp (Single Reduction units)

Output Speed (Rev / min)	Mounting Position (See pages 9 and 10)			
	ABC	DEF	GHJ KMN	PST WXY
0 to 100	1.0	1.0	1.0	Refer to David Brown Applications Department
>100 to 200	1.0	1.0	1.0	
>200 to 300	1.0	1.0	1.0	
>300 to 400	1.0	1.0	1.0	
>400 to 500	1.0	1.0	1.0	
>500 to 600	1.0	1.0	1.0	
>600 to 700	1.0	1.0	1.0	
>700	1.0	1.0	1.0	

Table 4. Thermal service factor Fd

Input shaft speed (Rev/min)	Unit Size	% Running time per hour					
		>60	>50 - 60	>40 - 50	>30 - 40	>20 - 30	<20
250	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.44	1.52	1.92	2.26	2.75
	860	1.0	1.46	1.72	1.96	2.32	2.86
500	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.38	1.56	1.75	2.02	2.38
	860	1.0	1.46	1.72	1.96	2.32	2.86
875	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.34	1.47	1.64	1.84	2.16
	860	1.0	1.41	1.60	1.79	2.07	2.45
1160	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.30	1.43	1.56	1.75	2.05
	860	1.0	1.37	1.54	1.72	1.96	2.32
1450	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.28	1.39	1.52	1.69	1.97
	860	1.0	1.34	1.50	1.66	1.88	2.21
1750	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.26	1.36	1.47	1.63	1.89
	860	1.0	1.32	1.46	1.61	1.81	2.14
2400	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.22	1.30	1.39	1.53	1.75
	860	1.0	1.30	1.42	1.55	1.75	2.03
3500	280 - 610	1.0	1.46	1.72	1.96	2.32	2.86
	730	1.0	1.13	1.23	1.30	1.41	1.58
	860	1.0	1.24	1.34	1.45	1.61	1.85

Table 5

U = Uniform load

M = Moderate shock load

H = Heavy shock load

† = Refer to David Brown

Driven Machine	type of load	Driven Machine	type of load	Driven Machine	type of load
Cranes main hoists bridge travel trolley travel	U † †	log haul-incline log haul-well type log turning device main log conveyor off bearing rolls planer feed chains planer floor chains planer tilting hoist re-saw merry-go-round conveyor	H H H M M M M M M	log haul presses pulp machine reel stock chest suction roll washers and thickeners winders	H M M M M M M M
Crusher ore stone sugar	H H H	planer floor chains planer tilting hoist re-saw merry-go-round conveyor	M M M M	Printing presses	†
Dredges cable reels conveyors cutter head drives jig drives manoeuvring winches pumps screen drive stackers utility winches	M M H H M M H M M	roll cases slab conveyor small waste conveyor-belt small waste conveyor-chain sorting table tipple hoist conveyor tipple hoist drive transfer conveyors transfer rolls tray drive trimmer feed waste conveyor	H H U M M M M M M M M M M M M	Pullers barge haul	H
Dry dock cranes main hoist auxiliary hoist boom, luffing rotating, swing or slew tracking, drive wheels	† † † †			Pumps centrifugal proportioning reciprocating	U M
Agitators pure liquids liquids and solids liquids-variable density	U M M			single acting; 3 or more cylinders double acting; 2 or more cylinders single acting; 1 or 2 cylinders double acting; single cylinder	M
Blowers centrifugal lobe vane	U M U			rotary gear type lobe, vane	† U U
Brewing and distilling bottling machinery brew kettles-continuous duty cookers-continuous duty mash tubs-continuous duty scale hopper-frequent starts	U U U U U M	Elevators bucket-uniform load bucket-heavy load bucket-continuous centrifugal discharge escalators freight gravity discharge man lifts passenger	U M U U U M U	Machine tools bending roll punch press-gear driven notching press- belt driven plate planers tapping machine other machine tools main drives auxiliary drives	M H H M U
Can filling machines	U				
Cane knives	M				
Car dumpers	H				
Car pullers	M				
Clarifiers	U				
Classifiers	M				
Clay working machinery brick press briquette machine clay working machinery pug mill	H H M M				
Compressors centrifugal lobe reciprocating multi-cylinder single cylinder	U M M H				
Conveyors-uniformly loaded or fed apron assembly belt bucket chain flight oven screw	U U U U U U U U				
Conveyors-heavy duty not uniformly fed apron assembly belt bucket chain flight live roll oven reciprocating screw shaker	M M M M M M M M H M H				

9609

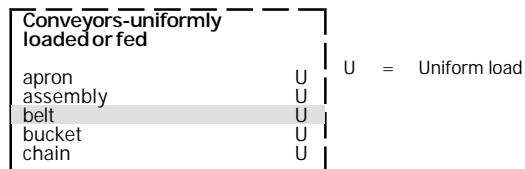
EXAMPLE APPLICATION DETAILS

Absorbed power of driven machine = 0.505 HP
 Output speed of gearbox or Input speed of machine = 58 rev/min
 Application = Uniformly loaded belt conveyor
 Duration of service (hours per day) = 24hrs
 David Brown mounting position = D
 Ambient temperature = 68°F
 Running time (%) = 100%

1 DETERMINE MECHANICAL SERVICE FACTOR (Fm)

Refer to Load Classification by Application, table 5, page 4

Application = Uniformly loaded belt conveyor



Refer to mechanical service factor (Fm), table 1, page 3

Duration of service (hours per day) = 24hrs

Prime mover	Duration of service-hrs per day	Load classification-drive	
		Uniform	Moderate Shock
Electric motor, steam turbine or hydraulic motor	Under 3	0.80	1.00
	3 to 10	1.00	1.25
	Over 10	1.25	1.50

Therefore mechanical service factor (Fm) = 1.25

2 DETERMINE REQUIRED OUTPUT TORQUE AT GEARBOX OUTPUT SHAFT

$$\text{Absorbed output torque} = \frac{\text{Absorbed power} \times 63025}{\text{Gearbox output speed}}$$

$$\frac{0.505 \times 63025}{58} = 548 \text{ lb.in}$$

3 SELECT GEARED MOTOR

Refer to selection table one motor size larger than absorbed power.

Absorbed power = 0.505 HP, therefore refer to 0.75 HP selection table, page 21

Required output speed of gearbox = 58 rev/min

0.75HP		N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION		lb		SERIES X	inches
		Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry	1 Through 20	Weight of Base Mount Unit	Motor Frame Size	Cone Ring Output Coupling	Max Bore Coupling Driven Half
4 POLE		329	5.25	127	2.96	390	A 0 4 1 0 5 . 0 - M - - - 7 5 4 A -		49.3	56C	6 1 1 0 1 -	1.50
		235	7.33	172	2.63	389		7 . 5				
		164	10.50	239	2.31	380		1 0 .				
		138	12.50	278	2.40	377		1 3 .				
		119	14.50	316	2.31	370		1 5 .				
		88	19.50	406	1.31	329		2 0 .				
		69	25.00	478	1.68	234		2 5 .				
		58	30.00	548	1.42	338		3 0 .				
		43	40.00	667	0.91	129		4 0 .				

Go to point 4

4 CHECK OUTPUT TORQUE

Output torque of selected unit must be equal or more than required output torque at gearbox outputshaft.

Required output torque at gearbox outputshaft = 548 lb.in

0.75HP		N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION	lb	SERIES X	inches
		Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry [1] Through [20] Spaces to be filled when entering order	Weight of Base Mount Unit	Cone Ring Output Coupling	Max Bore Coupling Driven Half
4 POLE		329	5.25	127	2.96	390	A 0 4 1 0 5 . 0 _ M _ - _ _ . 7 5 4 A _	49.3	56C	6 1 1 0 1 -
		235	7.33	172	2.63	389	7 . 5			1.50
		164	10.50	239	2.31	380	1 0 .			
		138	12.50	278	2.40	377	1 3 .			
		119	14.50	316	2.31	370	1 5 .			
		88	19.50	406	1.31	329	2 0 .			
		69	25.00	478	1.68	234	2 5 .			
		58	30.00	548	1.42	338	3 0 .			
		43	40.00	667	0.91	129	4 0 .			

Selected unit's output torque = 548 lb.in, therefore unit is acceptable

5 CHECK SERVICE FACTOR

Service factor (Fm) of selected unit must be equal or more than required service factor.

Required service factor of gearbox = 1.25

0.75HP		N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION	lb	SERIES X	inches
		Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry [1] Through [20] Spaces to be filled when entering order	Weight of Base Mount Unit	Cone Ring Output Coupling	Max Bore Coupling Driven Half
4 POLE		329	5.25	127	2.96	390	A 0 4 1 0 5 . 0 _ M _ - _ _ . 7 5 4 A _	49.3	56C	6 1 1 0 1 -
		235	7.33	172	2.63	389	7 . 5			1.50
		164	10.50	239	2.31	380	1 0 .			
		138	12.50	278	2.40	377	1 3 .			
		119	14.50	316	2.31	370	1 5 .			
		88	19.50	406	1.31	329	2 0 .			
		69	25.00	478	1.68	234	2 5 .			
		58	30.00	548	1.42	338	3 0 .			
		43	40.00	667	0.91	129	4 0 .			

Selected unit's service factor (Fm) = 1.42, therefore unit is acceptable.

6 CHECK OVERHUNG LOADS

If sprocket, gear, etc is mounted on the outputshaft then refer to Overhung Loads Procedure, page 35, and compare with allowable overhung load (N) of selected unit

Allowable overhung load (N) must be equal or more than calculated overhung load (P)

0.75HP		N2 R/MIN	i	lb in	Fm	N	UNIT DESIGNATION	lb	SERIES X	inches
		Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry [1] Through [20] Spaces to be filled when entering order	Weight of Base Mount Unit	Cone Ring Output Coupling	Max Bore Coupling Driven Half
4 POLE		329	5.25	127	2.96	390	A 0 4 1 0 5 . 0 _ M _ - _ _ . 7 5 4 A _	49.3	56C	6 1 1 0 1 -
		235	7.33	172	2.63	389	7 . 5			1.50
		164	10.50	239	2.31	380	1 0 .			
		138	12.50	278	2.40	377	1 3 .			
		119	14.50	316	2.31	370	1 5 .			
		88	19.50	406	1.31	329	2 0 .			
		69	25.00	478	1.68	234	2 5 .			
		58	30.00	548	1.42	338	3 0 .			
		43	40.00	667	0.91	129	4 0 .			

NOTE: If any of the following conditions occur then consult David Brown Radicon Application Engineers:-

- a) Inertia of the Driven Machine (Referred to motor speed) > 1.0 b) Ambient temperature is above 104°F or c) Sizes A0730 and A0860 are required without a fan

9611

EXAMPLE APPLICATION DETAILS

Absorbed power of driven machine = 0.375 HP
 Output speed of gearbox or Input speed of machine = 25 rev/min
 Application = Uniformly loaded belt conveyor
 Duration of service (hours per day) = 24 hrs
 Motor speed = 3 phase electric motor, 4 pole, 1750 rev/min
 David Brown mounting position = D
 Ambient temperature = 68°F
 Running time (%) = 100%

1 DETERMINE RATIO OF GEARBOX REQUIRED

$$\frac{\text{Motor speed}}{\text{Gearbox output speed}} = \frac{1750}{25} = 70$$

Refer to exact ratios (page 14) for nearest standard ratio = 70:1

3 DETERMINE REQUIRED MECHANICAL OUTPUT TORQUE CAPACITY OF GEARBOX

$$\text{Absorbed output torque} = \frac{\text{Absorbed power} \times 63025}{\text{Gearbox output speed}}$$

$$\frac{0.375 \times 63025}{25} = 945 \text{ lb.in}$$

$$\text{Required mechanical output torque} = \text{Absorbed output} \times F_m$$

$$945 \times 1.25 = 1181 \text{ lb.in}$$

2 DETERMINE MECHANICAL SERVICE FACTOR (Fm)

Refer to Load Classification by Application, table 5, page 4

Application = Heavy duty, non uniformly fed, bucket conveyor

Conveyors-uniformly loaded or fed

apron assembly
belt
bucket
chain

U = Moderate shock loading

Refer to mechanical service factor (Fm), table 1, page 3

Duration of service (hours per day) = 24 hrs

Prime mover	Duration of service-hrs per day	Load classification-drive	
		Uniform	Moderate Shock
Electric motor, steam turbine or hydraulic motor	Under 3	0.80	1.00
	3 to 10	1.00	1.25
	Over 10	1.25	1.50

Therefore mechanical service factor (Fm) = 1.25

4 DETERMINE SIZE OF GEAR BOX REQUIRED

Refer to ratings tables, Input speed = 1750 rpm, therefore refer to page 43.

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT			
			A0510	A0610	A0730	A0860
70.0	25.00	Input Power HP (mechanical)	0.39	0.64	0.94	1.47
		Input Power HP (thermal)	0.81	1.08	2.24	2.69
		Output Power HP (mechanical)	0.20	0.34	0.57	0.92
		Output Torque lb-in (mech.)	497	848	1430	2320
		Efficiency %	50	53	60	63

Mechanical output torque capacity must be equal or more than required mechanical output torque capacity of gear box.
 Required mechanical output torque capacity = 1181 lb-in. At a 70:1 ratio, nominal output speed 25 an A0730 unit has a mechanical output torque capacity of 1430 lb-in. Therefore the unit is acceptable

5 DETERMINE EXACT RATIO OF GEARBOX

Refer to exact ratios table, page 12

Nominal Ratio	Size A0510	Size A0610	Size A0730	Size A0860
Column Entry	Exact Ratio	Exact Ratio	Exact Ratio	Exact Ratio
6 7 8				

7	0	.	7	0	7	0	7
---	---	---	---	---	---	---	---

Exact ratio = 70.0:1

**6 CHECK THERMAL CAPACITY OF GEARBOX SELECTED
DETERMINE THERMAL INPUT POWER CAPACITY (Pt)**

Refer to ratings tables

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT			
			A0510	A0610	A0730	A0860
70.0	25.00	Input Power HP (mechanical)	0.39	0.64	0.94	1.47
		Input Power HP (thermal)	0.81	1.08	2.24	2.69
		Output Power HP (mechanical)	0.20	0.34	0.57	0.92
		Output Torque lb-in (mech.)	497	848	1430	2320
		Efficiency %	50	53	60	63

Pt = 2.24 HP

Go to point 7

7 DETERMINE THERMAL SERVICE FACTOR (Ft)

Refer to table 2, page 3

Ambient temperature = 68°F

Ambient temperature °F	-20	0	20	40	60	68
Factor Ft	1.64	1.50	1.36	1.22	1.07	1.0

$$Ft = 1.0$$

8 DETERMINE THERMAL SERVICE FACTOR (Fp)

Refer to table 3, page 3

Mounting position = D

Nominal output speed (rev/min) = 25

Unit Output Shaft Speed (Rev / min)	Mounting	
	ABC	DEF
0 to 100	1.0	1.0
>100 to 200	1.0	1.0
>200 to 300	1.0	1.0

$$Fp = 1.0$$

9 DETERMINE THERMAL SERVICE FACTOR (Fd)

Refer to table 4, page 3

% running time = 100

Input shaft speed (Rev / min)	% Running time per hour		
	Unit Size	>60	>50 - 60
1750	280 - 610	1.0	1.46
	730	1.0	1.26

$$Fd = 1.0$$

10 DETERMINE REQUIRED POWER OF ELECTRIC MOTOR

Refer to ratings tables to determine gear unit efficiency

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT			
			A0510	A0610	A0730	A0860
70.0	25.00	Input Power HP (mechanical)	0.39	0.64	0.94	1.47
		Input Power HP (thermal)	0.81	1.08	2.24	2.69
		Output Power HP (mechanical)	0.20	0.34	0.57	0.92
		Output Torque lb-in (mech.)	497	848	1430	2320
		Efficiency %	50	53	60	63

Efficiency % = 60

$$\text{Required motor power} = \frac{\text{Absorbed power of driven machine} \times 100}{\text{Efficiency}} = \frac{.375 \times 100}{60} = .625 \text{ HP}$$

The next largest standard motor power available is selected 0.75 HP

11 DETERMINE ALLOWABLE OUTPUT POWER THERMAL RATING (Ptherm)

$$\begin{aligned} P_{therm} &= \frac{Pt \times Ft \times Fp \times Fd \times \text{efficiency}}{100} \\ &= \frac{2.24 \times 1.0 \times 1.0 \times 1.0 \times 60}{100} \\ &= 1.344 \text{ HP} \end{aligned}$$

Thermal output power capacity (Ptherm) must be equal or more than absorbed output power to drive machine

Absorbed output power = 0.375 HP Ptherm = 1.344 HP

Therefore unit is acceptable

12 CHECK OVERHUNG LOADS

If sprocket, gear, etc is mounted on the input or output shaft then refer to Overhung loads procedure, pages 35 and 36

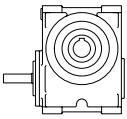
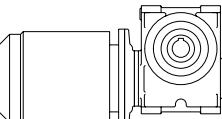
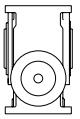
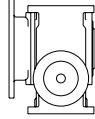
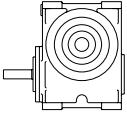
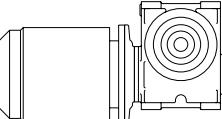
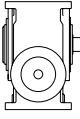
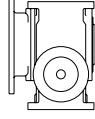
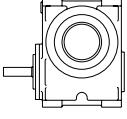
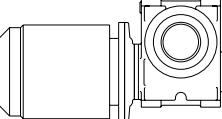
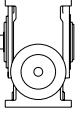
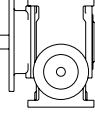
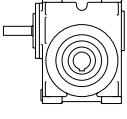
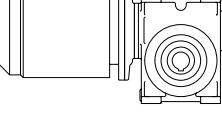
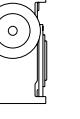
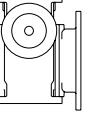
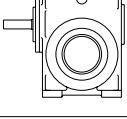
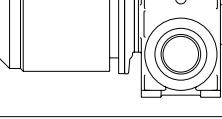
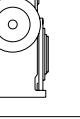
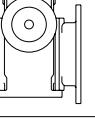
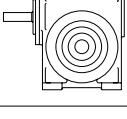
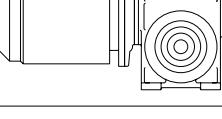
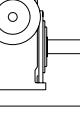
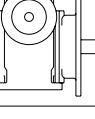
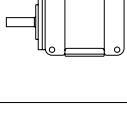
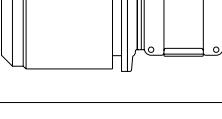
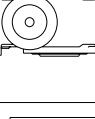
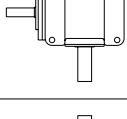
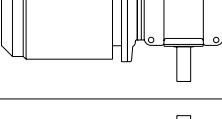
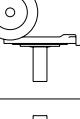
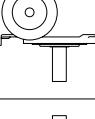
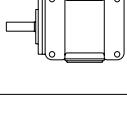
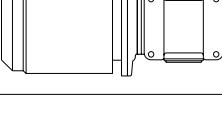
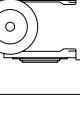
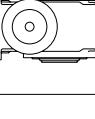
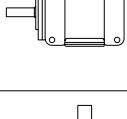
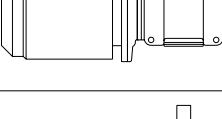
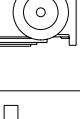
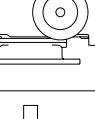
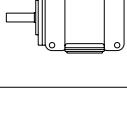
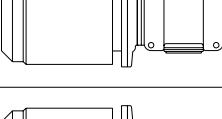
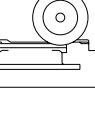
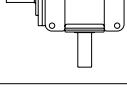
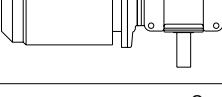
NOTE: If any of the following conditions occur then consult David Brown Radicon Application Engineers:-

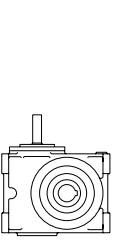
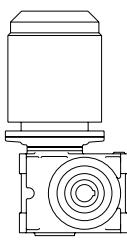
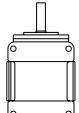
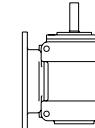
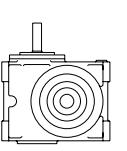
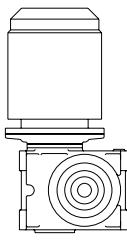
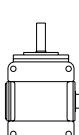
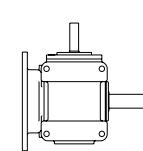
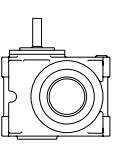
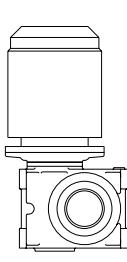
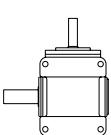
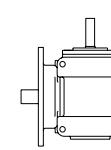
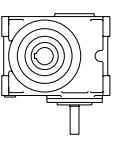
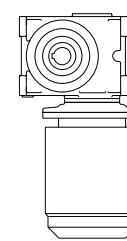
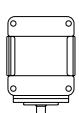
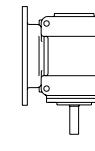
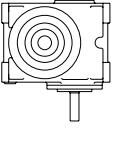
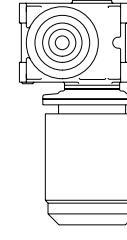
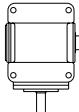
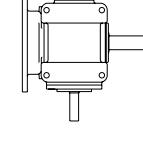
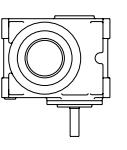
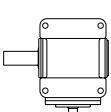
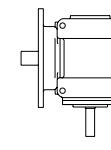
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 Inertia of Gear Unit plus Motor

b) Ambient temperature is above 120°F

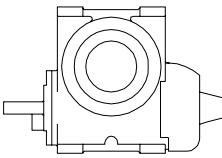
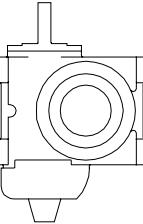
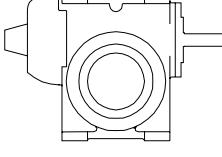
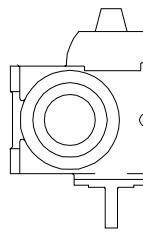
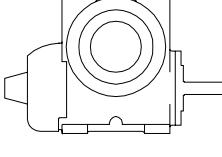
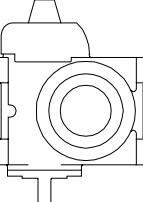
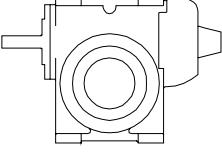
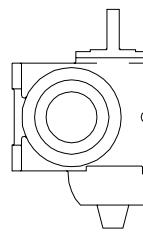
or c) The unit is required without a fan

9608

COLUMN 13 ENTRY	DOUBLE OUTPUT SHAFTS ARE AVAILABLE FOR ALL MOUNTING POSITIONS			
A	 			
B	 			
C	 			
D	 			
E	 			
F	 			
G	 			
H	 			
J	 			
K	 			
M	 			
N	 			

COLUMN 13 ENTRY	DOUBLE OUTPUT SHAFTS ARE AVAILABLE FOR ALL MOUNTING POSITIONS		
P	 	 	
S	 	 	
T	 	 	
W	 	 	
X	 	 	
Y	 	 	

9607

COLUMN 14 ENTRY		COLUMN 14 ENTRY	
1		2	
3		4	
5		6	
7		8	

PRIMARY UNIT POSITION RELATIVE TO THE SECONDARY UNIT

FOR SINGLE REDUCTION ENTER

 -



EXACT RATIOS

9608

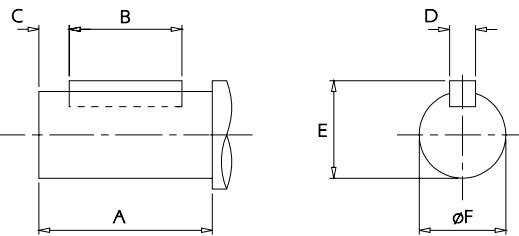
SINGLE REDUCTION

Nominal Ratio Column Entry 6 7 8	A0280	A0410	A0510	A0610	A0730	A0860
5 . 0	5.250	5.250	4.800	5.000	5.200	4.833
7 . 5	7.333	7.333	7.333	7.333	7.250	7.250
1 0 .	10.50	10.50	10.50	9.667	10.33	9.667
1 2 .	12.50	12.50	12.50	12.50	12.50	12.67
1 5 .	14.50	14.50	14.50	15.00	14.50	14.50
2 0 .	20.00	19.50	20.00	20.00	19.50	19.50
2 5 .	25.00	25.00	25.00	25.00	25.00	25.00
3 0 .	30.00	30.00	30.00	30.00	30.00	30.00
4 0 .	40.00	40.00	40.00	40.00	40.00	40.00
5 0 .	50.00	50.00	50.00	50.00	50.00	50.00
6 0 .	60.00	60.00	60.00	60.00	60.00	60.00
7 0 .	70.00	70.00	70.00	70.00	70.00	70.00

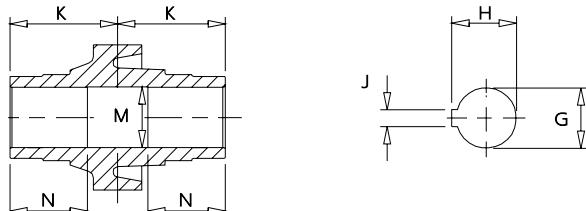
DOUBLE REDUCTION

Nominal Ratio	Column Entry 6 7 8	A0410	A0510	A0610	A0730	A0860
75.00	7 5 .	76.13	76.13	78.75	76.13	69.60
100.00	1 0 0	102.4	105.0	105.0	102.4	93.60
125.00	1 2 5	131.3	131.3	131.3	131.3	120.0
150.00	1 5 0	152.3	152.3	157.5	152.3	152.3
200.00	2 0 0	204.8	210.0	210.0	204.8	204.8
225.00	2 2 5	210.3	210.3	217.5	210.3	210.3
250.00	2 5 0	262.5	262.5	262.5	262.5	262.5
300.00	3 0 0	290.0	290.0	292.5	282.8	290.0
350.00	3 5 0	362.5	362.5	362.5	362.5	336.0
375.00	3 7 5	367.5	367.5	367.5	367.5	362.5
400.00	4 0 0	390.0	400.0	390.0	380.3	390.0
450.00	4 5 0	435.0	435.0	435.0	435.0	435.0
500.00	5 0 0	500.0	500.0	487.5	487.5	500.0
600.00	6 0 0	600.0	600.0	585.0	585.0	600.0
625.00	6 2 5	625.0	625.0	625.0	625.0	625.0
700.00	7 0 0	735.0	735.0	676.7	723.3	676.7
750.00	7 5 0	750.0	750.0	750.0	750.0	750.0
800.00	8 0 0	780.0	800.0	800.0	780.0	780.0
900.00	9 0 0	900.0	900.0	900.0	900.0	900.0
1000.00	1 0 C	1000.	1000.	1000.	1000.	1000.
1200.00	1 2 C	1200.	1200.	1200.	1200.	1200.
1250.00	1 3 C	1250.	1250.	1250.	1250.	1250.
1400.00	1 4 C	1365.	1400.	1400.	1365.	1365.
1500.00	1 5 C	1500.	1500.	1500.	1500.	1500.
1600.00	1 6 C	1600.	1600.	1600.	1600.	1600.
1750.00	1 7 C	1750.	1750.	1750.	1750.	1750.
1800.00	1 8 C	1800.	1800.	1800.	1800.	1800.
2000.00	2 0 C	2000.	2000.	2000.	2000.	2000.
2100.00	2 1 C	2100.	2100.	2100.	2100.	2100.
2400.00	2 4 C	2400.	2400.	2400.	2400.	2400.
2500.00	2 5 C	2500.	2500.	2500.	2500.	2500.
2800.00	2 8 C	2800.	2800.	2800.	2800.	2800.
3000.00	3 0 C	3000.	3000.	3000.	3000.	3000.
3500.00	3 5 C	3500.	3500.	3500.	3500.	3500.
3600.00	3 6 C	3600.	3600.	3600.	3600.	3600.
4200.00	4 2 C	4200.	4200.	4200.	4200.	4200.

9609

**OUTPUTSHAFT OPTIONS,
COLUMN 11 ENTRY**


SIZE OF UNIT	TYPE OF OUTPUTSHAFT	COLUMN 11 ENTRY		DIMENSIONS IN INCHES (METRIC IN MM)					
		SINGLE EXT	DOUBLE EXT	A	B	C	D	E	ØF
A0280	Standard Inch	N	P	1.25"	0.9375"	0.16"	0.190" 0.188"	0.707" 0.699"	0.6250" 0.6245"
	Metric	C	D	35	23	5.5	5.000 4.970	18.00 17.87	16.012 16.001
A0410	Standard Inch	N	P	1.625"	1.3125"	0.16"	0.190" 0.188"	0.834" 0.826"	0.7500" 0.7495"
	Metric	C	D	45	34	6	6.000 5.970	22.50 22.37	20.015 20.002
A0510	Standard Inch	N	P	2.125"	1.7500"	0.19"	0.252" 0.250"	1.110" 1.102"	1.0000" 0.9995"
	Metric	C	D	57	42	7	8.000 7.964	28.00 27.71	25.015 25.002
A0610	Standard Inch	N	P	2.625"	2.0000"	0.25"	0.252" 0.250"	1.238" 1.230"	1.1250" 1.1245"
	Metric	C	D	70	55	7	8.000 7.964	31.00 30.71	28.015 28.002
A0730	Standard Inch	N	P	3.25"	2.5000"	0.25"	0.252" 0.250"	1.364" 1.356"	1.2500" 1.2495"
	Metric	C	D	83	62	7	8.000 7.964	33.00 32.71	30.015 30.002"
A0860	Standard Inch	N	P	3.875"	3.2500"	0.31"	0.377" 0.375"	1.666" 1.658"	1.5000" 1.4995"
	Metric	C	D	98	80	8	10.000 9.964	38.00 37.71	35.018 35.002

**OUTPUTBORE OPTIONS,
COLUMN 11 ENTRY**


SIZE OF UNIT	TYPE OF OUTPUTBORE	COLUMN 11 ENTRY		DIMENSIONS IN INCHES (METRIC IN MM)					
		G	H	J	K	M	N		
A0280	Standard Inch	A		0.6257" 0.6250"	0.715" 0.709"	0.1895" 0.1875"	1.575"	0.635" 0.630"	1.26"
	Metric	H		16.034 16.016	18.4 18.3	5.015 4.985		40	16.3 16.2
A0410	Standard Inch	A		0.7508" 0.7500"	0.843" 0.837"	0.1895" 0.1875"	1.969"	0.760" 0.755"	1.57"
	Metric	H		22.041 22.020	24.9 24.8	6.015 5.985		50	22.3 22.2
A0510	Standard Inch	A		1.0008" 1.0000"	1.120" 1.114"	0.252" 0.250"	2.205"	1.010" 1.005"	1.77"
	Metric	H		25.041 25.020	28.5 28.3	8.018 7.982		56	25.3 25.2
A0610	Standard Inch	A		1.3760" 1.3750"	1.524" 1.518"	0.3145" 0.3125"	2.520"	1.385" 1.380"	1.97"
	Metric	H		35.050 35.025	38.5 38.3	10.018 9.982		64	35.3 35.2
A0730	Standard Inch	A		1.6260" 1.6250"	1.802" 1.796"	0.377" 0.375"	3.031"	1.635" 1.630"	2.36"
	Metric	H		40.050 40.025	43.5 43.3	12.021 11.979		77	40.3 40.2
A0860	Standard Inch	A		1.8760" 1.8750"	2.102" 2.096"	0.502" 0.500"	3.661"	1.885" 1.880"	2.87"
	Metric	H		50.050 50.025	54.0 53.8	14.021 13.979		93	50.3 50.2



**MOTOR ADAPTORS
IEC & NEMA
ADDITIONAL FEATURES**

9609

NEMA MOTOR ADAPTORS, COLUMN 12 ENTRY FOR A TYPE ONLY

MOTOR FRAME/FLANGE	UNIT SIZE					
	A0280	A0410	A0510	A0610	A0730	A0860
56C	T	T	T	T	-	-
143TC / 145TC	-	V	V	V	V	V
182TC / 184TC	-	-	-	X	X	X
213TC / 215TC	-	-	-	-	-	Y

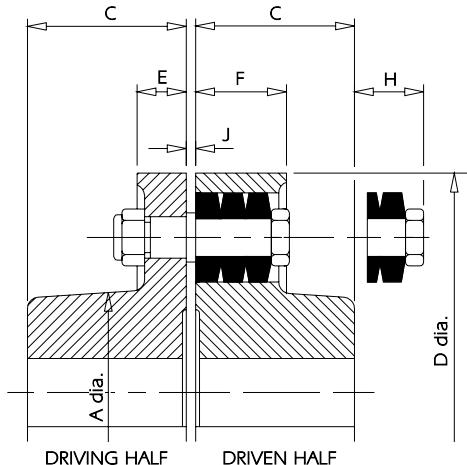
IEC MOTOR ADAPTORS, COLUMN 12 ENTRY FOR G TYPE ONLY

MOTOR FRAME/FLANGE	UNIT SIZE					
	A0280	A0410	A0510	A0610	A0730	A0860
63/D	A	-	-	-	-	-
71/D	B	B	B	-	-	-
71/C	C	C	C	-	-	-
80/D	-	D	D	D	D	-
80/C	-	E	E	E	-	-
90/D	-	-	F	F	F	F
90/C	-	-	G	G	G	-
100/112D	-	-	-	H	H	H
100/112C	-	-	-	J	J	J
132/D	-	-	-	-	-	K
132/C	-	-	-	-	-	L

ADDITIONAL FEATURES - COLUMN 20 ENTRY

COLUMN 20 ENTRY	SPIGOT CASE	PRIME PAINTED ONLY	LUBRICANT TYPE	
			MINERAL	SYNTHETIC
-			●	
B		●	●	
H				
K		●		
R				●
T		●		●
2	●		●	
3	●	●	●	
4	●			
5	●	●		
6	●			●
7	●	●		●

9611



This type of coupling compensates for normal angular and parallel misalignment of shafts, together with a limited freedom of axial movement. The conical section rubber rings provide greatly improved torsional flexibility in drives where shock or cyclic loadings are present.

Coupling Size	A	D	E	F	H	J
01	2.52	5.28	0.55	1.10	0.79	0.12
02	2.76	5.79	0.55	1.10	0.47	0.12
03	3.27	6.73	0.75	1.38	1.02	0.12
04	3.28	7.60	0.75	1.38	0.75	0.12
05	4.61	8.46	0.75	1.38	0.43	0.12
06	5.00	10.00	1.22	2.20	1.81	0.12
07	5.79	10.98	1.22	2.20	1.34	0.12
08	7.09	12.99	1.18	2.40	0.87	0.12
09	8.11	14.61	1.81	3.19	1.77	0.24
10	9.06	16.50	1.81	3.19	1.18	0.24
11	10.08	17.99	1.81	3.19	0.47	0.24
12	11.65	20.98	1.81	3.19	0	0.24

The coupling pin withdrawal distance is dimension H for straight bored couplings

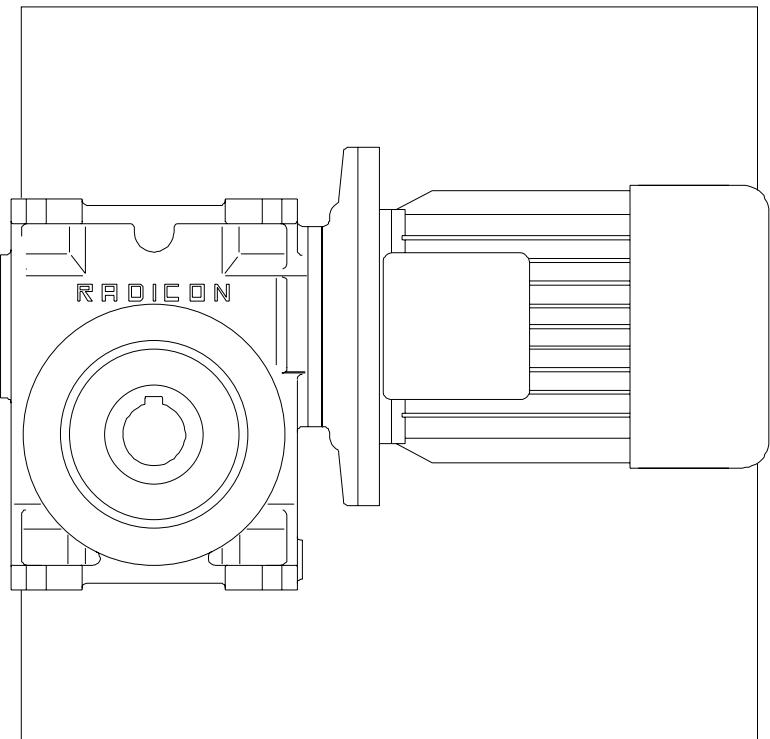
UNIT SIZE	STANDARD IMPERIAL SHAFT EXTENSION DIAMETER (INCHES)
A0280	0.6250 / 0.6245
A0410	0.7500 / 0.7495
A0510	1.0000 / 0.9995
A0610	1.1250 / 1.1245
A0730	1.2500 / 1.2495
A0860	1.5000 / 1.4995

Coupling Type 611 Straight bored						
Coupling size	Max. bore	Min. bore		Hub length C	Torque lbf-in	Max HP per 100 rpm
		Driving half	Driven half			
01	1.50	*	0.75	1.89	1575	2.5
02	1.65	*	0.87	2.20	2365	3.75
03	1.89	*	0.98	2.40	4098	6.5
04	2.36	*	1.10	2.68	6363	10.1
05	2.76	*	1.26	2.99	9071	14.4
06	3.15	0.98	1.65	3.46	18904	30.0
07	3.54	1.18	2.17	3.94	28355	45.0
08	3.94	1.57	2.36	4.61	44870	71.2
09	4.72	1.97	2.56	5.20	74995	119.0
10	5.51	3.15	3.15	5.79	98943	157.0
11	5.90	3.54	3.54	6.50	133635	212.0
12	6.69	3.94	3.94	7.40	207356	329.0

* Note: up to size 05 the Driving half hubs are solid.

Rating may be increased by 20% for speeds below 10 rpm.

For applications in ambient temperatures above 100°C (212°F) or below -20°C (-4°F) refer to David Brown Radicon.

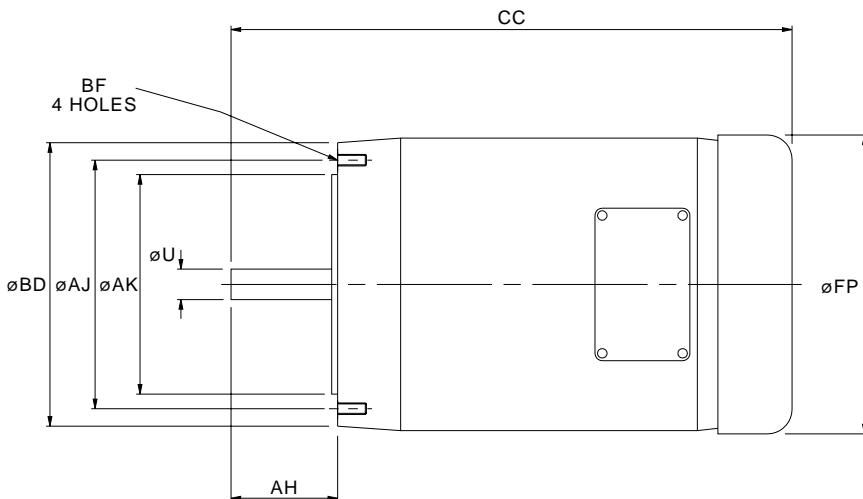


MOTORIZED

△ SERIES A

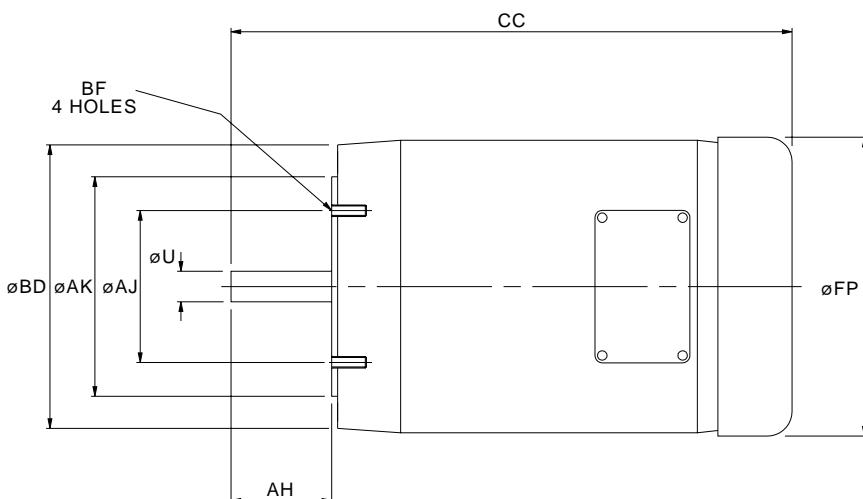
RADICON®

9812



MOTOR FRAME SIZE	ø BD	ø AJ	ø AK	ø U	ø AH	CC max	ø FP	BF TAP UNC
56C	6.50	5.88	4.5	0.625	2.06	14.06	7.19	0.38
143TC/145TC	6.50	5.88	4.5	0.875	2.13	14.19	7.19	0.38

These dimensions apply to David Brown Radicon Standard Motors



MOTOR FRAME SIZE	ø BD	ø AJ	ø AK	ø U	ø AH	CC max	ø FP	BF TAP UNC
182TC/184TC	9.00	7.25	8.5	1.125	2.63	18.06	8.50	0.50
213TC/215TC	9.00	7.25	8.5	1.375	3.13	19.44	10.19	0.50

These dimensions apply to David Brown Radicon Standard Motors

0.25 HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION		lb		SERIES X	inches
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry	1 Through 20	Weight of Base Mount Unit	Motor Frame Size	Cone Ring Output Coupling	Max Bore Coupling Driven Half
4 POLE										
329	5.25	42	3.93	256	A 0 2 8 0 5 . 0 - M - - - . 2 5 4 A -		33.4	56C	6 1 1 0 1 -	1.50
235	7.33	56	3.57	256		7 . 5				
164	10.50	77	3.25	256		1 0 .				
138	12.50	88	2.93	256		1 3 .				
119	14.50	101	2.56	254		1 5 .				
86	20.00	122	2.33	254		2 0 .				
69	25.00	147	2.09	253		2 5 .				
58	30.00	168	1.67	251		3 0 .				
43	40.00	186	0.97	251		4 0 .				
88	19.50	135	3.92	393	A 0 4 1 0 2 0 . _ M - - - . 2 5 4 A -		42.3	56C	6 1 1 0 1 -	1.50
43	40.00	222	2.73	388		4 0 .				
35	50.00	253	1.76	388		5 0 .				
29	60.00	261	1.32	388		6 0 .				
25	70.00	284	0.99	386		7 0 .				
23	76.13	436	2.02	381	A 0 4 1 0 7 5 . _ N - - - . 2 5 4 A -		51.1	56C	6 1 1 0 1 -	1.50
16	105.00	546	1.30	352		1 0 0				
13	131.25	619	1.42	345		1 2 5				
11	152.25	733	1.20	314		1 5 0				
35	50.00	272	2.99	899	A 0 5 1 0 5 0 . _ M - - - . 2 5 4 A -		51.1	56C	6 1 1 0 1 -	1.50
29	60.00	301	2.10	899		6 0 .				
25	70.00	322	1.54	896		7 0 .				
22	78.75	465	2.81	892	A 0 5 1 0 7 5 . _ N - - - . 2 5 4 A -		59.9	56C	6 1 1 0 1 -	1.50
16	105.00	568	3.60	890		1 0 0				1.65
13	131.25	674	3.24	885		1 2 5				
11	157.50	810	1.82	880		1 5 0				
8.2	210.00	982	2.23	874		2 0 0				
7.9	217.50	1041	1.50	871		2 2 5				
6.6	262.50	1148	1.90	862		2 5 0				
5.9	292.50	1200	1.36	824		3 0 0				
4.8	362.50	1460	1.50	782		3 5 0				
4.4	390.00	1435	1.52	798		4 0 0				
4.0	435.00	1666	1.28	732		4 5 0				
3.5	487.50	1660	1.32	741		5 0 0				
29	60.00	317	3.29	984	A 0 6 1 0 6 0 . _ M - - - . 2 5 4 A -		64.3	56C	6 1 1 0 1 -	1.50
25	70.00	336	2.52	980		7 0 .				
11	152.25	850	3.19	932	A 0 6 1 0 1 5 0 _ N - - - . 2 5 4 A -		81.9	56C	6 1 1 0 3 -	1.89
8.4	204.75	1001	2.91	916		2 0 0				
8.2	210.25	1077	2.65	907		2 2 5				
6.6	262.50	1177	2.68	898		2 5 0				
6.1	282.75	1386	2.16	867		3 0 0				
4.8	362.50	1464	2.15	864		3 5 0				
4.7	367.50	993	0.99	883		3 7 5				
4.5	380.25	1614	1.95	838		4 0 0				
4.0	435.00	1632	1.93	843		4 5 0				
3.5	487.50	1862	1.69	808		5 0 0				
2.9	585.00	2069	1.52	779		6 0 0				
2.8	625.00	2006	1.57	799		6 2 5				
2.4	723.33	1954	1.04	763		7 0 0				
2.3	750.00	2207	1.43	770		7 5 0				
2.2	780.00	2346	1.34	743		8 0 0				
1.9	900.00	2452	1.28	727		9 0 0				
1.7	1000.00	2648	1.19	696		1 0 C				
1.4	1200.00	2892	1.09	654		1 2 C				
1.4	1250.00	3040	1.04	627		1 2 C				
8.4	204.75	1151	3.35	1455	A 0 7 3 0 2 0 0 _ N - - - . 2 5 4 A -		110.6	56C	6 1 1 0 3 -	1.89
8.2	210.25	1165	3.61	1455		2 2 5				2.36
6.6	262.50	1320	3.18	1442		2 5 0				
5.9	290.00	1500	2.80	1419		3 0 0				
5.1	336.00	1653	2.54	1410		3 5 0				
4.8	362.50	1277	1.30	1424		3 7 5				
4.4	390.00	1870	2.16	1382		4 0 0				
4.0	435.00	1888	2.23	1388		4 5 0				
3.5	500.00	2109	1.99	1355		5 0 0				
2.9	600.00	2394	1.76	1323		6 0 0				
2.8	625.00	2291	1.83	1348		6 2 5				
2.5	676.67	2176	1.02	1312		7 0 0				
2.3	750.00	2589	1.62	1316		7 5 0				
2.2	780.00	2789	1.51	1287		8 0 0				
1.9	900.00	2880	1.46	1280		9 0 0				
1.7	1000.00	3058	1.37	1253		1 0 C				
1.4	1200.00	3427	1.23	1198		1 2 C				
1.4	1250.00	3518	1.19	1183		1 2 C				
1.3	1365.00	3694	1.02	1148		1 4 C				
1.1	1500.00	3936	1.07	1074		1 5 C				
1.1	1600.00	3961	1.05	989		1 6 C				
.99	1750.00	4119	1.02	573		1 7 C				
.96	1800.00	4056	1.04	802		1 8 C				

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

9608

0.33 HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION		lb	Weight of Base Mount Unit	Motor Frame Size	SERIES X	inches
					Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	
4 POLE											
329	5.25	55	2.98	255	A 0 2 8 0 5 . 0 - M - - - . 3 3 4 A -			35.4	56C	6 1 1 0 1 -	1.50
235	7.33	74	2.71	255				7 . 5			
164	10.50	102	2.46	255				1 0 .			
138	12.50	116	2.22	254				1 3 .			
119	14.50	134	1.94	250				1 5 .			
86	20.00	162	1.77	252				2 0 .			
69	25.00	194	1.58	247				2 5 .			
58	30.00	222	1.27	243				3 0 .			
88	19.50	178	2.97	383	A 0 4 1 0 2 0 . - M - - - . 3 3 4 A -			44.3	56C	6 1 1 0 1 -	1.50
69	25.00	210	3.81	366				2 5 .			
58	30.00	241	3.23	382				3 0 .			
43	40.00	293	2.07	347				4 0 .			
35	50.00	334	1.33	370				5 0 .			
29	60.00	345	1.00	375				6 0 .			
23	76.13	575	1.53	295	A 0 4 1 0 7 5 . - N - - - . 3 3 4 A -			53.1	56C	6 1 1 0 1 -	1.50
16	105.00	721	0.99	239				1 0 0			
13	131.25	817	1.08	234				1 2 5			
43	40.00	314	3.12	892	A 0 5 1 0 4 0 . - M - - - . 3 3 4 A -			53.1	56C	6 1 1 0 1 -	1.50
35	50.00	359	2.27	891				5 0 .			
29	60.00	397	1.59	894				6 0 .			
25	70.00	425	1.17	892				7 0 .			
22	78.75	614	2.13	874	A 0 5 1 0 7 5 . - N - - - . 3 3 4 A -			61.9	56C	6 1 1 0 1 -	1.50
16	105.00	750	2.72	870				1 0 0			1.65
13	131.25	890	2.46	858				1 2 5			
11	157.50	1069	1.38	829				1 5 0			
8.2	210.00	1296	1.69	804				2 0 0			
7.9	217.50	1374	1.13	788				2 2 5			
6.6	262.50	1516	1.44	766				2 5 0			
5.9	292.50	1584	1.03	737				3 0 0			
35	50.00	375	3.61	975	A 0 6 1 0 5 0 . - M - - - . 3 3 4 A -			66.3	56C	6 1 1 0 1 -	1.50
29	60.00	418	2.50	969				6 0 .			
25	70.00	444	1.91	963				7 0 .			
23	76.13	632	3.79	926	A 0 6 1 0 7 5 . - N - - - . 3 3 4 A -			83.9	56C	6 1 1 0 3 -	1.89
17	102.38	755	3.38	936				1 0 0			
13	131.25	900	3.35	921				1 2 5			
11	152.25	1123	2.42	893				1 5 0			
8.4	204.75	1321	2.20	856				2 0 0			
8.2	210.25	1421	2.01	761				2 2 5			
6.6	262.50	1554	2.03	842				2 5 0			
6.1	282.75	1830	1.63	799				3 0 0			
4.8	362.50	1932	1.63	792				3 5 0			
4.5	380.25	2131	1.48	570				4 0 0			
4.0	435.00	2155	1.46	573				4 5 0			
3.5	487.50	2458	1.28	714				5 0 0			
2.9	585.00	2731	1.15	674				6 0 0			
2.8	625.00	2648	1.19	690				6 2 5			
2.3	750.00	2913	1.08	647				7 5 0			
2.2	780.00	3096	1.02	397				8 0 0			
11	152.25	1207	3.48	1442	A 0 7 3 0 1 5 0 - N - - - . 3 3 4 A -			112.6	56C	6 1 1 0 4 -	2.36
8.4	204.75	1519	2.54	1300				2 0 0			1.89
8.2	210.25	1538	2.73	1300				2 2 5			2.36
6.6	262.50	1743	2.41	1352				2 5 0			
5.9	290.00	1980	2.12	1191				3 0 0			
5.1	336.00	2182	1.93	1184				3 5 0			
4.8	362.50	1686	0.98	1361				3 7 5			
4.4	390.00	2468	1.64	1305				4 0 0			
4.0	435.00	2492	1.69	1309				4 5 0			
3.5	500.00	2783	1.51	978				5 0 0			
2.9	600.00	3161	1.33	900				6 0 0			
2.8	625.00	3024	1.39	917				6 2 5			
2.3	750.00	3418	1.23	1200				7 5 0			
2.2	780.00	3682	1.14	1162				8 0 0			
1.9	900.00	3802	1.11	1146				9 0 0			
1.7	1000.00	4036	1.04	801				1 0 C			

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

0.50HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION		lb	Weight of Base Mount Unit	Motor Frame Size	SERIES X	inches
					Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	
4 POLE											
329	5.25	84	1.97	255	A 0 2 8 0 5 . 0 - M - - - . 5 0 4 A -			37.4	56C	6 1 1 0 1 -	1.50
235	7.33	113	1.79	254				7 . 5			
164	10.50	155	1.63	252				1 0 .			
138	12.50	176	1.47	251				1 3 .			
119	14.50	203	1.28	242				1 5 .			
86	20.00	245	1.17	249				2 0 .			
69	25.00	294	1.04	233				2 5 .			
58	30.00	336	0.84	227				3 0 .			
235	7.33	115	3.94	391	A 0 4 1 0 7 . 5 _ M - - - . 5 0 4 A -			46.3	56C	6 1 1 0 1 -	1.50
164	10.50	159	3.46	387				1 0 .			
138	12.50	185	3.60	385				1 3 .			
119	14.50	210	3.46	381				1 5 .			
88	19.50	270	1.96	361				2 0 .			
69	25.00	319	2.51	312				2 5 .			
58	30.00	365	2.13	364				3 0 .			
43	40.00	444	1.37	259				4 0 .			
35	50.00	507	0.88	331				5 0 .			
23	76.13	872	1.01	112	A 0 4 1 0 7 5 . _ N - - - . 5 0 4 A -			55.1	56C	6 1 1 0 1 -	1.50
119	14.50	217	3.91	897	A 0 5 1 0 1 5 . _ M - - - . 5 0 4 A -			55.1	56C	6 1 1 0 1 -	1.50
58	30.00	385	3.17	884				3 0 .			
43	40.00	477	2.06	873				4 0 .			
35	50.00	544	1.50	873				5 0 .			
29	60.00	602	1.05	885				6 0 .			
22	78.75	931	1.41	835	A 0 5 1 0 7 5 . _ N - - - . 5 0 4 A -			63.9	56C	6 1 1 0 1 -	1.50
16	105.00	1137	1.80	829				1 0 0			1.65
13	131.25	1348	1.62	800				1 2 5			
11	157.50	1620	0.91	721				1 5 0			
43	40.00	490	3.75	958	A 0 6 1 0 4 0 . _ M - - - . 5 0 4 A -			68.3	56C	6 1 1 0 2 -	1.65
35	50.00	568	2.38	947				5 0 .			1.50
29	60.00	634	1.65	936				6 0 .			
25	70.00	673	1.26	927				7 0 .			
23	76.13	959	2.50	832	A 0 6 1 0 7 5 . _ N - - - . 5 0 4 A -			85.9	56C	6 1 1 0 3 -	1.89
17	102.38	1144	2.23	881				1 0 0			
13	131.25	1363	2.21	855				1 2 5			
11	152.25	1701	1.60	809				1 5 0			
8.4	204.75	2002	1.45	729				2 0 0			
8.2	210.25	2154	1.33	453				2 2 5			
6.6	262.50	2355	1.34	724				2 5 0			
6.1	282.75	2773	1.08	656				3 0 0			
4.8	362.50	2928	1.08	638				3 5 0			
25	69.60	1013	3.67	1368	A 0 7 3 0 7 5 . _ N - - - . 5 0 4 A -			114.6	56C	6 1 1 0 3 -	1.89
18	93.60	1296	2.72	1377				1 0 0			
14	120.00	1529	2.75	1194				1 2 5			2.36
11	152.25	1829	2.30	1368				1 5 0			
8.4	204.75	2302	1.68	970				2 0 0			1.89
8.2	210.25	2331	1.80	970				2 2 5			2.36
6.6	262.50	2641	1.59	1160				2 5 0			
5.9	290.00	3000	1.40	709				3 0 0			
5.1	336.00	3306	1.27	704				3 5 0			
4.4	390.00	3740	1.08	1142				4 0 0			1.89
4.0	435.00	3777	1.11	1142				4 5 0			2.36

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

9608

0.75 HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION	lb		SERIES X	inches
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of Base Mount Unit	Motor Frame Size	Cone Ring Output Coupling	Max Bore Coupling Driven Half
4 POLE									
329	5.25	126	1.31	254	A 0 2 8 0 5 . 0 - M - - - . 7 5 4 A -	40.4	56C	6 1 1 0 1 -	1.50
235	7.33	170	1.19	251	7 . 5				
164	10.50	232	1.08	249	1 0 .				
138	12.50	265	0.98	247	1 3 .				
119	14.50	305	0.85	231	1 5 .				
329	5.25	127	2.96	390	A 0 4 1 0 5 . 0 - M - - - . 7 5 4 A -	49.3	56C	6 1 1 0 1 -	1.50
235	7.33	172	2.63	389	7 . 5				
164	10.50	239	2.31	380	1 0 .				
138	12.50	278	2.40	377	1 3 .				
119	14.50	316	2.31	370	1 5 .				
88	19.50	406	1.31	329	2 0 .				
69	25.00	478	1.68	234	2 5 .				
58	30.00	548	1.42	338	3 0 .				
43	40.00	667	0.91	129	4 0 .				
119	14.50	326	2.61	894	A 0 5 1 0 1 5 . _ M - - - . 7 5 4 A -	58.1	56C	6 1 1 0 1 -	1.50
86	20.00	414	3.23	880	2 0 .				
69	25.00	495	2.86	887	2 5 .				
58	30.00	577	2.11	868	3 0 .				
43	40.00	715	1.37	844	4 0 .				
35	50.00	816	1.00	848	5 0 .				
22	78.75	1397	0.94	777	A 0 5 1 0 7 5 . _ N - - - . 7 5 4 A -	66.9	56C	6 1 1 0 1 -	1.50
86	20.00	423	3.93	961	A 0 6 1 0 2 0 . _ M - - - . 7 5 4 A -	71.3	56C	6 1 1 0 2 -	1.65
69	25.00	511	3.84	951	2 5 .				
58	30.00	591	3.37	941	3 0 .				
43	40.00	735	2.50	922	4 0 .				
35	50.00	852	1.59	905	5 0 .			6 1 1 0 1 -	1.50
29	60.00	951	1.10	888	6 0 .				
25	70.00	1010	0.84	875	7 0 .				
23	76.13	1438	1.67	693	A 0 6 1 0 7 5 . _ N - - - . 7 5 4 A -	88.9	56C	6 1 1 0 3 -	1.89
17	102.38	1717	1.49	800	1 0 0				
13	131.25	2045	1.48	758	1 2 5				
11	152.25	2552	1.06	685	1 5 0				
8.4	204.75	3003	0.97	541	2 0 0				
25	69.60	1520	2.45	1225	A 0 7 3 0 7 5 . _ N - - - . 7 5 4 A -	117.6	56C	6 1 1 0 3 -	1.89
18	93.60	1945	1.82	1255	1 0 0				
14	120.00	2293	1.83	896	1 2 5			6 1 1 0 4 -	2.36
11	152.25	2744	1.53	1259	1 5 0				
8.4	204.75	3453	1.12	485	2 0 0			6 1 1 0 3 -	1.89
8.2	210.25	3497	1.20	485	2 2 5			6 1 1 0 4 -	2.36
6.6	262.50	3962	1.06	878	2 5 0				

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

1.00HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION		lb	Weight of Base Mount Unit	Motor Frame Size	SERIES X	inches
					Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	
4 POLE											
329	5.25	169	2.22	389	A 0 4 1 0 5 . 0 _ M _ - _ _ 1 . 0 4 A _			54.3	143TC	6 1 1 0 1 -	1.50
235	7.33	230	1.97	388				7 . 5			
164	10.50	319	1.73	374				1 0 .			
138	12.50	371	1.80	369				1 3 .			
119	14.50	421	1.73	358				1 5 .			
88	19.50	541	0.98	297				2 0 .			
69	25.00	638	1.26	156				2 5 .			
58	30.00	731	1.07	312				3 0 .			
235	7.33	236	3.37	896	A 0 5 1 0 7 . 5 _ M _ - _ _ 1 . 0 4 A _			63.1	143TC	6 1 1 0 1 -	1.50
164	10.50	327	3.13	893				1 0 .			
138	12.50	380	3.00	892				1 3 .			
119	14.50	435	1.96	890				1 5 .			
86	20.00	552	2.42	869				2 0 .			
69	25.00	661	2.14	879				2 5 .			
58	30.00	770	1.59	851				3 0 .			
43	40.00	954	1.03	816				4 0 .			
138	12.50	387	3.83	961	A 0 6 1 0 1 3 . _ M _ - _ _ 1 . 0 4 A _			76.3	143TC	6 1 1 0 1 -	1.50
115	15.00	456	3.41	954				1 5 .			
86	20.00	564	2.95	940				2 0 .			
69	25.00	681	2.88	926				2 5 .			
58	30.00	788	2.52	913				3 0 .			
43	40.00	980	1.88	887				4 0 .			
35	50.00	1136	1.19	863				5 0 .			
29	60.00	1268	0.82	840				6 0 .			
23	76.13	1918	1.25	554	A 0 6 1 0 7 5 . _ N _ - _ _ 1 . 0 4 A _			93.9	143TC	6 1 1 0 3 -	1.89
17	102.38	2289	1.12	719				1 0 0			
13	131.25	2727	1.11	661				1 2 5			
88	19.50	606	3.79	1483	A 0 7 3 0 2 0 . _ M _ - _ _ 1 . 0 4 A _			102.8	143TC	6 1 1 0 2 -	1.65
58	30.00	855	3.05	1459				3 0 .			
43	40.00	1085	2.34	1434				4 0 .			
35	50.00	1290	1.82	1409				5 0 .			
29	60.00	1438	1.26	1391				6 0 .			
25	70.00	1535	0.93	1373				7 0 .			
25	69.60	2027	1.84	1083	A 0 7 3 0 7 5 . _ N _ - _ _ 1 . 0 4 A _			122.6	143TC	6 1 1 0 3 -	1.89
18	93.60	2593	1.36	1133				1 0 0			
14	120.00	3058	1.37	598				1 2 5			
11	152.25	3659	1.15	1151				1 5 0			
35	50.00	1317	2.80	2383	A 0 8 6 0 5 0 . _ M _ - _ _ 1 . 0 4 A _			144.6	143TC	6 1 1 0 3 -	1.89
29	60.00	1483	1.90	2383				6 0 .			
25	70.00	1609	1.44	2360				7 0 .			

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

9608

1.50HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION		lb	Weight of Base Mount Unit	Motor Frame Size	SERIES X	inches
					Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	
4 POLE											
329	5.25	254	1.48	386	A 0 4 1 0 5 . 0 _ M _ - _ _ 1 . 5 4 A _			58.3	145TC	6 1 1 0 1 -	1.50
235	7.33	345	1.31	384	7 . 5						
164	10.50	479	1.15	361	1 0 .						
138	12.50	557	1.20	353	1 3 .						
119	14.50	632	1.15	335	1 5 .						
359	4.80	238	3.00	894	A 0 5 1 0 5 . 0 _ M _ - _ _ 1 . 5 4 A _		67.1	145TC	6 1 1 0 1 -	1.50	
235	7.33	354	2.25	893	7 . 5						
164	10.50	491	2.09	888	1 0 .						
138	12.50	570	2.00	887	1 3 .						
119	14.50	652	1.30	883	1 5 .						
86	20.00	828	1.61	848	2 0 .						
69	25.00	991	1.43	865	2 5 .						
58	30.00	1155	1.06	818	3 0 .						
235	7.33	360	3.46	962	A 0 6 1 0 7 . 5 _ M _ - _ _ 1 . 5 4 A _		82.5	145TC	6 1 1 0 1 -	1.50	
178	9.67	464	3.08	948	1 0 .						
138	12.50	581	2.56	932	1 3 .						
115	15.00	685	2.27	920	1 5 .						
86	20.00	846	1.97	899	2 0 .						1.65
69	25.00	1022	1.92	877	2 5 .						
58	30.00	1183	1.68	856	3 0 .						
43	40.00	1471	1.25	816	4 0 .						
23	76.13	2877	0.83	276	A 0 6 1 0 7 5 . _ N _ - _ _ 1 . 5 4 A _		97.9	145TC	6 1 1 0 3 -	1.89	
167	10.33	512	3.85	1489	A 0 7 3 0 1 0 . _ M _ - _ _ 1 . 5 4 A _		106.8	145TC	6 1 1 0 2 -	1.65	
119	14.50	696	3.48	1470	1 5 .						1.89
88	19.50	909	2.53	1446	2 0 .						1.65
69	25.00	1101	2.91	1428	2 5 .						1.89
58	30.00	1282	2.04	1276	3 0 .						
43	40.00	1628	1.56	1368	4 0 .						
35	50.00	1935	1.22	1330	5 0 .						1.65
29	60.00	2158	0.84	1300	6 0 .						
25	69.60	3041	1.22	798	A 0 7 3 0 7 5 . _ N _ - _ _ 1 . 5 4 A _		126.6	145TC	6 1 1 0 3 -	1.89	
18	93.60	3890	0.91	888	1 0 0						
88	19.50	919	3.87	2357	A 0 8 6 0 2 0 . _ M _ - _ _ 1 . 5 4 A _		148.6	145TC	6 1 1 0 3 -	1.89	
58	30.00	1312	3.39	2304	3 0 .						2.36
43	40.00	1669	2.71	2320	4 0 .						
35	50.00	1975	1.87	2331	5 0 .						
29	60.00	2224	1.27	2301	6 0 .						
25	70.00	2414	0.96	2337	7 0 .						

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

2.00HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION		lb	Weight of Base Mount Unit	Motor Frame Size	SERIES X	inches
					Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text"/> Through <input type="text"/> 20 Spaces to be filled when entering order	
4 POLE											
359	4.80	317	2.25	894	A 0 5 1 0 5 . 0 - M _ - _ _ 2 . 0 4 A _			74.1	145TC	6 1 1 0 1 -	1.50
235	7.33	472	1.69	890				7 . 5			
164	10.50	655	1.57	883				1 0 .			
138	12.50	761	1.50	881				1 3 .			
119	14.50	870	0.98	876				1 5 .			
86	20.00	1104	1.21	827				2 0 .			
345	5.00	334	3.23	961	A 0 6 1 0 5 . 0 - M _ - _ _ 2 . 0 4 A _		89.5	145TC	6 1 1 0 1 -	1.50	
235	7.33	480	2.60	943				7 . 5			
178	9.67	619	2.31	925				1 0 .			
138	12.50	775	1.92	903				1 3 .			
115	15.00	913	1.71	887				1 5 .			
86	20.00	1128	1.47	858				2 0 .			
69	25.00	1363	1.44	828				2 5 .			
58	30.00	1577	1.26	800				3 0 .			
43	40.00	1961	0.94	746				4 0 .			
238	7.25	489	3.93	1487	A 0 7 3 0 7 . 5 _ M _ - _ _ 2 . 0 4 A _		113.8	145TC	6 1 1 0 2 -	1.65	
167	10.33	683	2.89	1467				1 0 .			
138	12.50	809	3.01	1453				1 3 .			
119	14.50	928	2.61	1442				1 5 .			
88	19.50	1213	1.90	1410				2 0 .			
69	25.00	1468	2.18	1384				2 5 .			
58	30.00	1710	1.53	1094				3 0 .			
43	40.00	2171	1.17	1303				4 0 .			
35	50.00	2581	0.91	1251				5 0 .			
25	69.60	4055	0.92	513	A 0 7 3 0 7 5 . _ N _ - _ _ 2 . 0 4 A _		133.6	145TC	6 1 1 0 3 -	1.89	
88	19.50	1226	2.90	2331	A 0 8 6 0 2 0 . _ M _ - _ _ 2 . 0 4 A _		155.6	145TC	6 1 1 0 3 -	1.89	
69	25.00	1490	3.33	2306				2 5 .			
58	30.00	1749	2.54	2225				3 0 .			
43	40.00	2226	2.04	2257				4 0 .			
35	50.00	2634	1.40	2280				5 0 .			
29	60.00	2966	0.95	2219				6 0 .			

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon



SELECTION TABLES GEARED MOTORS

9608

3.00HP

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION	lb		SERIES X	inches
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of Base Mount Unit	Motor Frame Size	Cone Ring Output Coupling	Max Bore Coupling Driven Half
4 POLE									
345	5.00	501	2.15	933	A 0 6 1 0 5 . 0 - M _ - _ _ 3 . 0 4 A _	109.5	182TC	6 1 1 0 1 -	1.50
235	7.33	720	1.73	905	7 . 5				
178	9.67	929	1.54	878	1 0 .				
138	12.50	1163	1.28	846	1 3 .				
115	15.00	1370	1.14	820	1 5 .				
86	20.00	1693	0.98	776	2 0 .				
69	25.00	2045	0.96	731	2 5 .				
332	5.20	532	3.41	1478	A 0 7 3 0 5 . 0 - M _ - _ _ 3 . 0 4 A _	138.2	182TC	6 1 1 0 2 -	1.65
238	7.25	733	2.62	1455	7 . 5				
167	10.33	1025	1.93	1424	1 0 .				
138	12.50	1214	2.00	1403	1 3 .				
119	14.50	1393	1.74	1384	1 5 .				
88	19.50	1819	1.26	1336	2 0 .			6 1 1 0 2 -	1.65
69	25.00	2203	1.45	1296	2 5 .			6 1 1 0 3 -	1.89
58	30.00	2565	1.02	729	3 0 .				
238	7.25	737	3.97	2372	A 0 8 6 0 7 . 5 _ M _ - _ _ 3 . 0 4 A _	180.0	182TC	6 1 1 0 3 -	1.89
178	9.67	970	3.50	2367	1 0 .				
136	12.67	1253	2.79	2327	1 3 .				
119	14.50	1409	2.84	2305	1 5 .				
88	19.50	1839	1.93	2279	2 0 .				
69	25.00	2235	2.22	2229	2 5 .			6 1 1 0 4 -	2.36
58	30.00	2624	1.70	2068	3 0 .				
43	40.00	3339	1.36	2131	4 0 .				
35	50.00	3951	0.93	2178	5 0 .			6 1 1 0 3 -	1.89

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

5.00HP

4 POLE

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION	lb	SERIES X	inches
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of Base Mount Unit	Cone Ring Output Coupling	Max Bore Coupling Driven Half
345	5.00	835	1.29	879	A 0 6 1 0 5 . 0 _ M _ - _ _ 5 . 0 4 A _	123.5	184TC	6 1 1 0 1 -
235	7.33	1201	1.04	829	7 . 5			1.50
178	9.67	1549	0.93	784	1 0 .			
332	5.20	887	2.04	1429	A 0 7 3 0 5 . 0 _ M _ - _ _ 5 . 0 4 A _	152.2	184TC	6 1 1 0 2 -
238	7.25	1223	1.57	1391	7 . 5			1.65
167	10.33	1708	1.16	1337	1 0 .			
138	12.50	2023	1.20	1303	1 3 .			1.89
119	14.50	2322	1.04	1270	1 5 .			
69	25.00	3672	0.87	1119	2 5 .			
357	4.83	829	3.54	2372	A 0 8 6 0 5 . 0 _ M _ - _ _ 5 . 0 4 A _	194.0	184TC	6 1 1 0 3 -
238	7.25	1228	2.38	2362	7 . 5			1.89
178	9.67	1617	2.10	2352	1 0 .			
136	12.67	2089	1.67	2272	1 3 .			
119	14.50	2349	1.70	2227	1 5 .			
88	19.50	3065	1.16	2176	2 0 .			
69	25.00	3726	1.33	2075	2 5 .			
58	30.00	4373	1.02	1753	3 0 .			
43	40.00	5565	0.81	1879	4 0 .			2.36

7.50HP

4 POLE

N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION	lb	SERIES X	inches
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of Base Mount Unit	Cone Ring Output Coupling	Max Bore Coupling Driven Half
357	4.83	1244	2.36	2366	A 0 8 6 0 5 . 0 _ M _ - _ _ 7 . 5 4 A _	242.0	213TC	6 1 1 0 3 -
238	7.25	1842	1.59	2350	7 . 5			1.89
178	9.67	2425	1.40	2334	1 0 .			
136	12.67	3133	1.12	2202	1 3 .			
119	14.50	3524	1.14	2129	1 5 .			
69	25.00	5589	0.89	1883	2 5 .			2.36

10.0HP

4 POLE

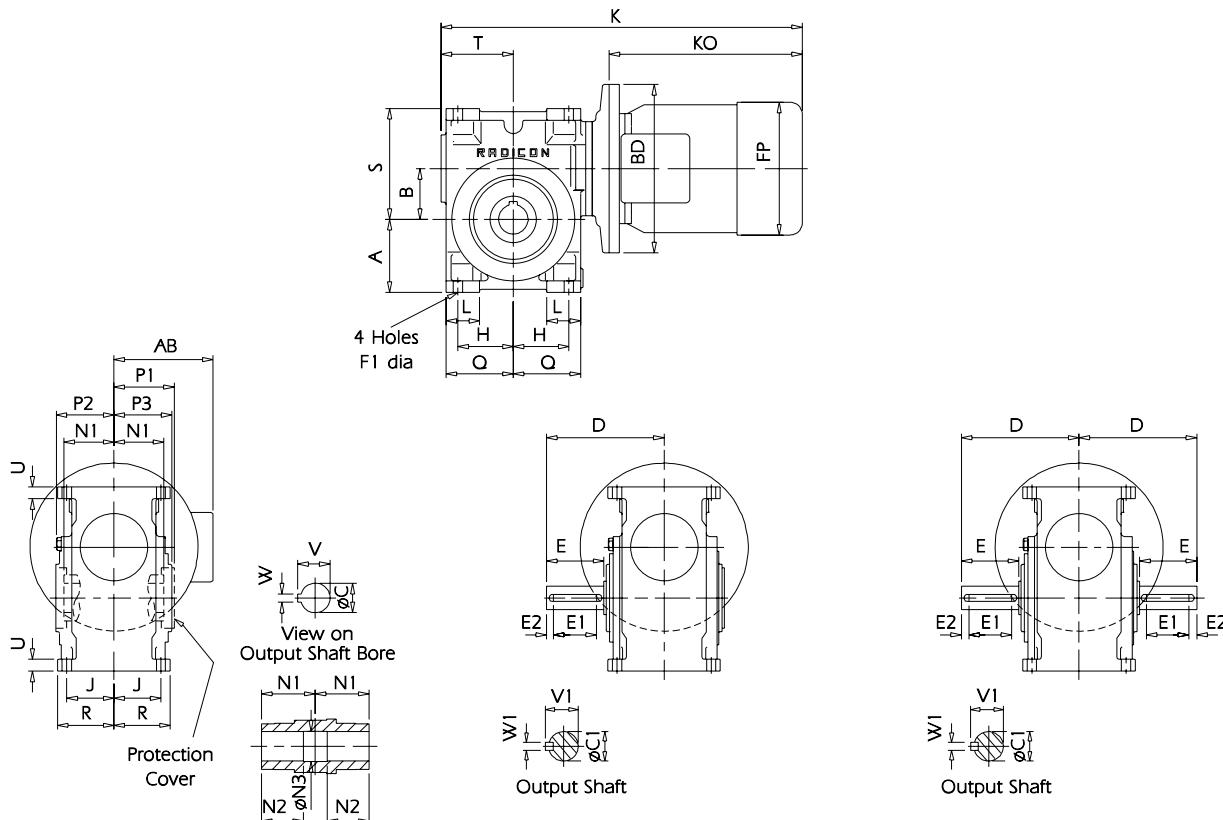
N2 R/MIN	i	lb in	Fm	lb	UNIT DESIGNATION	lb	SERIES X	inches
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of Base Mount Unit	Cone Ring Output Coupling Spaces to be filled when entering order	Max Bore Coupling Driven Half
357	4.83	1658	1.77	2360	A 0 8 6 0 5 . 0 _ M _ - _ _ 10 . 4 A _	257.0	215TC	6 1 1 0 3 -
238	7.25	2457	1.19	2338	7 . 5			1.89
178	9.67	3234	1.05	2315	1 0 .			
136	12.67	4178	0.84	2133	1 3 .			
119	14.50	4699	0.85	2032	1 5 .			2.36

NOTE

Other output speeds are available using 2 and 6 pole motors - Consult David Brown Radicon

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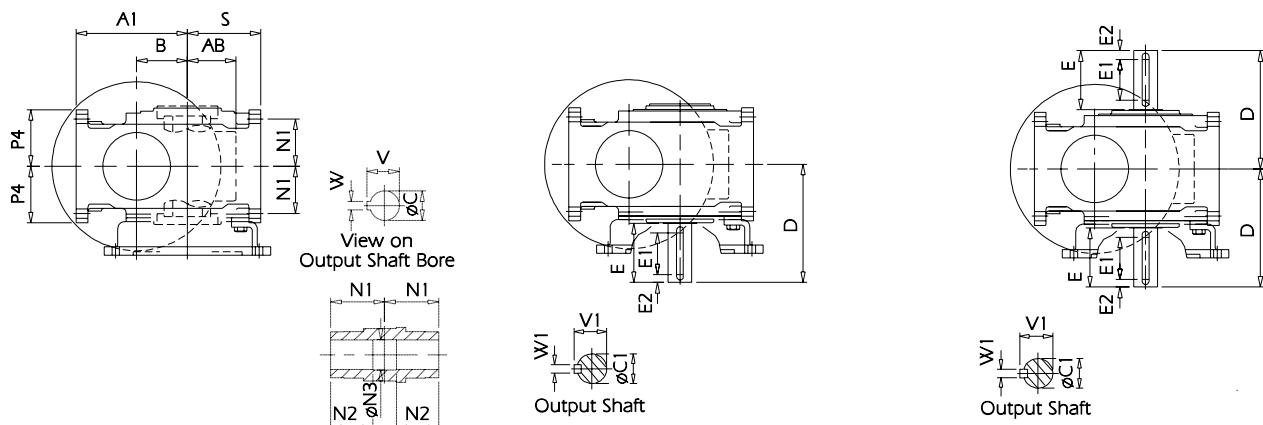
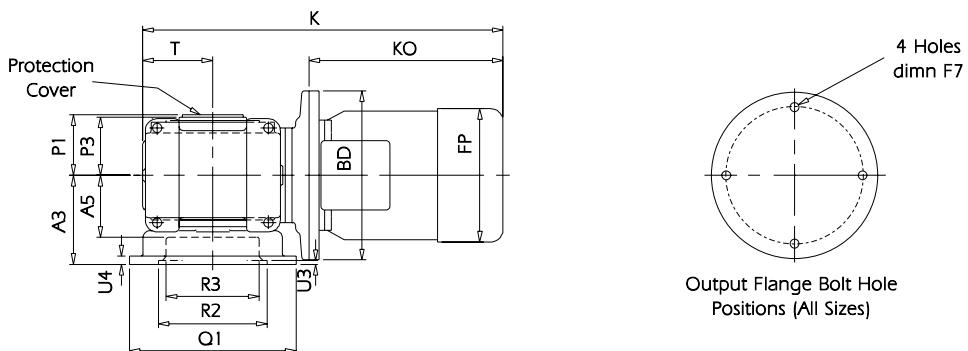
STANDARD UNIT


SIZE	A	B	ϕ C	ϕ C1	D	E	E1	E2	F1	H	J	L	N1	N2
A0280	2.283	1.125	0.625	0.625	3.125	1.250	0.9375	0.16	0.35	2.067	1.635	1.18	1.575	1.26
A0410	2.598	1.625	0.750	0.750	3.875	1.625	1.3125	0.16	0.45	2.303	1.930	1.26	1.969	1.57
A0510	2.913	2.000	1.000	1.000	4.625	2.125	1.75	0.19	0.45	2.244	2.045	1.38	2.205	1.77
A0610	3.425	2.375	1.375	1.125	5.500	2.625	2.0	0.25	0.45	2.599	2.205	1.58	2.520	1.97
A0730	4.134	2.875	1.625	1.250	6.625	3.250	2.5	0.25	0.53	3.189	2.755	1.77	3.031	2.36
A0860	4.606	3.375	1.875	1.500	7.875	3.875	3.25	0.31	0.69	3.544	3.110	2.16	3.661	2.87

SIZE	ϕ N3	P1	P2	P3	Q	R	S	T	U	V	V1	W	W1
A0280	0.635 0.630	1.89	1.77	1.73	2.42	1.99	3.189	2.09	0.35	0.715 0.709	0.707 0.699	0.1895 0.1875	0.190 0.188
A0410	0.760 0.755	2.28	2.16	2.16	2.72	2.36	3.976	2.44	0.39	0.843 0.837	0.834 0.826	0.1895 0.1875	0.190 0.188
A0510	1.010 1.005	2.48	2.40	2.40	2.64	2.44	4.409	2.96	0.47	1.120 1.114	1.110 1.102	0.2520 0.2500	0.252 0.250
A0610	1.385 1.380	2.84	2.64	2.72	3.15	2.64	5.197	3.39	0.55	1.524 1.518	1.238 1.230	0.3145 0.3125	0.252 0.250
A0730	1.635 1.630	3.42	3.19	3.31	3.74	3.31	6.024	4.06	0.63	1.802 1.796	1.364 1.356	0.3770 0.3750	0.252 0.250
A0860	1.885 1.880	4.09	3.82	3.90	4.25	3.82	7.008	4.57	0.71	2.102 2.096	1.666 1.658	0.5020 0.5000	0.377 0.375

MOTOR FRAME SIZE	MOTORS	ALL SIZES				A0280	A0410	A0510	A0610	A0730	A0860
		KO	ϕ BD	ϕ FP	AB	K (max)					
56C		12.00	6.50	7.19	5.25	17.48	18.06	19.09	19.96		
143/145TC		12.06	6.50	7.19	5.25		18.12	19.15	20.02	21.71	22.73
182/184TC		15.44	9.00	8.50	5.88				23.95	25.29	26.55
213/215TC		16.31	9.00	10.19	7.38						27.42

A	O		O		F	A
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 STANDARD UNIT FLANGE MOUNTED


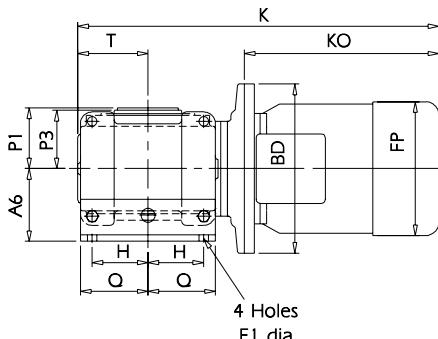
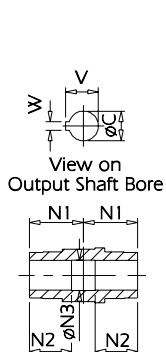
SIZE	A1	A3	A5	B	øC	øC1	D	E	E1	E2	F7	N1	N2	øN3
A0280	3.189	2.480	1.93	1.125	0.625	0.625	3.125	1.250	0.9375	0.16	ø0.26 on 3.937 pcd	1.575	1.26	0.635 0.630
A0410	3.976	3.150	2.36	1.625	0.750	0.750	3.875	1.625	1.3125	0.16	ø0.35 on 4.528 pcd	1.969	1.57	0.760 0.755
A0510	4.409	3.543	2.56	2.000	1.000	1.000	4.625	2.125	1.75	0.19	ø0.35 on 5.118 pcd	2.205	1.77	1.010 1.005
A0610	5.197	4.134	2.80	2.375	1.375	1.125	5.500	2.625	2.0	0.25	ø0.43 on 6.496 pcd	2.520	1.97	1.385 1.380
A0730	6.024	4.724	3.58	2.875	1.625	1.250	6.625	3.250	2.5	0.25	ø0.53 on 8.465 pcd	3.031	2.36	1.635 1.630
A0860	7.008	5.197	3.94	3.375	1.875	1.500	7.875	3.875	3.25	0.31	ø0.53 on 8.465 pcd	3.661	2.87	1.885 1.880

SIZE	P1	P3	P4	Q1	R2	R3	S	T	U3	U4	V	V1	W	W1
A0280	1.89	1.73	1.99	4.72	3.1508 3.1496	2.36	2.283	2.09	0.12	0.28	0.715 0.709	0.707 0.699	0.1895 0.1875	0.190 0.188
A0410	2.28	2.16	2.36	5.51	3.7415 3.7402	2.84	2.598	2.44	0.14	0.31	0.843 0.837	0.834 0.826	0.1895 0.1875	0.190 0.188
A0510	2.48	2.40	2.44	6.30	4.3321 4.3307	3.46	2.913	2.96	0.16	0.35	1.120 1.114	1.110 1.102	0.2520 0.2500	0.252 0.250
A0610	2.84	2.72	2.64	7.87	5.1197 5.1181	4.33	3.425	3.39	0.18	0.39	1.524 1.518	1.238 1.230	0.3145 0.3125	0.252 0.250
A0730	3.42	3.31	3.31	9.84	7.0882 7.0866	5.35	4.134	4.06	0.20	0.47	1.802 1.796	1.364 1.356	0.3770 0.3750	0.252 0.250
A0860	4.09	3.90	3.82	9.84	7.0882 7.0866	5.91	4.606	4.57	0.20	0.47	2.102 2.096	1.666 1.658	0.5020 0.5000	0.377 0.375

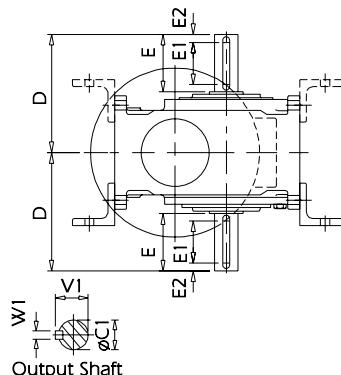
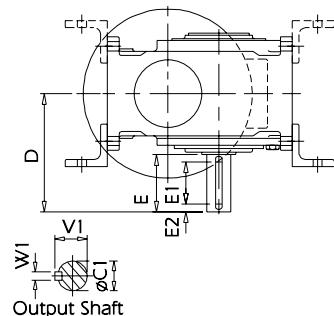
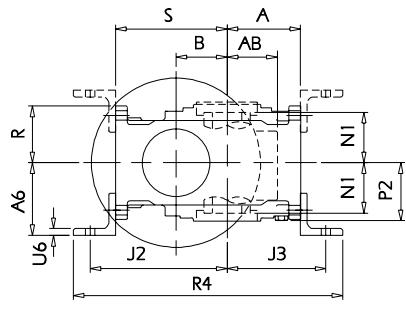
MOTOR FRAME SIZE	MOTORS	ALL SIZES				A0280	A0410	A0510	A0610	A0730	A0860
		KO	øBD	øFP	AB						
56C		12.00	6.50	7.19	5.25	17.48	18.06	19.09	19.96		
143/145TC		12.06	6.50	7.19	5.25		18.12	19.15	20.02	21.71	22.73
182/184TC		15.44	9.00	8.50	5.88				23.95	25.29	26.55
213/215TC		16.31	9.00	10.19	7.38						27.42

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A	0	0	G	A	STANDARD UNIT SIDE MOUNTED FEET
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Feet can be fitted on either side of the gearcase as shown by the dotted line



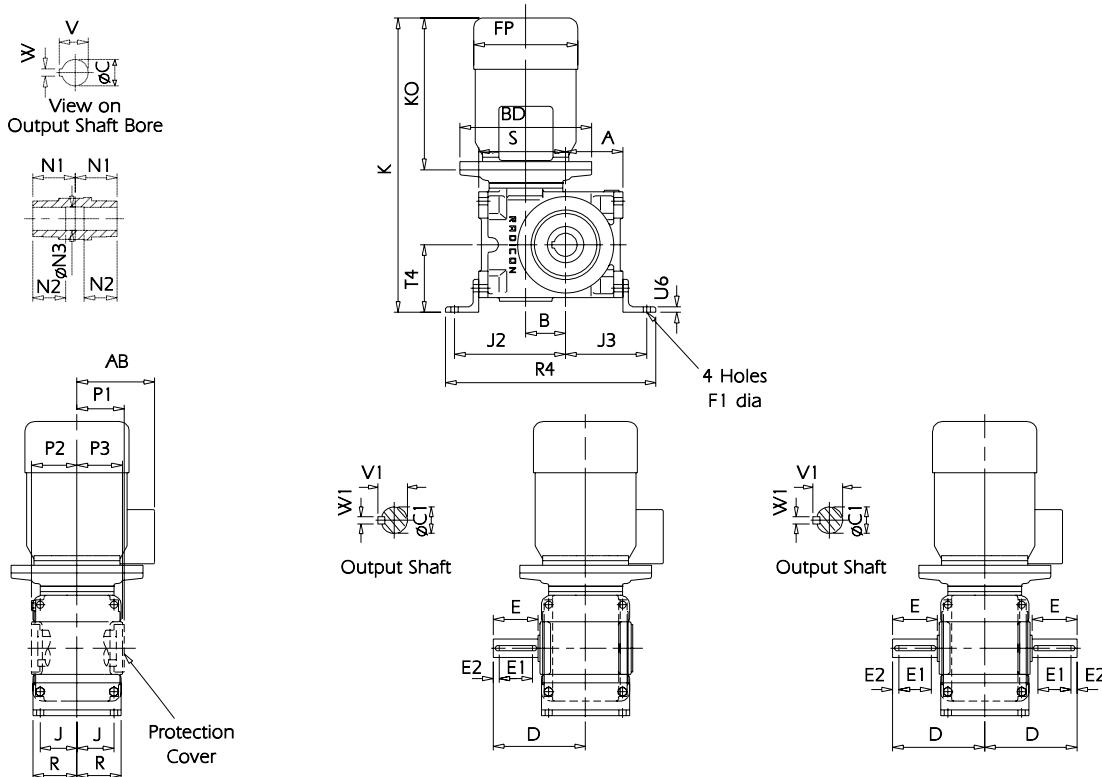
SIZE	A	A6	B	øC	øC1	D	E	E1	E2	F1	H	J2	J3	N1
A0280	2.283	2.441	1.125	0.625	0.625	3.125	1.250	0.9375	0.16	0.35	2.067	4.00	3.09	1.575
A0410	2.598	2.953	1.625	0.750	0.750	3.875	1.625	1.3125	0.16	0.45	2.303	5.00	3.62	1.969
A0510	2.913	3.071	2.000	1.000	1.000	4.625	2.125	1.75	0.19	0.45	2.244	5.43	3.94	2.205
A0610	3.425	3.386	2.375	1.375	1.125	5.500	2.625	2.0	0.25	0.45	2.599	6.38	4.61	2.520
A0730	4.134	4.055	2.875	1.625	1.250	6.625	3.250	2.5	0.25	0.53	3.189	7.32	5.43	3.031
A0860	4.606	4.646	3.375	1.875	1.500	7.875	3.875	3.25	0.31	0.69	3.544	8.54	6.14	3.661

SIZE	N2	øN3	P1	P2	P3	R	R4	S	T	U6	V	V1	W	W1
A0280	1.26	0.635 0.630	1.89	1.77	1.73	1.99	7.84	3.189	2.09	0.20	0.715 0.709	0.707 0.699	0.1895 0.1875	0.190 0.188
A0410	1.57	0.760 0.755	2.28	2.16	2.16	2.36	9.72	3.976	2.44	0.24	0.843 0.837	0.834 0.826	0.1895 0.1875	0.190 0.188
A0510	1.77	1.010 1.005	2.48	2.40	2.40	2.44	10.47	4.409	2.96	0.24	1.120 1.114	1.110 1.102	0.252 0.250	0.252
A0610	1.97	1.385 1.380	2.84	2.64	2.72	2.64	12.56	5.197	3.39	0.31	1.524 1.518	1.238 1.230	0.3145 0.3125	0.252
A0730	2.36	1.635 1.630	3.42	3.19	3.31	3.31	14.09	6.024	4.06	0.31	1.802 1.796	1.364 1.356	0.3770 0.3750	0.252
A0860	2.87	1.885 1.880	4.09	3.82	3.90	3.82	16.34	7.008	4.57	0.39	2.102 2.096	1.666 1.658	0.5020 0.5000	0.377 0.375

MOTOR FRAME SIZE	MOTORS	ALL SIZES				A0280	A0410	A0510	A0610	A0730	A0860
		KO	øBD	øFP	AB	K (max)					
56C		12.00	6.50	7.19	5.25	17.48	18.06	19.09	19.96		
143/145TC		12.06	6.50	7.19	5.25		18.12	19.15	20.02	21.71	22.73
182/184TC		15.44	9.00	8.50	5.88				23.95	25.29	26.55
213/215TC		16.31	9.00	10.19	7.38						27.42

A	O		O		H	A
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STANDARD UNIT END MOUNTED FEET



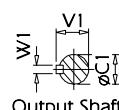
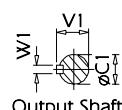
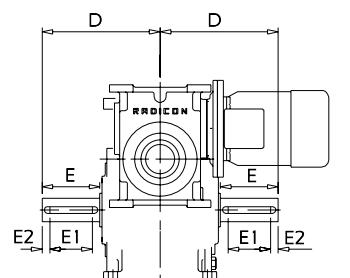
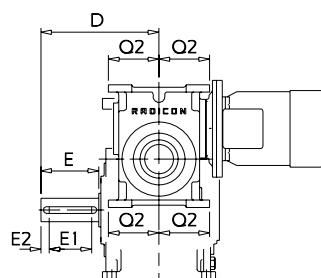
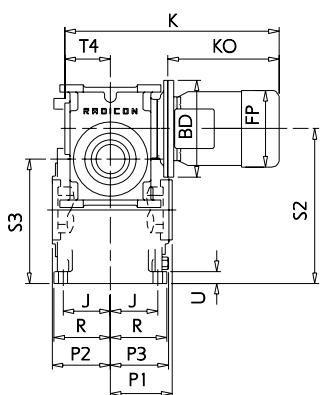
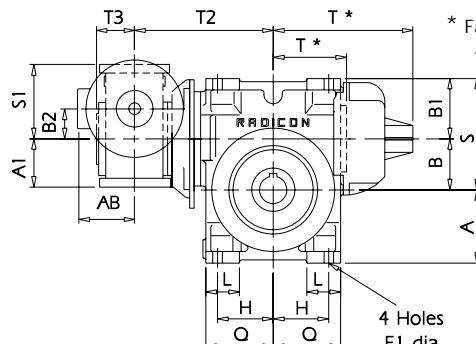
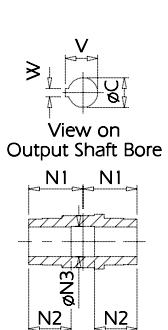
SIZE	A	B	ϕ C	ϕ C1	D	E	E1	E2	F1	J	J2	J3	N1	N2
A0280	2.283	1.125	0.625	0.625	3.125	1.250	0.9375	0.16	0.35	1.635	4.00	3.09	1.575	1.26
A0410	2.598	1.625	0.750	0.750	3.875	1.625	1.3125	0.16	0.45	1.930	5.00	3.62	1.969	1.57
A0510	2.913	2.000	1.000	1.000	4.625	2.125	1.75	0.19	0.45	2.045	5.43	3.94	2.205	1.77
A0610	3.425	2.375	1.375	1.125	5.500	2.625	2.0	0.25	0.45	2.205	6.38	4.61	2.520	1.97
A0730	4.134	2.875	1.625	1.250	6.625	3.250	2.5	0.25	0.53	2.755	7.32	5.43	3.031	2.36
A0860	4.606	3.375	1.875	1.500	7.875	3.875	3.25	0.31	0.69	3.110	8.54	6.14	3.661	2.87

SIZE	ϕ N3	P1	P2	P3	R	R4	S	T4	U6	V	V1	W	W1
A0280	0.635 0.630	1.89	1.77	1.73	1.99	7.84	3.189	2.874	0.20	0.715 0.709	0.707 0.699	0.1895 0.1875	0.190 0.188
A0410	0.760 0.755	2.28	2.16	2.16	2.36	9.72	3.976	3.327	0.24	0.843 0.837	0.834 0.826	0.1895 0.1875	0.190 0.188
A0510	1.010 1.005	2.48	2.40	2.40	2.44	10.47	4.409	3.268	0.24	1.120 1.114	1.110 1.102	0.2520 0.2500	0.252 0.250
A0610	1.385 1.380	2.84	2.64	2.72	2.64	12.56	5.197	3.780	0.31	1.524 1.518	1.238 1.230	0.3145 0.3125	0.252 0.250
A0730	1.635 1.630	3.42	3.19	3.31	3.31	14.09	6.024	4.488	0.31	1.802 1.796	1.364 1.356	0.3770 0.3750	0.252 0.250
A0860	1.885 1.880	4.09	3.82	3.90	3.82	16.34	7.008	5.079	0.39	2.102 2.096	1.666 1.658	0.5020 0.5000	0.377 0.375

MOTORS		ALL SIZES				A0280	A0410	A0510	A0610	A0730	A0860
		KO	ϕ BD	ϕ FP	AB	K (max)					
MOTOR FRAME SIZE	56C	12.00	6.50	7.19	5.25	17.48	18.06	19.09	19.96		
	143/145TC	12.06	6.50	7.19	5.25		18.12	19.15	20.02	21.71	22.73
	182/184TC	15.44	9.00	8.50	5.88				23.95	25.29	26.55
	213/215TC	16.31	9.00	10.19	7.38						27.42

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A	0	0	W	B
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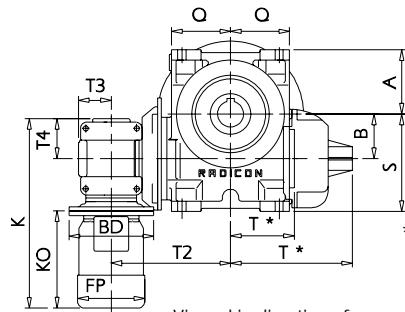
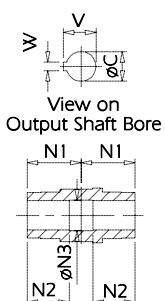
STANDARD UNIT


SIZE	A	A1	B	B1	B2	øC	øC1	D	E	E1	E2	F1	H	J	L	N1	N2	øN3	P1
A0410	2.598	2.283	1.625	2.350	1.125	0.750	0.750	3.875	1.625	1.3125	0.16	0.45	2.303	1.930	1.26	1.969	1.57	0.760 0.755	2.28
A0510	2.913	2.283	2.000	2.409	1.125	1.000	1.000	4.625	2.125	1.75	0.19	0.45	2.244	2.045	1.38	2.205	1.77	1.010 1.005	2.48
A0610	3.425	2.598	2.375	2.823	1.625	1.375	1.125	5.500	2.625	2.0	0.25	0.45	2.599	2.205	1.58	2.520	1.97	1.385 1.380	2.84
A0730	4.134	2.598	2.875	3.150	1.625	1.625	1.250	6.625	3.250	2.5	0.25	0.53	3.189	2.755	1.77	3.031	2.36	1.635 1.630	3.42
A0860	4.606	2.913	3.375	3.634	2.000	1.875	1.500	7.875	3.875	3.25	0.31	0.69	3.544	3.110	2.16	3.661	2.87	1.885 1.880	4.09

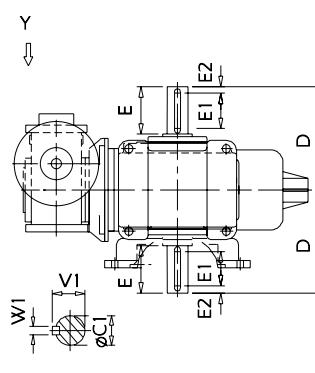
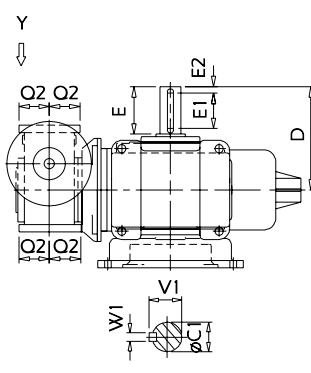
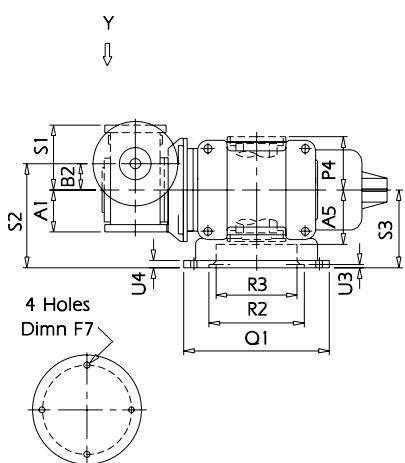
SIZE	P2	P3	O	Q2	R	S	S1	S2	S3	T	T2	T3	T4	U	V	V1	W	W1
A0410	2.16	2.16	2.72	2.42	2.36	3.976	3.189	2.283	4.225	2.44	4.961	1.89	2.09	0.39	0.843	0.834	0.1895	0.190
															0.837	0.826	0.1875	0.188
A0510	2.40	2.40	2.64	2.42	2.44	4.409	3.189	2.283	4.914	2.96	5.630	1.89	2.09	0.47	1.120	1.110	0.2520	0.252
															1.114	1.102	0.2500	0.250
A0610	2.64	2.72	3.15	2.72	2.64	5.197	3.976	2.598	5.800	3.39	6.732	2.28	2.44	0.55	1.524	1.238	0.3145	0.252
															1.518	1.230	0.3125	0.250
A0730	3.19	3.31	3.74	2.72	3.31	6.024	3.976	2.598	7.009	7.76	7.559	2.28	2.44	0.63	1.802	1.364	0.3770	0.252
															1.796	1.356	0.3750	0.250
A0860	3.82	3.90	4.25	2.64	3.82	7.008	4.409	2.913	7.980	8.94	8.189	2.48	2.96	0.71	2.102	1.666	0.5020	0.377
															2.096	1.658	0.5000	0.375

MOTOR FRAME SIZE	MOTORS	ALL SIZES				A0410	A0510	A0610	A0730	A0860
		KO	øBD	FP	AB					
56C	56C	12.00	6.50	7.19	5.25	17.48	17.48	18.06	18.06	19.09
	143/145TC	12.06	6.50	7.19	5.25			18.12	18.12	19.15

A	O		O		F	B
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STANDARD UNIT FLANGE MOUNTED


Viewed in direction of arrow Y



Output Flange Bolt Hole Positions (All Sizes)

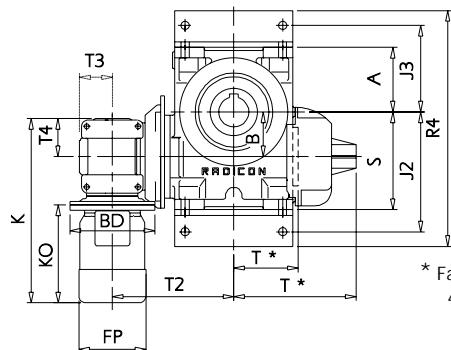
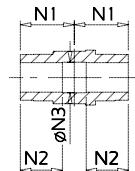
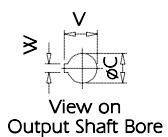
SIZE	A	A1	A5	B	B2	øC	øC1	D	E	E1	E2	F7	N1	N2	øN3	P4	Q	Q1
A0410	2.598	2.283	2.36	1.625	1.125	0.750	0.750	3.875	1.625	1.3125	0.16	0.35 on 4.528 pcd	1.969	1.57	0.760 0.755	2.16	2.72	5.51
A0510	2.913	2.283	2.56	2.000	1.125	1.000	1.000	4.625	2.125	1.75	0.19	ø0.35 on 5.118 pcd	2.205	1.77	1.010 1.005	2.40	2.64	6.30
A0610	3.425	2.598	2.80	2.375	1.625	1.375	1.125	5.500	2.625	2.0	0.25	ø 0.43 on 6.496 pcd	2.520	1.97	1.385 1.380	2.64	3.15	7.87
A0730	4.134	2.598	3.58	2.875	1.625	1.625	1.250	6.625	3.250	2.5	0.25	ø 0.53 on 8.465 pcd	3.031	2.36	1.635 1.630	3.19	3.74	9.84
A0860	4.606	2.913	3.94	3.375	2.000	1.875	1.500	7.875	3.875	3.25	0.31	ø0.53 on 8.465 pcd	3.661	2.87	1.885 1.880	3.82	4.25	9.84

SIZE	Q2	R2	R3	S	S1	S2	S3	T	T2	T3	T4	U3	U4	V	V1	W	W1
A0410	2.72	3.7415 3.7402	2.84	3.976	3.189	4.276	3.150	2.44	4.961	1.89	2.09	0.14	0.31	0.843 0.837	0.834 0.826	0.1895 0.1875	0.190 0.188
A0510	2.64	4.3321 4.3307	3.46	4.409	3.189	4.669	3.543	2.96	5.630	1.89	2.09	0.16	0.35	1.120 1.114	1.110 1.102	0.2520 0.2500	0.252 0.250
A0610	3.15	5.1197 5.1181	4.33	5.197	3.976	5.760	4.134	3.39	6.732	2.28	2.44	0.18	0.39	1.524 1.518	1.238 1.230	0.3145 0.3125	0.252 0.250
A0730	3.74	7.0882 7.0866	5.35	6.024	3.976	6.350	4.724	7.76	7.559	2.28	2.44	0.20	0.47	1.802 1.796	1.364 1.356	0.3770 0.3750	0.252 0.250
A0860	4.25	7.0882 7.0866	5.91	7.008	4.409	7.197	5.197	8.94	8.189	2.48	2.96	0.20	0.47	2.102 2.096	1.666 1.658	0.5020 0.5000	0.377 0.375

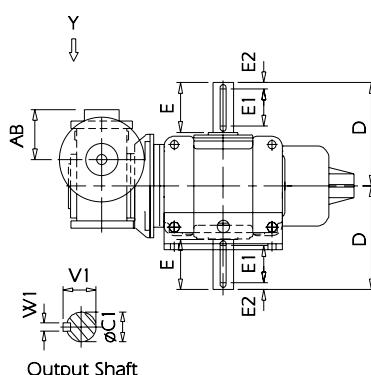
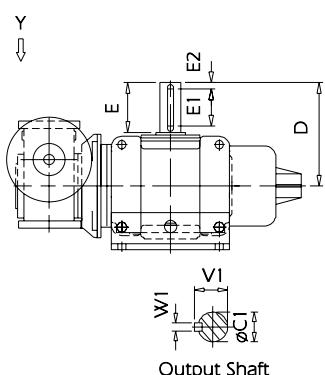
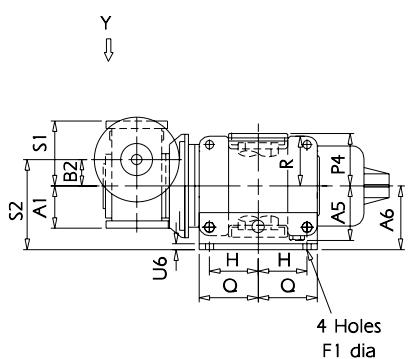
MOTOR FRAME SIZE	MOTORS	ALL SIZES				A0410	A0510	A0610	A0730	A0860
		KO	øBD	FP	AB					
56C	56C	12.00	6.50	7.19	5.25	17.48	17.48	18.06	18.06	19.09
	143/145TC	12.06	6.50	7.19	5.25			18.12	18.12	19.15

9611

A	0	0	G	B	STANDARD UNIT SIDE MOUNTED FEET
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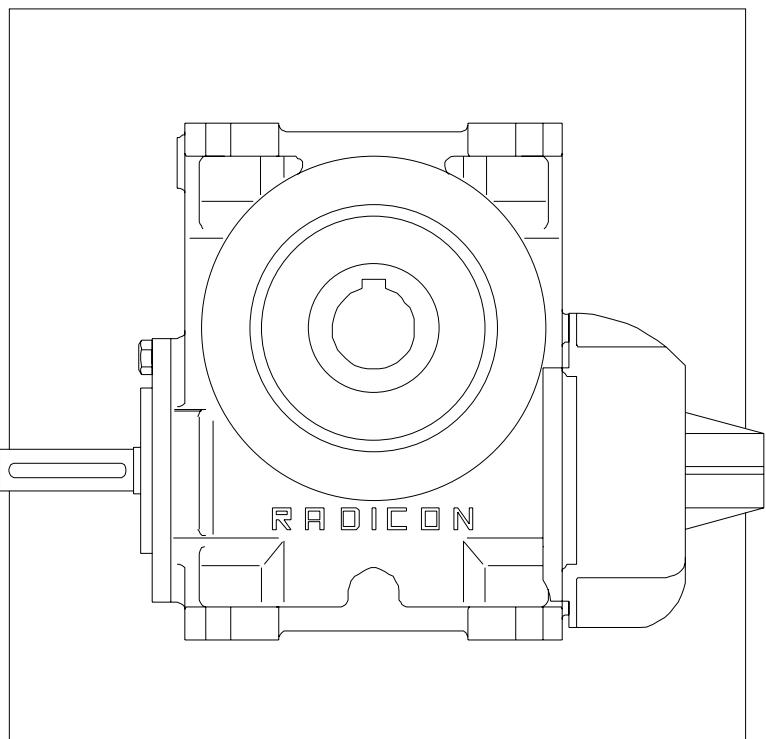
* Fans not fitted to sizes 410, 510 and 610



SIZE	A	A1	A5	A6	B	B2	øC	øC1	D	E	E1	E2	F1	H	J2	J3	N1	N2
A0410	2.598	2.283	2.16	2.953	1.625	1.125	0.750	0.750	3.875	1.625	1.3125	0.16	0.45	2.303	5.00	3.62	1.969	1.57
A0510	2.913	2.283	2.40	3.071	2.000	1.125	1.000	1.000	4.625	2.125	1.75	0.19	0.45	2.244	5.43	3.94	2.205	1.77
A0610	3.425	2.598	2.64	3.386	2.375	1.625	1.375	1.125	5.500	2.625	2.0	0.25	0.45	2.599	6.38	4.61	2.520	1.97
A0730	4.134	2.598	3.19	4.055	2.875	1.625	1.250	1.250	6.625	3.250	2.5	0.25	0.53	3.189	7.32	5.43	3.031	2.36
A0860	4.606	2.913	3.82	4.646	3.375	2.000	1.875	1.500	7.875	3.875	3.25	0.31	0.69	3.544	8.54	6.14	3.661	2.87

SIZE	øN3	P4	O	R	S	S1	S2	T	T2	T3	T4	U6	V	V1	W	W1
A0410	0.760 0.755	2.16	2.72	2.36	3.976	3.189	4.079	2.44	4.961	1.89	2.09	0.24	0.843 0.837	0.834 0.826	0.1895 0.1875	0.190 0.188
A0510	1.010 1.005	2.40	2.64	2.44	4.409	3.189	4.197	2.96	5.630	1.89	2.09	0.24	1.120 1.114	1.110 1.102	0.2520 0.2500	0.252 0.250
A0610	1.385 1.380	2.72	3.15	2.64	5.197	3.976	5.012	3.39	6.732	2.28	2.44	0.31	1.524 1.518	1.238 1.230	0.3145 0.3125	0.252 0.250
A0730	1.635 1.630	3.31	3.74	3.31	6.024	3.976	5.681	7.76	7.559	2.28	2.44	0.31	1.802 1.796	1.364 1.356	0.3770 0.3750	0.252 0.250
A0860	1.885 1.880	3.90	4.25	3.82	7.008	4.409	6.646	8.94	8.189	2.48	2.96	0.39	2.102 2.096	1.666 1.658	0.5020 0.5000	0.377 0.375

MOTORS		ALL SIZES				A0410	A0510	A0610	A0730	A0860	
		KO	øBD	FP	AB	K (max)					
MOTOR FRAME SIZE		56C	12.00	6.50	7.19	5.25	17.48	17.48	18.06	18.06	19.09
		143/145TC	12.06	6.50	7.19	5.25			18.12	18.12	19.15



REDUCER

SERIES A

RADICON®

9611

Maximum permissible overhung loads

When a sprocket, gear etc. is mounted on the shaft a calculation, as below, must be made to determine the overhung load on the shaft, and the results compared to the maximum permissible overhung loads tabulated. Overhung loads can be reduced by increasing the diameter of the sprocket, gear, etc. If the maximum permissible overhung load is exceeded, the sprocket, gear, etc. should be mounted on a separate shaft, flexibly coupled and supported in its own bearings, or the gear unit shaft should be extended to run in an outboard bearing. Alternatively, a larger gear is often a less expensive solution.

Permissible overhung loads vary according to the direction of rotation. The values tabulated are for the most unfavourable direction with the unit transmitting full rated power and the load P applied midway along the shaft extension. Hence they can sometimes be increased for a more favourable direction of rotation, or if the power transmitted is less than the rated capacity of the gear unit, or if the load is applied nearer to the gear unit case. Refer to David Brown Radicon for further details. In any event, the sprocket, gear etc. should be positioned as close as possible to the gear unit case in order to reduce bearing loads and shaft stresses, and to prolong life.

All units will accept 100% momentary overload on stated capacities.

Overhung load (lbs)

$$P = \frac{HP \times 126,000 \times K}{N \times D}$$

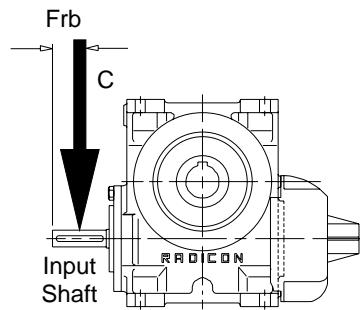
where

P	=	equivalent overhung load (lb)
HP	=	power transmitted by the shaft (HP)
N	=	speed of shaft (rpm)
D	=	pitch diameter of sprocket, etc. (in)
K	=	factor

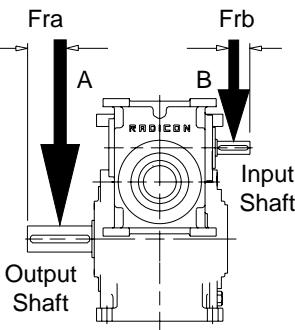
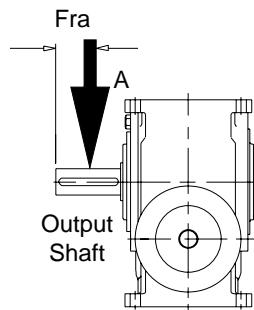
Note: 1 lb = 2.2047 kg = 4.4484 Newtons.

Overhung member	K (factor)
Chain sprocket*	1.00
Spur or helical pinion	1.25
Vee belt sheave	1.50
Flat belt pulley	2.00

* If multistrand chain drives are equally loaded and the outer stand is further than dimension A output or B input, refer to David Brown Radicon.



**Single reduction
(worm)**



**Double reduction
(worm/worm)**

Distance midway along the shaft extension

Size of unit	Dimension A (inches)	Dimension B (inches)	Dimension C (inches)
A0280	0.625	-	0.5625
A0410	0.8125	0.5625	0.8125
A0510	1.0625	0.5625	0.9375
A0610	1.3125	0.8125	1.125
A0730	1.625	0.8125	1.375
A0860	1.9375	0.9375	1.625



OVERHUNG LOADS & AXIAL THRUSTS (POUNDS)

9611

OVERHUNG LOAD OUTPUT SHAFT (POUNDS)

Input Shaft (rev/min)	Nominal Ratio	Nominal Output Speed (rev/min)	Size of Unit					
			A0280	A0410	A0510	A0610	A0730	A0860
1750	5.0	350	252	383	876	815	1300	2330
	7.5	233.33	250	376	878	820	1300	2330
	10.	175	249	341	822	798	1280	2310
	12.5	140	247	323	815	775	1220	2170
	15.	116.67	246	309	866	768	1230	2110
	20.	87.50	234	348	817	770	1250	2160
	25.	70	229	291	812	756	1140	1960
	30	58.33	235	220	793	747	1220	2020
	40	43.75	251	338	850	760	1230	2010
	50	35	253	378	878	829	1280	2170
	60	29.17	254	384	884	871	1340	2330
	70	25	255	386	889	899	1380	2340
1160	5.0	232	251	377	846	783	1250	2310
	7.5	154.67	249	355	851	783	1250	2210
	10.	116	232	325	804	760	1250	2160
	12.5	92.80	231	293	787	749	1190	2130
	15.	77.33	234	152	848	741	1190	2020
	20.	58	227	338	763	728	1220	2120
	25	46.40	221	-	735	684	934	1810
	30	38.67	232	-	758	679	1180	1920
	40	29	251	330	810	745	1190	1900
	50	23.20	253	362	876	819	1260	2140
	60	19.33	254	383	883	864	1330	2320
	70	16.57	255	386	888	893	1380	2340

OVERHUNG LOAD INPUT SHAFT (POUNDS)

Input Shaft (rev/min)	Nominal Ratio	Nominal Output Speed (rev/min)	Size of Unit					
			A0280	A0410	A0510	A0610	A0730	A0860
1750	5.0	350	23.1	125	39.6	40.7	195	80.6
	7.5	233.33	38.8	110	103	100	103	170
	10.	175	39.2	67.4	93.9	84.8	60.9	152
	12.5	140	74	97.4	88.8	85.3	99.1	54.0
	15.	116.67	40	94.3	45.5	67.1	82.4	101
	20.	87.50	89.7	41.9	161	149	43.4	61.1
	25.	70	65.5	82.9	143	142	140	206
	30	58.33	60.2	64.9	64.9	114	85.5	131
	40	43.75	103	69.9	41.2	78.5	50.1	88.3
	50	35	104	59.8	82.9	105	52.3	93.8
	60	29.17	104	122	76.6	97.7	122	136
	70	25	104	80.5	69.7	140	173	226
1160	5.0	232	6.9	104	0.2	0.1	134	8.1
	7.5	154.67	24.1	90.3	75.6	66.1	49.2	101
	10.	116	24.6	54	75	50.4	30.1	89
	12.5	92.80	58.7	75.2	59.2	63.1	67.1	11.8
	15.	77.33	32.1	69.8	29	42.3	50.8	57.7
	20.	58	73.6	32.7	120	110	11.9	19.4
	25	46.40	48.4	63.4	97.6	89	99.6	138
	30	38.67	52	51.2	40.4	59.2	51.5	83.3
	40	29	102	60.8	21.9	60.7	14.3	37
	50	23.20	103	53.5	73.4	92.5	35.7	70.1
	60	19.33	104	117	70	88.2	109	117
	70	16.57	104	77.1	64.8	133	163	212

AXIAL THRUST OUTPUT SHAFT (POUNDS)

Input Shaft (rev/min)	Nominal Ratio	Nominal Output Speed (rev/min)	Size of Unit					
			A0280	A0410	A0510	A0610	A0730	A0860
1750	5.0	350	690	845	1110	1010	1670	1500
	7.5	233.33	707	868	1110	1010	1670	1920
	10.	175	709	852	1050	984	1640	1960
	12.5	140	722	853	1050	956	1570	1980
	15.	116.67	724	849	1100	947	1580	1990
	20.	87.50	734	924	1050	949	1610	2130
	25.	70	729	884	1040	932	1470	2020
	30	58.33	743	873	1020	920	1570	2090
	40	43.75	784	943	1080	937	1580	2090
	50	35	805	993	1130	1020	1640	2240
	60	29.17	818	1020	1170	1070	1720	2360
	70	25	828	1040	1200	1110	1780	2440
1160	5.0	232	654	787	1070	965	1600	1310
	7.5	154.67	677	818	1080	966	1610	1750
	10.	116	681	818	1020	936	1600	1810
	12.5	92.80	697	804	1000	923	1530	1890
	15.	77.33	712	800	1070	913	1530	1890
	20.	58	714	907	987	898	1570	2060
	25	46.40	708	855	966	843	1410	1900
	30	38.67	735	857	989	837	1520	2010
	40	29	780	934	1050	919	1540	2020
	50	23.20	802	987	1120	1010	1620	2210
	60	19.33	816	1020	1170	1070	1710	2340
	70	16.57	826	1040	1200	1100	1770	2420

AXIAL THRUST INPUT SHAFT (POUNDS)

Input Shaft (rev/min)	Nominal Ratio	Nominal Output Speed (rev/min)	Size of Unit					
			A0280	A0410	A0510	A0610	A0730	A0860
1750	5.0	350	258	873	319	785	1350	1440
	7.5	233.33	217	819	340	851	1370	1640
	10.	175	154	707	439	804	1310	1530
	12.5	140	140	641	419	684	1080	1480
	15.	116.67	146	599	391	651	1130	1250
	20.	87.50	89.5	759	402	624	1240	1460
	25.	70	71.8	545	370	595	731	907
	30	58.33	114	511	319	548	1040	1090
	40	43.75	231	703	517	622	1110	1120
	50	35	289	836	378	910	1330	1530
	60	29.17	327	908	797	1090	1570	1880
	70	25	351	961	883	1190	1750	2080
1160	5.0	232	256	815	301	790	1420	1480
	7.5	154.67	212	754	341	832	1440	1570
	10.	116	143	655	460	760	1470	1420
	12.5	92.80	129	554	391	682	1210	1450
	15.	77.33	167	502	331	642	1270	1190
	20.	58	75.8	730	298	553	1390	1400
	25	46.40	57.6	471	261	407	829	714
	30	38.67	139	474	333	377	1170	1000
	40	29	267	684	559	658	1250	1030
	50	23.20	330	826	770	958	1580	1560
	60	19.33	369	905	899	1140	1840	1910
	70	16.57	397	961	991	1260	2010	2130



RATINGS AT 3500 REV/MIN INPUT

9608

SINGLE REDUCTION	NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
				A0280	A0410	A0510	A0610	A0730	A0860
5.0	700.00	466.67	Input Power HP (mechanical)	1.45	3.29	6.95	10.40	14.90	25.70
			Input Power HP (thermal)	3.46	4.46	7.87	10.80	30.00	39.10
			Output Power HP (mechanical)	1.27	2.88	6.33	9.56	13.90	24.10
			Output Torque lb.in (mech.)	120	272	547	860	1300	2100
			Efficiency %	88	87	91	92	93	94
7.5	350.00	350.00	Input Power HP (mechanical)	1.33	2.94	4.99	7.66	11.60	17.60
			Input Power HP (thermal)	2.73	3.64	6.08	8.74	26.30	32.80
			Output Power HP (mechanical)	1.13	2.52	4.40	6.86	10.70	16.20
			Output Torque lb.in (mech.)	149	332	581	906	1390	2120
			Efficiency %	85	86	88	90	92	92
10.0	280.00	280.00	Input Power HP (mechanical)	1.22	2.94	5.08	6.88	9.81	15.70
			Input Power HP (thermal)	2.06	2.94	4.63	7.50	22.00	27.60
			Output Power HP (mechanical)	1.00	2.46	4.37	6.09	8.82	14.30
			Output Torque lb.in (mech.)	188	464	825	1060	1640	2480
			Efficiency %	82	84	86	89	90	91
12.5	233.33	233.33	Input Power HP (mechanical)	1.11	2.73	4.51	6.94	10.60	14.30
			Input Power HP (thermal)	1.72	2.50	4.14	5.94	17.40	25.00
			Output Power HP (mechanical)	0.86	2.22	3.80	5.96	9.38	12.90
			Output Torque lb.in (mech.)	194	499	855	1340	2110	2950
			Efficiency %	78	81	84	85	88	90
15.0	175.00	175.00	Input Power HP (mechanical)	1.01	2.63	3.55	6.11	9.45	14.30
			Input Power HP (thermal)	1.72	2.29	4.12	5.34	16.40	20.50
			Output Power HP (mechanical)	0.79	2.10	2.94	5.15	8.31	12.70
			Output Torque lb.in (mech.)	206	549	768	1390	2170	3320
			Efficiency %	78	79	83	84	88	89
20.0	140.00	140.00	Input Power HP (mechanical)	0.89	1.76	3.86	5.21	6.87	10.30
			Input Power HP (thermal)	1.15	2.20	2.62	3.75	13.90	17.40
			Output Power HP (mechanical)	0.61	1.34	2.97	4.14	5.84	8.86
			Output Torque lb.in (mech.)	219	471	1070	1490	2050	3110
			Efficiency %	69	76	74	77	85	86
25.0	116.67	116.67	Input Power HP (mechanical)	0.80	2.00	3.25	5.05	7.23	10.30
			Input Power HP (thermal)	1.06	1.54	2.38	3.36	9.44	11.70
			Output Power HP (mechanical)	0.53	1.42	2.42	3.89	5.84	8.42
			Output Torque lb.in (mech.)	237	638	1090	1750	2630	3790
			Efficiency %	66	69	72	74	81	82
30.0	87.50	87.50	Input Power HP (mechanical)	0.66	1.77	2.71	4.13	5.47	8.91
			Input Power HP (thermal)	1.00	1.42	2.27	3.06	8.92	11.10
			Output Power HP (mechanical)	0.42	1.20	1.94	3.06	4.30	7.17
			Output Torque lb.in (mech.)	225	649	1050	1650	2320	3870
			Efficiency %	63	66	70	71	79	80
40.0	70.00	70.00	Input Power HP (mechanical)	0.43	1.22	1.83	3.08	4.20	6.82
			Input Power HP (thermal)	0.82	1.29	2.09	2.72	7.71	9.63
			Output Power HP (mechanical)	0.22	0.76	1.22	2.14	3.13	5.24
			Output Torque lb.in (mech.)	161	545	878	1540	2250	3770
			Efficiency %	52	62	67	68	74	77
50.0	58.33	58.33	Input Power HP (mechanical)	0.31	0.81	1.36	2.14	3.29	5.06
			Input Power HP (thermal)	0.63	0.96	1.46	1.95	5.68	6.82
			Output Power HP (mechanical)	0.14	0.45	0.82	1.36	2.33	3.67
			Output Torque lb.in (mech.)	130	402	735	1220	2100	3300
			Efficiency %	47	55	60	63	71	72
60.0	50.00	50.00	Input Power HP (mechanical)	0.24	0.62	0.98	1.51	2.36	3.53
			Input Power HP (thermal)	0.53	0.76	1.26	1.69	4.56	5.65
			Output Power HP (mechanical)	0.09	0.29	0.53	0.88	1.53	2.38
			Output Torque lb.in (mech.)	100	313	575	949	1650	2570
			Efficiency %	39	46	54	58	65	67
70.0	50.00	50.00	Input Power HP (mechanical)	0.19	0.49	0.74	1.18	1.77	2.72
			Input Power HP (thermal)	0.43	0.64	1.02	1.30	3.47	4.29
			Output Power HP (mechanical)	0.06	0.21	0.36	0.61	1.03	1.68
			Output Torque lb.in (mech.)	80	258	454	774	1300	2120
			Efficiency %	34	42	49	52	58	62



RATINGS AT 3500 REV/MIN INPUT

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	46.67	Input Power HP (mechanical)	0.99	1.23	2.21	2.89	5.35
		Input Power HP (thermal)	1.45	2.40	3.37	4.29	6.82
		Output Power HP (mechanical)	0.64	0.85	1.50	2.14	4.18
		Output Torque lb.in (mech.)	881	1160	2120	2930	5240
		Efficiency %	65	69	68	74	78
100.	35.00	Input Power HP (mechanical)	0.60	1.34	1.96	2.40	3.73
		Input Power HP (thermal)	1.36	1.65	2.54	4.29	5.90
		Output Power HP (mechanical)	0.36	0.83	1.20	1.70	2.77
		Output Torque lb.in (mech.)	656	1560	2260	3130	4660
		Efficiency %	59	62	61	71	74
125.	28.00	Input Power HP (mechanical)	0.69	1.34	1.93	2.68	4.30
		Input Power HP (thermal)	1.01	1.50	2.26	3.52	4.29
		Output Power HP (mechanical)	0.37	0.79	1.13	1.78	3.00
		Output Torque lb.in (mech.)	881	1870	2670	4210	6480
		Efficiency %	54	59	59	66	70
150.	23.33	Input Power HP (mechanical)	0.59	0.80	1.43	2.03	3.16
		Input Power HP (thermal)	1.19	2.01	2.74	2.83	3.98
		Output Power HP (mechanical)	0.32	0.48	0.84	1.36	2.20
		Output Torque lb.in (mech.)	881	1310	2390	3720	6030
		Efficiency %	54	60	59	67	70
200.	17.50	Input Power HP (mechanical)	0.40	1.00	1.29	1.54	2.25
		Input Power HP (thermal)	1.14	1.36	2.00	2.83	3.66
		Output Power HP (mechanical)	0.19	0.54	0.68	0.96	1.45
		Output Torque lb.in (mech.)	711	2040	2560	3530	5360
		Efficiency %	48	54	52	62	65
225.	15.56	Input Power HP (mechanical)	0.47	0.66	1.20	1.68	2.54
		Input Power HP (thermal)	1.09	1.90	2.52	2.21	3.58
		Output Power HP (mechanical)	0.23	0.37	0.65	1.04	1.69
		Output Torque lb.in (mech.)	881	1390	2540	3950	6390
		Efficiency %	50	56	54	62	66
250.	14.00	Input Power HP (mechanical)	0.43	0.91	1.28	1.56	2.54
		Input Power HP (thermal)	0.83	1.22	1.80	2.45	2.73
		Output Power HP (mechanical)	0.19	0.46	0.64	0.89	1.53
		Output Torque lb.in (mech.)	881	2190	3020	4210	7210
		Efficiency %	43	51	50	57	60
300.	11.67	Input Power HP (mechanical)	0.43	0.61	0.99	1.38	2.21
		Input Power HP (thermal)	1.09	1.27	2.32	2.13	2.26
		Output Power HP (mechanical)	0.17	0.28	0.51	0.82	1.30
		Output Torque lb.in (mech.)	881	1470	2680	4170	6780
		Efficiency %	39	46	52	59	59
350.	10.00	Input Power HP (mechanical)	0.35	0.72	1.07	1.25	0.98
		Input Power HP (thermal)	0.76	1.12	1.67	2.21	1.80
		Output Power HP (mechanical)	0.14	0.34	0.48	0.65	0.42
		Output Torque lb.in (mech.)	881	2190	3150	4210	2530
		Efficiency %	38	47	45	52	43
375.	9.33	Input Power HP (mechanical)	0.20	0.26	0.51	0.65	1.96
		Input Power HP (thermal)	0.50	0.72	1.08	1.50	2.34
		Output Power HP (mechanical)	0.05	0.08	0.14	0.24	1.10
		Output Torque lb.in (mech.)	312	548	934	1570	7210
		Efficiency %	24	31	27	37	56
400.	8.75	Input Power HP (mechanical)	0.32	0.73	0.91	1.04	1.62
		Input Power HP (thermal)	1.07	1.26	1.70	2.13	2.26
		Output Power HP (mechanical)	0.11	0.30	0.41	0.56	0.86
		Output Torque lb.in (mech.)	755	2190	2870	3840	6030
		Efficiency %	33	42	45	54	53
450.	7.78	Input Power HP (mechanical)	0.32	0.58	0.97	1.11	1.69
		Input Power HP (thermal)	0.71	1.10	1.56	2.11	2.22
		Output Power HP (mechanical)	0.11	0.25	0.40	0.54	0.91
		Output Torque lb.in (mech.)	881	1980	3150	4210	7130
		Efficiency %	35	44	42	48	54
500.	7.00	Input Power HP (mechanical)	0.34	0.63	0.85	0.99	1.66
		Input Power HP (thermal)	0.79	1.14	1.52	2.07	2.26
		Output Power HP (mechanical)	0.10	0.24	0.36	0.48	0.80
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	29	39	42	48	48
600.	5.83	Input Power HP (mechanical)	0.31	0.54	0.77	0.88	1.47
		Input Power HP (thermal)	0.74	1.11	1.42	1.95	2.14
		Output Power HP (mechanical)	0.08	0.19	0.30	0.40	0.67
		Output Torque lb.in (mech.)	881	2080	3150	4210	7210
		Efficiency %	26	36	39	45	45
625.	5.60	Input Power HP (mechanical)	0.29	0.54	0.80	0.91	1.43
		Input Power HP (thermal)	0.76	1.10	1.55	1.49	2.05
		Output Power HP (mechanical)	0.08	0.20	0.28	0.37	0.64
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	27	36	35	41	45
700.	5.00	Input Power HP (mechanical)	0.24	0.23	0.51	0.51	0.77
		Input Power HP (thermal)	0.43	0.47	0.85	0.62	0.89
		Output Power HP (mechanical)	0.05	0.05	0.16	0.16	0.29
		Output Torque lb.in (mech.)	626	603	1890	2060	3550
		Efficiency %	20	20	30	31	38
750.	4.67	Input Power HP (mechanical)	0.27	0.47	0.73	0.82	1.27
		Input Power HP (thermal)	0.71	1.08	1.45	1.49	2.05
		Output Power HP (mechanical)	0.07	0.16	0.23	0.31	0.53
		Output Torque lb.in (mech.)	881	2110	3150	4210	7210
		Efficiency %	24	33	32	38	42
800.	4.38	Input Power HP (mechanical)	0.25	0.46	0.68	0.74	1.05
		Input Power HP (thermal)	0.82	0.89	1.61	1.25	1.83
		Output Power HP (mechanical)	0.06	0.14	0.22	0.29	0.46
		Output Torque lb.in (mech.)	795	1950	3150	4050	6480
		Efficiency %	22	30	32	39	44



RATINGS AT 3500 REV/MIN INPUT

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	3.89	Input Power HP (mechanical)	0.25	0.42	0.66	0.74	1.12
		Input Power HP (thermal)	0.70	1.06	1.42	1.37	1.98
		Output Power HP (mechanical)	0.05	0.13	0.19	0.26	0.45
		Output Torque lb.in (mech.)	881	2130	3150	4210	7210
		Efficiency %	22	31	30	35	40
1000.	3.50	Input Power HP (mechanical)	0.26	0.44	0.61	0.69	1.03
		Input Power HP (thermal)	0.76	0.89	1.45	1.25	1.83
		Output Power HP (mechanical)	0.05	0.12	0.18	0.23	0.40
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	28	29	34	39
1200.	2.92	Input Power HP (mechanical)	0.24	0.39	0.56	0.63	0.92
		Input Power HP (thermal)	0.72	0.89	1.37	1.25	1.83
		Output Power HP (mechanical)	0.04	0.10	0.15	0.20	0.33
		Output Torque lb.in (mech.)	881	2170	3150	4210	7210
		Efficiency %	17	25	26	31	36
1250.	2.80	Input Power HP (mechanical)	0.23	0.34	0.54	0.61	0.93
		Input Power HP (thermal)	0.63	0.70	1.27	0.93	1.28
		Output Power HP (mechanical)	0.04	0.08	0.14	0.19	0.32
		Output Torque lb.in (mech.)	881	1830	3150	4210	7210
		Efficiency %	17	24	26	31	35
1400.	2.50	Input Power HP (mechanical)	0.21	0.23	0.51	0.51	0.77
		Input Power HP (thermal)	0.43	0.47	0.85	0.62	0.89
		Output Power HP (mechanical)	0.03	0.04	0.13	0.14	0.26
		Output Torque lb.in (mech.)	822	934	3150	3520	6480
		Efficiency %	16	16	24	28	34
1500.	2.33	Input Power HP (mechanical)	0.21	0.34	0.50	0.55	0.83
		Input Power HP (thermal)	0.63	0.70	1.27	0.93	1.28
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.27
		Output Torque lb.in (mech.)	881	2130	3150	4210	7210
		Efficiency %	15	23	23	28	32
1600.	2.19	Input Power HP (mechanical)	0.21	0.27	0.44	0.54	0.78
		Input Power HP (thermal)	0.67	0.89	1.26	1.25	1.71
		Output Power HP (mechanical)	0.03	0.05	0.08	0.14	0.24
		Output Torque lb.in (mech.)	795	1460	2400	4040	6970
		Efficiency %	13	19	19	26	31
1750.	2.00	Input Power HP (mechanical)	0.21	0.23	0.47	0.51	0.76
		Input Power HP (thermal)	0.43	0.47	0.85	0.62	0.89
		Output Power HP (mechanical)	0.03	0.03	0.10	0.13	0.23
		Output Torque lb.in (mech.)	881	1100	3150	3970	7210
		Efficiency %	13	15	21	25	30
1800.	1.94	Input Power HP (mechanical)	0.21	0.28	0.49	0.53	0.75
		Input Power HP (thermal)	0.53	0.58	1.01	0.74	1.11
		Output Power HP (mechanical)	0.03	0.05	0.10	0.13	0.22
		Output Torque lb.in (mech.)	881	1610	3150	4210	7210
		Efficiency %	13	18	20	24	30
2000.	1.75	Input Power HP (mechanical)	0.19	0.24	0.39	0.48	0.71
		Input Power HP (thermal)	0.63	0.70	1.23	0.93	1.28
		Output Power HP (mechanical)	0.02	0.04	0.07	0.11	0.20
		Output Torque lb.in (mech.)	804	1470	2430	4090	7050
		Efficiency %	12	17	17	24	28
2100.	1.67	Input Power HP (mechanical)	0.20	0.23	0.44	0.48	0.69
		Input Power HP (thermal)	0.43	0.47	0.85	0.62	0.89
		Output Power HP (mechanical)	0.02	0.03	0.08	0.11	0.19
		Output Torque lb.in (mech.)	881	1290	3150	4210	7210
		Efficiency %	12	15	19	23	28
2400.	1.46	Input Power HP (mechanical)	0.19	0.24	0.39	0.47	0.65
		Input Power HP (thermal)	0.53	0.58	1.01	0.74	1.11
		Output Power HP (mechanical)	0.02	0.03	0.06	0.10	0.17
		Output Torque lb.in (mech.)	810	1490	2450	4120	7110
		Efficiency %	10	15	15	20	25
2500.	1.40	Input Power HP (mechanical)	0.16	0.19	0.32	0.38	0.53
		Input Power HP (thermal)	0.60	0.70	1.09	0.93	1.28
		Output Power HP (mechanical)	0.01	0.02	0.04	0.07	0.11
		Output Torque lb.in (mech.)	576	1050	1750	3050	4780
		Efficiency %	8	12	12	18	20
2800.	1.25	Input Power HP (mechanical)	0.18	0.23	0.36	0.42	0.60
		Input Power HP (thermal)	0.43	0.47	0.85	0.62	0.89
		Output Power HP (mechanical)	0.02	0.03	0.05	0.08	0.14
		Output Torque lb.in (mech.)	816	1500	2470	4150	7160
		Efficiency %	9	13	14	19	24
3000.	1.17	Input Power HP (mechanical)	0.16	0.19	0.33	0.38	0.49
		Input Power HP (thermal)	0.53	0.58	1.01	0.74	1.11
		Output Power HP (mechanical)	0.01	0.02	0.03	0.06	0.09
		Output Torque lb.in (mech.)	581	1060	1760	3080	4820
		Efficiency %	7	10	10	15	18
3500.	1.00	Input Power HP (mechanical)	0.16	0.19	0.30	0.34	0.46
		Input Power HP (thermal)	0.43	0.47	0.85	0.62	0.89
		Output Power HP (mechanical)	0.009	0.02	0.03	0.05	0.08
		Output Torque lb.in (mech.)	585	1070	1780	3100	4850
		Efficiency %	6	9	9	14	17
3600.	0.97	Input Power HP (mechanical)	0.15	0.17	0.30	0.33	0.41
		Input Power HP (thermal)	0.53	0.58	1.01	0.74	1.11
		Output Power HP (mechanical)	0.007	0.01	0.02	0.04	0.06
		Output Torque lb.in (mech.)	443	814	1340	2330	3630
		Efficiency %	4	7	7	11	14
4200.	0.83	Input Power HP (mechanical)	0.15	0.17	0.27	0.30	0.39
		Input Power HP (thermal)	0.43	0.47	0.85	0.62	0.89
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	448	822	1360	2360	3670
		Efficiency %	4	7	7	10	13



**RATINGS AT
2400 REV/MIN INPUT**

9608

SINGLE REDUCTION	NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
				A0280	A0410	A0510	A0610	A0730	A0860
5.0	480.00		Input Power HP (mechanical)	1.18	2.67	5.71	8.56	12.30	21.20
			Input Power HP (thermal)	2.87	4.00	6.77	9.42	23.70	30.20
			Output Power HP (mechanical)	1.04	2.37	5.20	7.85	11.40	19.90
			Output Torque lb.in (mech.)	143	326	655	1030	1560	2530
			Efficiency %	88	89	91	92	93	94
7.5	320.00		Input Power HP (mechanical)	1.08	2.38	4.07	6.25	9.48	14.40
			Input Power HP (thermal)	2.29	3.30	5.38	7.79	20.60	25.40
			Output Power HP (mechanical)	0.92	2.05	3.60	5.61	8.72	13.30
			Output Torque lb.in (mech.)	177	395	693	1080	1660	2540
			Efficiency %	85	86	88	90	92	93
10.0	240.00		Input Power HP (mechanical)	0.99	2.36	4.12	5.60	7.93	12.70
			Input Power HP (thermal)	1.75	2.65	4.13	6.69	17.00	21.30
			Output Power HP (mechanical)	0.80	1.98	3.54	4.93	7.19	11.70
			Output Torque lb.in (mech.)	221	546	977	1250	1950	2960
			Efficiency %	81	84	86	88	91	92
12.5	192.00		Input Power HP (mechanical)	0.89	2.20	3.65	5.31	8.28	11.40
			Input Power HP (thermal)	1.47	2.27	3.68	5.33	13.60	19.10
			Output Power HP (mechanical)	0.70	1.79	3.08	4.54	7.38	10.30
			Output Torque lb.in (mech.)	229	588	1010	1490	2420	3420
			Efficiency %	78	81	84	86	89	90
15.0	160.00		Input Power HP (mechanical)	0.82	2.11	2.70	4.71	7.19	11.50
			Input Power HP (thermal)	1.45	2.07	3.61	4.77	12.80	15.80
			Output Power HP (mechanical)	0.63	1.69	2.24	3.96	6.33	10.20
			Output Torque lb.in (mech.)	241	645	853	1560	2410	3900
			Efficiency %	77	80	83	84	88	89
20.0	120.00		Input Power HP (mechanical)	0.71	1.33	3.11	4.01	5.22	7.82
			Input Power HP (thermal)	0.98	1.95	2.36	3.41	10.80	13.30
			Output Power HP (mechanical)	0.49	1.02	2.38	3.16	4.47	6.78
			Output Torque lb.in (mech.)	255	524	1250	1660	2290	3470
			Efficiency %	68	77	75	78	86	87
25.0	96.00		Input Power HP (mechanical)	0.64	1.59	2.60	3.90	5.75	8.20
			Input Power HP (thermal)	0.91	1.39	2.12	3.04	7.48	9.17
			Output Power HP (mechanical)	0.42	1.13	1.92	2.97	4.66	6.74
			Output Torque lb.in (mech.)	274	739	1260	1950	3060	4420
			Efficiency %	65	70	73	75	81	82
30.0	80.00		Input Power HP (mechanical)	0.53	1.40	2.15	3.31	4.16	6.80
			Input Power HP (thermal)	0.85	1.27	2.00	2.75	6.98	8.61
			Output Power HP (mechanical)	0.33	0.95	1.54	2.43	3.28	5.49
			Output Torque lb.in (mech.)	259	750	1210	1910	2580	4320
			Efficiency %	62	67	71	72	79	81
40.0	60.00		Input Power HP (mechanical)	0.32	0.90	1.40	2.43	3.19	5.39
			Input Power HP (thermal)	0.69	1.14	1.82	2.41	5.99	7.40
			Output Power HP (mechanical)	0.16	0.55	0.93	1.68	2.39	4.15
			Output Torque lb.in (mech.)	172	580	977	1760	2510	4360
			Efficiency %	52	62	66	69	75	77
50.0	48.00		Input Power HP (mechanical)	0.22	0.58	0.98	1.56	2.40	3.70
			Input Power HP (thermal)	0.54	0.85	1.29	1.76	4.44	5.26
			Output Power HP (mechanical)	0.10	0.33	0.59	0.98	1.72	2.70
			Output Torque lb.in (mech.)	137	426	779	1290	2260	3540
			Efficiency %	47	56	60	63	72	73
60.0	40.00		Input Power HP (mechanical)	0.17	0.44	0.70	1.09	1.68	2.53
			Input Power HP (thermal)	0.45	0.69	1.11	1.52	3.57	4.36
			Output Power HP (mechanical)	0.07	0.21	0.39	0.64	1.10	1.72
			Output Torque lb.in (mech.)	105	331	607	1000	1740	2710
			Efficiency %	40	48	55	58	66	68
70.0	34.29		Input Power HP (mechanical)	0.13	0.34	0.52	0.84	1.24	1.93
			Input Power HP (thermal)	0.37	0.58	0.90	1.18	2.74	3.34
			Output Power HP (mechanical)	0.05	0.15	0.26	0.44	0.75	1.21
			Output Torque lb.in (mech.)	85	272	478	816	1370	2230
			Efficiency %	35	44	50	53	60	63



RATINGS AT 2400 REV/MIN INPUT

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	32.00	Input Power HP (mechanical)	0.69	0.92	1.63	2.34	4.00
		Input Power HP (thermal)	1.24	2.08	2.92	3.87	5.21
		Output Power HP (mechanical)	0.44	0.62	1.10	1.73	3.08
		Output Torque lb.in (mech.)	881	1240	2280	3460	5630
		Efficiency %	64	68	68	74	77
100.	24.00	Input Power HP (mechanical)	0.43	1.09	1.45	1.77	2.78
		Input Power HP (thermal)	1.18	1.44	2.10	3.72	4.41
		Output Power HP (mechanical)	0.26	0.66	0.88	1.25	2.04
		Output Torque lb.in (mech.)	687	1820	2430	3350	5010
		Efficiency %	59	61	61	70	73
125.	19.20	Input Power HP (mechanical)	0.49	1.08	1.44	1.88	3.23
		Input Power HP (thermal)	0.84	1.28	1.86	2.72	3.22
		Output Power HP (mechanical)	0.26	0.62	0.83	1.22	2.22
		Output Torque lb.in (mech.)	881	2150	2870	4210	6980
		Efficiency %	53	58	58	65	68
150.	16.00	Input Power HP (mechanical)	0.41	0.59	1.04	1.50	2.34
		Input Power HP (thermal)	1.02	1.81	2.34	2.57	3.43
		Output Power HP (mechanical)	0.22	0.35	0.62	1.00	1.62
		Output Torque lb.in (mech.)	881	1400	2570	3990	6460
		Efficiency %	54	59	60	67	69
200.	12.00	Input Power HP (mechanical)	0.29	0.75	0.95	1.12	1.66
		Input Power HP (thermal)	0.99	1.17	1.70	2.57	2.94
		Output Power HP (mechanical)	0.14	0.40	0.50	0.70	1.07
		Output Torque lb.in (mech.)	738	2190	2750	3760	5750
		Efficiency %	48	53	53	62	64
225.	10.67	Input Power HP (mechanical)	0.33	0.49	0.87	1.23	1.88
		Input Power HP (thermal)	0.95	1.53	2.20	2.01	3.06
		Output Power HP (mechanical)	0.16	0.27	0.48	0.76	1.24
		Output Torque lb.in (mech.)	881	1480	2720	4210	6850
		Efficiency %	49	55	55	62	66
250.	9.60	Input Power HP (mechanical)	0.30	0.64	0.92	1.09	1.77
		Input Power HP (thermal)	0.71	1.06	1.51	2.07	2.18
		Output Power HP (mechanical)	0.13	0.32	0.46	0.61	1.05
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	42	49	50	56	59
300.	8.00	Input Power HP (mechanical)	0.30	0.45	0.71	0.96	1.63
		Input Power HP (thermal)	0.98	1.01	2.03	1.89	2.07
		Output Power HP (mechanical)	0.12	0.21	0.37	0.57	0.95
		Output Torque lb.in (mech.)	881	1560	2850	4210	7210
		Efficiency %	39	46	52	59	58
350.	6.86	Input Power HP (mechanical)	0.24	0.51	0.74	0.87	0.68
		Input Power HP (thermal)	0.67	0.99	1.42	1.97	1.34
		Output Power HP (mechanical)	0.09	0.23	0.33	0.44	0.30
		Output Torque lb.in (mech.)	881	2190	3150	4210	2610
		Efficiency %	38	45	45	51	44
375.	6.40	Input Power HP (mechanical)	0.13	0.18	0.34	0.44	1.36
		Input Power HP (thermal)	0.42	0.63	0.91	1.16	1.96
		Output Power HP (mechanical)	0.03	0.06	0.10	0.17	0.76
		Output Torque lb.in (mech.)	321	564	963	1620	7210
		Efficiency %	25	32	29	38	56
400.	6.00	Input Power HP (mechanical)	0.23	0.51	0.65	0.73	1.17
		Input Power HP (thermal)	0.95	1.01	1.47	1.89	2.07
		Output Power HP (mechanical)	0.08	0.21	0.30	0.40	0.62
		Output Torque lb.in (mech.)	777	2190	3060	3950	6340
		Efficiency %	34	41	46	54	53
450.	5.33	Input Power HP (mechanical)	0.22	0.43	0.66	0.76	1.18
		Input Power HP (thermal)	0.62	0.97	1.33	1.86	1.86
		Output Power HP (mechanical)	0.08	0.18	0.28	0.37	0.63
		Output Torque lb.in (mech.)	881	2080	3150	4210	7210
		Efficiency %	35	43	42	48	54
500.	4.80	Input Power HP (mechanical)	0.23	0.45	0.58	0.68	1.15
		Input Power HP (thermal)	0.69	1.01	1.31	1.86	1.96
		Output Power HP (mechanical)	0.07	0.17	0.25	0.33	0.55
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	29	37	42	48	48
600.	4.00	Input Power HP (mechanical)	0.21	0.39	0.53	0.60	1.01
		Input Power HP (thermal)	0.65	1.00	1.23	1.76	1.86
		Output Power HP (mechanical)	0.06	0.14	0.21	0.27	0.46
		Output Torque lb.in (mech.)	881	2130	3150	4210	7210
		Efficiency %	27	35	39	45	45
625.	3.84	Input Power HP (mechanical)	0.20	0.38	0.54	0.63	0.99
		Input Power HP (thermal)	0.67	0.92	1.34	1.35	1.86
		Output Power HP (mechanical)	0.05	0.13	0.19	0.26	0.44
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	27	35	35	41	44
700.	3.43	Input Power HP (mechanical)	0.17	0.16	0.35	0.35	0.54
		Input Power HP (thermal)	0.37	0.40	0.75	0.56	0.80
		Output Power HP (mechanical)	0.03	0.03	0.11	0.11	0.21
		Output Torque lb.in (mech.)	654	630	1970	2150	3710
		Efficiency %	20	20	31	33	39
750.	3.20	Input Power HP (mechanical)	0.19	0.34	0.49	0.56	0.87
		Input Power HP (thermal)	0.63	0.92	1.26	1.35	1.80
		Output Power HP (mechanical)	0.04	0.11	0.16	0.21	0.37
		Output Torque lb.in (mech.)	881	2160	3150	4210	7210
		Efficiency %	24	33	32	38	42
800.	3.00	Input Power HP (mechanical)	0.18	0.33	0.46	0.51	0.74
		Input Power HP (thermal)	0.68	0.70	1.40	1.10	1.61
		Output Power HP (mechanical)	0.04	0.10	0.15	0.20	0.32
		Output Torque lb.in (mech.)	814	2040	3150	4150	6630
		Efficiency %	23	29	32	40	44



RATINGS AT 2400 REV/MIN INPUT

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	2.67	Input Power HP (mechanical)	0.17	0.30	0.45	0.50	0.77
		Input Power HP (thermal)	0.62	0.86	1.24	1.23	1.75
		Output Power HP (mechanical)	0.04	0.09	0.13	0.18	0.31
		Output Torque lb.in (mech.)	881	2180	3150	4210	7210
		Efficiency %	22	30	30	35	40
1000.	2.40	Input Power HP (mechanical)	0.18	0.31	0.41	0.47	0.71
		Input Power HP (thermal)	0.68	0.70	1.28	1.10	1.61
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.28
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	27	29	34	39
1200.	2.00	Input Power HP (mechanical)	0.16	0.28	0.38	0.42	0.63
		Input Power HP (thermal)	0.65	0.70	1.21	1.10	1.61
		Output Power HP (mechanical)	0.03	0.07	0.10	0.13	0.23
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	25	26	32	36
1250.	1.92	Input Power HP (mechanical)	0.15	0.24	0.36	0.41	0.63
		Input Power HP (thermal)	0.54	0.59	1.11	0.83	1.14
		Output Power HP (mechanical)	0.03	0.06	0.10	0.13	0.22
		Output Torque lb.in (mech.)	881	1900	3150	4210	7210
		Efficiency %	18	24	27	31	35
1400.	1.71	Input Power HP (mechanical)	0.15	0.16	0.35	0.35	0.54
		Input Power HP (thermal)	0.37	0.40	0.75	0.56	0.80
		Output Power HP (mechanical)	0.02	0.03	0.09	0.10	0.19
		Output Torque lb.in (mech.)	838	970	3150	3660	6740
		Efficiency %	16	16	25	29	35
1500.	1.60	Input Power HP (mechanical)	0.14	0.24	0.33	0.37	0.56
		Input Power HP (thermal)	0.54	0.59	1.11	0.83	1.14
		Output Power HP (mechanical)	0.02	0.06	0.08	0.11	0.18
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	16	23	24	29	32
1600.	1.50	Input Power HP (mechanical)	0.14	0.19	0.29	0.36	0.53
		Input Power HP (thermal)	0.61	0.70	1.11	1.10	1.55
		Output Power HP (mechanical)	0.02	0.04	0.06	0.10	0.17
		Output Torque lb.in (mech.)	809	1490	2450	4120	7100
		Efficiency %	14	19	20	27	32
1750.	1.37	Input Power HP (mechanical)	0.14	0.16	0.31	0.35	0.52
		Input Power HP (thermal)	0.37	0.40	0.75	0.56	0.80
		Output Power HP (mechanical)	0.02	0.02	0.07	0.09	0.16
		Output Torque lb.in (mech.)	881	1150	3150	4110	7210
		Efficiency %	13	15	22	26	30
1800.	1.33	Input Power HP (mechanical)	0.14	0.20	0.32	0.36	0.51
		Input Power HP (thermal)	0.45	0.50	0.89	0.67	0.99
		Output Power HP (mechanical)	0.02	0.04	0.07	0.09	0.15
		Output Torque lb.in (mech.)	881	1670	3150	4210	7210
		Efficiency %	13	18	21	25	30
2000.	1.20	Input Power HP (mechanical)	0.13	0.17	0.26	0.32	0.48
		Input Power HP (thermal)	0.54	0.59	1.09	0.83	1.14
		Output Power HP (mechanical)	0.02	0.03	0.05	0.08	0.14
		Output Torque lb.in (mech.)	817	1500	2470	4160	7170
		Efficiency %	12	17	18	25	28
2100.	1.14	Input Power HP (mechanical)	0.14	0.16	0.29	0.32	0.46
		Input Power HP (thermal)	0.37	0.40	0.75	0.56	0.80
		Output Power HP (mechanical)	0.02	0.02	0.06	0.08	0.13
		Output Torque lb.in (mech.)	881	1330	3150	4210	7210
		Efficiency %	12	15	20	24	28
2400.	1.00	Input Power HP (mechanical)	0.13	0.16	0.26	0.31	0.44
		Input Power HP (thermal)	0.45	0.50	0.89	0.67	0.99
		Output Power HP (mechanical)	0.01	0.02	0.04	0.07	0.11
		Output Torque lb.in (mech.)	824	1510	2490	4190	7210
		Efficiency %	10	15	15	21	26
2500.	0.96	Input Power HP (mechanical)	0.11	0.13	0.21	0.25	0.35
		Input Power HP (thermal)	0.54	0.59	0.97	0.83	1.14
		Output Power HP (mechanical)	0.009	0.02	0.03	0.05	0.07
		Output Torque lb.in (mech.)	586	1070	1780	3110	4870
		Efficiency %	8	12	13	19	22
2800.	0.86	Input Power HP (mechanical)	0.12	0.16	0.23	0.28	0.40
		Input Power HP (thermal)	0.37	0.40	0.75	0.56	0.80
		Output Power HP (mechanical)	0.01	0.02	0.03	0.06	0.10
		Output Torque lb.in (mech.)	833	1530	2520	4210	7210
		Efficiency %	9	13	15	20	24
3000.	0.80	Input Power HP (mechanical)	0.11	0.13	0.21	0.25	0.32
		Input Power HP (thermal)	0.45	0.50	0.89	0.67	0.99
		Output Power HP (mechanical)	0.007	0.01	0.02	0.04	0.06
		Output Torque lb.in (mech.)	594	1090	1800	3150	4930
		Efficiency %	7	10	11	16	20
3500.	0.69	Input Power HP (mechanical)	0.11	0.13	0.19	0.22	0.30
		Input Power HP (thermal)	0.37	0.40	0.75	0.56	0.80
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	600	1100	1820	3180	4980
		Efficiency %	6	9	10	15	18
3600.	0.67	Input Power HP (mechanical)	0.10	0.12	0.18	0.21	0.26
		Input Power HP (thermal)	0.45	0.50	0.89	0.67	0.99
		Output Power HP (mechanical)	0.005	0.009	0.01	0.03	0.04
		Output Torque lb.in (mech.)	455	835	1380	2390	3730
		Efficiency %	5	8	8	12	15
4200.	0.57	Input Power HP (mechanical)	0.10	0.11	0.17	0.19	0.25
		Input Power HP (thermal)	0.37	0.40	0.75	0.56	0.80
		Output Power HP (mechanical)	0.004	0.008	0.01	0.02	0.03
		Output Torque lb.in (mech.)	459	844	1390	2420	3770
		Efficiency %	4	7	8	11	14



**RATINGS AT
1750 REV/MIN INPUT**

9608

SINGLE REDUCTION	NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
				A0280	A0410	A0510	A0610	A0730	A0860
5.0	350.00	233.33	Input Power HP (mechanical)	1.00	2.25	4.84	7.26	10.40	18.00
			Input Power HP (thermal)	2.44	3.55	5.87	8.23	18.90	23.80
			Output Power HP (mechanical)	0.87	1.99	4.39	6.61	9.67	16.90
			Output Torque lb.in (mech.)	165	376	759	1190	1810	2940
			Efficiency %	88	88	91	91	93	94
7.5	175.00	140.00	Input Power HP (mechanical)	0.91	2.00	3.42	5.27	7.97	12.10
			Input Power HP (thermal)	1.96	2.95	4.74	6.91	16.40	20.10
			Output Power HP (mechanical)	0.77	1.72	3.02	4.73	7.36	11.20
			Output Torque lb.in (mech.)	203	454	797	1250	1920	2930
			Efficiency %	85	86	88	90	92	93
10.0	116.67	87.50	Input Power HP (mechanical)	0.83	1.88	3.45	4.69	6.39	10.70
			Input Power HP (thermal)	1.50	2.37	3.66	5.95	13.50	16.80
			Output Power HP (mechanical)	0.67	1.57	2.94	4.11	5.78	9.77
			Output Torque lb.in (mech.)	252	594	1110	1430	2150	3400
			Efficiency %	81	84	85	88	90	91
12.5	70.00	58.33	Input Power HP (mechanical)	0.74	1.83	3.05	4.24	6.60	9.04
			Input Power HP (thermal)	1.27	2.04	3.26	4.76	10.90	15.00
			Output Power HP (mechanical)	0.58	1.48	2.56	3.60	5.87	8.18
			Output Torque lb.in (mech.)	259	668	1150	1620	2640	3730
			Efficiency %	77	81	84	85	89	90
15.0	43.75	29.17	Input Power HP (mechanical)	0.66	1.76	2.16	3.77	5.73	9.16
			Input Power HP (thermal)	1.25	1.86	3.18	4.25	10.20	12.50
			Output Power HP (mechanical)	0.51	1.40	1.78	3.15	5.04	8.14
			Output Torque lb.in (mech.)	264	730	927	1700	2630	4250
			Efficiency %	77	79	82	84	88	89
20.0	25.0	25.0	Input Power HP (mechanical)	0.59	1.06	2.59	3.23	4.16	6.24
			Input Power HP (thermal)	0.86	1.73	2.11	3.08	8.60	10.50
			Output Power HP (mechanical)	0.40	0.81	1.96	2.50	3.55	5.38
			Output Torque lb.in (mech.)	287	566	1410	1800	2490	3780
			Efficiency %	67	76	75	77	85	86
30.0	30.0	30.0	Input Power HP (mechanical)	0.53	1.32	2.17	3.15	4.74	6.80
			Input Power HP (thermal)	0.79	1.25	1.90	2.74	6.04	7.32
			Output Power HP (mechanical)	0.34	0.92	1.58	2.36	3.82	5.54
			Output Torque lb.in (mech.)	308	831	1420	2120	3440	4990
			Efficiency %	65	70	72	75	81	82
40.0	50.0	50.0	Input Power HP (mechanical)	0.42	1.15	1.73	2.76	3.33	5.45
			Input Power HP (thermal)	0.73	1.14	1.78	2.47	5.61	6.84
			Output Power HP (mechanical)	0.26	0.77	1.21	1.99	2.60	4.35
			Output Torque lb.in (mech.)	281	831	1310	2150	2810	4700
			Efficiency %	61	67	70	72	78	80
50.0	60.0	60.0	Input Power HP (mechanical)	0.25	0.69	1.12	1.90	2.55	4.35
			Input Power HP (thermal)	0.60	1.02	1.62	2.17	4.81	5.87
			Output Power HP (mechanical)	0.13	0.42	0.74	1.28	1.90	3.33
			Output Torque lb.in (mech.)	180	608	1060	1840	2740	4790
			Efficiency %	51	61	66	67	75	76
60.0	70.0	70.0	Input Power HP (mechanical)	0.17	0.45	0.76	1.21	1.85	2.85
			Input Power HP (thermal)	0.47	0.77	1.16	1.59	3.58	4.19
			Output Power HP (mechanical)	0.08	0.25	0.45	0.75	1.31	2.05
			Output Torque lb.in (mech.)	144	445	814	1350	2360	3690
			Efficiency %	47	55	60	62	71	72
70.0	70.0	70.0	Input Power HP (mechanical)	0.13	0.33	0.53	0.84	1.28	1.94
			Input Power HP (thermal)	0.40	0.62	1.00	1.38	2.90	3.48
			Output Power HP (mechanical)	0.05	0.16	0.29	0.49	0.84	1.31
			Output Torque lb.in (mech.)	110	344	633	1050	1810	2830
			Efficiency %	40	48	55	58	65	68
			Input Power HP (mechanical)	0.10	0.25	0.39	0.64	0.94	1.47
			Input Power HP (thermal)	0.33	0.53	0.81	1.08	2.24	2.69
			Output Power HP (mechanical)	0.03	0.11	0.20	0.34	0.57	0.92
			Output Torque lb.in (mech.)	88	283	497	848	1430	2320
			Efficiency %	35	44	50	53	60	63



**RATINGS AT
1750 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	23.33	Input Power HP (mechanical)	0.51	0.71	1.27	1.86	3.12
		Input Power HP (thermal)	1.09	1.88	2.56	3.44	4.24
		Output Power HP (mechanical)	0.32	0.48	0.84	1.36	2.37
		Output Torque lb.in (mech.)	881	1310	2390	3720	5940
		Efficiency %	63	67	66	73	76
100.	17.50	Input Power HP (mechanical)	0.33	0.91	1.13	1.38	2.17
		Input Power HP (thermal)	1.05	1.26	1.83	3.11	3.60
		Output Power HP (mechanical)	0.19	0.54	0.68	0.96	1.57
		Output Torque lb.in (mech.)	711	2040	2560	3530	5290
		Efficiency %	58	59	60	69	72
125.	14.00	Input Power HP (mechanical)	0.36	0.82	1.12	1.40	2.49
		Input Power HP (thermal)	0.74	1.12	1.63	2.28	2.63
		Output Power HP (mechanical)	0.19	0.46	0.64	0.89	1.67
		Output Torque lb.in (mech.)	881	2190	3020	4210	7210
		Efficiency %	52	56	57	64	67
150.	11.67	Input Power HP (mechanical)	0.30	0.46	0.81	1.16	1.83
		Input Power HP (thermal)	0.92	1.55	2.10	2.30	3.01
		Output Power HP (mechanical)	0.16	0.27	0.48	0.77	1.25
		Output Torque lb.in (mech.)	881	1480	2720	4210	6840
		Efficiency %	53	58	59	66	68
200.	8.75	Input Power HP (mechanical)	0.21	0.56	0.74	0.85	1.29
		Input Power HP (thermal)	0.89	1.06	1.51	2.30	2.58
		Output Power HP (mechanical)	0.10	0.29	0.39	0.52	0.83
		Output Torque lb.in (mech.)	758	2190	2910	3860	6090
		Efficiency %	48	51	52	62	64
225.	7.78	Input Power HP (mechanical)	0.24	0.38	0.67	0.91	1.46
		Input Power HP (thermal)	0.87	1.26	1.99	1.80	2.77
		Output Power HP (mechanical)	0.12	0.21	0.37	0.56	0.95
		Output Torque lb.in (mech.)	881	1560	2860	4210	7200
		Efficiency %	48	54	54	61	65
250.	7.00	Input Power HP (mechanical)	0.22	0.48	0.68	0.81	1.32
		Input Power HP (thermal)	0.64	0.96	1.35	1.88	1.91
		Output Power HP (mechanical)	0.09	0.23	0.33	0.45	0.76
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	42	48	49	55	58
300.	5.83	Input Power HP (mechanical)	0.22	0.35	0.55	0.71	1.21
		Input Power HP (thermal)	0.80	0.84	1.85	1.68	1.87
		Output Power HP (mechanical)	0.08	0.16	0.28	0.41	0.69
		Output Torque lb.in (mech.)	881	1640	2990	4210	7210
		Efficiency %	39	45	52	58	57
350.	5.00	Input Power HP (mechanical)	0.18	0.38	0.55	0.64	0.51
		Input Power HP (thermal)	0.60	0.91	1.28	1.80	1.10
		Output Power HP (mechanical)	0.07	0.17	0.24	0.32	0.22
		Output Torque lb.in (mech.)	881	2190	3150	4210	2680
		Efficiency %	38	44	44	50	44
375.	4.67	Input Power HP (mechanical)	0.10	0.14	0.25	0.33	1.01
		Input Power HP (thermal)	0.38	0.57	0.83	0.97	1.77
		Output Power HP (mechanical)	0.02	0.04	0.07	0.13	0.55
		Output Torque lb.in (mech.)	328	577	985	1660	7210
		Efficiency %	26	32	30	38	55
400.	4.38	Input Power HP (mechanical)	0.17	0.39	0.50	0.55	0.88
		Input Power HP (thermal)	0.80	0.84	1.33	1.68	1.87
		Output Power HP (mechanical)	0.06	0.15	0.22	0.30	0.46
		Output Torque lb.in (mech.)	795	2190	3150	4040	6480
		Efficiency %	34	39	45	54	52
450.	3.89	Input Power HP (mechanical)	0.16	0.32	0.49	0.56	0.88
		Input Power HP (thermal)	0.56	0.89	1.19	1.72	1.68
		Output Power HP (mechanical)	0.06	0.14	0.20	0.27	0.46
		Output Torque lb.in (mech.)	881	2130	3150	4210	7210
		Efficiency %	35	42	41	48	52
500.	3.50	Input Power HP (mechanical)	0.17	0.33	0.43	0.51	0.86
		Input Power HP (thermal)	0.63	0.84	1.19	1.68	1.78
		Output Power HP (mechanical)	0.05	0.12	0.18	0.24	0.40
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	29	36	42	47	47
600.	2.92	Input Power HP (mechanical)	0.15	0.29	0.39	0.45	0.75
		Input Power HP (thermal)	0.59	0.84	1.11	1.63	1.69
		Output Power HP (mechanical)	0.04	0.10	0.15	0.20	0.33
		Output Torque lb.in (mech.)	881	2170	3150	4210	7210
		Efficiency %	26	34	39	45	44
625.	2.80	Input Power HP (mechanical)	0.15	0.29	0.40	0.47	0.74
		Input Power HP (thermal)	0.61	0.77	1.22	1.21	1.68
		Output Power HP (mechanical)	0.04	0.10	0.14	0.19	0.32
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	27	34	35	40	43
700.	2.50	Input Power HP (mechanical)	0.12	0.12	0.26	0.26	0.40
		Input Power HP (thermal)	0.33	0.36	0.68	0.51	0.72
		Output Power HP (mechanical)	0.03	0.02	0.08	0.09	0.16
		Output Torque lb.in (mech.)	675	651	2040	2220	3830
		Efficiency %	21	20	32	33	39
750.	2.33	Input Power HP (mechanical)	0.14	0.25	0.36	0.41	0.65
		Input Power HP (thermal)	0.58	0.77	1.15	1.21	1.67
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.27
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	24	32	32	38	41
800.	2.19	Input Power HP (mechanical)	0.13	0.26	0.34	0.38	0.55
		Input Power HP (thermal)	0.56	0.59	1.17	0.99	1.44
		Output Power HP (mechanical)	0.03	0.07	0.11	0.15	0.24
		Output Torque lb.in (mech.)	828	2110	3150	4210	6750
		Efficiency %	23	29	32	39	44



**RATINGS AT
1750 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	1.94	Input Power HP (mechanical)	0.12	0.23	0.33	0.37	0.57
		Input Power HP (thermal)	0.57	0.71	1.13	1.11	1.58
		Output Power HP (mechanical)	0.03	0.07	0.10	0.13	0.22
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	22	30	30	35	39
1000.	1.75	Input Power HP (mechanical)	0.13	0.23	0.30	0.35	0.53
		Input Power HP (thermal)	0.56	0.59	1.17	0.99	1.44
		Output Power HP (mechanical)	0.02	0.06	0.09	0.12	0.20
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	26	29	34	38
1200.	1.46	Input Power HP (mechanical)	0.12	0.21	0.28	0.31	0.46
		Input Power HP (thermal)	0.56	0.59	1.11	0.99	1.44
		Output Power HP (mechanical)	0.02	0.05	0.07	0.10	0.17
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	24	26	31	36
1250.	1.40	Input Power HP (mechanical)	0.11	0.19	0.26	0.30	0.47
		Input Power HP (thermal)	0.47	0.50	0.99	0.75	1.03
		Output Power HP (mechanical)	0.02	0.04	0.07	0.09	0.16
		Output Torque lb.in (mech.)	881	1960	3150	4210	7210
		Efficiency %	17	24	27	31	34
1400.	1.25	Input Power HP (mechanical)	0.11	0.12	0.25	0.26	0.40
		Input Power HP (thermal)	0.33	0.36	0.68	0.51	0.72
		Output Power HP (mechanical)	0.02	0.02	0.06	0.08	0.14
		Output Torque lb.in (mech.)	850	997	3150	3770	6930
		Efficiency %	16	16	25	30	35
1500.	1.17	Input Power HP (mechanical)	0.10	0.18	0.24	0.27	0.42
		Input Power HP (thermal)	0.47	0.50	0.99	0.75	1.03
		Output Power HP (mechanical)	0.02	0.04	0.06	0.08	0.13
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	16	23	24	29	32
1600.	1.09	Input Power HP (mechanical)	0.10	0.14	0.21	0.27	0.39
		Input Power HP (thermal)	0.56	0.59	1.03	0.99	1.44
		Output Power HP (mechanical)	0.01	0.03	0.04	0.07	0.13
		Output Torque lb.in (mech.)	821	1510	2480	4170	7200
		Efficiency %	14	19	21	27	32
1750.	1.00	Input Power HP (mechanical)	0.11	0.12	0.23	0.26	0.38
		Input Power HP (thermal)	0.33	0.36	0.68	0.51	0.72
		Output Power HP (mechanical)	0.01	0.02	0.05	0.07	0.11
		Output Torque lb.in (mech.)	881	1180	3150	4210	7210
		Efficiency %	13	15	22	26	30
1800.	0.97	Input Power HP (mechanical)	0.10	0.15	0.24	0.26	0.37
		Input Power HP (thermal)	0.40	0.43	0.80	0.60	0.89
		Output Power HP (mechanical)	0.01	0.03	0.05	0.06	0.11
		Output Torque lb.in (mech.)	881	1720	3150	4210	7210
		Efficiency %	13	18	21	25	30
2000.	0.88	Input Power HP (mechanical)	0.09	0.12	0.19	0.23	0.35
		Input Power HP (thermal)	0.47	0.50	0.99	0.75	1.03
		Output Power HP (mechanical)	0.01	0.02	0.04	0.06	0.10
		Output Torque lb.in (mech.)	831	1530	2520	4210	7210
		Efficiency %	13	17	19	25	28
2100.	0.83	Input Power HP (mechanical)	0.10	0.12	0.21	0.23	0.34
		Input Power HP (thermal)	0.33	0.36	0.68	0.51	0.72
		Output Power HP (mechanical)	0.01	0.02	0.04	0.06	0.10
		Output Torque lb.in (mech.)	881	1370	3150	4210	7210
		Efficiency %	12	15	20	24	28
2400.	0.73	Input Power HP (mechanical)	0.09	0.12	0.19	0.23	0.32
		Input Power HP (thermal)	0.40	0.43	0.80	0.60	0.89
		Output Power HP (mechanical)	0.010	0.02	0.03	0.05	0.08
		Output Torque lb.in (mech.)	842	1550	2550	4210	7210
		Efficiency %	11	15	16	21	26
2500.	0.70	Input Power HP (mechanical)	0.08	0.10	0.15	0.18	0.25
		Input Power HP (thermal)	0.47	0.50	0.90	0.75	1.03
		Output Power HP (mechanical)	0.007	0.01	0.02	0.04	0.06
		Output Torque lb.in (mech.)	599	1100	1820	3180	4970
		Efficiency %	9	13	14	20	22
2800.	0.63	Input Power HP (mechanical)	0.09	0.12	0.17	0.20	0.29
		Input Power HP (thermal)	0.33	0.36	0.68	0.51	0.72
		Output Power HP (mechanical)	0.008	0.02	0.03	0.04	0.07
		Output Torque lb.in (mech.)	851	1560	2570	4210	7210
		Efficiency %	9	13	15	20	24
3000.	0.58	Input Power HP (mechanical)	0.08	0.10	0.15	0.18	0.23
		Input Power HP (thermal)	0.40	0.43	0.80	0.60	0.89
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	607	1110	1840	3210	5030
		Efficiency %	7	11	12	17	20
3500.	0.50	Input Power HP (mechanical)	0.08	0.09	0.13	0.16	0.21
		Input Power HP (thermal)	0.33	0.36	0.68	0.51	0.72
		Output Power HP (mechanical)	0.005	0.009	0.01	0.03	0.04
		Output Torque lb.in (mech.)	613	1120	1860	3250	5090
		Efficiency %	6	10	11	16	19
3600.	0.49	Input Power HP (mechanical)	0.07	0.08	0.13	0.15	0.19
		Input Power HP (thermal)	0.40	0.43	0.80	0.60	0.89
		Output Power HP (mechanical)	0.004	0.007	0.01	0.02	0.03
		Output Torque lb.in (mech.)	464	853	1410	2440	3810
		Efficiency %	5	8	8	13	16
4200.	0.42	Input Power HP (mechanical)	0.07	0.08	0.12	0.14	0.17
		Input Power HP (thermal)	0.33	0.36	0.68	0.51	0.72
		Output Power HP (mechanical)	0.003	0.006	0.009	0.02	0.03
		Output Torque lb.in (mech.)	469	861	1420	2470	3840
		Efficiency %	4	7	8	12	15



**RATINGS AT
1450 REV/MIN INPUT**

9608

SINGLE REDUCTION	NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
				A0280	A0410	A0510	A0610	A0730	A0860
5.0	290.00	193.33	Input Power HP (mechanical)	0.90	2.03	4.38	6.57	9.36	16.20
			Input Power HP (thermal)	2.21	3.28	5.38	7.58	16.50	20.50
			Output Power HP (mechanical)	0.79	1.79	3.96	5.98	8.72	15.30
			Output Torque lb.in (mech.)	179	409	826	1300	1970	3210
			Efficiency %	87	88	90	91	93	94
7.5	145.00	116.00	Input Power HP (mechanical)	0.81	1.79	3.08	4.75	7.17	10.90
			Input Power HP (thermal)	1.79	2.74	4.38	6.40	14.30	17.30
			Output Power HP (mechanical)	0.69	1.54	2.71	4.24	6.60	10.10
			Output Torque lb.in (mech.)	219	491	863	1350	2080	3180
			Efficiency %	85	86	88	89	92	93
10.0	96.67	72.50	Input Power HP (mechanical)	0.74	1.65	3.02	4.21	5.58	9.57
			Input Power HP (thermal)	1.37	2.20	3.39	5.52	11.80	14.50
			Output Power HP (mechanical)	0.59	1.37	2.56	3.69	5.03	8.74
			Output Torque lb.in (mech.)	271	624	1170	1550	2260	3670
			Efficiency %	80	83	85	88	90	91
12.5	58.00	48.33	Input Power HP (mechanical)	0.67	1.64	2.73	3.72	5.77	7.90
			Input Power HP (thermal)	1.16	1.90	3.02	4.43	9.52	12.90
			Output Power HP (mechanical)	0.51	1.32	2.26	3.15	5.10	7.12
			Output Torque lb.in (mech.)	278	718	1230	1710	2770	3920
			Efficiency %	77	81	83	85	88	90
15.0	36.25	24.17	Input Power HP (mechanical)	0.57	1.57	1.89	3.31	5.01	8.02
			Input Power HP (thermal)	1.14	1.73	2.95	3.96	8.91	10.80
			Output Power HP (mechanical)	0.43	1.24	1.55	2.73	4.38	7.10
			Output Torque lb.in (mech.)	272	783	975	1780	2760	4470
			Efficiency %	76	79	82	83	87	88
20.0	24.17	20.71	Input Power HP (mechanical)	0.53	0.91	2.32	2.84	3.64	5.46
			Input Power HP (thermal)	0.78	1.61	1.97	2.88	7.50	9.05
			Output Power HP (mechanical)	0.35	0.69	1.74	2.19	3.09	4.69
			Output Torque lb.in (mech.)	307	585	1510	1900	2620	3970
			Efficiency %	67	76	74	77	85	86
25.0	20.71	20.71	Input Power HP (mechanical)	0.47	1.17	1.95	2.78	4.17	6.08
			Input Power HP (thermal)	0.72	1.16	1.77	2.56	5.30	6.37
			Output Power HP (mechanical)	0.30	0.81	1.40	2.06	3.33	4.93
			Output Torque lb.in (mech.)	329	881	1520	2240	3620	5360
			Efficiency %	64	70	71	74	80	81
30.0	20.71	20.71	Input Power HP (mechanical)	0.37	1.01	1.53	2.44	2.92	4.79
			Input Power HP (thermal)	0.67	1.07	1.66	2.32	4.92	5.94
			Output Power HP (mechanical)	0.22	0.67	1.06	1.74	2.27	3.80
			Output Torque lb.in (mech.)	289	874	1380	2270	2960	4950
			Efficiency %	61	66	69	71	78	79
40.0	20.71	20.71	Input Power HP (mechanical)	0.21	0.60	0.99	1.64	2.24	3.83
			Input Power HP (thermal)	0.55	0.95	1.51	2.03	4.22	5.10
			Output Power HP (mechanical)	0.11	0.36	0.64	1.09	1.66	2.91
			Output Torque lb.in (mech.)	185	624	1120	1890	2880	5050
			Efficiency %	50	60	65	66	74	76
50.0	20.71	20.71	Input Power HP (mechanical)	0.15	0.38	0.65	1.04	1.58	2.44
			Input Power HP (thermal)	0.44	0.72	1.08	1.50	3.15	3.66
			Output Power HP (mechanical)	0.07	0.21	0.38	0.64	1.11	1.74
			Output Torque lb.in (mech.)	147	456	834	1380	2420	3780
			Efficiency %	46	55	59	61	71	71
60.0	20.71	20.71	Input Power HP (mechanical)	0.11	0.28	0.46	0.72	1.09	1.65
			Input Power HP (thermal)	0.37	0.59	0.94	1.30	2.55	3.04
			Output Power HP (mechanical)	0.04	0.14	0.25	0.41	0.71	1.11
			Output Torque lb.in (mech.)	112	352	647	1070	1850	2890
			Efficiency %	40	48	55	57	65	67
70.0	20.71	20.71	Input Power HP (mechanical)	0.08	0.21	0.33	0.55	0.80	1.25
			Input Power HP (thermal)	0.30	0.50	0.77	1.02	1.98	2.36
			Output Power HP (mechanical)	0.03	0.09	0.17	0.29	0.48	0.78
			Output Torque lb.in (mech.)	90	289	508	866	1460	2370
			Efficiency %	35	44	50	52	60	62



RATINGS AT 1450 REV/MIN INPUT

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	19.33	Input Power HP (mechanical)	0.43	0.62	1.09	1.60	2.69
		Input Power HP (thermal)	1.01	1.79	2.37	3.19	3.77
		Output Power HP (mechanical)	0.27	0.41	0.72	1.16	2.02
		Output Torque lb.in (mech.)	881	1350	2470	3850	6120
		Efficiency %	62	66	66	73	75
100.	14.50	Input Power HP (mechanical)	0.28	0.79	0.98	1.19	1.87
		Input Power HP (thermal)	0.97	1.17	1.71	2.85	3.21
		Output Power HP (mechanical)	0.16	0.46	0.58	0.82	1.34
		Output Torque lb.in (mech.)	725	2110	2640	3650	5440
		Efficiency %	58	58	59	69	72
125.	11.60	Input Power HP (mechanical)	0.30	0.69	0.97	1.18	2.10
		Input Power HP (thermal)	0.69	1.05	1.51	2.09	2.34
		Output Power HP (mechanical)	0.15	0.38	0.55	0.74	1.38
		Output Torque lb.in (mech.)	881	2190	3120	4210	7210
		Efficiency %	51	55	56	63	66
150.	9.67	Input Power HP (mechanical)	0.25	0.40	0.70	0.98	1.58
		Input Power HP (thermal)	0.87	1.39	1.98	2.14	2.83
		Output Power HP (mechanical)	0.13	0.23	0.41	0.64	1.07
		Output Torque lb.in (mech.)	881	1530	2800	4210	7050
		Efficiency %	52	58	59	65	67
200.	7.25	Input Power HP (mechanical)	0.18	0.48	0.64	0.72	1.11
		Input Power HP (thermal)	0.84	1.01	1.42	2.14	2.44
		Output Power HP (mechanical)	0.09	0.24	0.33	0.44	0.71
		Output Torque lb.in (mech.)	769	2190	3000	3920	6270
		Efficiency %	48	51	52	61	63
225.	6.44	Input Power HP (mechanical)	0.20	0.33	0.58	0.77	1.23
		Input Power HP (thermal)	0.82	1.13	1.88	1.68	2.62
		Output Power HP (mechanical)	0.10	0.18	0.31	0.46	0.79
		Output Torque lb.in (mech.)	881	1600	2940	4210	7210
		Efficiency %	48	54	54	60	64
250.	5.80	Input Power HP (mechanical)	0.19	0.41	0.57	0.68	1.11
		Input Power HP (thermal)	0.60	0.91	1.26	1.80	1.80
		Output Power HP (mechanical)	0.08	0.19	0.28	0.37	0.63
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	42	47	49	55	57
300.	4.83	Input Power HP (mechanical)	0.18	0.30	0.47	0.60	1.02
		Input Power HP (thermal)	0.72	0.75	1.76	1.57	1.75
		Output Power HP (mechanical)	0.07	0.13	0.24	0.34	0.57
		Output Torque lb.in (mech.)	881	1690	3090	4210	7210
		Efficiency %	38	45	52	58	56
350.	4.14	Input Power HP (mechanical)	0.15	0.32	0.46	0.54	0.43
		Input Power HP (thermal)	0.57	0.86	1.21	1.68	0.99
		Output Power HP (mechanical)	0.06	0.14	0.20	0.27	0.19
		Output Torque lb.in (mech.)	881	2190	3150	4210	2710
		Efficiency %	38	44	44	49	43
375.	3.87	Input Power HP (mechanical)	0.08	0.11	0.21	0.28	0.85
		Input Power HP (thermal)	0.36	0.54	0.79	0.89	1.68
		Output Power HP (mechanical)	0.02	0.04	0.06	0.11	0.46
		Output Torque lb.in (mech.)	332	584	997	1680	7210
		Efficiency %	26	32	30	38	54
400.	3.63	Input Power HP (mechanical)	0.14	0.33	0.41	0.46	0.75
		Input Power HP (thermal)	0.72	0.75	1.26	1.57	1.75
		Output Power HP (mechanical)	0.05	0.13	0.19	0.25	0.39
		Output Torque lb.in (mech.)	804	2190	3150	4090	6560
		Efficiency %	34	39	45	53	52
450.	3.22	Input Power HP (mechanical)	0.14	0.28	0.41	0.47	0.74
		Input Power HP (thermal)	0.53	0.85	1.13	1.66	1.59
		Output Power HP (mechanical)	0.05	0.11	0.17	0.22	0.38
		Output Torque lb.in (mech.)	881	2150	3150	4210	7210
		Efficiency %	35	41	41	47	52
500.	2.90	Input Power HP (mechanical)	0.14	0.28	0.36	0.42	0.72
		Input Power HP (thermal)	0.60	0.75	1.12	1.57	1.71
		Output Power HP (mechanical)	0.04	0.10	0.15	0.20	0.33
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	29	36	41	47	46
600.	2.42	Input Power HP (mechanical)	0.13	0.25	0.32	0.37	0.63
		Input Power HP (thermal)	0.56	0.75	1.05	1.55	1.63
		Output Power HP (mechanical)	0.03	0.08	0.12	0.17	0.28
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	26	34	38	45	44
625.	2.32	Input Power HP (mechanical)	0.12	0.24	0.33	0.39	0.62
		Input Power HP (thermal)	0.59	0.69	1.17	1.13	1.57
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.27
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	27	33	35	40	43
700.	2.07	Input Power HP (mechanical)	0.10	0.10	0.22	0.22	0.34
		Input Power HP (thermal)	0.30	0.33	0.63	0.48	0.68
		Output Power HP (mechanical)	0.02	0.02	0.07	0.07	0.13
		Output Torque lb.in (mech.)	687	662	2070	2260	3890
		Efficiency %	21	20	32	33	39
750.	1.93	Input Power HP (mechanical)	0.11	0.21	0.30	0.35	0.54
		Input Power HP (thermal)	0.55	0.69	1.09	1.13	1.57
		Output Power HP (mechanical)	0.03	0.07	0.10	0.13	0.22
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	24	32	32	37	41
800.	1.81	Input Power HP (mechanical)	0.11	0.22	0.29	0.32	0.47
		Input Power HP (thermal)	0.51	0.53	1.07	0.92	1.34
		Output Power HP (mechanical)	0.02	0.06	0.09	0.12	0.20
		Output Torque lb.in (mech.)	836	2140	3150	4210	6810
		Efficiency %	23	28	32	39	43



**RATINGS AT
1450 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	1.61	Input Power HP (mechanical)	0.10	0.19	0.27	0.31	0.48
		Input Power HP (thermal)	0.55	0.64	1.08	1.04	1.48
		Output Power HP (mechanical)	0.02	0.06	0.08	0.11	0.18
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	22	29	30	35	39
1000.	1.45	Input Power HP (mechanical)	0.11	0.20	0.25	0.29	0.44
		Input Power HP (thermal)	0.51	0.53	1.07	0.92	1.34
		Output Power HP (mechanical)	0.02	0.05	0.07	0.10	0.17
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	26	29	33	38
1200.	1.21	Input Power HP (mechanical)	0.10	0.17	0.23	0.26	0.39
		Input Power HP (thermal)	0.51	0.53	1.07	0.92	1.34
		Output Power HP (mechanical)	0.02	0.04	0.06	0.08	0.14
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	24	26	31	36
1250.	1.16	Input Power HP (mechanical)	0.09	0.16	0.22	0.25	0.39
		Input Power HP (thermal)	0.44	0.46	0.91	0.70	0.96
		Output Power HP (mechanical)	0.02	0.04	0.06	0.08	0.13
		Output Torque lb.in (mech.)	881	1990	3150	4210	7210
		Efficiency %	18	23	26	31	34
1400.	1.04	Input Power HP (mechanical)	0.09	0.10	0.21	0.22	0.34
		Input Power HP (thermal)	0.30	0.33	0.63	0.48	0.68
		Output Power HP (mechanical)	0.01	0.02	0.05	0.06	0.12
		Output Torque lb.in (mech.)	857	1010	3150	3830	6990
		Efficiency %	16	16	25	30	35
1500.	0.97	Input Power HP (mechanical)	0.09	0.15	0.20	0.23	0.35
		Input Power HP (thermal)	0.44	0.46	0.91	0.70	0.96
		Output Power HP (mechanical)	0.01	0.03	0.05	0.06	0.11
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	16	22	24	29	32
1600.	0.91	Input Power HP (mechanical)	0.09	0.12	0.17	0.22	0.33
		Input Power HP (thermal)	0.51	0.53	0.99	0.92	1.34
		Output Power HP (mechanical)	0.01	0.02	0.04	0.06	0.10
		Output Torque lb.in (mech.)	829	1520	2510	4210	7210
		Efficiency %	14	19	21	27	32
1750.	0.83	Input Power HP (mechanical)	0.09	0.10	0.19	0.22	0.32
		Input Power HP (thermal)	0.30	0.33	0.63	0.48	0.68
		Output Power HP (mechanical)	0.01	0.02	0.04	0.06	0.09
		Output Torque lb.in (mech.)	881	1190	3150	4210	7210
		Efficiency %	13	15	22	26	30
1800.	0.81	Input Power HP (mechanical)	0.09	0.12	0.20	0.22	0.31
		Input Power HP (thermal)	0.37	0.40	0.75	0.57	0.84
		Output Power HP (mechanical)	0.01	0.02	0.04	0.05	0.09
		Output Torque lb.in (mech.)	881	1750	3150	4210	7210
		Efficiency %	13	18	21	25	30
2000.	0.73	Input Power HP (mechanical)	0.08	0.10	0.15	0.20	0.30
		Input Power HP (thermal)	0.44	0.46	0.91	0.70	0.96
		Output Power HP (mechanical)	0.010	0.02	0.03	0.05	0.08
		Output Torque lb.in (mech.)	842	1550	2550	4210	7210
		Efficiency %	13	17	19	25	28
2100.	0.69	Input Power HP (mechanical)	0.08	0.10	0.17	0.19	0.28
		Input Power HP (thermal)	0.30	0.33	0.63	0.48	0.68
		Output Power HP (mechanical)	0.010	0.02	0.03	0.05	0.08
		Output Torque lb.in (mech.)	881	1390	3150	4210	7210
		Efficiency %	12	15	20	24	28
2400.	0.60	Input Power HP (mechanical)	0.08	0.10	0.15	0.19	0.27
		Input Power HP (thermal)	0.37	0.40	0.75	0.57	0.84
		Output Power HP (mechanical)	0.008	0.01	0.02	0.04	0.07
		Output Torque lb.in (mech.)	853	1560	2580	4210	7210
		Efficiency %	11	15	16	21	26
2500.	0.58	Input Power HP (mechanical)	0.06	0.08	0.12	0.15	0.21
		Input Power HP (thermal)	0.44	0.46	0.86	0.70	0.96
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	607	1110	1840	3220	5040
		Efficiency %	9	13	14	20	22
2800.	0.52	Input Power HP (mechanical)	0.07	0.10	0.14	0.17	0.24
		Input Power HP (thermal)	0.30	0.33	0.63	0.48	0.68
		Output Power HP (mechanical)	0.007	0.01	0.02	0.03	0.06
		Output Torque lb.in (mech.)	861	1580	2610	4210	7210
		Efficiency %	10	14	16	20	24
3000.	0.48	Input Power HP (mechanical)	0.06	0.08	0.12	0.15	0.19
		Input Power HP (thermal)	0.37	0.40	0.75	0.57	0.84
		Output Power HP (mechanical)	0.005	0.009	0.01	0.02	0.04
		Output Torque lb.in (mech.)	614	1120	1860	3250	5100
		Efficiency %	7	11	12	17	20
3500.	0.41	Input Power HP (mechanical)	0.06	0.08	0.11	0.13	0.18
		Input Power HP (thermal)	0.30	0.33	0.63	0.48	0.68
		Output Power HP (mechanical)	0.004	0.007	0.01	0.02	0.03
		Output Torque lb.in (mech.)	620	1130	1880	3290	5150
		Efficiency %	7	10	11	16	19
3600.	0.40	Input Power HP (mechanical)	0.06	0.07	0.11	0.12	0.15
		Input Power HP (thermal)	0.37	0.40	0.75	0.57	0.84
		Output Power HP (mechanical)	0.003	0.005	0.009	0.02	0.02
		Output Torque lb.in (mech.)	470	863	1430	2470	3850
		Efficiency %	5	8	9	13	16
4200.	0.35	Input Power HP (mechanical)	0.06	0.07	0.09	0.11	0.14
		Input Power HP (thermal)	0.30	0.33	0.63	0.48	0.68
		Output Power HP (mechanical)	0.003	0.005	0.008	0.01	0.02
		Output Torque lb.in (mech.)	474	871	1440	2490	3890
		Efficiency %	5	7	8	12	15



**RATINGS AT
1160REV/MIN INPUT**

9608

SINGLE REDUCTION	NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
				A0280	A0410	A0510	A0610	A0730	A0860
5.0	232.00	154.67	Input Power HP (mechanical)	0.79	1.79	3.86	5.64	8.28	13.70
			Input Power HP (thermal)	1.96	2.98	4.85	6.86	13.90	17.10
			Output Power HP (mechanical)	0.69	1.57	3.48	5.12	7.68	12.80
			Output Torque lb.in (mech.)	196	449	906	1390	2170	3370
			Efficiency %	87	88	90	91	93	94
7.5	116.00	92.80	Input Power HP (mechanical)	0.71	1.57	2.71	4.18	6.30	9.59
			Input Power HP (thermal)	1.59	2.50	3.97	5.83	12.00	14.50
			Output Power HP (mechanical)	0.60	1.35	2.37	3.72	5.79	8.86
			Output Torque lb.in (mech.)	239	537	944	1480	2280	3490
			Efficiency %	84	86	87	89	92	92
10.0	77.33	46.40	Input Power HP (mechanical)	0.64	1.40	2.57	3.70	4.74	8.39
			Input Power HP (thermal)	1.23	2.01	3.09	5.04	9.97	12.20
			Output Power HP (mechanical)	0.52	1.16	2.17	3.22	4.26	7.64
			Output Torque lb.in (mech.)	294	660	1240	1690	2390	4010
			Efficiency %	80	83	85	87	90	91
12.5	58.00	38.67	Input Power HP (mechanical)	0.58	1.43	2.39	3.17	4.91	6.71
			Input Power HP (thermal)	1.04	1.74	2.76	4.06	8.08	10.80
			Output Power HP (mechanical)	0.44	1.15	1.97	2.65	4.32	6.02
			Output Torque lb.in (mech.)	301	779	1340	1800	2930	4140
			Efficiency %	76	80	83	84	88	90
15.0	46.40	29.00	Input Power HP (mechanical)	0.48	1.37	1.61	2.82	4.26	6.82
			Input Power HP (thermal)	1.02	1.58	2.69	3.63	7.56	9.06
			Output Power HP (mechanical)	0.36	1.08	1.31	2.32	3.71	6.01
			Output Torque lb.in (mech.)	283	848	1030	1890	2920	4730
			Efficiency %	76	79	81	82	87	88
20.0	29.00	19.33	Input Power HP (mechanical)	0.46	0.76	1.99	2.44	3.10	4.65
			Input Power HP (thermal)	0.69	1.48	1.80	2.65	6.37	7.60
			Output Power HP (mechanical)	0.31	0.57	1.47	1.85	2.62	3.97
			Output Torque lb.in (mech.)	331	606	1600	2010	2770	4200
			Efficiency %	66	75	74	76	84	85
25.0	19.33	16.57	Input Power HP (mechanical)	0.41	0.95	1.71	2.38	3.56	5.33
			Input Power HP (thermal)	0.64	1.07	1.62	2.37	4.53	5.38
			Output Power HP (mechanical)	0.26	0.65	1.21	1.74	2.82	4.29
			Output Torque lb.in (mech.)	355	881	1640	2360	3830	5820
			Efficiency %	63	68	71	73	79	80
30.0	16.57	12.50	Input Power HP (mechanical)	0.31	0.83	1.31	2.10	2.50	4.10
			Input Power HP (thermal)	0.59	0.98	1.53	2.14	4.20	5.02
			Output Power HP (mechanical)	0.18	0.54	0.90	1.47	1.92	3.22
			Output Torque lb.in (mech.)	298	881	1460	2400	3130	5240
			Efficiency %	60	65	68	70	77	78
40.0	12.50	9.00	Input Power HP (mechanical)	0.18	0.50	0.85	1.37	1.92	3.28
			Input Power HP (thermal)	0.49	0.88	1.38	1.88	3.61	4.32
			Output Power HP (mechanical)	0.09	0.30	0.54	0.89	1.40	2.46
			Output Torque lb.in (mech.)	190	642	1180	1940	3050	5340
			Efficiency %	50	59	64	65	73	75
50.0	9.00	6.00	Input Power HP (mechanical)	0.12	0.32	0.54	0.87	1.31	2.03
			Input Power HP (thermal)	0.40	0.67	1.00	1.39	2.70	3.11
			Output Power HP (mechanical)	0.06	0.17	0.32	0.52	0.91	1.43
			Output Torque lb.in (mech.)	151	468	856	1420	2480	3880
			Efficiency %	46	55	58	60	70	70
60.0	6.00	4.00	Input Power HP (mechanical)	0.09	0.24	0.38	0.60	0.91	1.37
			Input Power HP (thermal)	0.34	0.54	0.87	1.21	2.20	2.59
			Output Power HP (mechanical)	0.04	0.11	0.20	0.34	0.58	0.91
			Output Torque lb.in (mech.)	115	361	663	1100	1900	2960
			Efficiency %	39	47	54	57	64	66
70.0	4.00	2.67	Input Power HP (mechanical)	0.07	0.18	0.28	0.45	0.66	1.04
			Input Power HP (thermal)	0.28	0.46	0.71	0.96	1.71	2.02
			Output Power HP (mechanical)	0.02	0.08	0.14	0.23	0.39	0.64
			Output Torque lb.in (mech.)	92	296	520	887	1490	2430
			Efficiency %	35	44	50	52	59	61



**RATINGS AT
1160 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	15.47	Input Power HP (mechanical)	0.35	0.52	0.92	1.36	2.28
		Input Power HP (thermal)	0.93	1.69	2.19	2.90	3.35
		Output Power HP (mechanical)	0.21	0.34	0.60	0.97	1.69
		Output Torque lb.in (mech.)	881	1410	2580	4020	6390
		Efficiency %	61	66	65	71	74
100.	11.60	Input Power HP (mechanical)	0.23	0.67	0.83	1.00	1.58
		Input Power HP (thermal)	0.90	1.08	1.57	2.63	2.86
		Output Power HP (mechanical)	0.13	0.38	0.48	0.68	1.12
		Output Torque lb.in (mech.)	740	2190	2760	3770	5690
		Efficiency %	58	57	58	68	71
125.	9.28	Input Power HP (mechanical)	0.25	0.57	0.80	0.96	1.71
		Input Power HP (thermal)	0.64	0.97	1.39	1.93	2.09
		Output Power HP (mechanical)	0.12	0.31	0.44	0.59	1.11
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	50	54	55	62	65
150.	7.73	Input Power HP (mechanical)	0.21	0.33	0.58	0.79	1.31
		Input Power HP (thermal)	0.81	1.22	1.86	1.96	2.65
		Output Power HP (mechanical)	0.11	0.19	0.34	0.51	0.87
		Output Torque lb.in (mech.)	881	1580	2900	4210	7210
		Efficiency %	52	57	58	64	67
200.	5.80	Input Power HP (mechanical)	0.15	0.39	0.53	0.59	0.92
		Input Power HP (thermal)	0.80	0.94	1.33	1.96	2.29
		Output Power HP (mechanical)	0.07	0.19	0.27	0.36	0.57
		Output Torque lb.in (mech.)	782	2190	3110	3990	6380
		Efficiency %	48	50	51	60	63
225.	5.16	Input Power HP (mechanical)	0.16	0.27	0.48	0.62	1.00
		Input Power HP (thermal)	0.77	1.00	1.77	1.54	2.40
		Output Power HP (mechanical)	0.08	0.15	0.26	0.37	0.63
		Output Torque lb.in (mech.)	881	1660	3050	4210	7210
		Efficiency %	48	53	53	59	63
250.	4.64	Input Power HP (mechanical)	0.15	0.33	0.46	0.55	0.90
		Input Power HP (thermal)	0.56	0.85	1.18	1.70	1.69
		Output Power HP (mechanical)	0.06	0.15	0.22	0.30	0.51
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	41	46	48	54	56
300.	3.87	Input Power HP (mechanical)	0.15	0.24	0.39	0.48	0.83
		Input Power HP (thermal)	0.64	0.66	1.66	1.44	1.61
		Output Power HP (mechanical)	0.06	0.11	0.20	0.27	0.46
		Output Torque lb.in (mech.)	881	1680	3150	4210	7210
		Efficiency %	38	44	51	57	55
350.	3.31	Input Power HP (mechanical)	0.12	0.26	0.37	0.44	0.35
		Input Power HP (thermal)	0.54	0.81	1.13	1.54	0.89
		Output Power HP (mechanical)	0.04	0.11	0.16	0.21	0.15
		Output Torque lb.in (mech.)	881	2190	3150	4210	2750
		Efficiency %	37	43	43	49	43
375.	3.09	Input Power HP (mechanical)	0.06	0.09	0.17	0.22	0.69
		Input Power HP (thermal)	0.34	0.52	0.75	0.83	1.58
		Output Power HP (mechanical)	0.02	0.03	0.05	0.09	0.37
		Output Torque lb.in (mech.)	337	592	1010	1700	7210
		Efficiency %	26	32	30	38	53
400.	2.90	Input Power HP (mechanical)	0.11	0.27	0.34	0.38	0.61
		Input Power HP (thermal)	0.64	0.66	1.19	1.44	1.61
		Output Power HP (mechanical)	0.04	0.10	0.15	0.20	0.31
		Output Torque lb.in (mech.)	815	2190	3150	4150	6650
		Efficiency %	34	38	44	53	51
450.	2.58	Input Power HP (mechanical)	0.11	0.23	0.33	0.38	0.60
		Input Power HP (thermal)	0.50	0.80	1.06	1.54	1.50
		Output Power HP (mechanical)	0.04	0.09	0.13	0.18	0.31
		Output Torque lb.in (mech.)	881	2180	3150	4210	7210
		Efficiency %	34	41	40	46	51
500.	2.32	Input Power HP (mechanical)	0.11	0.23	0.29	0.34	0.59
		Input Power HP (thermal)	0.57	0.66	1.06	1.44	1.61
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.27
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	29	35	41	46	45
600.	1.93	Input Power HP (mechanical)	0.10	0.20	0.26	0.30	0.51
		Input Power HP (thermal)	0.54	0.66	0.99	1.44	1.58
		Output Power HP (mechanical)	0.03	0.07	0.10	0.13	0.22
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	26	33	38	44	43
625.	1.86	Input Power HP (mechanical)	0.10	0.20	0.27	0.32	0.50
		Input Power HP (thermal)	0.56	0.61	1.11	1.04	1.45
		Output Power HP (mechanical)	0.03	0.06	0.09	0.12	0.21
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	26	33	34	39	42
700.	1.66	Input Power HP (mechanical)	0.08	0.08	0.18	0.18	0.28
		Input Power HP (thermal)	0.28	0.30	0.59	0.45	0.63
		Output Power HP (mechanical)	0.02	0.02	0.06	0.06	0.11
		Output Torque lb.in (mech.)	701	675	2110	2300	3970
		Efficiency %	21	21	32	33	38
750.	1.55	Input Power HP (mechanical)	0.09	0.17	0.24	0.28	0.44
		Input Power HP (thermal)	0.53	0.61	1.04	1.04	1.45
		Output Power HP (mechanical)	0.02	0.05	0.08	0.10	0.18
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	24	31	32	37	40
800.	1.45	Input Power HP (mechanical)	0.09	0.18	0.23	0.26	0.38
		Input Power HP (thermal)	0.45	0.47	0.95	0.84	1.24
		Output Power HP (mechanical)	0.02	0.05	0.07	0.10	0.16
		Output Torque lb.in (mech.)	845	2190	3150	4210	6890
		Efficiency %	23	28	31	38	43



**RATINGS AT
1160 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	1.29	Input Power HP (mechanical)	0.08	0.16	0.22	0.25	0.39
		Input Power HP (thermal)	0.53	0.57	1.03	0.95	1.36
		Output Power HP (mechanical)	0.02	0.04	0.06	0.09	0.15
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	22	29	29	34	38
1000.	1.16	Input Power HP (mechanical)	0.08	0.16	0.20	0.24	0.36
		Input Power HP (thermal)	0.45	0.47	0.95	0.84	1.24
		Output Power HP (mechanical)	0.02	0.04	0.06	0.08	0.13
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	25	28	33	37
1200.	0.97	Input Power HP (mechanical)	0.08	0.14	0.19	0.21	0.32
		Input Power HP (thermal)	0.45	0.47	0.95	0.84	1.24
		Output Power HP (mechanical)	0.01	0.03	0.05	0.06	0.11
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	24	26	31	35
1250.	0.93	Input Power HP (mechanical)	0.07	0.13	0.18	0.21	0.32
		Input Power HP (thermal)	0.39	0.41	0.81	0.65	0.89
		Output Power HP (mechanical)	0.01	0.03	0.05	0.06	0.11
		Output Torque lb.in (mech.)	881	2030	3150	4210	7210
		Efficiency %	18	23	26	30	33
1400.	0.83	Input Power HP (mechanical)	0.07	0.08	0.17	0.18	0.28
		Input Power HP (thermal)	0.28	0.30	0.59	0.45	0.63
		Output Power HP (mechanical)	0.01	0.01	0.04	0.05	0.10
		Output Torque lb.in (mech.)	869	1030	3150	3890	7090
		Efficiency %	16	16	24	29	34
1500.	0.77	Input Power HP (mechanical)	0.07	0.12	0.16	0.18	0.28
		Input Power HP (thermal)	0.39	0.41	0.81	0.65	0.89
		Output Power HP (mechanical)	0.01	0.03	0.04	0.05	0.09
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	16	22	24	28	31
1600.	0.73	Input Power HP (mechanical)	0.07	0.09	0.14	0.18	0.27
		Input Power HP (thermal)	0.45	0.47	0.94	0.84	1.24
		Output Power HP (mechanical)	0.010	0.02	0.03	0.05	0.08
		Output Torque lb.in (mech.)	842	1550	2550	4210	7210
		Efficiency %	14	19	21	27	31
1750.	0.66	Input Power HP (mechanical)	0.07	0.08	0.15	0.18	0.26
		Input Power HP (thermal)	0.28	0.30	0.59	0.45	0.63
		Output Power HP (mechanical)	0.009	0.01	0.03	0.04	0.08
		Output Torque lb.in (mech.)	881	1210	3150	4210	7210
		Efficiency %	13	15	22	25	29
1800.	0.64	Input Power HP (mechanical)	0.07	0.10	0.16	0.18	0.25
		Input Power HP (thermal)	0.34	0.36	0.68	0.53	0.78
		Output Power HP (mechanical)	0.009	0.02	0.03	0.04	0.07
		Output Torque lb.in (mech.)	881	1780	3150	4210	7210
		Efficiency %	13	18	21	24	29
2000.	0.58	Input Power HP (mechanical)	0.06	0.08	0.12	0.16	0.24
		Input Power HP (thermal)	0.39	0.41	0.81	0.65	0.89
		Output Power HP (mechanical)	0.008	0.01	0.02	0.04	0.07
		Output Torque lb.in (mech.)	855	1570	2590	4210	7210
		Efficiency %	13	17	19	25	28
2100.	0.55	Input Power HP (mechanical)	0.06	0.08	0.14	0.16	0.23
		Input Power HP (thermal)	0.28	0.30	0.59	0.45	0.63
		Output Power HP (mechanical)	0.008	0.01	0.03	0.04	0.06
		Output Torque lb.in (mech.)	881	1410	3150	4210	7210
		Efficiency %	12	15	20	24	27
2400.	0.48	Input Power HP (mechanical)	0.06	0.08	0.12	0.15	0.22
		Input Power HP (thermal)	0.34	0.36	0.68	0.53	0.78
		Output Power HP (mechanical)	0.007	0.01	0.02	0.03	0.06
		Output Torque lb.in (mech.)	865	1590	2620	4210	7210
		Efficiency %	11	15	16	21	26
2500.	0.46	Input Power HP (mechanical)	0.05	0.06	0.10	0.12	0.17
		Input Power HP (thermal)	0.39	0.41	0.81	0.65	0.89
		Output Power HP (mechanical)	0.004	0.008	0.01	0.02	0.04
		Output Torque lb.in (mech.)	616	1130	1870	3260	5110
		Efficiency %	9	13	14	20	22
2800.	0.41	Input Power HP (mechanical)	0.06	0.08	0.11	0.14	0.20
		Input Power HP (thermal)	0.28	0.30	0.59	0.45	0.63
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	874	1600	2640	4210	7210
		Efficiency %	10	14	16	20	24
3000.	0.39	Input Power HP (mechanical)	0.05	0.06	0.10	0.12	0.15
		Input Power HP (thermal)	0.34	0.36	0.68	0.53	0.78
		Output Power HP (mechanical)	0.004	0.007	0.01	0.02	0.03
		Output Torque lb.in (mech.)	623	1140	1890	3300	5170
		Efficiency %	8	11	12	17	21
3500.	0.33	Input Power HP (mechanical)	0.05	0.06	0.09	0.11	0.14
		Input Power HP (thermal)	0.28	0.30	0.59	0.45	0.63
		Output Power HP (mechanical)	0.003	0.006	0.01	0.02	0.03
		Output Torque lb.in (mech.)	629	1150	1910	3330	5220
		Efficiency %	7	10	12	16	19
3600.	0.32	Input Power HP (mechanical)	0.05	0.05	0.08	0.10	0.12
		Input Power HP (thermal)	0.34	0.36	0.68	0.53	0.78
		Output Power HP (mechanical)	0.002	0.004	0.007	0.01	0.02
		Output Torque lb.in (mech.)	476	874	1440	2500	3910
		Efficiency %	5	8	9	13	16
4200.	0.28	Input Power HP (mechanical)	0.04	0.05	0.07	0.09	0.11
		Input Power HP (thermal)	0.28	0.30	0.59	0.45	0.63
		Output Power HP (mechanical)	0.002	0.004	0.006	0.01	0.02
		Output Torque lb.in (mech.)	480	882	1460	2530	3940
		Efficiency %	5	7	9	12	15



**RATINGS AT
875 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
			A0280	A0410	A0510	A0610	A0730	A0860
5.0	175.00	Input Power HP (mechanical)	0.64	1.52	2.91	4.26	7.05	10.30
		Input Power HP (thermal)	1.69	2.64	4.26	6.06	11.20	13.60
		Output Power HP (mechanical)	0.55	1.33	2.60	3.83	6.52	9.63
		Output Torque lb.in (mech.)	209	503	899	1380	2440	3350
		Efficiency %	87	88	89	90	92	93
7.5	116.67	Input Power HP (mechanical)	0.60	1.33	2.29	3.54	5.33	8.12
		Input Power HP (thermal)	1.38	2.22	3.52	5.19	9.74	11.50
		Output Power HP (mechanical)	0.50	1.13	1.99	3.11	4.87	7.45
		Output Torque lb.in (mech.)	265	597	1050	1640	2540	3890
		Efficiency %	84	85	87	88	91	92
10.0	87.50	Input Power HP (mechanical)	0.53	1.14	2.09	3.12	3.77	7.08
		Input Power HP (thermal)	1.07	1.79	2.74	4.50	8.07	9.72
		Output Power HP (mechanical)	0.42	0.93	1.75	2.69	3.37	6.39
		Output Torque lb.in (mech.)	320	703	1320	1870	2510	4450
		Efficiency %	79	82	84	86	89	90
12.5	70.00	Input Power HP (mechanical)	0.49	1.20	2.00	2.57	3.98	5.12
		Input Power HP (thermal)	0.90	1.55	2.45	3.63	6.56	8.64
		Output Power HP (mechanical)	0.37	0.95	1.63	2.13	3.48	4.56
		Output Torque lb.in (mech.)	331	859	1470	1920	3130	4160
		Efficiency %	76	80	82	83	87	89
15.0	58.33	Input Power HP (mechanical)	0.38	1.09	1.31	2.30	3.46	5.54
		Input Power HP (thermal)	0.89	1.42	2.39	3.26	6.15	7.26
		Output Power HP (mechanical)	0.28	0.84	1.05	1.86	2.99	4.83
		Output Torque lb.in (mech.)	297	881	1100	2010	3120	5040
		Efficiency %	75	77	80	81	86	87
20.0	43.75	Input Power HP (mechanical)	0.39	0.60	1.63	1.99	2.43	3.61
		Input Power HP (thermal)	0.59	1.32	1.62	2.39	5.19	6.10
		Output Power HP (mechanical)	0.25	0.45	1.18	1.49	2.04	3.05
		Output Torque lb.in (mech.)	364	632	1700	2140	2860	4280
		Efficiency %	65	75	72	75	84	84
25.0	35.00	Input Power HP (mechanical)	0.35	0.73	1.45	1.96	2.91	4.38
		Input Power HP (thermal)	0.55	0.96	1.46	2.14	3.71	4.35
		Output Power HP (mechanical)	0.22	0.49	1.01	1.40	2.28	3.46
		Output Torque lb.in (mech.)	389	881	1810	2520	4100	6230
		Efficiency %	62	67	69	71	78	79
30.0	29.17	Input Power HP (mechanical)	0.25	0.64	1.08	1.73	2.04	3.35
		Input Power HP (thermal)	0.51	0.88	1.37	1.94	3.44	4.06
		Output Power HP (mechanical)	0.14	0.41	0.72	1.19	1.55	2.59
		Output Torque lb.in (mech.)	309	881	1560	2560	3350	5600
		Efficiency %	58	64	67	69	76	77
40.0	21.88	Input Power HP (mechanical)	0.14	0.40	0.67	1.09	1.52	2.63
		Input Power HP (thermal)	0.43	0.79	1.25	1.71	2.96	3.50
		Output Power HP (mechanical)	0.07	0.23	0.42	0.70	1.09	1.93
		Output Torque lb.in (mech.)	197	664	1220	2010	3140	5570
		Efficiency %	49	58	63	64	72	74
50.0	17.50	Input Power HP (mechanical)	0.10	0.25	0.43	0.69	1.04	1.61
		Input Power HP (thermal)	0.35	0.61	0.91	1.27	2.23	2.53
		Output Power HP (mechanical)	0.04	0.13	0.25	0.41	0.71	1.11
		Output Torque lb.in (mech.)	156	483	883	1470	2560	4010
		Efficiency %	45	54	57	59	68	69
60.0	14.58	Input Power HP (mechanical)	0.07	0.19	0.30	0.47	0.72	1.09
		Input Power HP (thermal)	0.30	0.49	0.79	1.11	1.82	2.12
		Output Power HP (mechanical)	0.03	0.09	0.16	0.26	0.45	0.71
		Output Torque lb.in (mech.)	118	372	683	1130	1960	3050
		Efficiency %	39	47	53	55	63	65
70.0	12.50	Input Power HP (mechanical)	0.05	0.14	0.22	0.36	0.52	0.82
		Input Power HP (thermal)	0.25	0.42	0.65	0.88	1.43	1.66
		Output Power HP (mechanical)	0.02	0.06	0.11	0.18	0.31	0.49
		Output Torque lb.in (mech.)	95	304	535	912	1540	2490
		Efficiency %	35	44	49	51	59	60



**RATINGS AT
875 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	11.67	Input Power HP (mechanical)	0.27	0.42	0.74	1.09	1.84
		Input Power HP (thermal)	0.85	1.55	2.00	2.56	2.95
		Output Power HP (mechanical)	0.16	0.27	0.48	0.77	1.34
		Output Torque lb.in (mech.)	881	1480	2720	4210	6730
		Efficiency %	60	64	64	70	73
100.	8.75	Input Power HP (mechanical)	0.18	0.52	0.67	0.78	1.28
		Input Power HP (thermal)	0.82	0.99	1.43	2.43	2.52
		Output Power HP (mechanical)	0.10	0.29	0.39	0.52	0.89
		Output Torque lb.in (mech.)	758	2190	2910	3860	5990
		Efficiency %	57	56	57	67	69
125.	7.00	Input Power HP (mechanical)	0.19	0.44	0.62	0.74	1.32
		Input Power HP (thermal)	0.58	0.89	1.26	1.78	1.85
		Output Power HP (mechanical)	0.09	0.23	0.33	0.45	0.83
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	49	53	54	60	63
150.	5.83	Input Power HP (mechanical)	0.16	0.27	0.47	0.61	1.01
		Input Power HP (thermal)	0.75	1.05	1.72	1.74	2.45
		Output Power HP (mechanical)	0.08	0.15	0.27	0.38	0.66
		Output Torque lb.in (mech.)	881	1650	3030	4210	7210
		Efficiency %	51	56	57	63	65
200.	4.38	Input Power HP (mechanical)	0.11	0.30	0.41	0.46	0.72
		Input Power HP (thermal)	0.74	0.88	1.22	1.74	2.12
		Output Power HP (mechanical)	0.05	0.15	0.21	0.28	0.44
		Output Torque lb.in (mech.)	797	2190	3150	4060	6500
		Efficiency %	48	48	50	59	61
225.	3.89	Input Power HP (mechanical)	0.12	0.21	0.38	0.48	0.77
		Input Power HP (thermal)	0.73	0.87	1.54	1.36	2.14
		Output Power HP (mechanical)	0.06	0.11	0.20	0.28	0.48
		Output Torque lb.in (mech.)	881	1680	3150	4210	7210
		Efficiency %	47	52	53	58	62
250.	3.50	Input Power HP (mechanical)	0.12	0.26	0.36	0.42	0.70
		Input Power HP (thermal)	0.52	0.79	1.09	1.55	1.56
		Output Power HP (mechanical)	0.05	0.12	0.17	0.22	0.38
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	41	45	47	53	55
300.	2.92	Input Power HP (mechanical)	0.11	0.19	0.30	0.37	0.64
		Input Power HP (thermal)	0.55	0.57	1.45	1.28	1.44
		Output Power HP (mechanical)	0.04	0.08	0.15	0.21	0.35
		Output Torque lb.in (mech.)	881	1680	3150	4210	7210
		Efficiency %	38	43	50	56	54
350.	2.50	Input Power HP (mechanical)	0.09	0.20	0.29	0.34	0.27
		Input Power HP (thermal)	0.50	0.76	1.05	1.36	0.79
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.12
		Output Torque lb.in (mech.)	881	2190	3150	4210	2790
		Efficiency %	37	42	42	48	42
375.	2.33	Input Power HP (mechanical)	0.05	0.07	0.13	0.17	0.54
		Input Power HP (thermal)	0.32	0.49	0.71	0.77	1.51
		Output Power HP (mechanical)	0.01	0.02	0.04	0.07	0.28
		Output Torque lb.in (mech.)	342	602	1030	1730	7210
		Efficiency %	26	32	30	38	52
400.	2.19	Input Power HP (mechanical)	0.09	0.21	0.26	0.30	0.48
		Input Power HP (thermal)	0.55	0.57	1.11	1.28	1.44
		Output Power HP (mechanical)	0.03	0.08	0.11	0.15	0.24
		Output Torque lb.in (mech.)	828	2190	3150	4210	6750
		Efficiency %	34	37	43	52	50
450.	1.94	Input Power HP (mechanical)	0.08	0.18	0.26	0.30	0.46
		Input Power HP (thermal)	0.47	0.75	0.98	1.36	1.43
		Output Power HP (mechanical)	0.03	0.07	0.10	0.13	0.23
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	34	40	39	45	50
500.	1.75	Input Power HP (mechanical)	0.09	0.18	0.22	0.27	0.46
		Input Power HP (thermal)	0.54	0.57	0.99	1.28	1.44
		Output Power HP (mechanical)	0.02	0.06	0.09	0.12	0.20
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	29	34	40	45	44
600.	1.46	Input Power HP (mechanical)	0.08	0.16	0.20	0.23	0.40
		Input Power HP (thermal)	0.50	0.57	0.93	1.28	1.44
		Output Power HP (mechanical)	0.02	0.05	0.07	0.10	0.17
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	26	32	37	43	42
625.	1.40	Input Power HP (mechanical)	0.07	0.15	0.21	0.24	0.39
		Input Power HP (thermal)	0.51	0.53	1.01	0.90	1.30
		Output Power HP (mechanical)	0.02	0.05	0.07	0.09	0.16
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	26	32	34	38	41
700.	1.25	Input Power HP (mechanical)	0.06	0.06	0.14	0.14	0.22
		Input Power HP (thermal)	0.25	0.27	0.53	0.41	0.58
		Output Power HP (mechanical)	0.01	0.01	0.04	0.05	0.08
		Output Torque lb.in (mech.)	716	690	2160	2360	4060
		Efficiency %	21	21	31	33	38
750.	1.17	Input Power HP (mechanical)	0.07	0.13	0.19	0.22	0.34
		Input Power HP (thermal)	0.50	0.53	0.98	0.90	1.30
		Output Power HP (mechanical)	0.02	0.04	0.06	0.08	0.13
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	24	30	31	36	39
800.	1.09	Input Power HP (mechanical)	0.07	0.14	0.18	0.20	0.30
		Input Power HP (thermal)	0.40	0.41	0.83	0.73	1.12
		Output Power HP (mechanical)	0.02	0.04	0.05	0.07	0.12
		Output Torque lb.in (mech.)	855	2190	3150	4210	6970
		Efficiency %	23	27	31	37	42



**RATINGS AT
875 REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	0.97	Input Power HP (mechanical)	0.06	0.12	0.17	0.19	0.30
		Input Power HP (thermal)	0.48	0.49	0.93	0.82	1.23
		Output Power HP (mechanical)	0.01	0.03	0.05	0.06	0.11
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	22	28	29	34	37
1000.	0.88	Input Power HP (mechanical)	0.06	0.12	0.16	0.18	0.28
		Input Power HP (thermal)	0.40	0.41	0.83	0.73	1.12
		Output Power HP (mechanical)	0.01	0.03	0.04	0.06	0.10
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	25	28	32	36
1200.	0.73	Input Power HP (mechanical)	0.06	0.11	0.14	0.16	0.24
		Input Power HP (thermal)	0.40	0.41	0.83	0.73	1.12
		Output Power HP (mechanical)	0.01	0.03	0.04	0.05	0.08
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	23	26	30	34
1250.	0.70	Input Power HP (mechanical)	0.06	0.10	0.14	0.16	0.25
		Input Power HP (thermal)	0.34	0.35	0.71	0.59	0.81
		Output Power HP (mechanical)	0.010	0.02	0.04	0.05	0.08
		Output Torque lb.in (mech.)	881	2070	3150	4210	7210
		Efficiency %	18	23	26	30	32
1400.	0.63	Input Power HP (mechanical)	0.05	0.06	0.13	0.14	0.22
		Input Power HP (thermal)	0.25	0.27	0.53	0.41	0.58
		Output Power HP (mechanical)	0.009	0.01	0.03	0.04	0.07
		Output Torque lb.in (mech.)	881	1050	3150	3970	7210
		Efficiency %	17	16	24	29	33
1500.	0.58	Input Power HP (mechanical)	0.05	0.09	0.12	0.14	0.22
		Input Power HP (thermal)	0.34	0.35	0.71	0.59	0.81
		Output Power HP (mechanical)	0.008	0.02	0.03	0.04	0.07
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	16	22	24	28	31
1600.	0.55	Input Power HP (mechanical)	0.05	0.07	0.11	0.14	0.20
		Input Power HP (thermal)	0.40	0.41	0.83	0.73	1.12
		Output Power HP (mechanical)	0.007	0.01	0.02	0.04	0.06
		Output Torque lb.in (mech.)	858	1580	2600	4210	7210
		Efficiency %	14	19	21	26	31
1750.	0.50	Input Power HP (mechanical)	0.05	0.06	0.12	0.13	0.20
		Input Power HP (thermal)	0.25	0.27	0.53	0.41	0.58
		Output Power HP (mechanical)	0.007	0.010	0.02	0.03	0.06
		Output Torque lb.in (mech.)	881	1240	3150	4210	7210
		Efficiency %	13	16	22	25	28
1800.	0.49	Input Power HP (mechanical)	0.05	0.08	0.12	0.14	0.20
		Input Power HP (thermal)	0.30	0.31	0.60	0.48	0.71
		Output Power HP (mechanical)	0.007	0.01	0.02	0.03	0.06
		Output Torque lb.in (mech.)	881	1810	3150	4210	7210
		Efficiency %	13	18	20	24	29
2000.	0.44	Input Power HP (mechanical)	0.05	0.06	0.10	0.12	0.18
		Input Power HP (thermal)	0.34	0.35	0.71	0.59	0.81
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	871	1600	2630	4210	7210
		Efficiency %	13	17	19	24	27
2100.	0.42	Input Power HP (mechanical)	0.05	0.06	0.11	0.12	0.18
		Input Power HP (thermal)	0.25	0.27	0.53	0.41	0.58
		Output Power HP (mechanical)	0.006	0.009	0.02	0.03	0.05
		Output Torque lb.in (mech.)	881	1440	3150	4210	7210
		Efficiency %	12	15	19	23	27
2400.	0.36	Input Power HP (mechanical)	0.05	0.06	0.09	0.12	0.17
		Input Power HP (thermal)	0.30	0.31	0.60	0.48	0.71
		Output Power HP (mechanical)	0.005	0.009	0.02	0.02	0.04
		Output Torque lb.in (mech.)	880	1620	2660	4210	7210
		Efficiency %	11	15	16	21	25
2500.	0.35	Input Power HP (mechanical)	0.04	0.05	0.07	0.09	0.13
		Input Power HP (thermal)	0.34	0.35	0.71	0.59	0.81
		Output Power HP (mechanical)	0.003	0.006	0.01	0.02	0.03
		Output Torque lb.in (mech.)	627	1150	1900	3320	5200
		Efficiency %	10	13	15	20	22
2800.	0.31	Input Power HP (mechanical)	0.04	0.06	0.08	0.10	0.15
		Input Power HP (thermal)	0.25	0.27	0.53	0.41	0.58
		Output Power HP (mechanical)	0.004	0.008	0.01	0.02	0.04
		Output Torque lb.in (mech.)	881	1630	2690	4210	7210
		Efficiency %	10	14	16	20	24
3000.	0.29	Input Power HP (mechanical)	0.04	0.05	0.07	0.09	0.12
		Input Power HP (thermal)	0.30	0.31	0.60	0.48	0.71
		Output Power HP (mechanical)	0.003	0.005	0.009	0.02	0.02
		Output Torque lb.in (mech.)	633	1160	1920	3360	5260
		Efficiency %	8	11	12	17	21
3500.	0.25	Input Power HP (mechanical)	0.04	0.05	0.07	0.08	0.11
		Input Power HP (thermal)	0.25	0.27	0.53	0.41	0.58
		Output Power HP (mechanical)	0.002	0.005	0.008	0.01	0.02
		Output Torque lb.in (mech.)	639	1170	1940	3390	5300
		Efficiency %	7	10	12	17	19
3600.	0.24	Input Power HP (mechanical)	0.03	0.04	0.06	0.07	0.09
		Input Power HP (thermal)	0.30	0.31	0.60	0.48	0.71
		Output Power HP (mechanical)	0.002	0.003	0.006	0.010	0.02
		Output Torque lb.in (mech.)	484	889	1470	2550	3970
		Efficiency %	6	9	9	13	17
4200.	0.21	Input Power HP (mechanical)	0.03	0.04	0.06	0.07	0.09
		Input Power HP (thermal)	0.25	0.27	0.53	0.41	0.58
		Output Power HP (mechanical)	0.002	0.003	0.005	0.008	0.01
		Output Torque lb.in (mech.)	488	897	1480	2570	4000
		Efficiency %	5	8	9	13	15



**RATINGS AT
500REV/MIN INPUT**

9608

SINGLE REDUCTION	NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
				A0280	A0410	A0510	A0610	A0730	A0860
5.0	5.0	100.00	Input Power HP (mechanical)	0.36	1.07	1.67	2.43	4.91	5.90
			Input Power HP (thermal)	1.27	2.07	3.31	4.78	7.33	8.59
			Output Power HP (mechanical)	0.31	0.93	1.46	2.14	4.49	5.44
			Output Torque lb.in (mech.)	205	614	884	1350	2940	3310
	7.5	66.67	Efficiency %	85	87	88	88	91	92
10.0	7.5	66.67	Input Power HP (mechanical)	0.39	0.93	1.61	2.37	3.12	5.03
			Input Power HP (thermal)	1.05	1.75	2.77	4.14	6.41	7.38
			Output Power HP (mechanical)	0.32	0.78	1.37	2.06	2.81	4.56
			Output Torque lb.in (mech.)	295	721	1270	1900	2570	4170
	10.0	50.00	Efficiency %	82	84	85	87	90	91
12.5	10.0	50.00	Input Power HP (mechanical)	0.35	0.74	1.36	1.96	2.15	4.36
			Input Power HP (thermal)	0.81	1.42	2.18	3.61	5.35	6.24
			Output Power HP (mechanical)	0.27	0.59	1.11	1.66	1.90	3.88
			Output Torque lb.in (mech.)	357	784	1470	2020	2470	4720
	12.5	40.00	Efficiency %	78	80	82	85	88	89
15.0	12.5	40.00	Input Power HP (mechanical)	0.33	0.72	1.31	1.68	2.59	2.93
			Input Power HP (thermal)	0.68	1.24	1.95	2.93	4.37	5.57
			Output Power HP (mechanical)	0.24	0.56	1.04	1.36	2.22	2.56
			Output Torque lb.in (mech.)	380	881	1640	2140	3490	4090
	15.0	33.33	Efficiency %	74	77	79	81	86	87
20.0	15.0	33.33	Input Power HP (mechanical)	0.24	0.64	0.83	1.45	2.16	3.32
			Input Power HP (thermal)	0.68	1.13	1.91	2.64	4.10	4.70
			Output Power HP (mechanical)	0.18	0.48	0.65	1.15	1.83	2.84
			Output Torque lb.in (mech.)	322	881	1190	2170	3340	5180
	20.0	25.00	Efficiency %	73	75	79	79	85	85
25.0	20.0	20.00	Input Power HP (mechanical)	0.27	0.38	1.08	1.32	1.39	2.06
			Input Power HP (thermal)	0.45	1.06	1.30	1.90	3.48	3.97
			Output Power HP (mechanical)	0.17	0.28	0.76	0.95	1.14	1.70
			Output Torque lb.in (mech.)	432	680	1910	2390	2790	4180
	25.0	20.00	Efficiency %	63	73	70	72	82	83
30.0	25.0	20.00	Input Power HP (mechanical)	0.22	0.43	1.01	1.30	1.77	2.90
			Input Power HP (thermal)	0.42	0.76	1.17	1.67	2.51	2.86
			Output Power HP (mechanical)	0.13	0.28	0.67	0.90	1.34	2.22
			Output Torque lb.in (mech.)	421	881	2120	2820	4210	6980
	30.0	16.67	Efficiency %	60	64	67	69	76	76
40.0	30.0	16.67	Input Power HP (mechanical)	0.16	0.38	0.68	1.12	1.26	2.08
			Input Power HP (thermal)	0.39	0.70	1.11	1.52	2.34	2.67
			Output Power HP (mechanical)	0.09	0.23	0.44	0.73	0.93	1.55
			Output Torque lb.in (mech.)	330	881	1660	2770	3500	5850
	40.0	12.50	Efficiency %	56	61	64	65	73	74
50.0	40.0	12.50	Input Power HP (mechanical)	0.09	0.25	0.41	0.69	0.87	1.50
			Input Power HP (thermal)	0.33	0.63	1.02	1.35	2.03	2.32
			Output Power HP (mechanical)	0.04	0.14	0.25	0.42	0.60	1.06
			Output Torque lb.in (mech.)	208	703	1250	2130	3010	5330
	50.0	10.00	Efficiency %	47	56	60	61	69	71
60.0	50.0	10.00	Input Power HP (mechanical)	0.06	0.16	0.27	0.44	0.65	1.01
			Input Power HP (thermal)	0.28	0.50	0.75	1.07	1.54	1.69
			Output Power HP (mechanical)	0.03	0.08	0.15	0.25	0.43	0.67
			Output Torque lb.in (mech.)	164	509	931	1550	2680	4220
	60.0	8.33	Efficiency %	44	52	55	56	66	66
70.0	60.0	8.33	Input Power HP (mechanical)	0.04	0.12	0.19	0.30	0.45	0.68
			Input Power HP (thermal)	0.24	0.41	0.66	0.93	1.27	1.43
			Output Power HP (mechanical)	0.02	0.05	0.09	0.16	0.27	0.43
			Output Torque lb.in (mech.)	124	391	718	1190	2060	3210
	70.0	7.14	Efficiency %	38	45	51	53	61	62
	70.0	7.14	Input Power HP (mechanical)	0.03	0.08	0.13	0.22	0.33	0.51
			Input Power HP (thermal)	0.20	0.35	0.54	0.75	1.00	1.13
			Output Power HP (mechanical)	0.01	0.04	0.06	0.11	0.18	0.30
			Output Torque lb.in (mech.)	99	319	561	956	1610	2610
	70.0	7.14	Efficiency %	34	43	47	48	56	58



**RATINGS AT
500REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	6.67	Input Power HP (mechanical)	0.16	0.27	0.48	0.64	1.17
		Input Power HP (thermal)	0.73	1.32	1.70	2.01	2.49
		Output Power HP (mechanical)	0.09	0.17	0.30	0.44	0.82
		Output Torque lb.in (mech.)	881	1620	2960	4210	7210
		Efficiency %	59	63	62	68	70
100.	5.00	Input Power HP (mechanical)	0.11	0.31	0.43	0.48	0.81
		Input Power HP (thermal)	0.71	0.85	1.21	2.01	2.14
		Output Power HP (mechanical)	0.06	0.17	0.24	0.31	0.54
		Output Torque lb.in (mech.)	790	2190	3150	4030	6400
		Efficiency %	56	54	55	65	67
125.	4.00	Input Power HP (mechanical)	0.11	0.26	0.37	0.44	0.79
		Input Power HP (thermal)	0.50	0.76	1.07	1.54	1.57
		Output Power HP (mechanical)	0.05	0.13	0.19	0.26	0.48
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	48	51	52	58	60
150.	3.33	Input Power HP (mechanical)	0.09	0.16	0.29	0.36	0.60
		Input Power HP (thermal)	0.66	0.79	1.49	1.36	1.95
		Output Power HP (mechanical)	0.05	0.09	0.16	0.22	0.38
		Output Torque lb.in (mech.)	881	1680	3150	4210	7210
		Efficiency %	50	55	56	61	63
200.	2.50	Input Power HP (mechanical)	0.07	0.18	0.25	0.28	0.44
		Input Power HP (thermal)	0.65	0.77	1.06	1.36	1.94
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.26
		Output Torque lb.in (mech.)	824	2190	3150	4200	6720
		Efficiency %	47	46	48	58	59
225.	2.22	Input Power HP (mechanical)	0.07	0.13	0.23	0.28	0.46
		Input Power HP (thermal)	0.63	0.65	1.16	1.03	1.71
		Output Power HP (mechanical)	0.03	0.06	0.12	0.16	0.27
		Output Torque lb.in (mech.)	881	1670	3150	4210	7210
		Efficiency %	46	50	51	56	60
250.	2.00	Input Power HP (mechanical)	0.07	0.15	0.21	0.25	0.42
		Input Power HP (thermal)	0.46	0.69	0.94	1.34	1.43
		Output Power HP (mechanical)	0.03	0.07	0.10	0.13	0.22
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	40	44	45	50	52
300.	1.67	Input Power HP (mechanical)	0.07	0.11	0.18	0.22	0.39
		Input Power HP (thermal)	0.42	0.43	1.11	0.98	1.16
		Output Power HP (mechanical)	0.02	0.05	0.09	0.12	0.20
		Output Torque lb.in (mech.)	881	1670	3150	4210	7210
		Efficiency %	37	42	49	54	51
350.	1.43	Input Power HP (mechanical)	0.05	0.12	0.17	0.20	0.17
		Input Power HP (thermal)	0.45	0.65	0.92	1.03	0.68
		Output Power HP (mechanical)	0.02	0.05	0.07	0.09	0.07
		Output Torque lb.in (mech.)	881	2190	3150	4210	2870
		Efficiency %	36	40	41	46	40
375.	1.33	Input Power HP (mechanical)	0.03	0.04	0.08	0.11	0.32
		Input Power HP (thermal)	0.30	0.46	0.64	0.69	1.37
		Output Power HP (mechanical)	0.008	0.01	0.02	0.04	0.16
		Output Torque lb.in (mech.)	352	618	1050	1780	7210
		Efficiency %	27	32	30	37	49
400.	1.25	Input Power HP (mechanical)	0.05	0.12	0.15	0.18	0.29
		Input Power HP (thermal)	0.42	0.43	0.98	0.98	1.16
		Output Power HP (mechanical)	0.02	0.04	0.06	0.09	0.14
		Output Torque lb.in (mech.)	850	2190	3150	4210	6930
		Efficiency %	34	35	42	50	48
450.	1.11	Input Power HP (mechanical)	0.05	0.10	0.15	0.18	0.28
		Input Power HP (thermal)	0.42	0.65	0.87	1.03	1.32
		Output Power HP (mechanical)	0.02	0.04	0.06	0.08	0.13
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	33	38	38	44	47
500.	1.00	Input Power HP (mechanical)	0.05	0.11	0.13	0.16	0.27
		Input Power HP (thermal)	0.42	0.43	0.87	0.98	1.16
		Output Power HP (mechanical)	0.01	0.03	0.05	0.07	0.11
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	28	33	39	43	42
600.	0.83	Input Power HP (mechanical)	0.05	0.09	0.12	0.14	0.24
		Input Power HP (thermal)	0.42	0.43	0.82	0.98	1.16
		Output Power HP (mechanical)	0.01	0.03	0.04	0.06	0.10
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	26	31	36	41	40
625.	0.80	Input Power HP (mechanical)	0.04	0.09	0.12	0.15	0.24
		Input Power HP (thermal)	0.39	0.40	0.77	0.69	1.03
		Output Power HP (mechanical)	0.01	0.03	0.04	0.05	0.09
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	26	31	33	37	39
700.	0.71	Input Power HP (mechanical)	0.04	0.04	0.09	0.08	0.14
		Input Power HP (thermal)	0.20	0.21	0.44	0.34	0.49
		Output Power HP (mechanical)	0.008	0.008	0.03	0.03	0.05
		Output Torque lb.in (mech.)	745	717	2240	2450	4210
		Efficiency %	21	21	30	32	36
750.	0.67	Input Power HP (mechanical)	0.04	0.08	0.11	0.13	0.21
		Input Power HP (thermal)	0.39	0.40	0.77	0.69	1.03
		Output Power HP (mechanical)	0.009	0.02	0.03	0.04	0.08
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	24	29	30	35	37
800.	0.63	Input Power HP (mechanical)	0.04	0.08	0.11	0.12	0.18
		Input Power HP (thermal)	0.30	0.32	0.64	0.57	0.91
		Output Power HP (mechanical)	0.009	0.02	0.03	0.04	0.07
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	23	26	30	36	40



**RATINGS AT
500REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	0.56	Input Power HP (mechanical)	0.04	0.07	0.10	0.12	0.18
		Input Power HP (thermal)	0.37	0.38	0.71	0.64	0.99
		Output Power HP (mechanical)	0.008	0.02	0.03	0.04	0.06
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	22	27	28	32	36
1000.	0.50	Input Power HP (mechanical)	0.04	0.07	0.09	0.11	0.17
		Input Power HP (thermal)	0.30	0.32	0.64	0.57	0.91
		Output Power HP (mechanical)	0.007	0.02	0.02	0.03	0.06
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	24	27	31	34
1200.	0.42	Input Power HP (mechanical)	0.03	0.07	0.08	0.10	0.15
		Input Power HP (thermal)	0.30	0.32	0.64	0.57	0.91
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	22	25	29	33
1250.	0.40	Input Power HP (mechanical)	0.03	0.06	0.08	0.09	0.15
		Input Power HP (thermal)	0.27	0.28	0.56	0.49	0.67
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	881	2140	3150	4210	7210
		Efficiency %	17	22	25	28	31
1400.	0.36	Input Power HP (mechanical)	0.03	0.04	0.08	0.08	0.13
		Input Power HP (thermal)	0.20	0.21	0.44	0.34	0.49
		Output Power HP (mechanical)	0.005	0.006	0.02	0.02	0.04
		Output Torque lb.in (mech.)	881	1080	3150	4110	7210
		Efficiency %	17	16	23	28	32
1500.	0.33	Input Power HP (mechanical)	0.03	0.06	0.07	0.08	0.13
		Input Power HP (thermal)	0.27	0.28	0.56	0.49	0.67
		Output Power HP (mechanical)	0.005	0.01	0.02	0.02	0.04
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	16	21	23	27	29
1600.	0.31	Input Power HP (mechanical)	0.03	0.04	0.06	0.08	0.12
		Input Power HP (thermal)	0.30	0.32	0.64	0.57	0.91
		Output Power HP (mechanical)	0.004	0.008	0.01	0.02	0.04
		Output Torque lb.in (mech.)	881	1630	2690	4210	7210
		Efficiency %	15	19	21	26	29
1750.	0.29	Input Power HP (mechanical)	0.03	0.04	0.07	0.08	0.12
		Input Power HP (thermal)	0.20	0.21	0.44	0.34	0.49
		Output Power HP (mechanical)	0.004	0.006	0.01	0.02	0.03
		Output Torque lb.in (mech.)	881	1270	3150	4210	7210
		Efficiency %	13	15	21	24	27
1800.	0.28	Input Power HP (mechanical)	0.03	0.05	0.07	0.08	0.12
		Input Power HP (thermal)	0.24	0.24	0.47	0.40	0.59
		Output Power HP (mechanical)	0.004	0.008	0.01	0.02	0.03
		Output Torque lb.in (mech.)	881	1870	3150	4210	7210
		Efficiency %	13	17	20	23	27
2000.	0.25	Input Power HP (mechanical)	0.03	0.04	0.06	0.07	0.11
		Input Power HP (thermal)	0.27	0.28	0.56	0.49	0.67
		Output Power HP (mechanical)	0.003	0.006	0.01	0.02	0.03
		Output Torque lb.in (mech.)	881	1650	2720	4210	7210
		Efficiency %	13	17	19	24	26
2100.	0.24	Input Power HP (mechanical)	0.03	0.04	0.06	0.07	0.11
		Input Power HP (thermal)	0.20	0.21	0.44	0.34	0.49
		Output Power HP (mechanical)	0.003	0.006	0.01	0.02	0.03
		Output Torque lb.in (mech.)	881	1480	3150	4210	7210
		Efficiency %	12	15	19	22	26
2400.	0.21	Input Power HP (mechanical)	0.03	0.04	0.06	0.07	0.10
		Input Power HP (thermal)	0.24	0.24	0.47	0.40	0.59
		Output Power HP (mechanical)	0.003	0.005	0.009	0.01	0.02
		Output Torque lb.in (mech.)	881	1670	2750	4210	7210
		Efficiency %	11	15	16	20	24
2500.	0.20	Input Power HP (mechanical)	0.02	0.03	0.04	0.05	0.08
		Input Power HP (thermal)	0.27	0.28	0.56	0.49	0.67
		Output Power HP (mechanical)	0.002	0.004	0.006	0.01	0.02
		Output Torque lb.in (mech.)	647	1180	1960	3430	5370
		Efficiency %	10	13	15	20	22
2800.	0.18	Input Power HP (mechanical)	0.02	0.04	0.05	0.06	0.09
		Input Power HP (thermal)	0.20	0.21	0.44	0.34	0.49
		Output Power HP (mechanical)	0.002	0.005	0.008	0.01	0.02
		Output Torque lb.in (mech.)	881	1680	2780	4210	7210
		Efficiency %	10	14	16	20	23
3000.	0.17	Input Power HP (mechanical)	0.02	0.03	0.04	0.05	0.07
		Input Power HP (thermal)	0.24	0.24	0.47	0.40	0.59
		Output Power HP (mechanical)	0.002	0.003	0.005	0.009	0.01
		Output Torque lb.in (mech.)	654	1190	1980	3460	5420
		Efficiency %	8	11	12	17	20
3500.	0.14	Input Power HP (mechanical)	0.02	0.03	0.04	0.05	0.07
		Input Power HP (thermal)	0.20	0.21	0.44	0.34	0.49
		Output Power HP (mechanical)	0.002	0.003	0.004	0.008	0.01
		Output Torque lb.in (mech.)	659	1200	2000	3490	5470
		Efficiency %	8	10	12	16	19
3600.	0.14	Input Power HP (mechanical)	0.02	0.02	0.03	0.04	0.05
		Input Power HP (thermal)	0.24	0.24	0.47	0.40	0.59
		Output Power HP (mechanical)	0.001	0.002	0.003	0.006	0.009
		Output Torque lb.in (mech.)	499	916	1510	2620	4090
		Efficiency %	6	9	10	13	17
4200.	0.12	Input Power HP (mechanical)	0.02	0.02	0.03	0.04	0.05
		Input Power HP (thermal)	0.20	0.21	0.44	0.34	0.49
		Output Power HP (mechanical)	0.001	0.002	0.003	0.005	0.008
		Output Torque lb.in (mech.)	503	923	1530	2650	4120
		Efficiency %	5	8	9	13	15



**RATINGS AT
250REV/MIN INPUT**

9608

SINGLE REDUCTION	NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT					
				A0280	A0410	A0510	A0610	A0730	A0860
5.0	5.0	50.00	Input Power HP (mechanical)	0.18	0.68	0.83	1.22	2.45	2.95
			Input Power HP (thermal)	1.01	1.62	2.59	3.83	4.95	5.42
			Output Power HP (mechanical)	0.15	0.58	0.72	1.06	2.21	2.67
	7.5	33.33	Output Torque lb.in (mech.)	202	765	867	1330	2890	3250
			Efficiency %	84	85	86	87	90	90
			Input Power HP (mechanical)	0.19	0.58	0.84	1.18	1.56	2.52
10.0	10.0	25.00	Input Power HP (thermal)	0.83	1.38	2.19	3.35	4.37	4.71
			Output Power HP (mechanical)	0.16	0.48	0.70	1.00	1.38	2.24
			Output Torque lb.in (mech.)	288	881	1300	1850	2520	4090
	12.5	20.00	Efficiency %	81	82	84	85	88	89
			Input Power HP (mechanical)	0.17	0.42	0.78	0.98	1.08	2.18
			Input Power HP (thermal)	0.62	1.11	1.72	2.84	3.68	4.01
15.0	15.0	16.67	Output Power HP (mechanical)	0.13	0.33	0.62	0.81	0.93	1.90
			Output Torque lb.in (mech.)	348	880	1630	1980	2420	4620
			Efficiency %	76	78	79	83	86	87
	20.0	12.50	Input Power HP (mechanical)	0.18	0.37	0.68	0.90	1.30	1.46
			Input Power HP (thermal)	0.51	0.94	1.55	2.24	3.02	3.60
			Output Power HP (mechanical)	0.13	0.28	0.52	0.71	1.08	1.25
25.0	25.0	10.00	Output Torque lb.in (mech.)	413	881	1640	2230	3410	3990
			Efficiency %	72	75	77	79	83	86
			Input Power HP (mechanical)	0.13	0.33	0.41	0.73	1.08	1.66
	30.0	8.33	Input Power HP (thermal)	0.52	0.85	1.54	2.02	2.84	3.05
			Output Power HP (mechanical)	0.10	0.24	0.32	0.56	0.89	1.38
			Output Torque lb.in (mech.)	349	881	1160	2100	3250	5030
40.0	40.0	6.25	Efficiency %	71	73	77	77	82	83
			Input Power HP (mechanical)	0.17	0.21	0.62	0.76	0.70	1.03
			Input Power HP (thermal)	0.35	0.82	0.99	1.44	2.43	2.60
	50.0	5.00	Output Power HP (mechanical)	0.10	0.15	0.41	0.52	0.55	0.82
			Output Torque lb.in (mech.)	506	730	2080	2640	2700	4050
			Efficiency %	60	71	67	69	79	80
60.0	60.0	4.17	Input Power HP (mechanical)	0.13	0.23	0.52	0.71	0.93	1.47
			Input Power HP (thermal)	0.33	0.57	0.88	1.27	1.77	1.89
			Output Power HP (mechanical)	0.07	0.14	0.33	0.46	0.67	1.07
	70.0	3.57	Output Torque lb.in (mech.)	450	881	2070	2920	4210	6750
			Efficiency %	57	62	63	66	72	73
			Input Power HP (mechanical)	0.09	0.20	0.34	0.56	0.63	1.04
70.0	70.0	3.57	Input Power HP (thermal)	0.31	0.53	0.86	1.17	1.65	1.77
			Output Power HP (mechanical)	0.05	0.12	0.21	0.35	0.44	0.74
			Output Torque lb.in (mech.)	351	881	1570	2630	3340	5580
	70.0	3.57	Efficiency %	54	58	61	62	70	71
			Input Power HP (mechanical)	0.05	0.14	0.21	0.38	0.43	0.75
			Input Power HP (thermal)	0.26	0.48	0.80	1.05	1.45	1.55
70.0	70.0	3.57	Output Power HP (mechanical)	0.02	0.07	0.12	0.22	0.28	0.50
			Output Torque lb.in (mech.)	220	744	1190	2200	2860	5050
			Efficiency %	45	53	57	58	65	67
	70.0	3.57	Input Power HP (mechanical)	0.03	0.09	0.15	0.24	0.32	0.52
			Input Power HP (thermal)	0.23	0.41	0.62	0.88	1.11	1.15
			Output Power HP (mechanical)	0.01	0.04	0.08	0.13	0.20	0.32
70.0	70.0	3.57	Output Torque lb.in (mech.)	173	537	982	1630	2540	4060
			Efficiency %	42	50	52	53	62	62
			Input Power HP (mechanical)	0.02	0.06	0.10	0.17	0.25	0.38
	70.0	3.57	Input Power HP (thermal)	0.20	0.34	0.55	0.80	0.92	0.97
			Output Power HP (mechanical)	0.009	0.03	0.05	0.08	0.14	0.22
			Output Torque lb.in (mech.)	131	411	755	1250	2160	3370
70.0	70.0	3.57	Efficiency %	37	43	48	50	57	59
			Input Power HP (mechanical)	0.02	0.05	0.07	0.12	0.18	0.29
			Input Power HP (thermal)	0.17	0.29	0.46	0.65	0.73	0.77
	70.0	3.57	Output Power HP (mechanical)	0.006	0.02	0.03	0.06	0.10	0.16
			Output Torque lb.in (mech.)	104	335	588	1000	1690	2740
			Efficiency %	33	41	45	46	53	54



**RATINGS AT
250REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
75.0	3.33	Input Power HP (mechanical)	0.08	0.15	0.26	0.34	0.61
		Input Power HP (thermal)	0.61	1.09	1.42	1.58	2.15
		Output Power HP (mechanical)	0.05	0.09	0.16	0.22	0.41
		Output Torque lb.in (mech.)	881	1680	3150	4210	7210
		Efficiency %	56	60	60	66	68
100.	2.50	Input Power HP (mechanical)	0.06	0.16	0.23	0.26	0.44
		Input Power HP (thermal)	0.61	0.71	1.00	1.58	1.86
		Output Power HP (mechanical)	0.03	0.08	0.12	0.16	0.28
		Output Torque lb.in (mech.)	824	2190	3150	4200	6690
		Efficiency %	54	51	53	62	64
125.	2.00	Input Power HP (mechanical)	0.06	0.14	0.19	0.23	0.42
		Input Power HP (thermal)	0.42	0.64	0.89	1.27	1.38
		Output Power HP (mechanical)	0.03	0.07	0.10	0.13	0.24
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	46	48	49	55	57
150.	1.67	Input Power HP (mechanical)	0.05	0.08	0.15	0.19	0.31
		Input Power HP (thermal)	0.57	0.60	1.13	1.01	1.52
		Output Power HP (mechanical)	0.02	0.04	0.08	0.11	0.19
		Output Torque lb.in (mech.)	881	1670	3150	4210	7210
		Efficiency %	48	53	54	58	60
200.	1.25	Input Power HP (mechanical)	0.04	0.09	0.13	0.15	0.24
		Input Power HP (thermal)	0.57	0.60	0.91	1.01	1.52
		Output Power HP (mechanical)	0.02	0.04	0.06	0.08	0.14
		Output Torque lb.in (mech.)	852	2190	3150	4210	6950
		Efficiency %	46	44	46	55	57
225.	1.11	Input Power HP (mechanical)	0.04	0.06	0.12	0.15	0.24
		Input Power HP (thermal)	0.48	0.50	0.87	0.78	1.37
		Output Power HP (mechanical)	0.02	0.03	0.06	0.08	0.14
		Output Torque lb.in (mech.)	881	1660	3150	4210	7210
		Efficiency %	44	49	49	53	57
250.	1.00	Input Power HP (mechanical)	0.03	0.08	0.11	0.13	0.22
		Input Power HP (thermal)	0.40	0.60	0.81	1.01	1.23
		Output Power HP (mechanical)	0.01	0.03	0.05	0.06	0.11
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	38	41	43	48	50
300.	0.83	Input Power HP (mechanical)	0.03	0.06	0.09	0.12	0.20
		Input Power HP (thermal)	0.32	0.33	0.83	0.75	0.87
		Output Power HP (mechanical)	0.01	0.02	0.04	0.06	0.10
		Output Torque lb.in (mech.)	881	1660	3150	4210	7210
		Efficiency %	35	40	47	51	49
350.	0.71	Input Power HP (mechanical)	0.03	0.06	0.09	0.11	0.09
		Input Power HP (thermal)	0.39	0.50	0.80	0.78	0.61
		Output Power HP (mechanical)	0.010	0.02	0.03	0.05	0.04
		Output Torque lb.in (mech.)	881	2190	3150	4210	2980
		Efficiency %	35	38	39	43	38
375.	0.67	Input Power HP (mechanical)	0.01	0.02	0.04	0.06	0.17
		Input Power HP (thermal)	0.27	0.43	0.55	0.64	1.18
		Output Power HP (mechanical)	0.004	0.007	0.01	0.02	0.08
		Output Torque lb.in (mech.)	366	644	1100	1850	7210
		Efficiency %	27	31	29	35	47
400.	0.63	Input Power HP (mechanical)	0.03	0.07	0.08	0.09	0.16
		Input Power HP (thermal)	0.32	0.33	0.83	0.75	0.87
		Output Power HP (mechanical)	0.009	0.02	0.03	0.04	0.07
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	33	33	40	48	46
450.	0.56	Input Power HP (mechanical)	0.02	0.05	0.08	0.09	0.15
		Input Power HP (thermal)	0.37	0.50	0.75	0.78	1.13
		Output Power HP (mechanical)	0.008	0.02	0.03	0.04	0.07
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	32	37	36	42	45
500.	0.50	Input Power HP (mechanical)	0.03	0.06	0.07	0.08	0.15
		Input Power HP (thermal)	0.32	0.33	0.76	0.75	0.87
		Output Power HP (mechanical)	0.007	0.02	0.03	0.03	0.06
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	27	31	37	41	39
600.	0.42	Input Power HP (mechanical)	0.02	0.05	0.06	0.07	0.13
		Input Power HP (thermal)	0.32	0.33	0.72	0.75	0.87
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	25	30	35	40	38
625.	0.40	Input Power HP (mechanical)	0.02	0.05	0.06	0.08	0.13
		Input Power HP (thermal)	0.30	0.31	0.58	0.53	0.78
		Output Power HP (mechanical)	0.006	0.01	0.02	0.03	0.05
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	25	29	31	35	37
700.	0.36	Input Power HP (mechanical)	0.02	0.02	0.05	0.05	0.07
		Input Power HP (thermal)	0.17	0.18	0.35	0.29	0.41
		Output Power HP (mechanical)	0.004	0.004	0.01	0.01	0.03
		Output Torque lb.in (mech.)	774	745	2330	2540	4370
		Efficiency %	21	21	29	31	35
750.	0.33	Input Power HP (mechanical)	0.02	0.04	0.06	0.07	0.11
		Input Power HP (thermal)	0.30	0.31	0.58	0.53	0.78
		Output Power HP (mechanical)	0.005	0.01	0.02	0.02	0.04
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	23	28	29	33	35
800.	0.31	Input Power HP (mechanical)	0.02	0.04	0.06	0.06	0.10
		Input Power HP (thermal)	0.24	0.25	0.49	0.44	0.70
		Output Power HP (mechanical)	0.004	0.01	0.02	0.02	0.04
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	23	24	28	34	38



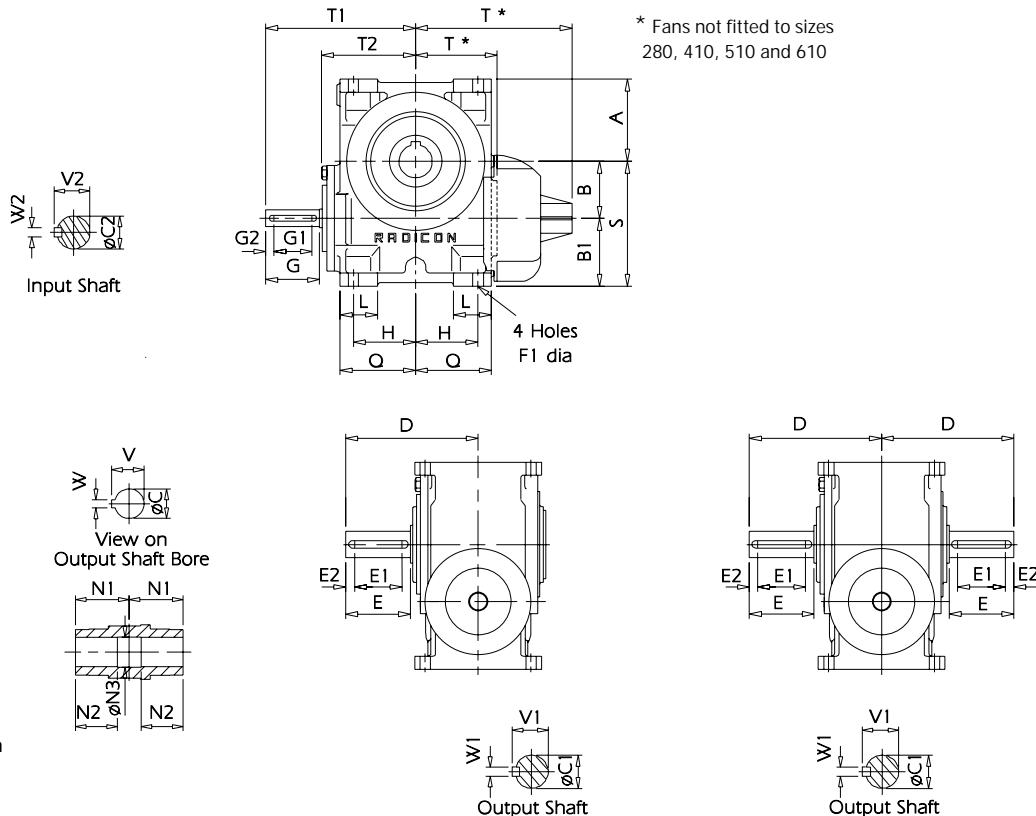
**RATINGS AT
250REV/MIN INPUT**

9608

NOMINAL RATIO	NOMINAL OUTPUT SPEED REV / MIN	CAPACITY	SIZE OF UNIT				
			A0410	A0510	A0610	A0730	A0860
900.	0.28	Input Power HP (mechanical)	0.02	0.04	0.05	0.06	0.09
		Input Power HP (thermal)	0.28	0.29	0.54	0.49	0.76
		Output Power HP (mechanical)	0.004	0.010	0.01	0.02	0.03
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	22	26	27	31	34
1000.	0.25	Input Power HP (mechanical)	0.02	0.04	0.05	0.06	0.09
		Input Power HP (thermal)	0.24	0.25	0.49	0.44	0.70
		Output Power HP (mechanical)	0.003	0.009	0.01	0.02	0.03
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	19	22	26	29	32
1200.	0.21	Input Power HP (mechanical)	0.02	0.03	0.04	0.05	0.08
		Input Power HP (thermal)	0.24	0.25	0.49	0.44	0.70
		Output Power HP (mechanical)	0.003	0.007	0.01	0.01	0.02
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	21	24	28	31
1250.	0.20	Input Power HP (mechanical)	0.02	0.03	0.04	0.05	0.08
		Input Power HP (thermal)	0.21	0.22	0.44	0.39	0.56
		Output Power HP (mechanical)	0.003	0.007	0.01	0.01	0.02
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	17	21	24	27	29
1400.	0.18	Input Power HP (mechanical)	0.02	0.02	0.04	0.05	0.07
		Input Power HP (thermal)	0.17	0.18	0.35	0.29	0.41
		Output Power HP (mechanical)	0.003	0.003	0.009	0.01	0.02
		Output Torque lb.in (mech.)	881	1120	3150	4210	7210
		Efficiency %	17	16	22	27	30
1500.	0.17	Input Power HP (mechanical)	0.01	0.03	0.04	0.04	0.07
		Input Power HP (thermal)	0.21	0.22	0.44	0.39	0.56
		Output Power HP (mechanical)	0.002	0.006	0.008	0.01	0.02
		Output Torque lb.in (mech.)	881	2190	3150	4210	7210
		Efficiency %	16	20	22	26	28
1600.	0.16	Input Power HP (mechanical)	0.01	0.02	0.03	0.04	0.06
		Input Power HP (thermal)	0.24	0.25	0.49	0.44	0.70
		Output Power HP (mechanical)	0.002	0.004	0.007	0.01	0.02
		Output Torque lb.in (mech.)	881	1700	2800	4210	7210
		Efficiency %	15	18	20	25	28
1750.	0.14	Input Power HP (mechanical)	0.01	0.02	0.04	0.04	0.06
		Input Power HP (thermal)	0.17	0.18	0.35	0.29	0.41
		Output Power HP (mechanical)	0.002	0.003	0.007	0.009	0.02
		Output Torque lb.in (mech.)	881	1310	3150	4210	7210
		Efficiency %	13	15	20	23	26
1800.	0.14	Input Power HP (mechanical)	0.01	0.03	0.04	0.04	0.06
		Input Power HP (thermal)	0.19	0.20	0.37	0.33	0.49
		Output Power HP (mechanical)	0.002	0.004	0.007	0.009	0.02
		Output Torque lb.in (mech.)	881	1930	3150	4210	7210
		Efficiency %	13	17	19	22	26
2000.	0.13	Input Power HP (mechanical)	0.01	0.02	0.03	0.04	0.06
		Input Power HP (thermal)	0.21	0.22	0.44	0.39	0.56
		Output Power HP (mechanical)	0.002	0.003	0.006	0.008	0.01
		Output Torque lb.in (mech.)	881	1710	2830	4210	7210
		Efficiency %	14	17	19	23	25
2100.	0.12	Input Power HP (mechanical)	0.01	0.02	0.03	0.04	0.06
		Input Power HP (thermal)	0.17	0.18	0.35	0.29	0.41
		Output Power HP (mechanical)	0.002	0.003	0.006	0.008	0.01
		Output Torque lb.in (mech.)	881	1530	3150	4210	7210
		Efficiency %	12	15	18	21	24
2400.	0.10	Input Power HP (mechanical)	0.01	0.02	0.03	0.04	0.05
		Input Power HP (thermal)	0.19	0.20	0.37	0.33	0.49
		Output Power HP (mechanical)	0.002	0.003	0.005	0.007	0.01
		Output Torque lb.in (mech.)	881	1730	2850	4210	7210
		Efficiency %	11	15	16	19	23
2500.	0.10	Input Power HP (mechanical)	0.010	0.01	0.02	0.03	0.04
		Input Power HP (thermal)	0.21	0.22	0.44	0.39	0.56
		Output Power HP (mechanical)	0.001	0.002	0.003	0.006	0.009
		Output Torque lb.in (mech.)	671	1230	2040	3550	5570
		Efficiency %	11	14	15	20	21
2800.	0.09	Input Power HP (mechanical)	0.01	0.02	0.03	0.03	0.05
		Input Power HP (thermal)	0.17	0.18	0.35	0.29	0.41
		Output Power HP (mechanical)	0.001	0.002	0.004	0.006	0.01
		Output Torque lb.in (mech.)	881	1740	2870	4210	7210
		Efficiency %	10	13	16	19	22
3000.	0.08	Input Power HP (mechanical)	0.010	0.01	0.02	0.03	0.04
		Input Power HP (thermal)	0.19	0.20	0.37	0.33	0.49
		Output Power HP (mechanical)	0.001	0.002	0.003	0.005	0.007
		Output Torque lb.in (mech.)	677	1240	2050	3590	5620
		Efficiency %	9	12	13	17	20
3500.	0.07	Input Power HP (mechanical)	0.010	0.01	0.02	0.03	0.03
		Input Power HP (thermal)	0.17	0.18	0.35	0.29	0.41
		Output Power HP (mechanical)	0.001	0.001	0.002	0.004	0.006
		Output Torque lb.in (mech.)	682	1250	2070	3610	5660
		Efficiency %	8	11	12	16	18
3600.	0.07	Input Power HP (mechanical)	0.009	0.01	0.02	0.02	0.03
		Input Power HP (thermal)	0.19	0.20	0.37	0.33	0.49
		Output Power HP (mechanical)	0.001	0.001	0.002	0.003	0.005
		Output Torque lb.in (mech.)	516	948	1570	2710	4230
		Efficiency %	7	9	10	14	16
4200.	0.06	Input Power HP (mechanical)	0.008	0.01	0.02	0.02	0.03
		Input Power HP (thermal)	0.17	0.18	0.35	0.29	0.41
		Output Power HP (mechanical)	0.000	0.001	0.002	0.003	0.004
		Output Torque lb.in (mech.)	520	954	1580	2730	4260
		Efficiency %	6	9	10	13	15

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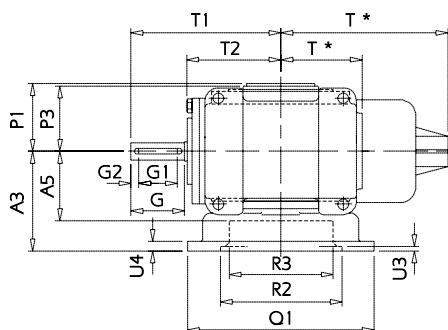
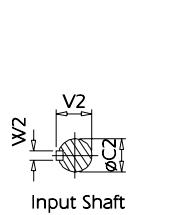
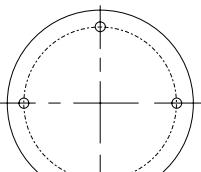
STANDARD UNIT


SIZE	A	B	B1	ϕC	$\phi C1$	C2	D	E	E1	E2	F1	G	G1	G2
A0280	2.283	1.125	2.063	0.625	0.625	0.4375	3.125	1.250	0.9375	0.16	0.35	1.125	0.906	0.13
A0410	2.598	1.625	2.350	0.750	0.750	0.625	3.875	1.625	1.3125	0.16	0.45	1.625	1.188	0.22
A0510	2.913	2.000	2.409	1.000	1.000	0.625	4.625	2.125	1.75	0.19	0.45	1.875	1.438	0.22
A0610	3.425	2.375	2.823	1.375	1.125	0.750	5.500	2.625	2.0	0.25	0.45	2.250	1.813	0.22
A0730	4.134	2.875	3.150	1.625	1.250	0.750	6.625	3.250	2.5	0.25	0.53	2.750	2.313	0.22
A0860	4.606	3.375	3.634	1.875	1.500	1.000	7.875	3.875	3.25	0.31	0.69	3.250	2.750	0.25

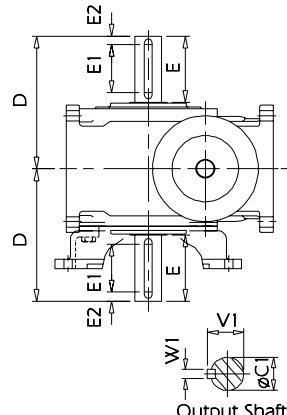
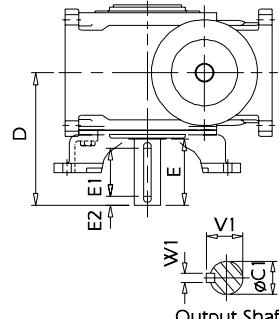
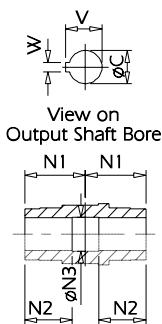
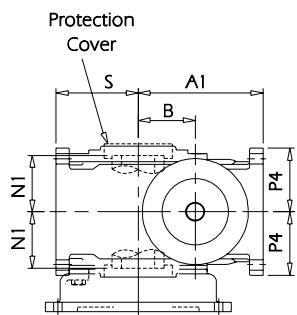
SIZE	H	J	L	N1	N2	$\phi N3$	P1	P2	P3	Q	R	S	T	T1
A0280	2.067	1.635	1.18	1.575	1.26	0.635 0.630	1.89	1.77	1.73	2.42	1.99	3.189	2.09	3.563
A0410	2.303	1.930	1.26	1.969	1.57	0.760 0.755	2.28	2.16	2.16	2.72	2.36	3.976	2.44	4.313
A0510	2.244	2.045	1.38	2.205	1.77	1.010 1.005	2.48	2.40	2.40	2.64	2.44	4.409	2.96	5.250
A0610	2.599	2.205	1.58	2.520	1.97	1.385 1.380	2.84	2.64	2.72	3.15	2.64	5.197	3.39	6.250
A0730	3.189	2.755	1.77	3.031	2.36	1.635 1.630	3.42	3.19	3.31	3.74	3.31	6.024	4.06	7.500
A0860	3.544	3.110	2.16	3.661	2.87	1.885 1.880	4.09	3.82	3.90	4.25	3.82	7.008	4.57	8.625

SIZE	T2	U	V	V1	V2	W	W1	W2
A0280	2.40	0.35	0.715 0.709	0.707 0.699	0.480 0.472	0.1895 0.1875	0.190 0.188	0.096 0.094
A0410	2.68	0.39	0.843 0.837	0.834 0.826	0.708 0.700	0.1895 0.1875	0.190 0.188	0.190 0.188
A0510	3.39	0.47	1.120 1.114	1.110 1.102	0.708 0.700	0.2520 0.2500	0.252 0.250	0.190 0.188
A0610	3.94	0.55	1.524 1.518	1.238 1.230	0.833 0.825	0.3145 0.3125	0.252 0.250	0.190 0.188
A0730	4.80	0.63	1.802 1.796	1.364 1.356	0.833 0.825	0.3770 0.3750	0.252 0.250	0.190 0.188
A0860	5.20	0.71	2.102 2.096	1.666 1.658	1.110 1.102	0.5020 0.5000	0.377 0.375	0.252 0.250

A	0	0	F	R
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STANDARD UNIT FLANGE MOUNTED

Flange Bolt Hole Positions (all sizes)


* Fans not fitted to sizes
280, 410, 510 and 610



SIZE	A1	A3	A5	B	\varnothing C	\varnothing C1	C2	D	E	E1	E2	F7	G
A0280	3.189	2.480	1.93	1.125	0.625	0.625	0.4375	3.125	1.250	0.9375	0.16	\varnothing 0.26 on 3.937 pcd	1.125
A0410	3.976	3.150	2.36	1.625	0.750	0.750	0.625	3.875	1.625	1.3125	0.16	\varnothing 0.35 on 4.528 pcd	1.625
A0510	4.409	3.543	3.56	2.000	1.000	1.000	0.625	4.625	2.125	1.75	0.19	\varnothing 0.35 on 5.118 pcd	1.875
A0610	5.197	4.134	2.80	2.375	1.375	1.125	0.750	5.500	2.625	2.0	0.25	\varnothing 0.43 on 6.496 pcd	2.250
A0730	6.024	4.724	3.58	2.875	1.625	1.250	0.750	6.625	3.250	2.5	0.25	\varnothing 0.53 on 8.465 pcd	2.750
A0860	7.008	5.197	3.94	3.375	1.875	1.500	1.000	7.875	3.875	3.25	0.31	\varnothing 0.53 on 8.465 pcd	3.250

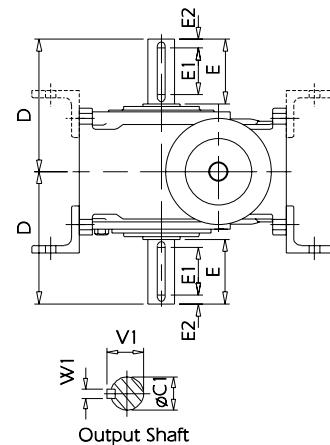
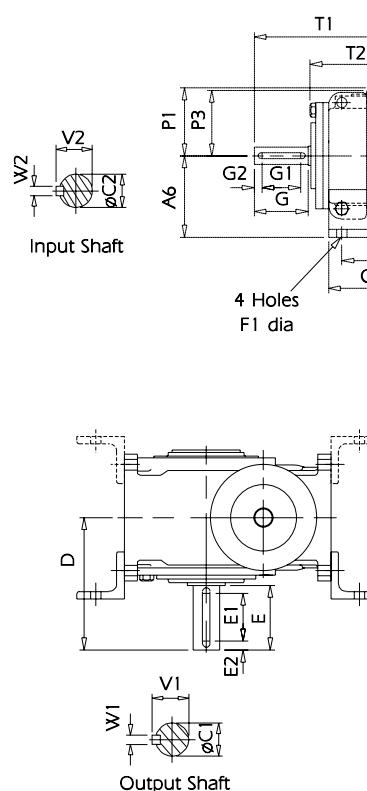
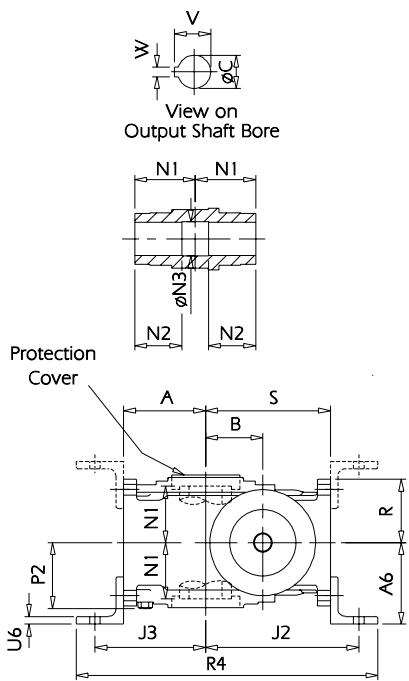
SIZE	G1	G2	N1	N2	\varnothing N3	P1	P3	P4	Q1	R2	R3	S	T	T1
A0280	0.906	0.13	1.575	1.26	0.635 0.630	1.89	1.73	1.99	4.72	3.1508 3.1496	2.36	2.283	2.09	3.563
A0410	1.188	0.22	1.969	1.57	0.760 0.755	2.28	2.16	2.36	5.51	3.7415 3.7402	2.84	2.598	2.44	4.313
A0510	1.438	0.22	2.205	1.77	1.010 1.005	2.48	2.40	2.44	6.30	4.3321 4.3307	3.46	2.913	2.96	5.250
A0610	1.813	0.22	2.520	1.97	1.385 1.380	2.84	2.72	2.64	7.87	5.1197 5.1181	4.33	3.425	3.39	6.250
A0730	2.313	0.22	3.031	2.36	1.635 1.630	3.42	3.31	3.31	9.84	7.0882 7.0866	5.36	4.134	4.06	7.500
A0860	2.750	0.25	3.661	2.87	1.885 1.880	4.09	3.90	3.82	9.84	7.0882 7.0866	5.91	4.606	4.57	8.625

SIZE	T2	U3	U4	V	V1	V2	W	W1	W2
A0280	2.40	0.12	0.28	0.715 0.709	0.707 0.699	0.480 0.472	0.1895 0.1875	0.190 0.188	0.096 0.094
A0410	2.68	0.14	0.31	0.843 0.837	0.834 0.826	0.708 0.700	0.1895 0.1875	0.190 0.188	0.190 0.188
A0510	3.39	0.16	0.35	1.120 1.114	1.110 1.102	0.708 0.700	0.2520 0.2500	0.252 0.250	0.190 0.188
A0610	3.94	0.18	0.39	1.524 1.518	1.238 1.230	0.833 0.825	0.3145 0.3125	0.252 0.250	0.190 0.188
A0730	4.80	0.20	0.47	1.802 1.796	1.364 1.356	0.833 0.825	0.3770 0.3750	0.252 0.250	0.190 0.188
A0860	5.20	0.20	0.47	2.102 2.096	1.666 1.658	1.110 1.102	0.5020 0.5000	0.377 0.375	0.252 0.250

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STANDARD UNIT WITH SIDE MOUNTED FEET



* Fans not fitted to sizes 280, 410, 510 and 610

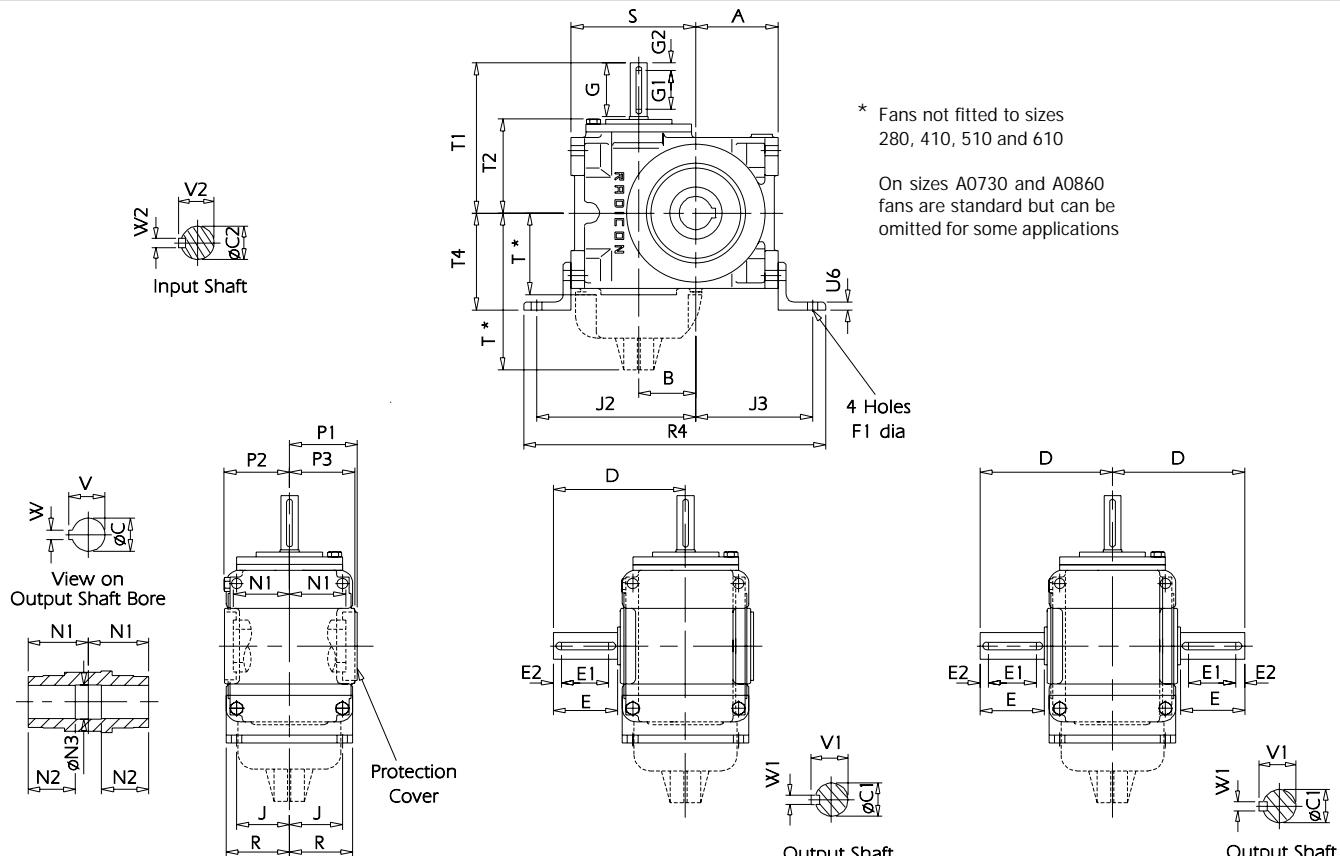
Feet can be fitted on either side of the gearcase as shown by the dotted line

SIZE	A	A6	B	ϕ C	ϕ C1	C2	D	E	E1	E2	F1	G	G1	G2
A0280	2.283	2.441	1.125	0.625	0.625	0.4375	3.125	1.250	0.9375	0.16	0.35	1.125	0.906	0.13
A0410	2.598	2.953	1.625	0.750	0.750	0.625	3.875	1.625	1.3125	0.16	0.45	1.625	1.188	0.22
A0510	2.913	3.071	2.000	1.000	1.000	0.625	4.625	2.125	1.75	0.19	0.45	1.875	1.438	0.22
A0610	3.425	3.386	2.375	1.375	1.125	0.750	5.500	2.625	2.0	0.25	0.45	2.250	1.813	0.22
A0730	4.134	4.055	2.875	1.625	1.250	0.750	6.625	3.250	2.5	0.25	0.53	2.750	2.313	0.22
A0860	4.606	4.646	3.375	1.875	1.500	1.000	7.875	3.875	3.25	0.31	0.69	3.250	2.750	0.25

SIZE	H	J2	J3	N1	N2	ϕ N3	P1	P2	P3	R	R4	S	T	T1
A0280	2.067	4.00	3.09	1.575	1.26	0.635 0.630	1.89	1.77	1.73	1.99	7.84	3.189	2.09	3.563
A0410	2.303	5.00	3.62	1.969	1.57	0.760 0.755	2.28	2.16	2.16	2.36	9.72	3.976	2.44	4.313
A0510	2.244	5.43	3.94	2.205	1.77	1.010 1.005	2.48	2.40	2.40	2.44	10.47	4.409	2.96	5.250
A0610	2.599	6.38	4.61	2.520	1.97	1.385 1.380	2.84	2.64	2.72	2.64	12.56	5.197	3.39	6.250
A0730	3.189	7.32	5.43	3.031	2.36	1.635 1.630	3.42	3.19	3.31	3.31	14.09	6.024	4.06	7.500
A0860	3.544	8.54	6.14	3.661	2.87	1.885 1.880	4.09	3.82	3.90	3.82	16.34	7.008	4.57	8.625

SIZE	T2	U6	V	V1	V2	W	W1	W2
A0280	2.40	0.20	0.715 0.709	0.707 0.699	0.480 0.472	0.1895 0.1875	0.190 0.188	0.096 0.094
A0410	2.68	0.24	0.843 0.837	0.834 0.826	0.708 0.700	0.1895 0.1875	0.190 0.188	0.190 0.188
A0510	3.39	0.24	1.120 1.114	1.110 1.102	0.708 0.700	0.2520 0.2500	0.252 0.250	0.190 0.188
A0610	3.94	0.31	1.524 1.518	1.238 1.230	0.833 0.825	0.3145 0.3125	0.252 0.250	0.190 0.188
A0730	4.80	0.31	1.802 1.796	1.364 1.356	0.833 0.825	0.3770 0.3750	0.252 0.250	0.190 0.188
A0860	5.20	0.39	2.102 2.096	1.666 1.658	1.110 1.102	0.5020 0.5000	0.377 0.375	0.252 0.250

A	0	0	H	R
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STANDARD UNIT WITH END MOUNTED FEET


SIZE	A	B	\varnothing C	\varnothing C1	C2	D	E	E1	E2	F1	G	G1	G2	J
A0280	2.283	1.125	0.625	0.625	0.4375	3.125	1.250	0.9375	0.16	0.35	1.125	0.906	0.13	1.635
A0410	2.598	1.625	0.750	0.750	0.625	3.875	1.625	1.3125	0.16	0.45	1.625	1.188	0.22	1.930
A0510	2.913	2.000	1.000	1.000	0.625	4.625	2.125	1.75	0.19	0.45	1.875	1.438	0.22	2.045
A0610	3.425	2.375	1.375	1.125	0.750	5.500	2.625	2.0	0.25	0.45	2.250	1.813	0.22	2.205
A0730	4.134	2.875	1.625	1.250	0.750	6.625	3.250	2.5	0.25	0.53	2.750	2.313	0.22	2.755
A0860	4.606	3.375	1.875	1.500	1.000	7.875	3.875	3.25	0.31	0.69	3.250	2.750	0.25	3.110

SIZE	J2	J3	N1	N2	\varnothing N3	P1	P2	P3	R	R4	S	T	T1	T2
A0280	4.00	3.09	1.575	1.26	0.635 0.630	1.89	1.77	1.73	1.99	7.84	3.189	2.09	3.563	2.40
A0410	5.00	3.62	1.969	1.57	0.760 0.755	2.28	2.16	2.16	2.36	9.72	3.976	2.44	4.313	2.68
A0510	5.43	3.94	2.205	1.77	1.010 1.005	2.48	2.40	2.40	2.44	10.47	4.409	2.96	5.250	3.39
A0610	6.38	4.61	2.520	1.97	1.385 1.380	2.84	2.64	2.72	2.64	12.56	5.197	3.39	6.250	3.94
A0730	7.32	5.43	3.031	2.36	1.635 1.630	3.42	3.19	3.31	3.31	14.09	6.024	4.06	7.500	4.80
A0860	8.54	6.14	3.661	2.87	1.885 1.880	4.09	3.82	3.90	3.82	16.34	7.008	4.57	8.625	5.20

SIZE	T4	U6	V	V1	V2	W	W1	W2
A0280	2.874	0.20	0.715 0.709	0.707 0.699	0.480 0.472	0.1895 0.1875	0.190 0.188	0.096 0.094
A0410	3.327	0.24	0.843 0.837	0.834 0.826	0.708 0.700	0.1895 0.1875	0.190 0.188	0.190 0.188
A0510	3.268	0.24	1.120 1.114	1.110 1.102	0.708 0.700	0.2520 0.2500	0.252 0.250	0.190 0.188
A0610	3.780	0.31	1.524 1.518	1.238 1.230	0.833 0.825	0.3145 0.3125	0.252 0.250	0.190 0.188
A0730	4.488	0.31	1.802 1.796	1.364 1.356	0.833 0.825	0.3770 0.3750	0.252 0.250	0.190 0.188
A0860	5.079	0.39	2.102 2.096	1.666 1.658	1.110 1.102	0.5020 0.5000	0.377 0.375	0.252 0.250

SERIES A

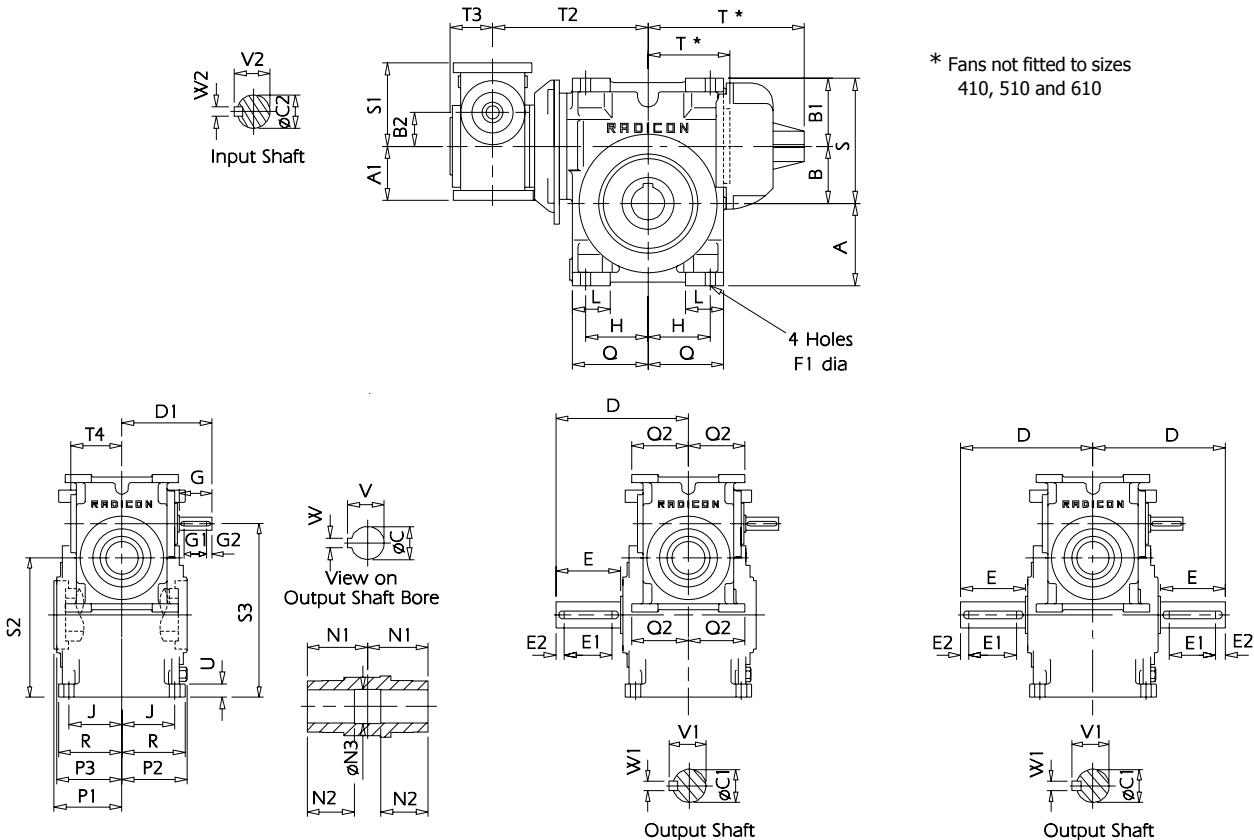
RADICON

DIMENSIONS

DOUBLE REDUCTION

9906

A 0 0 W D STANDARD UNIT



* Fans not fitted to sizes
410, 510 and 610

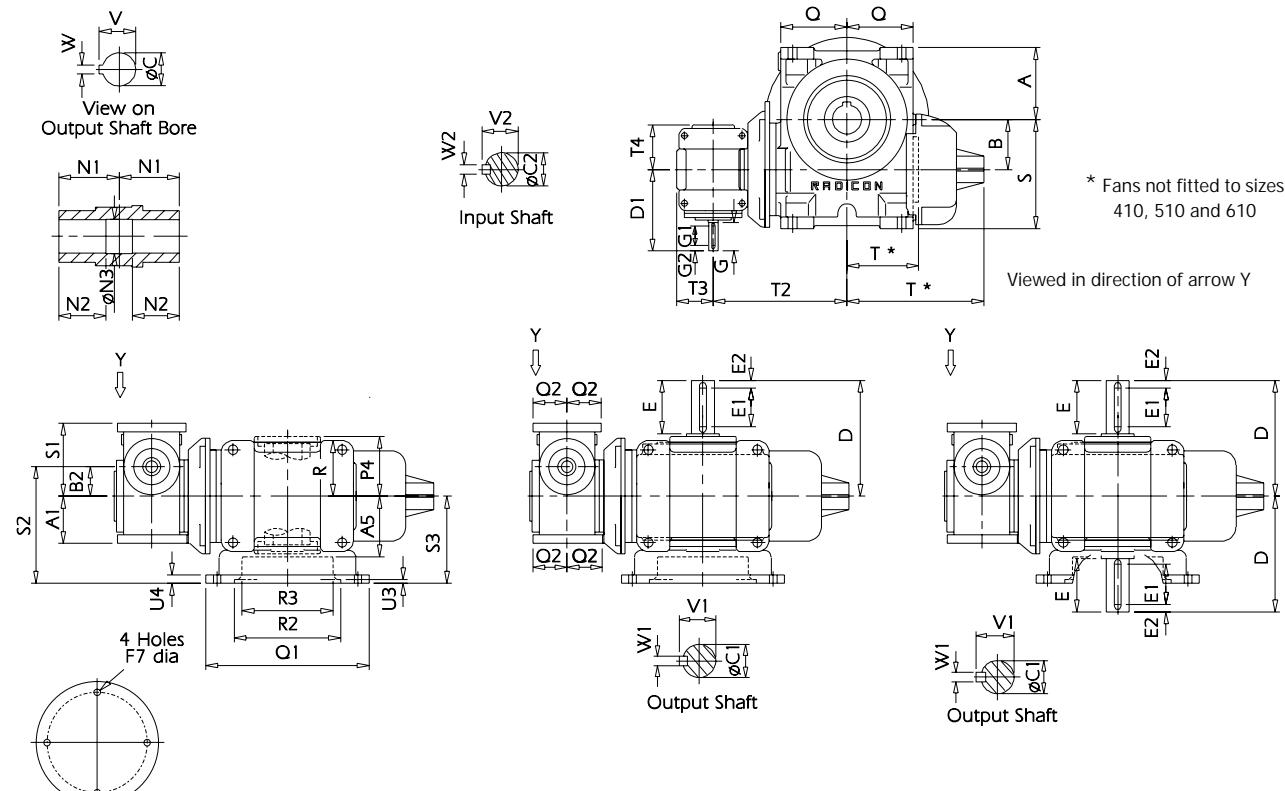
SIZE	A	A1	B	B1	B2	ϕC	$\phi C1$	C2	D	D1	E	E1	E2	F1	G
A0410	2.598	2.283	1.625	2.350	1.125	0.750	0.750	0.4375	3.875	3.563	1.625	1.3125	0.16	0.45	1.125
A0510	2.913	2.283	2.000	2.409	1.125	1.000	1.000	0.4375	4.625	3.563	2.125	1.75	0.19	0.45	1.125
A0610	3.425	2.598	2.375	2.823	1.625	1.375	1.125	0.625	5.500	4.313	2.625	2.0	0.25	0.45	1.625
A0730	4.134	2.598	2.875	3.150	1.625	1.625	1.250	0.625	6.625	4.313	3.250	2.5	0.25	0.53	1.625
A0860	4.606	2.913	3.375	3.634	2.000	1.875	1.500	0.625	7.875	5.250	3.875	3.25	0.31	0.69	1.875

SIZE	G1	G2	H	J	L	N1	N2	$\phi N3$	P1	P2	P3	Q	Q2	R	S
A0410	0.906	0.13	2.303	1.930	1.26	1.969	1.57	0.760 0.755	2.28	2.16	2.16	2.72	2.42	2.36	3.976
A0510	0.906	0.13	2.244	2.045	1.38	2.205	1.77	1.010 1.005	2.48	2.40	2.40	2.64	2.42	2.44	4.409
A0610	1.188	0.22	2.599	2.205	1.58	2.520	1.97	1.385 1.380	2.84	2.64	2.72	3.15	2.72	2.64	5.197
A0730	1.188	0.22	3.189	2.755	1.77	3.031	2.36	1.635 1.630	3.42	3.19	3.31	3.74	2.72	3.31	6.024
A0860	1.438	0.22	3.544	3.110	2.16	3.661	2.87	1.885 1.880	4.09	3.82	3.90	4.25	2.64	3.82	7.008

SIZE	S1	S2	S3	T	T2	T3	T4	U	V	V1	V2	W	W1	W2
A0410	3.189	4.223	4.225	2.44	4.961	1.89	2.09	0.39	0.843 0.837	0.834 0.826	0.480 0.472	0.1895 0.1875	0.190 0.188	0.096
A0510	3.189	4.913	4.914	2.96	5.630	1.89	2.09	0.47	1.120 1.114	1.110 1.102	0.480 0.472	0.2520 0.2500	0.252 0.250	0.096
A0610	3.976	5.800	5.800	3.39	6.732	2.28	2.44	0.55	1.524 1.518	1.238 1.230	0.708 0.700	0.3145 0.3125	0.252 0.250	0.190 0.188
A0730	3.976	7.009	7.009	7.76	7.559	2.28	2.44	0.63	1.802 1.796	1.364 1.356	0.708 0.700	0.3770 0.3750	0.252 0.250	0.190 0.188
A0860	4.409	7.981	7.980	8.94	8.189	2.48	2.96	0.71	2.102 2.096	1.666 1.658	0.708 0.700	0.5020 0.5000	0.377 0.375	0.190 0.188

A O O F D

STANDARD UNIT FLANGE MOUNTED



Flange Bolt Hole Positions
(All Sizes)

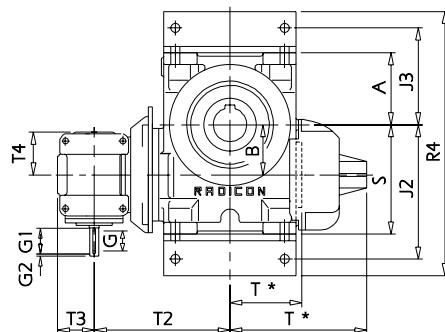
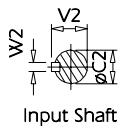
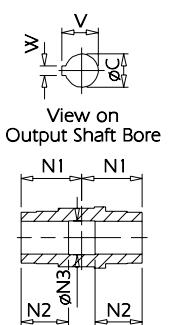
SIZE	A	A1	A5	B	B2	ϕC	$\phi C1$	C2	D	D1	E	E1	E2	F7
A0410	2.598	2.283	2.36	1.625	1.125	0.750	0.750	0.4375	3.875	3.563	1.625	1.3125	0.16	$\phi 0.35$ on 4.528 pcd
A0510	2.913	2.283	2.56	2.000	1.125	1.000	1.000	0.4375	4.625	3.563	2.125	1.75	0.19	$\phi 0.35$ on 5.118 pcd
A0610	3.425	2.598	2.80	2.375	1.625	1.375	1.125	0.625	5.500	4.313	2.625	2.0	0.25	$\phi 0.43$ on 6.496 pcd
A0730	4.134	2.598	3.58	2.875	1.625	1.625	1.250	0.625	6.625	4.313	3.250	2.5	0.25	$\phi 0.53$ on 8.465 pcd
A0860	4.606	2.913	3.94	3.375	2.000	1.875	1.500	0.625	7.875	5.250	3.875	3.25	0.31	$\phi 0.53$ on 8.465 pcd

SIZE	G	G1	G2	N1	N2	$\phi N3$	P4	Q	Q1	Q2	R2	R3	S	S1	S2
A0410	1.125	0.906	0.13	1.969	1.57	0.760 0.755	2.16	2.72	5.51	2.72	3.7415 3.7402	2.84	3.976	3.189	4.276
A0510	1.125	0.906	0.13	2.205	1.77	1.010 1.005	2.40	2.64	6.30	2.64	4.3321 4.3307	3.46	4.409	3.189	4.669
A0610	1.625	1.188	0.22	2.520	1.97	1.385 1.380	2.64	3.15	7.87	3.15	5.1197 5.1181	4.33	5.197	3.976	5.760
A0730	1.625	1.188	0.22	3.031	2.36	1.635 1.630	3.19	3.74	9.84	3.74	7.0882 7.0866	5.35	6.024	3.976	6.350
A0860	1.875	1.438	0.22	3.661	2.87	1.885 1.880	3.82	4.25	9.84	4.25	7.0882 7.0866	5.91	7.008	4.409	7.197

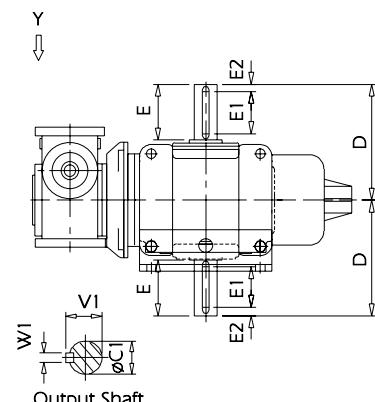
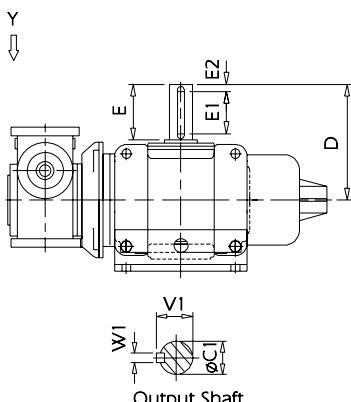
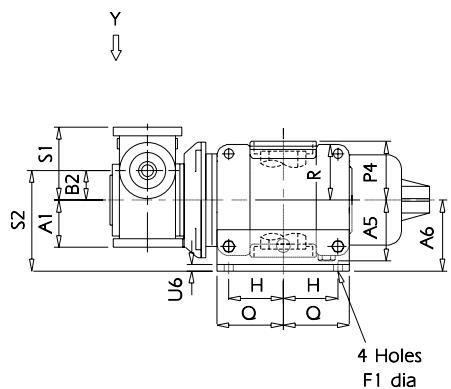
SIZE	S3	T	T2	T3	T4	U3	U4	V	V1	V2	W	W1	W2
A0410	3.150	2.44	4.961	1.89	2.09	0.14	0.31	0.843 0.837	0.834 0.826	0.480	0.1895 0.1875	0.190 0.188	0.096 0.094
A0510	3.543	2.96	5.630	1.89	2.09	0.16	0.35	1.120 1.114	1.110 1.102	0.480	0.2520 0.2500	0.252 0.250	0.096 0.094
A0610	4.134	3.39	6.732	2.28	2.44	0.18	0.39	1.524 1.518	1.238 1.230	0.708	0.3145 0.3125	0.252 0.250	0.190 0.188
A0730	4.724	7.76	7.559	2.28	2.44	0.20	0.47	1.802 1.796	1.364 1.356	0.708	0.3770 0.3750	0.252 0.250	0.190 0.188
A0860	5.197	8.94	8.189	2.48	2.96	0.20	0.47	2.102 2.096	1.666 1.658	0.708	0.5020 0.5000	0.377 0.375	0.190 0.188

9906

A 0 0 G D STANDARD UNIT WITH SIDE MOUNTED FEET



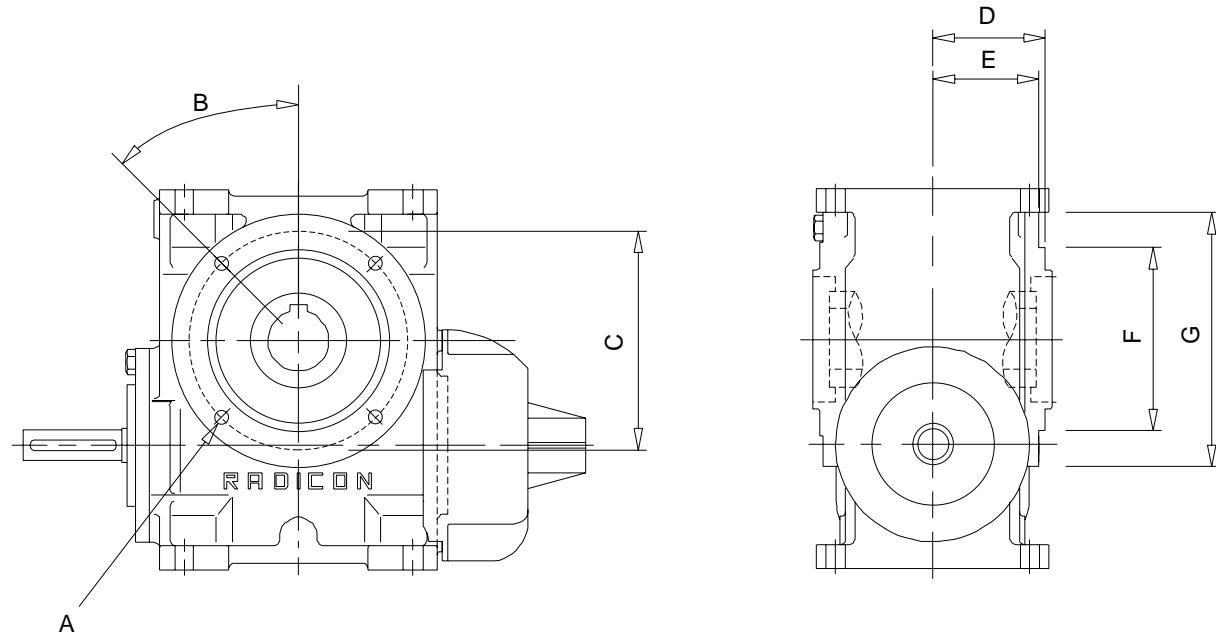
Viewed in direction of arrow Y



SIZE	A	A1	A5	A6	B	B2	ϕ C	ϕ C1	C2	D	D1	E	E1	E2	F1
A0410	2.598	2.283	2.16	2.953	1.625	1.125	0.750	0.750	0.4375	3.875	3.563	1.625	1.3125	0.16	0.45
A0510	2.913	2.283	2.40	3.071	2.000	1.125	1.000	1.000	0.4375	4.625	3.563	2.125	1.75	0.19	0.45
A0610	3.425	2.598	2.64	3.386	2.375	1.625	1.375	1.125	0.625	5.500	4.313	2.625	2.0	0.25	0.45
A0730	4.134	2.598	3.19	4.055	2.875	1.625	1.625	1.250	0.625	6.625	4.313	3.250	2.5	0.25	0.53
A0860	4.606	2.913	3.82	4.646	3.375	2.000	1.875	1.500	0.625	7.875	5.250	3.875	3.25	0.31	0.69

SIZE	G	G1	G2	H	J2	J3	N1	N2	ϕ N3	P4	Q	R	S	S1	S2
A0410	1.125	0.906	0.13	2.303	5.00	3.62	1.969	1.57	0.760 0.755	2.16	2.72	2.36	3.976	3.189	4.079
A0510	1.125	0.906	0.13	2.244	5.43	3.94	2.205	1.77	1.010 1.005	2.40	2.64	2.44	4.409	3.189	4.197
A0610	1.625	1.188	0.22	2.599	6.38	4.61	2.520	1.97	1.385 1.380	2.72	3.15	2.64	5.197	3.976	5.012
A0730	1.625	1.188	0.22	3.189	7.32	5.43	3.031	2.36	1.635 1.630	3.31	3.74	3.31	6.024	3.976	5.681
A0860	1.875	1.438	0.22	3.544	8.54	6.14	3.661	2.87	1.885 1.880	3.90	4.25	3.82	7.008	4.409	6.646

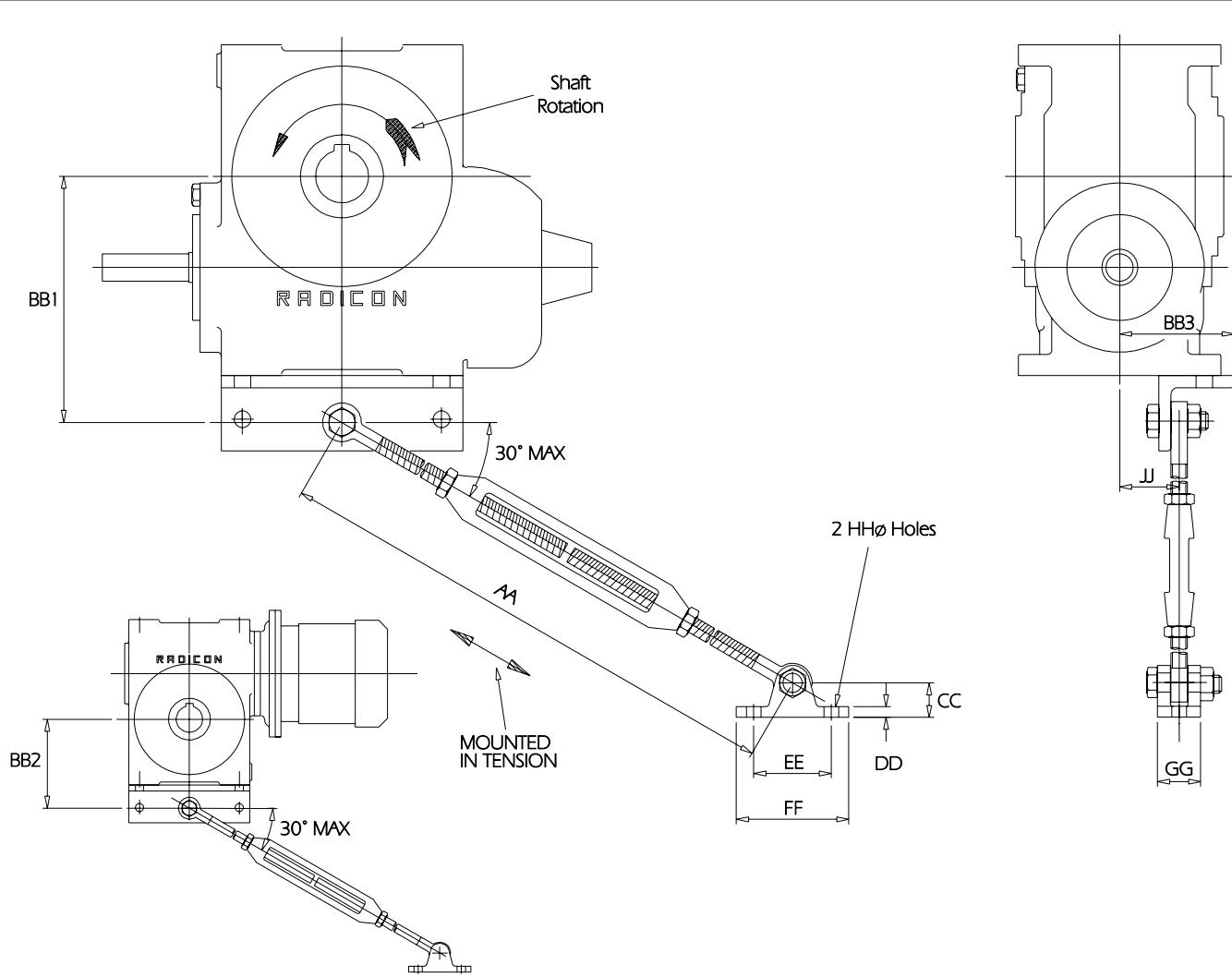
SIZE	T	T2	T3	T4	U6	V	V1	V2	W	W1	W2
A0410	2.44	4.961	1.89	2.09	0.24	0.843 0.837	0.834 0.826	0.480 0.472	0.1895 0.1875	0.190 0.188	0.096 0.094
A0510	2.96	5.630	1.89	2.09	0.24	1.120 1.114	1.110 1.102	0.480 0.472	0.2520 0.2500	0.252 0.250	0.096 0.094
A0610	3.39	6.732	2.28	2.44	0.31	1.524 1.518	1.238 1.230	0.708 0.700	0.3145 0.3125	0.252 0.250	0.190 0.188
A0730	7.76	7.559	2.28	2.44	0.31	1.802 1.796 1.356	1.364 1.356 0.700	0.708 0.3770 0.3750	0.252 0.190 0.250	0.190 0.188	
A0860	8.94	8.189	2.48	2.96	0.39	2.102 2.096	1.666 1.658	0.708 0.700	0.5020 0.5000	0.377 0.375	0.190 0.188



UNIT SIZE	A	B	C	D	E	F	G
A0280	4 Holes equally spaced M6 x 0.35 Deep	45°	2.87 PCD	1.73	1.61	2.0862 2.0854	3.35
A0410	4 Holes equally spaced M6 x 0.47 Deep	45°	3.50 PCD	2.17	2.01	2.7555 2.7547	3.98
A0510	4 Holes equally spaced M8 x 0.55 Deep	45°	4.21 PCD	2.32	2.17	3.3461 3.3453	4.80
A0610	8 Holes equally spaced M8 x 0.55 Deep	22.5°	5.12 PCD	2.56	2.40	4.1335 4.1327	5.75
A0730	8 Holes equally spaced M10 x 0.71 Deep	22.5°	6.10 PCD	3.11	2.91	4.9209 4.9201	6.89
A0860	8 Holes equally spaced M10 x 0.71 Deep	22.5°	6.93 PCD	3.74	3.54	5.7083 5.7075	7.72

This option is available in Additional Features - Column 20

9609



	SIZE OF UNIT					
	A0280	A0410	A0510	A0610	A0730	A0860
BB1	3.94	4.96	5.39	6.42	7.24	8.46
BB2	3.03	3.58	3.90	4.65	5.35	6.06
BB3	2.00	2.48	2.60	2.99	3.43	3.94
AA	14.0 - 20.0	14.0 - 20.0	19.0 - 25.0	19.0 - 25.0	19.0 - 25.0	24.0 - 29.5
CC	0.8125	0.8125	1.00	1.00	1.00	1.1875
DD	0.25	0.25	0.3125	0.3125	0.3125	0.375
EE	2.00	2.00	2.25	2.25	2.25	2.75
FF	2.75	2.75	3.25	3.25	3.25	4.00
GG	1.00	1.00	1.25	1.25	1.25	1.50
HH	0.35	0.35	0.43	0.43	0.43	0.56
JJ	1.22	1.34	1.50	1.57	2.01	2.28

The torque arm should be fitted on that side of the gear unit which is adjacent to the driven machine.

The angle between the torque arm and the high speed shaft MUST NOT EXCEED 30°. The torque arm must be positioned so that it is loaded IN TENSION, ie in the direction of TORQUE REACTION, which is opposite to the direction of shaft rotation, as shown above.

For reversing applications two torque arms must be fitted in opposite mounting positions.

Gear units must be locked axially when mounted in position, and supported by the low speed sleeve for a minimum of 90% of the bore length.



SHIPPING SPECIFICATION

9611

SINGLE REDUCTION

COLUMN 10 ENTRY		UNIT SIZE					
		A0280	A0410	A0510	A0610	A0730	A0860
R	Unit Weight	9.9	16.3	24.7	35.3	63.9	99.2
	Weight Packed	13.2	19.8	29.1	41.9	75.0	116.8
	Volume Packed (ft³)	0.5	0.5	1.0	1.0	2.3	3.0
G	Unit Weight	15.4	24.9	33.7	48.5	77.2	119.0
	Weight Packed	19.8	28.7	39.7	57.3	92.6	141.1
	Volume Packed (ft³)	0.6	0.6	1.1	1.1	2.4	3.6

DOUBLE REDUCTION

COLUMN 10 ENTRY		UNIT SIZE				
		A0410	A0510	A0610	A0730	A0860
D	Unit Weight	27.6	36.4	55.1	83.8	130.1
	Weight Packed	34.2	40.8	61.7	94.8	143.3
	Volume Packed (ft³)	1.0	1.5	1.5	2.8	3.8
H	Unit Weight	34.2	41.9	63.9	92.6	138.9
	Weight Packed	41.9	48.5	81.6	108.0	154.3
	Volume Packed (ft³)	1.2	1.6	1.6	2.9	4.2

ALL WEIGHTS IN lb

ALL WEIGHTS INCLUDE LUBRICANT

- COLUMN 10 ENTRY R - REDUCER UNIT - SINGLE REDUCTION
 G - UNIT TO ALLOW FITTING OF A NON DB RADICON MOTOR - SINGLE REDUCTION
 D - REDUCER UNIT - DOUBLE REDUCTION
 H - UNIT TO ALLOW FITTING OF A NON DB RADICON MOTOR - DOUBLE REDUCTION

G AND H TYPE UNIT WEIGHTS AND VOLUMES DO NOT INCLUDE MOTORS

MAXIMUM STANDARD MOTOR FLANGES HAVE BEEN INCLUDED IN WEIGHTS AND VOLUMES



MOMENTS OF INERTIA

9608

MOMENTS OF INERTIA (lb.in²) Referred to Input Shaft

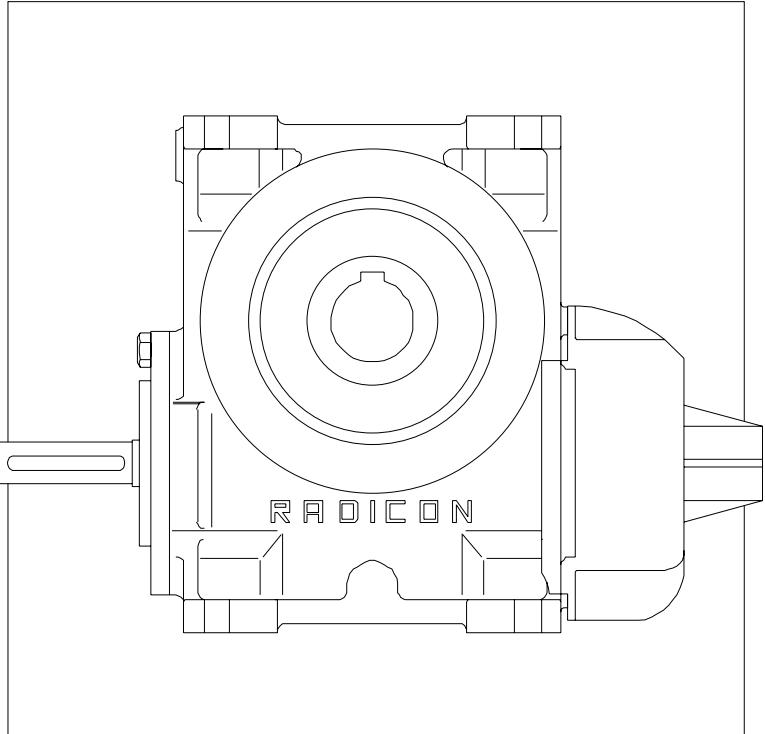
SINGLE REDUCTION

RATIO	A0280	A0410	A0510	A0610	A0730	A0860
5.00	0.02	0.14	0.40	0.85	1.96	4.66
7.50	0.02	0.10	0.23	0.48	1.21	2.67
10.00	0.01	0.08	0.17	0.33	0.78	1.97
12.50	0.01	0.07	0.14	0.27	0.74	1.44
15.00	0.01	0.07	0.11	0.22	0.63	1.47
20.00	0.02	0.05	0.14	0.26	0.48	1.11
25.00	0.01	0.06	0.12	0.22	0.64	1.45
30.00	0.01	0.06	0.09	0.18	0.49	1.18
40.00	0.01	0.05	0.07	0.14	0.40	1.01
50.00	0.01	0.04	0.07	0.12	0.36	0.88
60.00	0.01	0.05	0.06	0.10	0.35	0.82
70.00	0.01	0.04	0.05	0.10	0.35	0.83

DOUBLE REDUCTION

RATIO	A0410	A0510	A0610	A0730	A0860
75.00	0.01	0.01	0.07	0.08	0.14
100.00	0.01	0.01	0.07	0.07	0.12
125.00	0.01	0.01	0.07	0.08	0.14
150.00	0.01	0.01	0.06	0.06	0.12
200.00	0.01	0.01	0.06	0.06	0.11
225.00	0.01	0.01	0.06	0.06	0.08
250.00	0.01	0.01	0.06	0.06	0.12
300.00	0.01	0.01	0.05	0.05	0.13
350.00	0.01	0.01	0.06	0.06	0.11
375.00	0.01	0.01	0.06	0.07	0.08
400.00	0.01	0.01	0.05	0.05	0.13
450.00	0.01	0.01	0.06	0.06	0.08
500.00	0.01	0.01	0.05	0.05	0.13
600.00	0.01	0.01	0.05	0.05	0.13
625.00	0.01	0.01	0.06	0.06	0.11
700.00	0.01	0.01	0.04	0.04	0.05
750.00	0.01	0.01	0.06	0.06	0.11
800.00	0.01	0.01	0.05	0.05	0.07
900.00	0.01	0.01	0.05	0.05	0.09
1000.00	0.01	0.01	0.05	0.05	0.07
1200.00	0.01	0.01	0.05	0.05	0.07
1250.00	0.01	0.01	0.04	0.04	0.06
1400.00	0.01	0.01	0.04	0.04	0.05
1500.00	0.01	0.01	0.04	0.04	0.06
1600.00	0.01	0.01	0.05	0.05	0.07
1750.00	0.01	0.01	0.04	0.04	0.05
1800.00	0.01	0.01	0.04	0.04	0.06
2000.00	0.01	0.01	0.04	0.04	0.06
2100.00	0.01	0.01	0.04	0.04	0.05
2400.00	0.01	0.01	0.04	0.04	0.06
2500.00	0.01	0.01	0.04	0.04	0.06
2800.00	0.01	0.01	0.04	0.04	0.05
3000.00	0.01	0.01	0.04	0.04	0.06
3500.00	0.01	0.01	0.04	0.04	0.05
3600.00	0.01	0.01	0.04	0.04	0.06
4200.00	0.01	0.01	0.04	0.04	0.05

$$GD^2 (\text{lb.in}^2) = 4 \times \text{Moment of Inertia} (\text{lb.in}^2)$$



INSTALLATION & MAINTENANCE

SERIES A

DAVID BROWN
R A D I C O N

SERIES A JUNIOR

1 GENERAL INFORMATION

The following instructions will help you achieve a satisfactory installation of your David Brown Radicon Series A unit, ensuring the best possible conditions for a long and trouble free operation.

All units are tested and checked prior to despatch, a great deal of care is taken in packing and shipping arrangements to ensure that the unit arrives at the customer in the approved condition.

Series A gear units will perform satisfactorily if subjected to full load immediately after installation. However, optimum performance is best achieved by a process of gradual load increments, up to the full value, over the first 50 hours or so of their working life. During these early stages of running, sensible precautions should be taken to avoid overloads.

The gear unit operating temperature may be higher during this period of run-in. A progressive reduction in temperature may occur over many hours until the unit has reached its highest efficiency.

2 FITTING OF COMPONENTS TO EITHER THE UNIT INPUT OR OUTPUT SHAFT

Shaft dimensions are held to limits of +0.0000" -0.0005".

- Items (such as gears, sprockets, couplings etc) should not be hammered onto these shafts since this would damage the shaft support bearings.
- The item should be pushed onto the shaft using a screw jack device fitted into the threaded hole provided in the end of the shaft.
- Items being fitted may be heated to 80/100°C (176/212°F) to aid assembly further.

3 WEATHER PROTECTION OF UNIT

All Series A units are provided with protection against normal weather conditions. Where units are to operate in extreme conditions, or where they are to stand for long periods without running, eg during plant construction, we should be notified when ordering so that arrangements for adequate protection can be made.

4 INSTALLATION

4.1 MOTORIZED AND REDUCERS

All sizes are factory filled with a Polyglycol based synthetic lubricant. They are 'Lubricated for Life' and require no routine maintenance in service

4.2 FIXING TO CUSTOMER EQUIPMENT

Fixing the Gear Head flange facing or feet to the customer equipment use set screws to ISO grade 8.8 minimum.

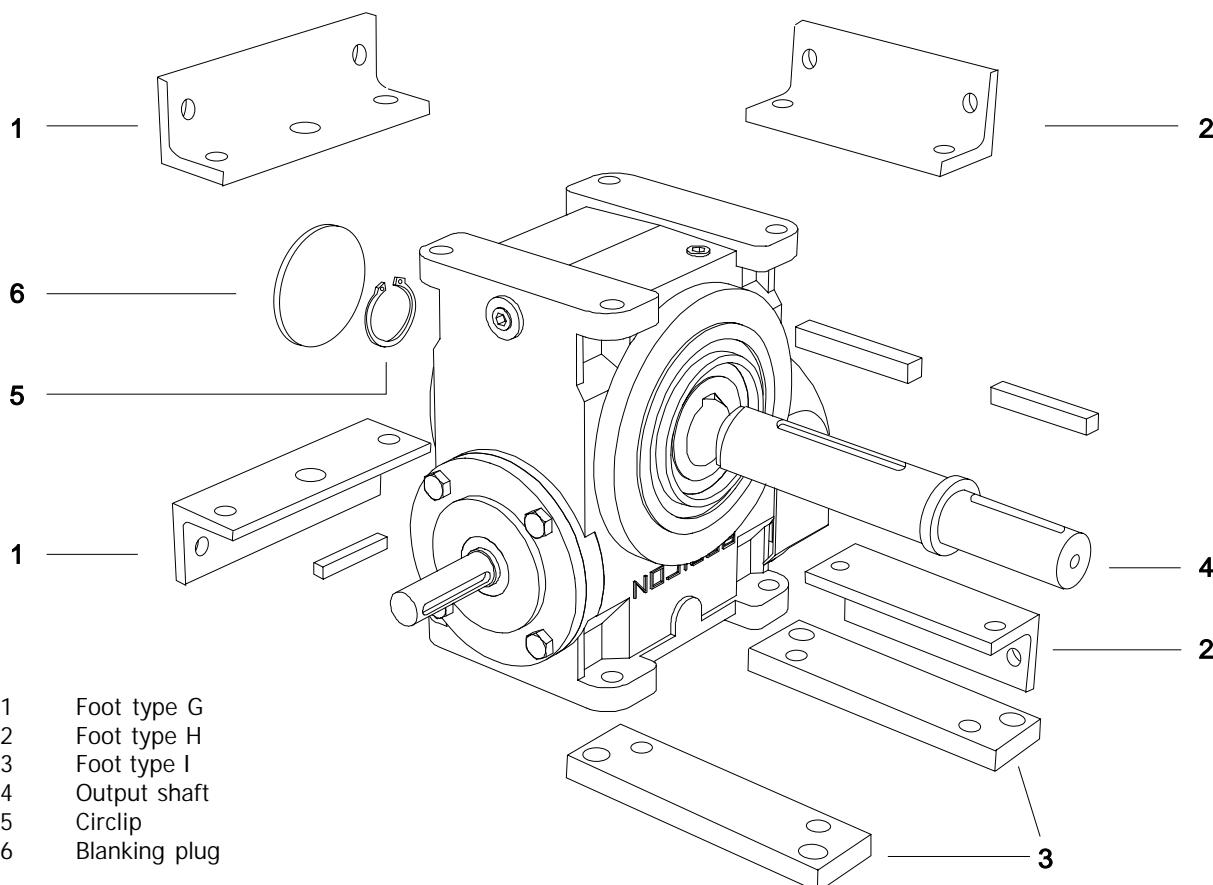
Torque tighten to:-

Set Screw Size	Tightening Torque	Tightening Torque
M6	88 lb-ins	7.3 lb-ft
M8	220 lb-ins	18.3 lb-ft
M10	450 lb-ins	37.5 lb-ft
M12	750 lb-ins	62.5 lb-ft
M16	1770 lb-ins	147.5 lb-ft
M20	3100 lb-ins	258.3 lb-ft
M24	5400 lb-ins	450.0 lb-ft

4.3 MOTOR CONNECTIONS

TO MAINS

Connection of the electric motor to the mains supply should be made by a qualified person. The current rating of the motor will be identified on the motor plate, and correct sizing of the cables to electrical regulations is essential.



FEET ASSEMBLY (TYPES G, H, I)

- 1 Clean shaft extension with petroleum spirit
- 2 Remove paint from locating faces on gearcase with scraper and petroleum spirit
- 3 Secure feet (item 1, 2 or 3) to gear case with nuts and bolts provided to thumb tightness, in required operating position
- 4 Ensure foot pads are correctly seated
- 5 Secure to foundations with bolts to thumb tightness and line up unit
- 6 Tighten feet bolts to unit
- 7 Check shaft alignment (see page 77) and tighten down bolts. Series A units are provided with intergral feet for mounting in the overdriven and underdriven positions. Feet type I are available to provide exact interchangeability with previous well established Radicon adaptable Series 9 range.

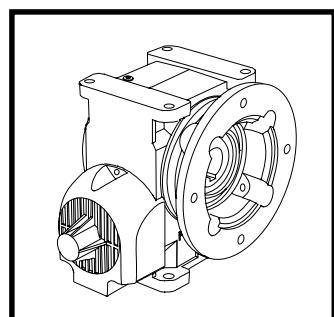
OUTPUT SHAFT ASSEMBLY

- 1 Clean outputshaft (item 4) and bore in gear unit with petroleum spirit
- 2 Fit keys into output shaft, ensuring they are firmly seated
- 3 Press shaft into gear unit bore to give desired shaft handling (Left or Right), until firmly up against shaft shoulder
- 4 Fit circlip (item 5) into groove in shaft on opposite side to extension
- 5 Tap blanking plug (item 6) into recess in gear case/end cover

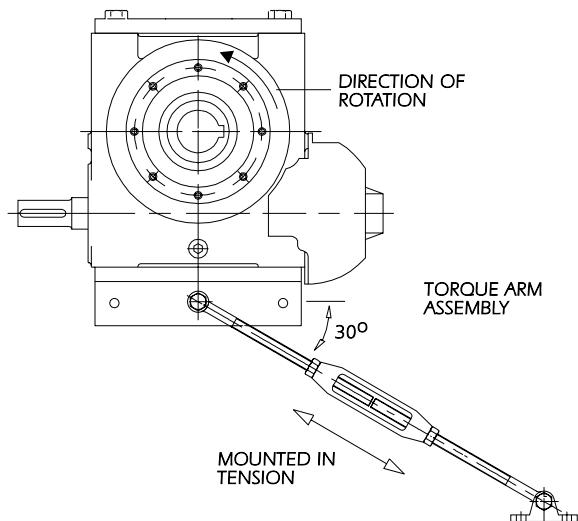
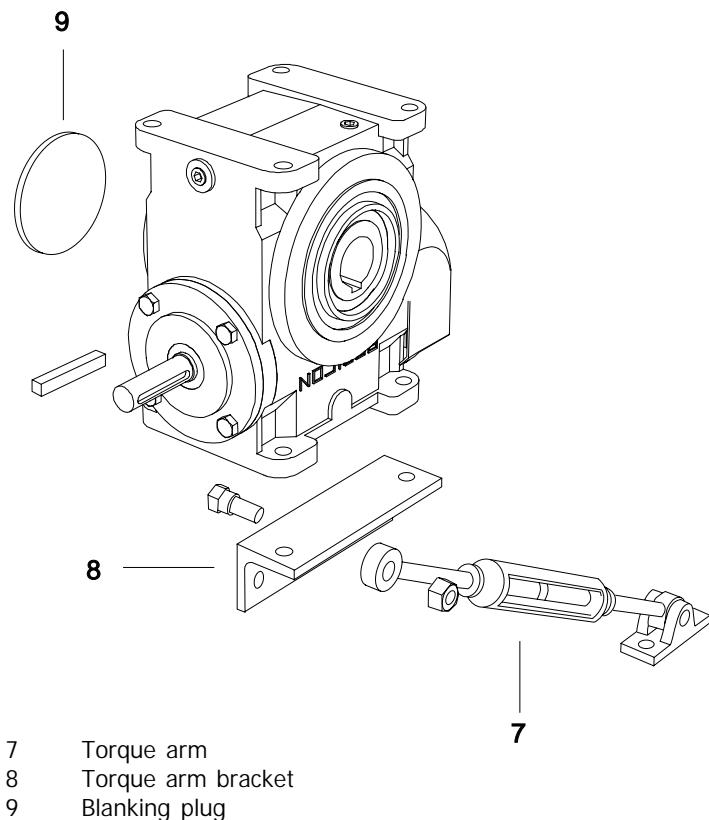
NOTE: For reversing drives where end float is critical, it may be necessary to fit shims behind the circlip fixing.
These are available on request from David Brown Radicon

FLANGE MOUNT UNIT (VERSION F)

- 1 Series A units are also available with circular output flanges located to the output shaft cover with extended bolts. These are normally factory fitted
- 2 The output flange is provided with a female spigot recess facilitating accurate location and concentricity with clients driven shaft
- 3 Flange to foundation fixing is by means of stud and nut, alternatively bolt and nut, entered from the side of the driven machinery
- 4 Ensure facing of flange is thoroughly cleaned prior to mounting

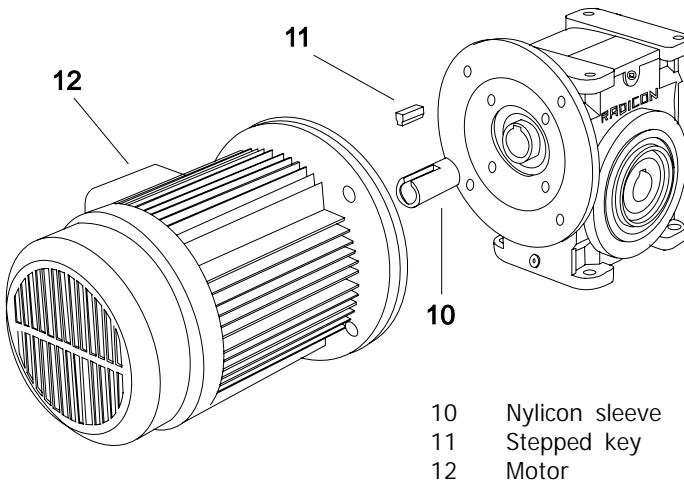


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SHAFT MOUNT UNITS

- 1 Clean input shaft extension and output bore with petroleum spirit
- 2 Fit torque arm assembly (item 7) on side of unit nearest to driven machine. Torque arm must be secured to the central hole in the torque arm bracket (item 8) fitted to the gear unit. Angle of torque arm to input shaft centre line must not exceed 30°, and should be mounted in tension (see diagram above).



MOTOR FRAME / BUSH COMBINATIONS

Motor Frame	Unit Size					
	280	410	510	610	730	860
D63	11mm					
D71	*	14mm				
D80		*	19mm	19mm	19mm	
D90			*	24mm	24mm	24mm
D100/112				*	*	28mm
D132						*

* No bush required - motor fits direct into gearbox

MOTORIZED UNITS

- 1 Motorized units are available with a variety of flange adaptors and bushing to accommodate different motor sizes. The table below details the frame size/bush combinations.
- 2 The motor flange is normally factory fitted, and is spigot located to the input shaft cover with extended bolts.
- 3 Clean locating faces of motor, gear unit, and motor shaft with petroleum spirit, discard standard motor shaft key
- 4 Where applicable, slide nylon sleeve (item 10) over motor shaft and line up keyway slot
- 5 Fit stepped key provided (item 11) into motor shaft and bush, ensuring it is firmly seated
- 6 The surface of the wormshaft bore is pre-treated with an anti-fretting agent, which must not be removed
- 7 Slide motor shaft into wormshaft bore, locating motor (item 12) and unit flanges
- 8 Rotate motor until terminal box is in desired position. Secure motor to unit using four flange bolts provided. Ensure bolts are tightened uniformly to prevent flange distortion
- 9 Check motor wiring for correct direction of rotation



LUBRICATION

9608

Radicon Series A Junior units are factory filled with a Polyglycol based synthetic lubricant. They are "Lubricated for Life" and require no routine maintenance in service.

In the event of a major overhaul involving strip-down and re-assembly of the gear unit refer to Table 1 for a list of approved lubricants. Lubricant quantities are given in Tables 2 and 3.

Table 1 Approved Lubricants

Type G Polyglycol based synthetic lubricants with Anti-Wear or EP additives

These lubricants are suitable for ambient temperatures of 32°F to 104°F (0°C to 40°C); outside of this, please consult David Brown Radicon Application Engineers

SUPPLIER	LUBRICANT RANGE	DAVID BROWN GRADE 6G
		OIL SUPPLIERS' CORRESPONDING DESIGNATIONS
Boxer Services Limited	Boxergear W	320 (-13)
Carl Bechem GmbH	Berusynth EP	320 (-13)
Castrol International	Alphasyn PG	320 (-24)
Esso/Exxon	Glycolube	320 (-13)
Fuchs Mineraloelwerke GmbH	Renolin PG	320 (-29)
International Speciality Chemicals	Breox Industrial Lubricant Sw	320 (-13)
Klüber Lubrication	Klübersynth GH6	320 (-13)
Kuwait Petroleum International	Q8 Gade	320 (-8)
Mobil Oil Company Limited	Glygoyle	HE320 (-22)
Shell Oils	Tivela	SC (-13)
Texaco Limited	Synlube CLP	320 (-24)
Tribol, Molub-Alloy	Tribol 800	320 (-13)

DANGER
Numbers in brackets indicate recommended minimum operating temperature in °F.

The unit must not run below this temperature

Table 2 Lubricant Quantities (Litres)

Applicable for all mounting positions:-

CONVERSION TABLE

Litres to US gallons	=	litres	x	0.26
Litres to Imperial gallons	=	litres	x	0.22

MOTORIZED or REDUCER	UNIT SIZE					
	A0280	A0410	A0510	A0610	A0730	A0860
Oil Capacity (Litres)	0.24	0.38	0.56	1.00	2.02	3.10

Table 3 Lubricant Quantities (Litres)

For units running at input speeds below 500 rev/min with either the input or output shaft vertical, also for the secondary stage of all double reduction units irrespective of shaft disposition, the oil quantities in Table 3 below are applicable:-

MOTORIZED or REDUCER	UNIT SIZE					
	A0280	A0410	A0510	A0610	A0730	A0860
Oil Capacity (Litres)	0.31	0.48	0.74	1.28	2.62	3.94

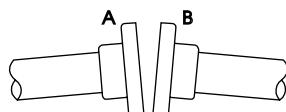
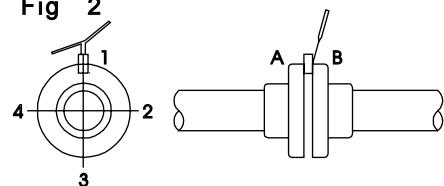
Double Reduction Units - obtain secondary stage lubricant quantity from table 3 and primary stage quantity from table 2

MOTORIZED or REDUCER	DOUBLE REDUCTION UNIT SIZE					
	A0280	A0410	A0510	A0610	A0730	A0860
Secondary stage	-	A0410	A0510	A0610	A0730	A0860
Primary stage	-	A0280	A0280	A0410	A0410	A0510

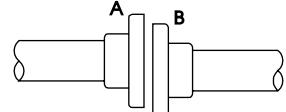
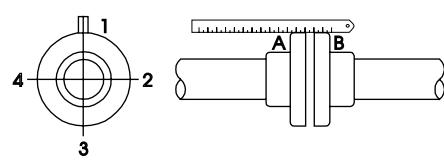
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GENERAL INSTRUCTIONS
SHAFT ALIGNMENT Coupling Connections
Angular Errors

- 1 Take up end float pushing in shaft ends.
- 2 Using thickness and feeler gauges, take readings in positions 1, 2, 3 and 4 (Fig 2).
- 3 Adjust unit by shimming under feet.

Fig 1**Fig 2****Eccentric Errors**

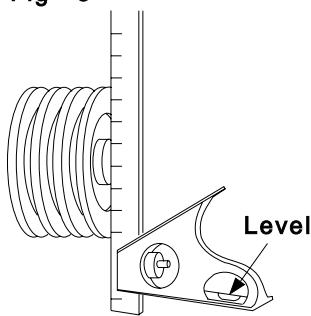
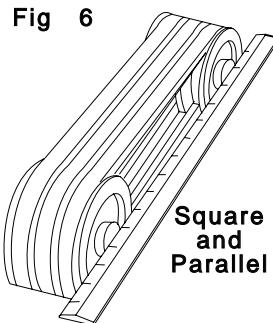
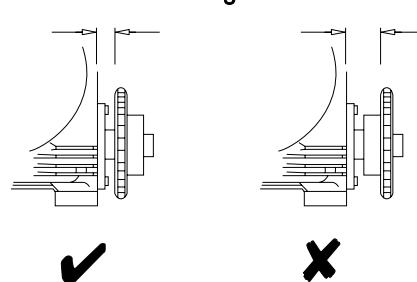
- 1 Place straight edge across coupling halves at points 1, 2, 3 and 4 (Fig 4). If coupling diameters are nor equal, use feeler gauge equal to half the difference in diameters.
- 2 if error is in vertical plane, adjust height of unit. If error is in horizontal plane, move unit transversally.

Fig 3**Fig 4****CHAIN AND BELT DRIVES**

Mount sprockets or pulleys as close to the gear unit as possible to avoid undue bearing loads and shaft deflection see Fig 5. Chains and belts should be sufficiently light as to prevent slip OVER TIGHTENING CAN CAUSE DAMAGE TO THE UNIT. Consult manufacturers' recommendations.

Check that driving and driven shafts are square and parallel using straight edge as in Fig 6.

Check horizontal shaft alignment using combined square and level as in Fig 7.

Fig 5**Fig 6****Fig 7****FIT GUARDS IN ACCORDANCE WITH FACTORY ACTS**

If a unit is to be subject to long term storage refer to David Brown.

WARNING

The customer shall be responsible for the proper use of articles supplied by David Brown, particularly the rotating shafts between their driving and driven members, and their guarding for safety. David Brown shall not be responsible for any injury or damage sustained as a result of the improper use of the articles supplied.

Attention is hereby drawn to the danger of using naked lights in proximity of opening in gearboxes and gear units supplied by David Brown, and the company shall not be liable for any claim for injury or damage arising from any action in contradiction of this warning.

GENERAL SAFETY

Potential hazards which can be encountered during installation, maintenance and operation of drives is covered in greater detail in the product safety page at the front of this booklet.

Advice is also given on sensible precautions which need to be taken to avoid injury or damage. **PLEASE READ !**

IMPORTANT

General - The following information is important in ensuring safety. It must be brought to the attention of personnel involved in the selection of Textron Power Transmission equipment; those responsible for the design of the machinery in which it is to be incorporated and those involved in its installation, use and maintenance.

Textron Power Transmission equipment will operate safely provided it is selected, installed, used and maintained properly. As with any power transmission equipment proper precautions must be taken as indicated in the following paragraphs, to ensure safety.

Potential Hazards - these are not necessarily listed in any order of severity as the degree of danger varies in individual circumstances. It is important therefore that the list is studied in its entirety.

- 1) **Fire/Explosion**
 - (a) Oil mists and vapor are generated within gear units. It is therefore dangerous to use naked lights in the proximity of gearbox openings, due to the risk of fire or explosion.
 - (b) In the event of fire or serious overheating (over 570 °F (300°C)), certain materials (rubber, plastics, etc.) may decompose and produce fumes. Care should be taken to avoid exposure to the fumes, and the remains of burned or overheated plastic/rubber materials should be handled with rubber gloves.
- 2) **Guards - Rotating shafts and couplings must be guarded to eliminate the possibility of physical contact or entanglement of clothing. It should be of rigid construction and firmly secured.**
- 3) **Noise - High speed gearboxes and gearbox driven machinery may produce noise levels which are damaging to the hearing with prolonged exposure. Ear plugs should be provided for personnel in these circumstances. Reference should be made to state and federal regulations for reducing exposure of employed persons to noise.**
- 4) **Lifting - Where provided (on larger units) only the lifting points or eyebolts must be used for lifting operations (see maintenance manual or general arrangement drawing for lifting point positions). Failure to use the lifting points provided may result in personal injury and/or damage to the product or surrounding equipment. Keep clear of raised equipment.**
- 5) **Lubricants and Lubrication**
 - (a) Prolonged contact with lubricants can be detrimental to the skin. The manufacturer's instruction must be followed when handling lubricants.
 - (b) The lubrication status of the equipment must be checked before commissioning. Read and carry out all instructions on the lubricant plate and in the installation and maintenance literature. Heed all warning tags. Failure to do so could result in mechanical damage and in extreme cases risk of injury to personnel.
- 6) **Electrical Equipment - Observe hazard warnings on electrical equipment and isolate power before working on the gearbox or associated equipment, in order to prevent the machinery being started.**
- 7) **Installation, Maintenance and Storage**
 - (a) In the event that equipment is to be held in storage, for a period exceeding 6 months, prior to installation or commissioning, Textron must be consulted regarding special preservation requirements. Unless otherwise agreed, equipment must be stored in a building protected from extremes of temperature and humidity to prevent deterioration.

The rotating components (gears and shafts) must be turned a few revolutions once a month (to prevent bearings brinelling).

- (b) External gearbox components may be supplied with preservative materials applied, in the form of a "waxed" tape overwrap or wax film preservative. Gloves should be worn when removing these materials. The former can be removed manually, the latter using white spirit as a solvent.
- (c) Preservatives applied to the internal parts of the gear units do not require removal prior to operation.
- (d) Installation must be performed in accordance with the manufacturer's instructions and be undertaken by suitably qualified personnel.
- (e) Before working on a gearbox or associated equipment, ensure that the load has been removed from the system to eliminate the possibility of any movement of the machinery and isolate power supply. Where necessary, provide mechanical means to ensure the machinery cannot move or rotate. Ensure removal of such devices after work is complete.
- (f) Ensure the proper maintenance of gearboxes in operation. Use only the correct tools and Textron approved spare parts for repair and maintenance. Consult the Maintenance Manual before dismantling or performing maintenance work.
- (g) **Hot Surfaces and Lubricants**
 - (a) During operation, gear units may become sufficiently hot to cause skin burns. Care must be taken to avoid accidental contact.
 - (b) After extended running the lubricant in gear units and lubrication systems may reach temperatures sufficient to cause burns. Allow equipment to cool before servicing or performing adjustments.
- (h) **Selection and Design**
 - (a) Where gear units provide a backstop facility, ensure that back-up systems are provided if failure of the backstop device would endanger personnel or result in damage.
 - (b) The driving and driven equipment must be correctly selected to ensure that the complete machinery installation will perform satisfactorily, avoiding system critical speeds, system torsional vibration, etc.
 - (c) The equipment must not be operated in an environment or at speeds, powers, torques or with external loads beyond those for which it was designed.
 - (d) As improvements in design are being made continually the contents of this catalog are not to be regarded as binding in detail, and drawings and capacities are subject to alterations without notice.

The above guidance is based on the current state of knowledge and our best assessment of the potential hazards in the operation of the gear units.

STANDARD CONDITIONS OF SALE FOR ALL PRODUCTS

0108

Applicable to All Orders and Quotations**APPLICABILITY**

These Standard Conditions of Sale shall apply to all quotations issued and orders accepted by Cone Drive Operations, Inc. (the "Company"), and shall take precedence over any terms and conditions set forth in any purchase order or other communication issued by the purchaser. The Company's failure to object to provisions in such purchase orders or communications shall not be deemed a waiver of these Conditions of Sale or acceptance of such provisions. These Conditions of Sale may not be modified except in writing by an authorized representative of the company.

PRICE POLICY**QUOTATIONS**

Written quotations are valid for 30 days including the date of quotation unless otherwise stated in writing. Verbal quotations are valid only on the day in which they are made. Stenographic and clerical errors are subject to correction. Prices shown in published price lists or other literature are not offers to sell by the Company and are subject to confirmation by specific quotations. All price lists and discounts are subject to change without notice.

ORDERS

All orders are received subject to acceptance by the Company. All orders must be bona fide commitments showing complete description of equipment, quantity, price and shipping dates required by the purchaser. Shipping dates are subject to final confirmation or change by the Company and are based on prompt receipt of all necessary information regarding the order. Stenographic and clerical errors are subject to correction. Prices will be firm for 90 days from the date of acceptance of the purchase order for all products except motors. Motors are subject to pricing at the time of shipment. Material scheduled for shipment beyond 90 days will be subject to price negotiation.

TERMS

Terms of payment are net 30 days from date of shipment. Extended payments are subject to deferred payment charges of 2% per month on the unpaid balance. No deductions are to be made from amounts due unless specifically authorized by the Company in writing. If in the judgment of the Company, the financial condition of the purchaser at any time does not justify continuance of production or shipment on the terms of payment specified, the Company may require full or partial payment in advance.

TAXES

The Company's prices do not include sales, use, or excise taxes. In addition to the purchase price, there shall be added to the billing price an amount equal to any applicable sales, use, excise or other tax levies on the sale or use of the apparatus ordered by the purchaser. In lieu thereof, the purchaser may provide the Company with a tax-exempt certificate acceptable by the taxing authorities.

HELD ORDERS

Should shipment of an order be delayed beyond the original scheduled shipping date for the convenience of the buyer or because of lack of shipping instructions, such an order is referred to as a held order. Changes will be made for storage, deferred payment and any other expenses incurred by the delay. Billing will be issued immediately for all held equipment and charges, and payment in full is due 30 days from invoice date. Charges on held orders will, in some instances, be equal to cancellation charge. Held material will be stored at buyer's expense and risk. Held orders may be released and continued subject to the same prices, schedule and conditions as apply to a new order entered on the date the held order is continued.

RESCHEDULED ORDERS

The Company requires an advance notice of 60 days to readjust schedules on shipping dates revised by the purchaser. All reschedules must include new scheduled shipping dates or the order will be considered a "held" order.

BLANKET ORDERS

Prices on blanket orders are firm for a period of 6 months from date of order. Unshipped balances of a blanket order will be subject to price and delivery renegotiations.

DELIVERY

Shipments are F.O.B. point of manufacture, freight collect. Shipments of 20 pounds or less will generally be shipped Parcel Post or U.P.S. and the shipping costs will be included on the invoice. The routing of shipments will be chosen by the Company unless a routing is specified by the purchaser.

PACKING

Price includes the Company's standard packing for domestic shipment. Extra charge is made for "export boxing" or "special boxing". No credit or deduction from the selling price will be allowed if the purchaser specifies no packing.

SHIPPING DATES

The Company shall not be responsible or liable for any loss, damage, detention or delay resulting from causes beyond its control, including but not limited to fire, strike or other labor action, civil or military authority, preference ratings issued by the United States Government or any department branch or representative thereof, insurrection or riot, embargoes, or delays in transportation or inability to obtain necessary labor, materials or manufacturing facilities due to such causes, nor in any event for consequential damages. The Company expressly rejects any penalty or liquidated damage clauses in purchase orders or contracts which relate to the Company's failure to meet target shipping dates, except in those specific cases where such clauses are required by law and approved in writing by the Company.

SERVICE CALLS

The services of Cone Drive Factory Representatives performed outside Company plants are available when not specifically covered by a Company warranty or contract. For rates, contact Main Sales Office.

DISOLESCEENCE

Special charges apply when exact duplication of obsolete equipment is required. Proposals involving obsolete equipment must be approved by the Main Office of the Company to determine availability and shipping schedule as well as price.

WARRANTY

For the specified warranty term commencing from the date of shipment (see chart below) Cone Drive Operations Inc. warrants that products delivered will conform to the specifications provided by the Company for such products, and will be free from defects in material and workmanship.

Product Type	Warranty Term
Precision Products including right angle worm and in-line planetary reducers	2 years
David Brown label products including Series A, C, E, G, K, M and Q	2 years
Cone Drive Brand Standard Reducers (as advertised in the catalog) including single, double and triple reduction units (HP and Cone Classic)	5 years
Cone Drive label modified standard products, stand alone gears, special or engineered products; any products not specified as standard in the catalog	1 year

Any claims under this warranty must be made in writing to the Company at the address set forth above within thirty days of the discovery thereof. The Company's obligation under this warranty shall be limited to the repair or replacement, at the Company's option, of the product, or any part thereof, when the Company has determined the product is not as warranted; any product or parts repaired or replaced pursuant to this warranty will be warranted for the remainder of the original warranty period. The warranty on normal wear items such as oil seals is limited to one year. The warranties for motors, brakes, couplings and all other add-on items shall be the warranties provided by, and shall be the responsibility of, the original equipment manufacturer. The Company is not responsible for and does not warrant equipment furnished by the purchaser or any defects caused thereby. The Company shall not be responsible for any claims, which the Company determines are due to improper installation, operation, abuse, rated capacity or accident, or because the product has been used, adjusted, altered, handled, maintained or stored other than as directed by the Company.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESS OR IMPLIED OR STATUTORY, WHETHER WRITTEN OR ORAL, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING FROM ANY COURSE OF PERFORMANCE OR DEALING OR TRADE USAGE. THIS WARRANTY IS ALSO IN LIEU OF ANY OTHER OBLIGATIONS, LIABILITIES, RIGHTS OR CLAIMS, WHETHER IN CONTRACT OR IN TORT, INCLUDING ANY RIGHT IN STRICT LIABILITY IN TORT OR ANY RIGHT ARISING FROM NEGLIGENCE ON THE PART OF THE COMPANY. IN NO EVENT, WHETHER AS A RESULT OF A BREACH OF WARRANTY, CONTRACT CLAIM OR ALLEGED NEGLIGENCE, SHALL THE COMPANY BE LIABLE FOR SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS OR REVENUES, LOSS OF USE OF THE EQUIPMENT ON WHICH THE PRODUCT IS INSTALLED OR REPLACEMENT OF SUCH EQUIPMENT.

PATENTS

The Company shall defend any suit or proceeding brought against the purchaser based on a claim that any apparatus, or any part thereof, furnished under the contract infringes any patent of the United States, provided the Company is notified promptly in writing and given authority, information and assistance (at the Company's expense) for the defense of such suit or proceeding. The Company will pay all damages and costs awarded thereto against the purchaser. If said apparatus or any part thereof is held to infringe and the use thereof is enjoined, the Company shall, at its own expense either procure for the purchaser the right to continue using said apparatus or part, or replace same with noninfringing apparatus; or modify it so that it becomes noninfringing; or remove said apparatus and refund the purchase price and the transportation and installation costs thereof. The foregoing states the entire liability of the Company for patent infringement.

RETURN APPARATUS

The purchaser must apply for authorization through the Main Office of the Company before returning an apparatus to the factory for credit. The Company will advise the purchaser of the credit to be allowed and necessary restocking charges on unused materials, subject to our inspection and acceptance when received. No estimate of allowance for used material can be made except upon receipt and inspection at Traverse City, Michigan, as directed by our Main Office. No material should be returned to this address except upon receipt of written authorization. In addition to the usual restocking charges, the purchaser must pay the actual transportation expense which the Company paid, plus the return transportation. When the outgoing transportation paid by the Company is not known, the purchaser pays double the return transportation charges, plus the restocking charges. Motors and special parts will not be accepted for return or credit.

TERMINATION

In the event purchaser, due to the change in design or other good and sufficient cause, desires to effect cancellation of this purchase order, notice shall be given in writing to the Company. The Company shall cease work and ship to the purchaser all completed and partially completed material. The purchaser will pay the Company all estimated expenditures made by the Company relating to the order plus a minimum of 20%.

PRODUCT USAGE

IN ANY APPLICATIONS OF CONE DRIVE PRODUCTS WHERE BREAKAGE, DAMAGE, DISCONNECTION, ANY OTHER MALFUNCTION OF ANY DRIVE TRAIN COMPONENT, OR EXCESSIVE WEAR COULD RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE, A FAIL-SAFE DEVICE CAPABLE OF STOPPING AND HOLDING THE LOAD IN THE EVENT OF SUCH AN OCCURRENCE MUST BE INCORPORATED AFTER THE DRIVE TRAIN.

The horsepower or output torque rating shown on the face of this order is in accordance with AGMA and must not be exceeded for normal operation. Starting or momentary overload must be limited to 300% of AGMA class 1 rating.

WE HEREBY CERTIFY THAT GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7, AND 12 OF THE FAIR LABOR STANDARD ACT AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR, ISSUED UNDER SECTION 14 THEREOF.

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0107

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AGRICULTURE

ENERGY

PULP & PAPER

AUTOMOTIVE

FOOD & BEVERAGE

QUARRYING

CEMENT

FORESTRY

RUBBER & PLASTICS

CHEMICAL

MARINE

TEXTILES

CONSTRUCTION

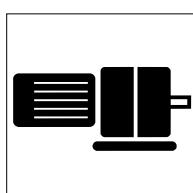
METALS

TRANSPORTATION

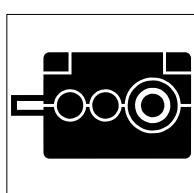
DEFENCE

MINING

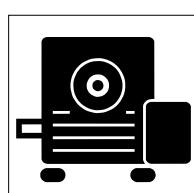
WATER



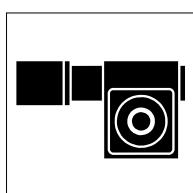
Geared motors



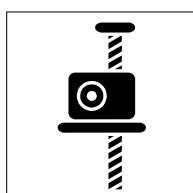
Industrial reducers



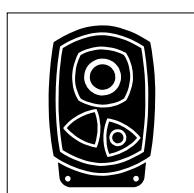
Worm



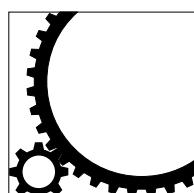
Precision products



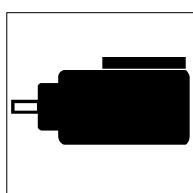
Screwjacks



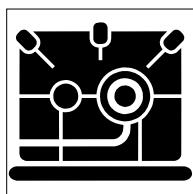
Shaftmount



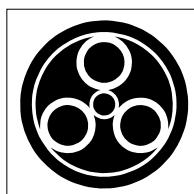
Horizontal mill drives



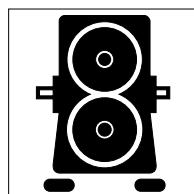
Vertical mill drives



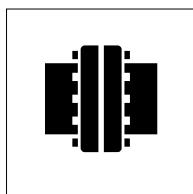
High speed



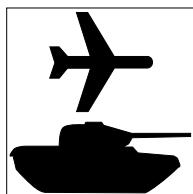
Planetary units



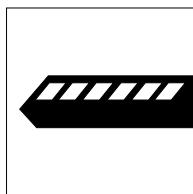
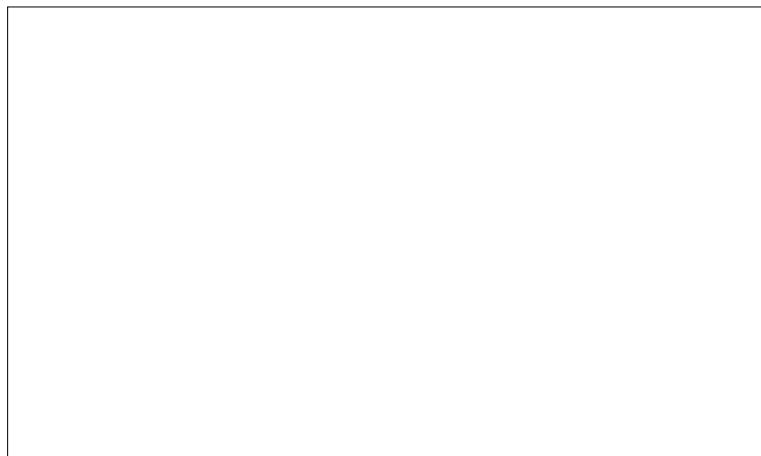
Specialist drives



Couplings



Defence Systems



Rail

TEXTRON POWER TRANSMISSION

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