



MAXUM Concentric Reducer EASY SELECTION METHOD - SEPARATE REDUCERS (for 1750 RPM motors)

When to Use Easy Selection

The Easy Selection tables for Separate Reducers are for electric motor selections up to 250 HP with input speeds of 1750 rpm using AGMA recommended service factors. For all other motor/prime mover input speeds and horse powers, use the Horsepower/Torque Selection Method on pages G3-57 through G3-58.

NOTE: If your application has unusual requirements (i.e., excessive shock or overloads, extreme ambient temperatures, non-standard motors or oversized equipment), refer to Horsepower/ Torque Selection Method.

How to Select

Step 1: Determine Service Factor – See Table 2 to determine service factor for applications under normal conditions. **Note:** When service factor exceeds 2.0, Horsepower/ Torque Selection Method must be used.

NOTE: AGMA classifies scoop mounted motors as gear motor applications which are sized using a load classification in place of a service factor. (See Easy Selection Method for scoop mounting, page G3-16.)

Step 2: Determine Unit Size – See tables on pages G3-11 through G3-15. Find the service factor table that is required for the application. Read the unit size under required Horsepower and opposite the required low speed shaft RPM. **Note:** For applications where fan cooling is unacceptable, use easy selection table with an increased service factor.

Step 3: Check External Thrust and Overhung Load – See information on page G3-59 to calculate high speed and low speed overhung loads. Consult DODGE about external thrust loads.

Step 4: Check Dimensions – See specification/dimension section, pages G3-23 through G3-33 for dimensions, weights and part numbers.

Step 5: Select Accessories – Check matrix for compatibility of combinations of accessories, page G3-34.

Example: Easy Selection Method - Separate Reducers

A 75 hp 1750 rpm motor is used to drive a uniformly loaded belt conveyor at 84 rpm operating 16 hours per day. The reducer is coupling connected at both the input and output shafts.

Step 1: Determine Service Factor - From Table 2, Service Factors, locate "Belt Conveyors - Uniformly Loaded or Fed." Select the Service Factor of 1.25 under the column headed 10+ hours/day service.

Step 2: Determine Unit Size - Turn to the Easy Selection Table for 1.25 Service Factor (Table 4). Find the column headed by 75 motor horsepower and read down to 83.6

rpm. A MAXUM size 7 is the correct selection and the nominal ratio is 20.93:1.

Step 3: Check External Thrust and Overhung Loads - Since the input and output shafts are coupling connected, thrust and overhung loads will not exist. (An overhung load example is given on page G3-59. Consult DODGE about external thrust loads.)

Step 4: Check Dimensions - Refer to the specifications for the DODGE MAXUM size 7 reducer located on page G3-29. The part number for the reducer is **299145**.

Step 5: Select Accessories - No accessories were required for this example.

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SERVICE FACTORS

The service factors that follow are adapted from AGMA 6010-E88 Appendix A.

Applications which expose the gear drive to high starting torques, extreme repetitive shock, or where high energy loads must be absorbed as when stalling, require special consideration. Service factors for these special applications should be agreed upon by the user and DODGE since variations of the values in the table may be required.

The service factors in the service factor table are based on the use of an electric or hydraulic motor or the use of a steam or gas turbine as a prime mover. If the prime mover is a single or multi-cylinder engine, then the service factor must be adjusted in accordance with Table 1.

Table 1: Conversion Table For Single Or Multi-cylinder Engines To Find Equivalent Single Or Multi-Cylinder Application Factor Or Service Factor

Steam and Gas Turbines, Hydraulic or Electric Motor	Single Cylinder Engines	Multi Cylinder Engines
1.00	1.50	1.25
1.25	1.75	1.50
1.50	2.00	1.75
1.75	2.25	2.00
2.00	2.50	2.25
2.25	2.75	2.50
2.50	3.00	2.75
2.75	3.25	3.00
3.00	3.50	3.25
3.50	4.00	3.75

Table 2: Service Factors

Application	Service		Application	Service		Application	Service	
	3-10 Hrs./Day	10+ Hrs./Day		3-10 Hrs./Day	10+ Hrs./Day		3-10 Hrs./Day	10+ Hrs./Day
AGITATORS			Scale Hoppers -			Reciprocating:		
Pure Liquids	1.00	1.25	Frequent Starts	1.25	1.50	Multi-cylinder	1.50	1.75
Liquids & Solids	1.25	1.50	BRICK PRESS (Clay Working)	1.75	2.00	Single Cylinder	1.75	2.00
Liquids - Variable Density	1.25	1.50	BRIQUETTE MACHINES (Clay Working)	1.75	2.00	CONCRETE MIXERS		
APRON CONVEYORS			BUCKET			Continuous	1.25	1.50
Uniformly Loaded			Conveyors Uniform	1.00	1.25	Intermittent	1.25	1.50
or Fed			Conveyors Heavy Duty	1.25	1.50	CONVEYORS - Uniformly		
Heavy Duty	1.00	1.25	Elevators Cont.	1.00	1.25	Loaded or Fed: Apron		
APRON FEEDERS	1.25	1.50	Elevators Uniform	1.00	1.25	Assembly, Belt,		
ASSEMBLY CONVEYORS			Elevators Heavy Duty	1.25	1.50	Bucket, chain, Flight		
Uniformly Loaded			CALENDERS			Oven, Screw	1.00	1.25
or Fed			Rubber		1.50	CONVEYORS - Heavy Duty		
Heavy Duty	1.00	1.25	Textile	1.25	1.50	Not Uniformly Fed:		
APRON FEEDERS	1.25	1.50	CANE KNIVES		1.50	Apron, Assembly, Belt,		
ASSEMBLY CONVEYORS			CAN FILLING MACHINES	1.00	1.25	Bucket, Chain, Flight,		
Uniformly Loaded			CARD MACHINES (Textile)	1.25	1.50	Oven, Screw	1.25	1.50
or Fed			CAR DUMPERS	1.75	2.00	CONVEYORS - Severe Duty		
Heavy Duty	1.00	1.25	CAR PULLERS	1.25	1.50	Live Roll Reciprocating	†	†
BALL MILLS	▲	▲	CEMENT KILNS	▲	▲	Shaker	1.75	2.00
BARGE HAUL PULLERS	1.25	1.50	CENTRIFUGAL			COOKERS (Brewing & Distilling), (Food)	1.25	1.25
BARKING			Blowers, compressors, Discharge Elevators, Fans or Pumps	1.00	1.25	COOLING TOWER FANS	†	†
Drums (coupling connected)		2.00	CHAIN CONVEYORS			CRANES	†	†
Mechanical		2.00	Uniformly Loaded or Fed	1.00	1.25	CRUSHERS		
BAR SCREENS (Sewage)	1.25	1.25	Heavy Duty	1.25	1.50	Ore or Stone	1.75	2.00
BATCHERS (Textile)	1.25	1.50	CHEMICAL FEEDERS (Sewage)	1.25	1.25	Sugar	1.50	1.50
BELT CONVEYORS			CLARIFIERS	1.00	1.25	DEWATERING SCREENS (Sewage)	1.50	1.50
Uniformly Loaded			CLASSIFIERS	1.25	1.50	DISC FEEDERS	1.00	1.25
or Fed			CLAY WORKING IND.			DISTILLING (See Brewing)		
Heavy Duty	1.00	1.25	Brick Press	1.75	2.00	DOUBLE ACTING PUMPS		
BELT FEEDERS	1.25	1.50	Briquette Machines	1.75	2.00	2 or More Cylinders	1.25	1.50
BENDING ROLLS (Machine)	1.25	1.50	Pug Mills	1.25	1.50	Single Cylinder	1.25	1.50
BLOWERS			COLLECTORS (Sewage)	1.25	1.25	DOUGH MIXER (Food)	†	†
Centrifugal	1.00	1.25	COMPRESSORS			DRAW BENCH (Metal Mills) carriage & Main Drive	1.25	1.50
Lobe	1.25	1.50	Cable Reels, Conveyors	1.00	1.25	DREDGES		
Vane	1.25	1.50	Cutter Head & Jig Drives	1.25	1.50		1.25	1.50
BOTTLING MACHINERY	1.00	1.25					2.00	2.00
BREWING & DISTILLING								
Bottling Machinery	1.00	1.25						
Brew Kettles, Cont. Duty	1.25	1.25						
Can Filling Machines	1.00	1.25						
Cookers - Cont. Duty	1.25	1.25						
Mash Tubs - Cont. Duty	1.25	1.25						

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Table 2 - Service Factor (cont'd)

Application	Service		Application	Service		Application	Service	
	3-10 Hrs./Day	10+Hrs./Day		3-10 Hrs./Day	10+ Hrs./Day		3-10 Hrs./Day	10+ Hrs./Day
Maneuvering Winches	1.25	1.50	COMPRESSORS	1.25	1.50	with Helical Ring Gear		1.50
Pumps	2.00	2.00	LOG HAULS (Lumber)			Direct connected		2.00
Screen Drives	1.75	2.00	Incline-well Type	1.75	1.75	Cement Kilns, Dryers,		
Stackers, Utility Winches	1.25	1.50	LOOMS (Textile)	1.25	1.50	Coolers, Pebble, Plain		
DRY DOCK CRANES	†	†	LUMBER INDUSTRY			& Wedge Bar Mills		1.50
DRYERS & COOLERS			Barkers - Spindle Feed	1.25	1.50	Tumbling Barrels	1.75	2.00
(Mills, Rotary)		1.50	Barkers - Main Drive	1.75	1.75	MIXERS (Also see Agitators)		
DYEING MACHINERY			Carriage Drive	†	†	Concrete, Cont. & Int.	1.25	1.50
(Textile)	1.25	1.50	Conveyors			Constant Density	1.00	1.25
ELEVATORS			Burner	1.25	1.50	Variable Density	1.25	1.50
Bucket - Uniform Load	1.00	1.25	Main or Heavy Duty	1.50	1.50	NAPPERS (Textile)	1.25	1.50
Bucket - Heavy Duty	1.25	1.50	Main Log	1.75	2.00	OIL INDUSTRY		
Centrifugal Discharge	1.00	1.25	Re-Saw Merry-Go-			Chillers	1.25	1.50
Escalators	1.00	1.25	Round	1.25	1.50	Oil Well Pumping	†	†
Freight	1.25	1.50	Slab	1.75	2.00	Paraffin Filter Press	1.25	1.50
Gravity Discharge	1.00	1.25	Transfer	1.25	1.50	Rotary Kilns	1.25	1.50
Man. Lifts, Passenger	†	†	Chains - Floor	1.50	1.50	ORE CRUSHERS	1.75	2.00
EXTRUDERS			Chains - Green	1.50	1.75	OVEN CONVEYORS		
General	1.50	1.50	Cut-Off Saws - Chain			Uniform	1.00	1.25
Plastics			& Drag	1.50	1.75	Heavy Duty	1.25	1.50
Variable Speed Drive	1.50	1.50	Debarking Drums	1.75	2.00	PAPER MILLS (1)		
Fixed Speed Drive	1.75	1.75	Feeds - Edger	1.25	1.50	Agitator (Mixer)		1.50
Rubber			Feeds - Gang	1.75	1.75	Agitator for Pure Liquids		1.25
Continuous Screw			Feeds - Trimmer	1.25	1.50	Barking Drums. Barkers		
Operation	1.75	1.75	Log Deck	1.75	1.75	-Mech.		2.00
Intermittent Screw			Log Hauls - Incline,			Beater		1.50
Operation	1.75	1.75	Well Type	1.75	1.75	Breaker Stack		1.25
FANS			Log Turning Devices	1.75	1.75	Calendar (2)		1.25
Centrifugal	1.00	1.25	Planer Feed	1.25	1.50	Chipper		2.00
Cooling Towers	†	†	Planer Tilting Hoists	1.25	1.50	Chip Feeder		1.50
Forced Draft	1.25	1.25	Rolls - Live - Off			Coating Rolls		1.25
Induced Draft	1.50	1.50	Bearing - Roll cases	1.75	1.75	Conveyors -		
Large (Mine, etc.)	1.50	1.50	Sorting Table, Tipple			Chip, Bark, Chemical		1.25
Large Industrial	1.50	1.50	Hoist	1.25	1.50	Log (Incl. Slab)		2.00
Light (Small Diameter)	1.00	1.25	Transfer - Chain &			Couch Rolls		1.25
FEEDERS			Craneway	1.50	1.75	Cutter		2.00
Apron, Belt	1.25	1.50	Tray Drives	1.25	1.50	Cylinder Molds		1.25
Disc	1.00	1.25	Veneer Lathe Drives	†	†	Dryers (2)		
Reciprocating	1.75	2.00	MACHINE TOOLS			Paper Mach. &		
Screw	1.25	1.50	Auxiliary Drives	1.00	1.25	Conveyor Type		1.25
FLIGHT			Banding Rolls	1.25	1.50	Embosses		1.25
Conveyors, Uniform	1.00	1.25	Main Drives	1.25	1.50	Extruder		1.50
Conveyors, Heavy	1.25	1.50	Notching Press (Belted)	†	†	Fourdrinier Rolls -		
FOOD/INDUSTRY			Plate Planers	1.75	2.00	Lumpbreaker, Wire		
Beet Slicers	1.25	1.50	Punch Press (Geared)	1.75	2.00	Turning, Dandy &		
Bottling, Can Filling			Tapping Machines	1.75	2.00	Return Rolls		1.25
Machine	1.00	1.25	MANGLE (Textile)	1.25	1.50	Jordan		1.50
Cereal Cookers	1.00	1.25	MASH TUBS (Brewing &			Kiln Drive		1.50
Dough Mixers, Meat			Distilling	1.25	1.25	Mt. Hope & Paper Rolls		1.25
Grinders	1.25	1.50	MEAT GRINDERS (Food)	1.25	1.50	Platter		1.50
GENERATORS (Not			METAL MILLS			Presses (Felt & Suction)		1.25
Welding)	1.00	1.25	Draw Bench Carriages			Pulper		2.00
GRAVITY DISCHARGE			& Main Drives	1.25	1.50	Reel (Surface Type)		1.25
ELEVATORS	1.00	1.25	Pinch, Dryer & Scrubber			Screens -		
HAMMER MILLS	1.75	2.00	Rolls Reversing	†	†	Chip, Rotary		1.50
HOISTS (See Cranes)	†	†	Slitters	1.25	1.50	Vibrating		2.00
INDUCED DRAFT FANS	1.50	1.50	Table Conveyors,			Size Press		1.25
KILNS	▲	▲	Non-Reversing			Super Calendar (3)		1.25
LAUNDRY			Group Drives	1.50	1.50	Thickener & Washer -		
Tumblers	1.25	1.50	Individual Drives	2.00	2.00	AC Motor		1.50
Washers	1.50	2.00	Reversing	†	†	DC Motor		1.25
LINE SHAFTS			Wire Drawing &			Vacuum Pumps		1.50
Driving Processing			Flattening Machines			Wind & Unwind Stand		1.25
Equipment	1.25	1.50	Wire Winding Machines	1.50	1.50	Winders (Surface Type)		1.25
Other Line Shafts, Light	1.00	1.25	MILLS, ROTARY			Yankee Dryer (2)		1.25
LIVE ROLL CONVEYORS	†	†	Ball and Rod Mills			PASSENGER ELEVATORS	†	†
LOBE BLOWERS OR			with Spur Ring Gear		2.00	PEBBLE MILLS	▲	▲

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Table 2 - Service Factor (cont'd)

Application	Service		Application	Service		Application	Service	
	3-10 Hrs./Day	10+Hrs./Day		3-10 Hrs./Day	10+Hrs./Day		3-10 Hrs./Day	10+Hrs./Day
PLASTICS INDUSTRY			Mixing Mill-2smooth rolls (If corrugated rolls are used, then use the same service factors that are used for a Cracker-Warmer)	1.50	1.50	SLITTERS (metal)	1.25	1.50
Primary Processing			Batch Drop Mill	1.50	1.50	SLUDGE COLLECTORS (Sewage)	1.25	1.25
Intensive Internal Mixers			2 Smooth Rolls	1.50	1.50	SOAPERS (Textile)	1.25	1.50
Batch Mixers	1.75	1.75	Cracker Warmer-2	1.75	1.75	SPINNERS (Textile)	1.25	1.50
Continuous Mixers	1.50	1.50	Rolls: 1 corrugated Roll	1.75	1.75	STEERING GEARS		
Batch Drop Mill - 2 Smooth Rolls	1.25	1.25	Cracker-2 corrugated Rolls	2.00	2.00	STOKERS	1.00	1.25
Continuous Feed, Holding & Blend Mill	1.25	1.25	Holding, Feed & Blend Mill-2 Rolls	1.25	1.25	STONE CRUSHERS	1.75	2.00
Compounding Mill	1.25	1.25	Refiner-2 Rolls	1.50	1.50	SUGAR INDUSTRY		
Calenders	1.50	1.50	Calenders	1.50	1.50	Cane Knives, Crushers Mill		1.50
Secondary Processing			SAND MULLERS	1.25	1.50	TABLE CONVEYORS (Non-Reversing)		
Blow Molders	1.50	1.50	SCREENS			Group Drives	1.50	1.50
Coating	1.25	1.25	Air Washing	1.00	1.25	Individual Drives	2.00	2.00
Film	1.25	1.25	Rotary-Sand or Gravel	1.25	1.50	Reversing	†	†
Pipe	1.25	1.25	Traveling Water Intake	1.00	1.25	TENTER FRAMES (Textile)	1.25	1.50
Pre-Plasticizers	1.50	1.50	SCREW CONVEYORS			TEXTILE INDUSTRY		
Rods	1.25	1.25	Uniform	1.00	1.25	Batchers, calenders	1.25	1.50
Sheets	1.25	1.25	Heavy Duty or Feeder	1.25	1.50	Card Machines	1.25	1.50
Tubing	1.25	1.25	SCUM BREAKERS (Sewage)	1.50	1.50	Dry Cans, Dryers	1.25	1.50
PLATE PLANERS	1.75	2.00	SEWAGE DISPOSAL			Dyeing Machinery	1.25	1.50
PRINTING PRESSES	†	†	Bar Screens	1.25	1.25	Knitting Machinery	†	†
PROPORTIONING PUMPS	1.25	1.50	Chemical Feeders	1.25	1.25	Looms, Mangles		
PUG MILLS (Clay)	1.25	1.50	Collectors	1.25	1.25	Nappers, Pads	1.25	1.50
PULLERS (Barge Haul)	1.25	1.50	Dewatering Screens	1.50	1.50	Range Drives	†	†
PUMPS			Scum Breakers	1.50	1.50	Slashers, Soapers		
Centrifugal	1.00	1.25	Slow or Rapid Mixers	1.50	1.50	Spinners	1.25	1.50
Proportioning	1.25	1.50	Thickeners	1.50	1.50	Tenter Framers,		
Reciprocating			Vacuum Filters	1.50	1.50	Washers, Winders	1.25	1.50
Single Act., 3 or More Cyl.	1.25	1.50	SHAKER CONVEYORS	1.75	2.00	THICKNESS (Sewage)	1.50	1.50
Double Act, 2 or More Cyl.	1.25	1.50	SHEETERS (Rubber)			TUMBLING BARRELS	1.75	2.00
Single Act., 1 or 2 Cyl.	†	†	SINGLE ACTING PUMP			VACUUM FILTERS (Sewage)	1.50	1.50
Double Act, 1 Cyl.	†	†	1 or 2 Cylinders	†	†	VANE BLOWERS	1.25	1.50
Rotary: Gear, Lobe, Vane	1.00	1.25	3 or More Cylinders	1.25	1.50	WINCHES (Dredges)	1.25	1.50
PUNCH PRESS (Gear Driven)	1.75	2.00	SKIP HOIST	†	†	WINDERS (Textile)	1.25	1.50
RECIPROCATING			SLAB PUSHERS	1.50	1.50	WINDGLASS	†	†
Conveyors, Feeders	1.75	2.00				WIRE		
RECIPROCATING COMPRESSORS						Drawing Machines	1.25	1.50
Multi Cylinder	1.50	1.75				Winding Machines	1.50	1.50
Single Cylinder	1.75	2.00						
REVERSING DIRECTION APPLICATION	†	†	▲ Consult DODGE					
ROD MILLS	▲	▲	▲ See Mill, Rotary					
ROTARY			(1) Service factors for paper mill applications are applied to the nameplate rating of the electric motor at the motor rated base speed					
Pumps	1.00	1.25	(2) Using anti-friction bearings only. Use 1.50 for sleeve bearings					
Screens (Sand and Gravel)	1.25	1.50	(3) When a super calender operates over a speed range of part constant horsepower and part constant torque and the constant horsepower speed range is greater than 1.5:1, use a service factor of 1.00 at base speed. When operating at constant torque over the entire speed range or when the constant horsepower speed range is less than 1.5:1, a 1.25 service factor should be used.					
RUBBER INDUSTRY			NOTE: when mounting variable speed AC or DC motors, consult pages G3-81 and G3-82.					
Intensive Internal Mixers								
Batch Mixers	1.75	1.75						
Continuous Mixers	1.50	1.50						

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Table 3: Easy Selection - Separate Reducers 1750 RPM - 1.0 Service Factor

Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			1	1-1/2	2	3	5	7-1/2	10	15	20	25	
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)	
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	1	1	1	
2.75	636.4		1	1	1	1	1	1	1	1	1	1	
3.37	519.3		1	1	1	1	1	1	1	1	1	1	
4.13	423.7		1	1	1	1	1	1	1	1	1	1	
5.06	345.8		1	1	1	1	1	1	1	1	1	1	
6.20	282.3		1	1	1	1	1	1	1	1	1	1	
7.59	230.6		1	1	1	1	1	1	1	1	1	2	
9.30	188.2		1	1	1	1	1	1	1	1	2	2	
11.39	153.6		1	1	1	1	1	1	1	1	2	2	
13.95	125.4		1	1	1	1	1	1	1	2	2	3	
17.09	102.4		1	1	1	1	1	1	1	2	3	3	
20.93	83.6		1	1	1	1	1	1	2	2	3	3	
25.63	68.3		1	1	1	1	1	1	2	3	3	4	
31.39	55.8		TRIPLE	1	1	1	1	1	2	2	3	4	4
38.44	45.5	1		1	1	1	1	2	3	3	4	4	
47.08	37.2	1		1	1	1	2	2	3	4	4	5	
57.67	30.4	1		1	1	1	2	3	3	4	5	6	
70.62	24.8	1		1	1	1	2	3	4	5	6	6	
86.50	20.2	1		1	1	2	3	4	4	6	6	6	
105.90	16.5	1		1	1	2	3	4	5	6	6	7	
129.70	13.5	1		1	2	2	4	4	6	6	7	7	
158.90	11.0	1		2	2	3	4	5	6	7	7	9	
194.60	9.0	1		2	2	3	4	6	6	7	9	9	
Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			30	40	50	60	75	100	125	150	200	250	
			(286T)	(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(445T)	(447T)	(449T)	
2.25	777.8	DOUBLE	1	2	3	3 ●	3 ●	4 ●	4 ●	5 ●	-	-	
2.75	636.4		1	2	3	3 ●	3 ●	4 ●	5 ●	5 ●	6 ●	-	-
3.37	519.3		2	2	3	3	4 ●	4 ●	5 ●	6 ●	-	-	
4.13	423.7		1	3	3 ●	3 ●	4 ●	4 ●	5 ●	6 ●	-	-	
5.06	345.8		2	3	3 ●	3 ●	4 ●	4 ●	5 ●	6 ●	7 ●	7 ●	
6.20	282.3		2	3	3 ●	4 ●	4 ●	5 ●	5 ●	6 ●	7 ●	7 ●	
7.59	230.6		2	3	3 ●	4 ●	4 ●	5 ●	5 ●	6 ●	7 ●	7 ●	
9.30	188.2		3	3	4	4 ●	4 ●	5 ●	6 ●	7 ●	7 ●	7 ●	
11.39	153.6		3	3 ●	4 ●	4 ●	5 ●	6 ●	7	7 ●	7 ●	9 ●	
13.95	125.4		3	4	4 ●	5 ●	5 ●	6 ●	7	7 ●	9 ●	9 ●	
17.09	102.4		3	4	4 ●	5 ●	6 ●	7	7 ●	7 ●	9 ●	10 ●	
20.93	83.6		4	4 ●	5 ●	6 ●	6 ●	7	7 ●	9 ●	9 ●	10 ●	
25.63	68.3		4	5 ●	6	6 ●	7	7	9 ●	9 ●	10 ●	10 ●	
31.39	55.8		TRIPLE	4	6	6	7	7	9	9 ●	10 ●	11 ●	
38.44	45.5	5		6	6	7	7	9	9 ●	10 ●	10 ●	11 ●	
47.08	37.2	6		6	7	7	9	9	10 ●	10 ●	11 ●	12 ●	
57.67	30.4	6		7	7	9	9	10 ●	10 ●	11 ●	12 ●	-	
70.62	24.8	6		7	9	9	9	10 ●	11 ●	11 ●	-	-	
86.50	20.2	7		9	9	9	10	10	11	12	-	-	
105.90	16.5	7		9	9	10	10	11	12	-	-	-	
129.70	13.5	9		9	10	10	11	12	-	-	-	-	
158.90	11.0	9		10	10	11	11	-	-	-	-	-	
194.60	9.0	9		10	11	11	12	-	-	-	-	-	

● Cooling Fan Required

+ TEFC-XE Frame, Energy Efficient Motors

■ Sizes 1-3 discontinued. Remaining stock may be available

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EASY SELECTION



MAXUM Concentric Reducer

Table 4: Easy Selection - Separate Reducers 1750 RPM - 1.25 Service Factor

Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			1	1-1/2	2	3	5	7-1/2	10	15	20	25	
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)	
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	1	1	1	
2.75	636.4		1	1	1	1	1	1	1	1	1	2	
3.37	519.3		1	1	1	1	1	1	1	1	1	2	
4.13	423.7		1	1	1	1	1	1	1	1	1	1	
5.06	345.8		1	1	1	1	1	1	1	1	1	2	
6.20	282.3		1	1	1	1	1	1	1	1	1	2	
7.59	230.6		1	1	1	1	1	1	1	1	2	2	
9.30	188.2		1	1	1	1	1	1	1	1	2	2	
11.39	153.6		1	1	1	1	1	1	1	2	2	3	
13.95	125.4		1	1	1	1	1	1	1	2	3	3	
17.09	102.4		1	1	1	1	1	1	2	2	3	4	
20.93	83.6		1	1	1	1	1	2	2	3	3	4	
25.63	68.3	1	1	1	1	1	2	2	3	4	4		
31.39	55.8	TRIPLE	1	1	1	1	1	2	3	4	4	5	
38.44	45.5		1	1	1	1	2	2	3	4	4	6	
47.08	37.2		1	1	1	1	2	3	3	4	5	6	
57.67	30.4		1	1	1	1	2	2	3	4	5	6	
70.62	24.8		1	1	1	2	3	4	4	6	6	7	
86.50	20.2		1	1	1	2	3	4	5	6	6	7	
105.9	16.5		1	1	2	3	4	4	6	6	7	7	
129.7	13.5		1	2	2	3	4	5	6	7	7	9	
158.9	11.0		1	2	3	3	4	6	6	7	9	9	
194.6	9.0		2	2	3	4	5	6	7	9	9	10	
Norm Ratio	Approx Low Speed Shaft RPM		Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)									
				30	40	50	60	75	100	125	150	200	250
		(286T)		(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(445T)	(447T)	(449T)	
2.25	777.8	DOUBLE	2	2	3	3●	4●	4●	5●	6●	-	-	
2.75	636.4		2	3	3	3●	4●	5●	5●	6●	-	-	
3.37	519.3		2	3	3	4	4●	5●	6●	6●	-	-	
4.13	423.7		2	3	3●	4●	4●	5●	5●	6●	-	-	
5.06	345.8		2	3	3●	4●	4●	5●	5●	6●	7●	7●	
6.20	282.3		2	3	4	4●	4●	5●	6●	7	7●	7●	
7.59	230.6		2	3	4	4●	5●	5●	7	7	7●	7●	
9.30	188.2		3	4	4	4●	5●	6●	7	7	7●	9●	
11.39	153.6		3	4	4●	5●	5●	7	7	7●	9●	9●	
13.95	125.4		4	4	5	5●	6●	7	7	7●	9●	10●	
17.09	102.4		4	4	5●	6	7	7	9	9●	10●	10●	
20.93	83.6		4	5	6	6●	7	7	9●	9●	10●	10●	
25.63	68.3	5	6	6	7	7	9●	9	9●	10●	11●		
31.39	55.8	TRIPLE	6	6	7	7	9	9	9	10●	11●	12●	
38.44	45.5		6	6	7	7	9	9	10●	10●	11●	12●	
47.08	37.2		6	7	7	9	9	10●	10●	11●	12●	-	
57.67	30.4		7	7	9	9	9	10●	11	11●	-	-	
70.62	24.8		7	9	9	9	10	11	11●	12●	-	-	
86.50	20.2		7	9	9	10	10	11	12	-	-	-	
105.9	16.5		9	9	10	10	11	12	-	-	-	-	
129.7	13.5		9	10	10	11	12	-	-	-	-	-	
158.9	11.0		10	10	11	11	-	-	-	-	-	-	
194.6	9.0		10	11	11	12	-	-	-	-	-	-	

! Cooling Fan Required

+ TEFC-XE Frame, Energy Efficient Motors

Sizes 1-3 discontinued. Remaining stock may be available

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MAXUM Concentric Reducer

Table 5: Easy Selection Table 5 - Separate Reducers 1750 RPM - 1.50 Service Factor

Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			1	1-1/2	2	3	5	7-1/2	10	15	20	25	
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)	
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	1	1	2	
2.75	636.4		1	1	1	1	1	1	1	1	1	2	
3.37	519.3		1	1	1	1	1	1	1	2	2	2	
4.13	423.7		1	1	1	1	1	1	1	1	1	2	
5.06	345.8		1	1	1	1	1	1	1	1	2	2	
6.20	282.3		1	1	1	1	1	1	1	1	2	2	
7.59	230.6		1	1	1	1	1	1	1	2	2	2	
9.30	188.2		1	1	1	1	1	1	1	2	2	3	
11.39	153.6		1	1	1	1	1	1	1	2	3	3	
13.95	125.4		1	1	1	1	1	1	2	2	3	4	
17.09	102.4		1	1	1	1	1	2	2	3	3	4	
20.93	83.6		1	1	1	1	1	2	2	3	4	4	
25.63	68.3		1	1	1	1	1	2	3	4	4	5	
31.39	55.8		TRIPLE	1	1	1	1	2	2	3	4	4	6
38.44	45.5			1	1	1	1	2	3	3	4	5	6
47.08	37.2	1		1	1	1	2	3	4	5	6	6	
57.67	30.4	1		1	1	2	3	4	4	6	6	7	
70.62	24.8	1		1	1	2	3	4	5	6	6	7	
86.50	20.2	1		1	2	3	4	4	6	6	7	7	
105.9	16.5	1		2	2	3	4	5	6	7	7	9	
129.7	13.5	1		2	2	3	4	6	6	7	9	9	
158.9	11.0	2		2	3	4	5	6	7	9	9	10	
194.6	9.0	2		3	3	4	6	6	7	9	9	10	
Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.		MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)									
				30	40	50	60	75	100	125	150	200	250
				(286T)	(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(445T)	(447T)	(449T)
2.25	777.8	DOUBLE		2	3	3	4 ●	4 ●	5 ●	6 ●	6 ●	-	-
2.75	636.4			2	3	3	4	4 ●	5 ●	6 ●	-	-	-
3.37	519.3		3	3	4	4	5 ●	6 ●	6 ●	-	-	-	
4.13	423.7		2	3	4	4 ●	4 ●	5 ●	6 ●	-	-	-	
5.06	345.8		2	3	4	4 ●	5 ●	5 ●	6 ●	7 ●	7 ●	7 ●	
6.20	282.3		3	4	4	4 ●	5 ●	6 ●	7	7	7 ●	9 ●	
7.59	230.6		3	4	4	5	5 ●	6 ●	7	7	7 ●	9 ●	
9.30	188.2		4	4	4	5 ●	6	7	7	7	9 ●	10 ●	
11.39	153.6		4	4	5	5 ●	6	7	7	7	9 ●	10 ●	
13.95	125.4		4	5	5	6	7	7	7	9 ●	10 ●	10 ●	
17.09	102.4		4	5	6	6	7	7	9	9 ●	10 ●	11 ●	
20.93	83.6		5	6	6	7	7	9 ●	9 ●	10 ●	10 ●	11 ●	
25.63	68.3		6	6	7	7	9	9	9 ●	10 ●	11 ●	11 ●	
31.39	55.8		TRIPLE	6	7	7	9	9	9	10 ●	10 ●	11 ●	12 ●
38.44	45.5			6	7	7	9	9	10	10 ●	11	12 ●	-
47.08	37.2	7		7	9	9	9	10	11	11 ●	-	-	
57.67	30.4	7		9	9	9	10	11	11	12 ●	-	-	
70.62	24.8	7		9	9	10	10	11	12	-	-	-	
86.50	20.2	9		9	10	10	11	12	-	-	-	-	
105.9	16.5	9		10	10	11	12	-	-	-	-	-	
129.7	13.5	10		10	11	11	12	-	-	-	-	-	
158.9	11.0	10		11	11	12	-	-	-	-	-	-	
194.6	9.0	10		11	12	-	-	-	-	-	-	-	

● Cooling Fan Required

+ TEFC-XE Frame, Energy Efficient Motors

Sizes 1-3 discontinued. Remaining stock may be available

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EASY SELECTION



MAXUM Concentric Reducer

Table 6: Easy Selection - Separate Reducers 1750 RPM - 1.75 Service Factor

Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			1	1-1/2	2	3	5	7-1/2	10	15	20	25	
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)	
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	1	2	2	
2.75	636.4		1	1	1	1	1	1	1	1	2	2	
3.37	519.3		1	1	1	1	1	1	1	2	2	3	
4.13	423.7		1	1	1	1	1	1	1	1	2	2	
5.06	345.8		1	1	1	1	1	1	1	1	2	2	
6.20	282.3		1	1	1	1	1	1	1	2	2	3	
7.59	230.6		1	1	1	1	1	1	1	2	2	3	
9.30	188.2		1	1	1	1	1	1	1	2	3	3	
11.39	153.6		1	1	1	1	1	1	2	2	3	4	
13.95	125.4		1	1	1	1	1	1	2	3	4	4	
17.09	102.4		1	1	1	1	1	2	2	3	4	4	
20.93	83.6		1	1	1	1	1	2	3	4	4	5	
25.63	68.3	1	1	1	1	2	2	3	4	5	6		
31.39	55.8	TRIPLE	1	1	1	1	2	3	3	4	5	6	
38.44	45.5		1	1	1	1	2	3	4	5	6	6	
47.08	37.2		1	1	1	2	3	4	4	5	6	7	
57.67	30.4		1	1	1	2	3	4	4	6	6	7	
70.62	24.8		1	1	2	2	3	4	5	6	7	7	
86.50	20.2		1	2	2	3	3	5	6	7	7	9	
105.9	16.5		1	2	2	3	4	6	6	7	8	9	
129.7	13.5		1	2	3	4	4	6	7	7	9	10	
158.9	11.0		2	3	3	4	5	6	7	9	9	10	
194.6	9.0		2	3	4	4	6	7	7	9	10	10	
Norm Ratio	Approx Low Speed Shaft RPM		Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)									
				30	40	50	60	75	100	125	150	200	250
		(286T)		(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(445T)	(447T)	(449T)	
2.25	777.8	DOUBLE	2	3	4	4●	5●	5●	6●	-	-	-	
2.75	636.4		3	3	4	4	5●	6●	6●	-	-	-	
3.37	519.3		3	3	4	4	5●	6●	-	-	-	-	
4.13	423.7		2	3	4	4●	5●	5●	6●	-	-	-	
5.06	345.8		3	4	4	4●	5●	6●	7	7●	7●	9●	
6.20	282.3		3	4	4	5	5●	7●	7	7	9●	9●	
7.59	230.6		4	4	5	5	6	7●	7	7	9●	10●	
9.30	188.2		4	4	5	5●	6	7	7	7	9●	10●	
11.39	153.6		4	5	5	6	7	7	7	9●	10●	10●	
13.95	125.4		4	5	6	7	7	7	9●	9●	10●	11●	
17.09	102.4		5	6	6	7	7	9	9	10●	10●	11●	
20.93	83.6		5	6	7	7	7	9	10●	10●	11●	11●	
25.63	68.3	6	6	7	7	9	9	10●	10●	11●	12●		
31.39	55.8	TRIPLE	6	7	7	9	9	10	10●	11	12●	-	
38.44	45.5		7	7	9	9	9	10	11	11	11	-	
47.08	37.2		7	9	9	9	10	11	11	11	12●	-	
57.67	30.4		7	9	9	10	10	11	12	-	-	-	
70.62	24.8		9	9	10	10	11	12	-	-	-	-	
86.50	20.2		9	10	10	11	12	-	-	-	-	-	
105.9	16.5		9	10	11	11	12	-	-	-	-	-	
129.7	13.5		10	11	11	12	-	-	-	-	-	-	
158.9	11.0		10	11	12	-	-	-	-	-	-	-	
194.6	9.0		11	12	-	-	-	-	-	-	-	-	

● Cooling Fan Required

+ TEFC-XE Frame, Energy Efficient Motors

■ Sizes 1-3 discontinued. Remaining stock may be available

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MAXUM Concentric Reducer

Table 7: Easy Selection - Separate Reducers 1750 RPM - 2.0 Service Factor

Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			1	1-1/2	2	3	5	7-1/2	10	15	20	25	
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)	
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	1	2	2	
2.75	636.4		1	1	1	1	1	1	1	1	2	3	
3.37	519.3		1	1	1	1	1	1	1	2	2	3	
4.13	423.7		1	1	1	1	1	1	1	2	2	2	
5.06	345.8		1	1	1	1	1	1	1	2	2	3	
6.20	282.3		1	1	1	1	1	1	1	2	2	3	
7.59	230.6		1	1	1	1	1	1	1	2	3	3	
9.30	188.2		1	1	1	1	1	1	2	2	3	4	
11.39	153.6		1	1	1	1	1	1	2	3	3	4	
13.95	125.4		1	1	1	1	1	2	2	3	4	4	
17.09	102.4		1	1	1	1	1	2	3	3	4	4	
20.93	83.6		1	1	1	1	2	2	3	4	4	5	
25.63	68.3		1	1	1	1	2	3	3	4	5	6	
31.39	55.8		TRIPLE	1	1	1	1	2	3	4	4	6	6
38.44	45.5			1	1	1	2	3	3	4	5	6	6
47.08	37.2	1		1	1	2	3	4	4	6	6	7	
57.67	30.4	1		1	2	2	3	4	5	6	7	7	
70.62	24.8	1		1	2	3	4	5	6	6	7	9	
86.50	20.2	1		2	2	3	4	6	6	7	9	9	
105.9	16.5	1		2	3	4	5	6	6	7	9	9	
129.7	13.5	2		2	3	4	6	6	7	9	9	10	
158.9	11.0	2		3	3	4	6	7	7	9	10	10	
194.6	9.0	2		3	4	5	6	7	9	9	10	11	
Norm Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			30	40	50	60	75	100	125	150	200	250	
			(286T)	(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(445T)	(447T)	(449T)	
2.25	777.8	DOUBLE	3	3	4	4 ●	5 ●	6 ●	-	-	-	-	
2.75	636.4		3	3	4	4	5 ●	6 ●	-	-	-	-	
3.37	519.3		3	4	4	5	6	-	-	-	-	-	
4.13	423.7		3	4	4	4 ●	5 ●	6 ●	-	-	-	-	
5.06	345.8		3	4	4	5	5 ●	7	7	7 ●	7 ●	9 ●	
6.20	282.3		4	4	5	5	6	7	7	7	9 ●	10 ●	
7.59	230.6		4	4	5	5	6	7	7	7	9 ●	10 ●	
9.30	188.2		4	5	5	6	7	7	7	9 ●	10 ●	10 ●	
11.39	153.6		4	5	6	7	7	7	9 ●	9 ●	10 ●	11 ●	
13.95	125.4		5	6	6	7	7	9	9	10 ●	10 ●	11 ●	
17.09	102.4		5	6	7	7	7	9	10	10 ●	11 ●	11 ●	
20.93	83.6		6	7	7	7	9	9	10 ●	10 ●	11 ●	12 ●	
25.63	68.3		6	7	7	9	9	10	10 ●	11 ●	12 ●	-	
31.39	55.8		TRIPLE	7	7	9	9	9	10	11	11	12 ●	-
38.44	45.5			7	9	9	9	10	10	11	11	12	-
47.08	37.2	7		9	9	10	10	11	12	-	-	-	
57.67	30.4	9		9	10	10	11	12	-	-	-	-	
70.62	24.8	9		10	10	11	11	-	-	-	-	-	
86.50	20.2	9		10	10	11	12	-	-	-	-	-	
105.9	16.5	10		10	11	12	-	-	-	-	-	-	
129.7	13.5	10		11	12	-	-	-	-	-	-	-	
158.9	11.0	11		12	-	-	-	-	-	-	-	-	
194.6	9.0	11		-	-	-	-	-	-	-	-	-	

● Cooling Fan Required

+ TEFC-XE Frame, Energy Efficient Motors

Shaded cells: Sizes 1-3 discontinued. Remaining stock may be available

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EASY SELECTION



MAXUM Concentric Reducer

EASY SELECTION METHOD – SCOOP MOUNT MOTORS/REDUCERS (for 1750 RPM motors)

When to Use Easy Selection

The Easy Selection tables for Scoop Mount Motors/Reducers are for electric motor selections up to 250 HP with constant input speeds of 1750 rpm using AGMA recommended load classifications. For all other motor/prime mover input speeds and horsepowers, use the Horsepower/Torque Selection Method on page G3-57 through G3-58.

NOTE: If your application has unusual requirements (i.e., variable speed, excessive shock or over loads, extreme ambient temperatures, non-standard motors or oversized equipment), refer to Horsepower/Torque Selection Method.

How to Select

Step 1: Determine Load Classification – See Table 8 to determine minimum load classification for applications under normal conditions.

Example: Easy Selection Method - SCOOP MOUNT MOTORS/REDUCERS

A 30 horsepower motor is used to drive a metal mill non-reversing table conveyor at 100 rpm operating 12 hours per day. The reducer is coupling connected at both the high speed and low speed shafts and the motor is to be supported by a scoop. A PARA-FLEX coupling is desired.

Step 1: Determine Load Classification - Refer to Table 8 and note that “Metal Mills - Table Conveyors, Non-Reversing” requires a Class III Load Classification for 10+ hours/day service.

Step 2: Determine Unit Size - Turn to the Easy Selection Table (Table 11) for Class III service. Under 30 motor horsepower and opposite 102.4 rpm, locate the MAXUM Size 5 reducer and note the nominal ratio is 17.09:1. Also note that the motor frame size is 286T

NOTE: AGMA classifies scoop mounted motors as gear motor applications which are sized using a load classification in place of a service factor.

Step 2: Determine Unit Size – See tables on pages G3-20 through G3-22. Find the load classification table that is required for the application. Read the unit size under required horsepower and opposite the required low speed shaft RPM. **Note:** For applications where fan cooling is unacceptable, use an Easy Selection Table with an increased class of service.

Step 3: Check External Thrust and Overhung Load – See information on page G3-59 to calculate high speed and low speed shaft overhung loads.

Step 4: Check Dimensions – See Specification/Dimensions section pages G3-23 through G3-33 for dimensions, weights, and part numbers.

Step 5: Select Accessories – Check matrix for compatibility of combinations of accessories, page G3-34.

Step 3: Check External Thrust and Overhung Loads - Since the input and output shafts are coupling connected, thrust and overhung loads will not exist. (An overhung load example is given on page G3-59)

Step 4: Check Dimensions and Part Numbers - The dimensions are shown under “Scoop Mount Motor/Reducers with AC motors Sizes 5-9” page G3-59. Part numbers can be found on the DODGE MAXUM Size 5 Specifications/Dimensions page G3-27. The Reducer part number is 299102.

Step 5: Select Accessories - The accessories are also found on the DODGE MAXUM Size 5 Specifications/Dimensions page G3-27. The Scoop Package part number is DCS05280P and includes the scoop, coupling, coupling guard and mounting hardware.

Drive System Vibration

The probability of a constant speed motor operating at resonant frequency is remote. Should this occur, however, the customer must add stiffening supports to the scoop bottom plate to move the resonant frequency away from the motor operating speed.

When mounting variable speed AC or DC motors, consult guidelines on pages G3-81 through G3-82.

CAUTION: The customer is responsible and Reliance Electric expressly disclaims responsibility for isolating the DODGE MAXUM Scoop Mount Motor/Reducer from any vibratory or transient load induced by the motor or the other equipment that is driven by the motor.

The MAXUM Scoop Mount Motor/Reducer is expressly not warranted against failure or unsatisfactory operation resulting from dynamic vibrations of any form imposed upon it whether by the drive system in which it is installed or for any other reason, no matter how induced, unless the nature of such vibrations has been fully defined by the customer on the face of its purchase order and explicitly accepted in writing by DODGE.

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MAXUM Concentric Reducer LOAD CLASSIFICATIONS

The load classifications that follow are adapted from AGMA 6019-E89 Appendix A. Class numbers are minimums and normal conditions are assumed.

Applications which expose the gear drive to high starting torques, extreme repetitive shock, or where high energy loads must be absorbed as when stalling, require special consideration. Load classifications for these special applications should be agreed upon by the user and DODGE

since variations of the values in the table may be required.

The load classifications in the table are based upon the use of electric motors with characteristics normally used for that application. Should motors with unusually high starting torques or motors designed for intermittent service be used, adjustments in the load classification selected may be required. Consult DODGE

Table 8: Load Classification For Scoop Mounted Motor/Reducers

APPLICATION	SERVICE		APPLICATION	SERVICE		APPLICATION	SERVICE	
	3-10 Hrs. / Day	10+ Hrs. / Day		3-10 Hrs. / Day	10+ Hrs. / Day		3-10 Hrs. / Day	10+ Hrs. / Day
AGITATORS			BRICK PRESS (Clay Working)	III	III	CONVERTING MACHINES (Paper)		II
Paper Mills	II	II	BRIQUETTE MACHINES (Clay Working)	III	III	CONVEYORS - Uniformly Loaded or Fed: Apron		
Pure Liquids	II	II	BUCKET			Assembly, Belt		
Liquids & Solids	II	II	Conveyors Uniform	I	II	Bucket, Chain, Flight		
Liquids - Variable Density	II	II	Conveyors Heavy Duty	I	II	Oven, Screw	I	II
APRON CONVEYORS			Elevators Cont.	I	II	CONVEYORS - Heavy Duty Not Uniformly Fed:		
Uniformly Loaded or Fed	I	II	Elevators Uniform	I	II	Apron, Assembly, Belt		
Heavy Duty	II	II	Elevators Heavy Duty	II	II	Bucket, Chain, Flight		
ASSEMBLY CONVEYORS			CALENDERS			Oven, Screw		
Uniformly Loaded or Fed	I	II	Paper (2)		II	Live Roll (Package)	I	II
Heavy Duty	II	II	Super (Paper) (3)		II	Reciprocating, Shaker	III	III
BALL MILLS	▲	▲	Rubber	II	II	COOKERS (Brewing & Distilling) (Food)	II	II
BARGE HAUL PULLERS	II	II	Textile	II	II	COUCH (Paper)		II
BARKING			CANE KNIVES	II	II	CRANES	†	†
Drums		III	CAN FILLING MACHINES	II	II	CRUSHERS		
Hydraulic Auxiliaries		III	CARD MACHINES (Textile)	II	II	Ore or Stone	III	III
Mechanical		III	CAR DUMPERS	III	III	CUTTERS (Paper)		III
BAR SCREENS (Sewage)	II	II	CAR PULLERS	II	II	CYLINDERS (Paper)		II
BATCHERS (Textile)	II	II	CEMENT KILNS	▲	▲	DEWATERING SCREENS (Sewage)	II	II
BEATERS (Paper)	II	II	CENTRIFUGAL			DISC FEEDERS	I	II
BELT CONVEYORS			Blowers, Compressors			DISTILLING (See Brewing)		
Uniformly Loaded or Fed	I	II	Discharge Elevators	I	II	DOUBLE ACTING PUMPS		
Heavy Duty	II	II	Fans or Pumps			2 or More Cylinders	II	II
BELT FEEDERS	II	II	CHAIN CONVEYORS			Single Cylinder	†	†
BENDING ROLLS (Machine)	II	II	Uniformly Loaded or Fed	I	II	DOUGH MIXER (Food)	II	II
BLEACHERS (Paper)	II	II	Heavy Duty	II	II	DRAW BENCH (Metal Mills)		
BLOWERS			CHEMICAL FEEDERS (Sewage)	II	II	Carriage & Main Drive	II	II
Centrifugal	I	II	CLARIFIERS	I	II	DREDGES		
Lobe	II	II	CLASSIFIERS	II	II	Cable Reels	II	II
Vane	II	II	CLAY WORKING IND. Brick Press	III	III	Conveyors	II	II
BOTTLING MACHINERY	I	II	Briquette Machines	III	III	Cutter Head Drives	III	III
BREWING & DISTILLING			Pug Mills	II	II	Jig Drives	III	III
Bottling Machinery	I	II	COLLECTORS (Sewage)	II	II	Maneuvering Winches	III	III
Brew Kettle, Cont. Duty		II	COMPRESSORS			Pumps	III	III
Can Filling Machines	I	II	Centrifugal	I	II	Screen Drives	III	III
Cookers - Cont. Duty	II	II	Lobe	II	II	Stackers	II	II
Mash Tubs - Cont. Duty	II	II	Reciprocating:			Utility Winches	II	II
Scale Hoppers - Frequent Starts	II	II	Multi-Cylinder	II	III	DRYERS (Paper) (2)		
			Single Cylinder	III	III	DRYERS & COOLERS (Mills, Rotary)	▲	▲
			CONCRETE MIXERS					
			Continuous	II	II			
			Intermittent	II	II			

† - Consult DODGE

▲ - See Mills, Rotary

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EASY SELECTION

MAXUM Concentric Reducer

Table 8 - Load Classification (cont'd)

APPLICATION	SERVICE		APPLICATION	SERVICE		APPLICATION	SERVICE	
	3-10 Hrs. / Day	10+ Hrs. / Day		3-10 Hrs. / Day	10+ Hrs. / Day		3-10 Hrs. / Day	10+ Hrs. / Day
DYEING MACHINERY (Textile)	II	II	LOOMS (Textile)	II	II	Helical Ring Gear	II	II
ELEVATORS			LUMBER INDUSTRY			Direct Connected	III	III
Bucket - Uniform Load	I	II	Barkers - Spindle Feed	II	II	Cement Kilns	II	II
Bucket - Heavy Duty	II	II	Barkers - Main Drive	II	III	Dryers & Coolers	II	II
Centrifugal Discharge	I	II	Carriage Drive	†	†	Tumbling Barrels	III	III
Escalators	I	II	Conveyors			MIXERS (Also see Agitators)		
Freight	II	II	Burner	II	II	Concrete, Continuous	II	II
Gravity Discharge	I	II	Main or Heavy Duty	II	II	Concrete, Intermittent	II	II
Man Lifts, Passenger	†	†	Main Log	III	III	Constant Density	I	I
ESCALATORS	I	II	Re-Saw Merry-Go-			Variable Density	II	II
FANS			Slab	III	III	NAPPERS (Textile)	II	II
Centrifugal	I	II	Transfer	II	II	OIL INDUSTRY		
Cooling Towers	†	†	Chains - Floor	II	II	Chillers	II	II
Forced Draft	II	II	Chains - Green	II	III	Oil Well Pumping	†	†
Induced Draft	II	II	Cut-Off Saws - Chain	II	III	Paraffin Filter Press	II	II
Large (Mine, etc.)	II	II	Cut-Off Saws - Drag	II	III	Rotary Kilns	II	II
Large Industrial	II	II	Debarking Drums	III	III	ORE CRUSHERS	III	III
FEEDERS			Feeds - Edger	II	II	OVEN CONVEYORS		
Apron, Belt	II	II	Feeds - Gang	III	III	Uniform	I	I
Disc	I	II	Feeds - Trimmer	II	II	Heavy Duty	II	II
Reciprocating	III	III	Log Deck	II	III	PAPER MILLS		
Screw	II	II	Log Hauls - Incline, Well Type	III	III	Agitators (Mixers)	II	II
FELT			Log Turning Devices	III	III	Barker - Auxiliaries - Hyd.		
Stretchers (Paper)		II	Planer Feed	II	II	Barker, Mechanical		III
Whippers (Paper)		III	Planer Tilting Hoists	II	II	Barking Drum		III
FLIGHT			Rolls - Live - Off			Beater		II
Conveyors, Uniform	I	II	Bearing - Roll Cases	III	III	Bleacher		II
Conveyors, Heavy	II	II	Sorting Table	II	II	Converting Machine - Except Cutters-Platers		II
FOOD INDUSTRY			Tipple Hoist	II	II	Conveyors (Chip, Bark, Chemical)		
Beet Slicers	II	II	Transfer - Chain	II	III	Couch		II
Bottling, Can Filling Machine	I	II	Transfer - Craneway	II	III	Cutters, Platers		III
Cereal Cookers	I	II	Tray Drives	II	II	Cylinders		II
Dough Mixers	II	II	MACHINE TOOLS			Felt Stretchers		II
Meat Grinders	II	II	Auxiliary Drives	I	II	Felt Whippers		III
FORMING MACHINES (Metal Mills)	III	III	Bending Rolls	II	II	Jordans		II
GENERATORS (Not Welding)	II	II	Main Drives	II	II	Log Haul		III
GRAVITY DISCHARGE ELEVATORS	I	II	Notching Press (Belted)	†	†	Presses		II
GRIT COLLECTORS (Sewage)	II	II	Plate Planers	III	III	Pulper		III
HAMMER MILLS	III	III	Punch Press (Gearing)	III	III	Pulp Machine Reels		II
HOISTS	†	†	Tapping Machines	III	III	Stock Chests		II
INDUCED DRAFT FANS	II	II	MANGLE (Textile)	II	II	Suction Rolls		II
JORDANS (Paper)	II	II	MASH TUBS (Brewing & Distilling)	II	II	Washers & Thickeners		II
KILNS (Mills, Rotary)			MEAT GRINDERS (Food)	II	II	Winders		II
Cement	▲	▲	METAL MILLS			PASSENGER ELEVATORS	†	†
LAUNDRY TUMBLERS	II	II	Draw Bench Carriages & Main Drives	II	II	PEBBLE MILLS	▲	▲
LAUNDRY WASHERS	II	III	Forming Machines	III	III	PLASTICS INDUSTRY		
LINE SHAFTS			Pinch, Dryer & Scrubber			Primary Processing		
Heavy Shock Load	III	III	Rolls Reversing	†	†	Intensive Internal Mixers		
Moderate Shock Load	II	II	Slitters	II	II	Batch Mixers	III	III
Uniform Load	I	II	Table Conveyors, Non-Reversing	II	III	Continuous Mixers	II	II
LIVE ROLL CONVEYORS			Reversing	†	†	Batch Drop Mill - 2 Smooth Rolls	II	II
Package	I	II	Wire Drawing & Flattening Machines	II	II	Continuous Feed, Holding & Blend Mill	II	II
LOBE BLOWERS OR COMPRESSORS	II	II	Wire Winding Machines	II	II	Calenders	II	II
LOG HAULS (Paper & Lumber)	III	III	MILLS, ROTARY TYPE			Secondary Processing		
			Ball and Rod			Blow Molders	II	II
			Spur Ring Gear	III	III			

† - Consult DODGE

▲ - See Mills, Rotary

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MAXUM Concentric Reducer

Table 8 - Load Classification (cont'd)

APPLICATION	SERVICE		APPLICATION	SERVICE		APPLICATION	SERVICE	
	3-10 Hrs. / Day	10+ Hrs. / Day		3-10 Hrs. / Day	10+ Hrs. / Day		3-10 Hrs. / Day	10+ Hrs. / Day
Coating	II	II	1 or 2 corrugated rolls	III	III	SPINNERS (Textile)	II	II
Film	II	II	Batch Drop Mill -			STEERING GEARS	†	†
Pipe	II	II	2 Smooth Rolls	II	II	STOCK CHESTS (Paper)		II
Pre-Plasticizers	II	II	Cracker Warmer - 2			STOKERS	I	I
Rods	II	II	Rolls; 1 Corrugated Roll	III	III	STONE CRUSHERS	III	III
Sheet	II	II	Cracker - 2 Corrugated			SUCTION ROLLS (Paper)		II
Tubing	II	II	Rolls	III	III	TABLE CONVEYORS		
PLATE PLANERS	III	III	Holding, Feed & Blend			(Metal Mills)		
PRESSES (Paper)			Mill - 2 Rolls	II	II	Non-Reversing	II	III
PROPORTIONING PUMPS	II	II	Refiner-2 Rolls	II	II	Reversing	†	†
PUG MILLS (Clay)	II	II	Calenders	II	II	TEXTILE INDUSTRY		
PULLERS (Barge Haul)	II	II	SAND MULLERS	II	II	Batchers	II	II
PULP MACHINE REELS			SCREENS			Calenders	II	II
PUMPS			Air Washing	I	II	Card Machines	II	II
Centrifugal	I	II	Rotary - Sand or Gravel	II	II	Cloth Finishing Mach.,		
Proportioning	II	II	Traveling Water Intake	I	II	(Calenders, Dryers,		
Reciprocating			SCREW CONVEYORS			Pads, Tenters,"		
"Single Act., 3 or"			Uniform	I	I	Washers)	II	II
More Cyl.	II	II	Heavy Duty or Feeder	II	II	Dry Cans	II	II
"Double Act., 2 or"			SEWAGE DISPOSAL			Dyeing Machinery	II	II
More Cyl.	II	II	Aerators	†	†	Knitting Machinery	†	†
Single Act., 1 or 2 Cyl.	†	†	Bar Screens	II	II	Looms, Mangles,		
"Rotary: Gear, Lobe, Vane"	I	II	Chemical Feeders	II	II	Nappers	II	II
PUNCH PRESSES			Collectors	II	II	Range Drives	†	†
(Gear Driven)	III	III	Dewatering Screens	II	II	Tenter Frames	II	II
RECIPROCATING			Grit Collectors	II	II	Winders	II	II
"Conveyors, Feeders"	III	III	Scum Breakers	II	II	Yarn Preparatory		
RECIPROCATING			Slow or Rapid Mixers	II	II	Machinery (Cards, Soapers,		
COMPRESSORS			Sludge Collectors	II	II	Spinners, Slashers)	II	II
Multi Cylinder	II	III	Thickeners	II	II	THICKENERS (Sewage)	II	II
Single Cylinder	III	III	Vacuum Filters	II	II	TUMBLING BARRELS	III	III
REVERSING DIRECTION			SHAKER CONVEYORS	III	III	VACUUM FILTERS		
APPLICATION	†	†	SHEETERS (Rubber)	II	II	(Sewage)	II	II
ROD MILLS	▲	▲	SINGLE ACTING PUMP			VANE BLOWERS	II	II
ROTARY			1 or 2 Cylinders	†	†	WINCHES (Dredges)	II	II
Pumps: Gear, Lobe,			3 or More Cylinders	II	II	WINDERS		
Vane	I	II	SKIP HOIST	II	II	(Paper)		II
Screens (Sand or Gravel)	II	II	SLAB PUSHERS	II	II	(Textile)	II	II
RUBBER INDUSTRY			SLITTERS (Metal)	II	II	WINDLASS	II	II
Intensive Internal Mixers			SLUDGE COLLECTORS			WIRE		
Batch Mixers	III	III	(Sewage)	II	II	Drawing Machines	II	II
Continuous Mixers	II	II	SOAPERS (Textile)	II	II	Winding Machines	II	II
Mixing Mill								
2 smooth rolls	II	II						

† - Consult DODGE

▲ - See Mills, Rotary

Reference: AGMA Standard 6021-G89 (11/89). The table of application class numbers has been developed from the experience of manufacturers and users of gear drives for use in common applications and has been found to be generally satisfactory for the listed industries when gears are rated using AGMA standards. It is recommended that class numbers for special applications be agreed upon by the user and the gear manufacturer when variations of the table may be required. Special conditions can be any special type of prime mover, starting or stopping conditions, system conditions, ambient conditions, lubrication, overloads, overspeeds, brake equipped applications, high inertia and reversing loads.

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EASY SELECTION



MAXUM Concentric Reducer

Table 9: Easy Selection - Scoop Mount Motors/Reducers 1750 RPM - Class I Service (1.0 Service Factor) ■

Nom Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			1	1-1/2	2	3	5	7-1/2	10	15	20	25	
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)	
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	2	2	3	
2.75	636.4		1	1	1	1	1	1	1	2	2	3	
3.37	519.3		1	1	1	1	1	1	1	2	2	3	
4.13	423.7		1	1	1	1	1	1	1	2	2	3	
5.06	345.8		1	1	1	1	1	1	1	2	2	3	
6.20	282.3		1	1	1	1	1	1	1	2	2	3	
7.59	230.6		1	1	1	1	1	1	1	2	2	3	
9.30	188.2		1	1	1	1	1	1	1	2	2	3	
11.39	153.6		1	1	1	1	1	1	1	2	2	3	
13.95	125.4		1	1	1	1	1	1	1	2	2	3	
17.09	102.4		1	1	1	1	1	1	1	2	3	3	
20.93	83.6		1	1	1	1	1	1	2	2	3	3	
25.63	68.3	1	1	1	1	1	1	2	3	3	4		
31.39	55.8	TRIPLE	1	1	1	1	1	2	2	3	4	4	
38.44	45.5		1	1	1	1	1	2	3	3	4	4	
47.08	37.2		1	1	1	1	2	2	3	4	4	5	
57.67	30.4		1	1	1	1	2	3	3	4	5	6	
70.62	24.8		1	1	1	1	2	3	4	5	6	6	
86.50	20.2		1	1	1	2	3	4	4	6	6	6	
105.9	16.5		1	1	1	2	3	4	5	6	6	7	
129.7	13.5		1	1	2	2	4	4	6	6	7	7	
158.9	11.0		1	2	2	3	4	5	6	7	7	9	
194.6	9.0		1	2	2	3	4	6	6	7	9	9	
Nom Ratio	Approx Low Speed Shaft RPM		Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)									
				30	40	50	60	75	100	125	150	200	250
		(286T)		(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(4455T)	(447T)	(449T)	
2.25	777.8	DOUBLE	3	4	4	5●	5●	-	-	-	-	-	
2.75	636.4		3	4	4	5	5●	-	-	-	-	-	
3.37	519.3		3	4	4	5	5●	-	-	-	-	-	
4.13	423.7		3	4	4	5●	5●	-	-	-	-	-	
5.06	345.8		3	4	4	5	5●	7	7	7●	7●	7●	
6.20	282.3		3	4	4	5	5●	7	7	7	7●	7●	
7.59	230.6		3	4	4	5	5●	7	7	7	7●	7●	
9.30	188.2		3	4	4	5●	5●	7	7	7●	7●	7●	
11.39	153.6		3	4	4●	5●	5●	7	7	7●	7●	9●	
13.95	125.4		3	4	4●	5●	5●	7	7	7●	9●	9●	
17.09	102.4		3	4	4●	5●	6●	7	7●	7●	9●	10●	
20.93	83.6		4	4●	5●	6●	6●	7	7●	9●	9●	10●	
25.63	68.3	4	5●	6	6●	7	7	9●	9●	10●	10●		
31.39	55.8	TRIPLE	4	6	6	7	7	9	9	9●	10●	11●	
38.44	45.5		5	6	6	7	7	9	9●	10●	10●	11●	
47.08	37.2		6	6	7	7	9	9	10●	10●	11●	12●	
57.67	30.4		6	7	7	9	9	10●	10●	11●	12●	-	
70.62	24.8		6	7	9	9	9	10●	11●	11●	-	-	
86.50	20.2		7	9	9	9	10	10	11	12	-	-	
105.9	16.5		7	9	9	10	10	11	12	-	-	-	
129.7	13.5		9	9	10	10	11	12	-	-	-	-	
158.9	11.0		9	10	10	11	11	-	-	-	-	-	
194.6	9.0		9	10	11	11	12	-	-	-	-	-	

■ Some reducers selections are oversized to accommodate scoop mounting of motor on reducers
 ● Cooling fan required + TEFC-XE Frame, Energy Efficient Motors
 Note: The suggested mounting for motors weighing 700 pounds or more is the MAXUM HD baseplate. See page G3-38

■ Sizes 1-3 discontinued. Remaining stock may be available

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MAXUM Concentric Reducer

Table 10: Easy Selection - Scoop Mount Motors/Reducers 1750 RPM - Class II Service (1.4 Service Factor) ■

Nom Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)											
			1	1-1/2	2	3	5	7-1/2	10	15	20	25		
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)		
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	2	2	3		
2.75	636.4		1	1	1	1	1	1	1	2	2	3		
3.37	519.3		1	1	1	1	1	1	1	2	2	3		
4.13	423.7		1	1	1	1	1	1	1	2	2	3		
5.06	345.8		1	1	1	1	1	1	1	2	2	3		
6.20	282.3		1	1	1	1	1	1	1	2	2	3		
7.59	230.6		1	1	1	1	1	1	1	2	2	3		
9.30	188.2		1	1	1	1	1	1	1	2	2	3		
11.39	153.6		1	1	1	1	1	1	1	2	3	3		
13.95	125.4		1	1	1	1	1	1	2	2	3	4		
17.09	102.4		1	1	1	1	1	1	2	3	3	4		
20.93	83.6		1	1	1	1	1	2	2	3	4	4		
25.63	68.3		1	1	1	1	1	2	3	3	4	5		
31.39	55.8		TRIPLE	1	1	1	1	2	2	3	4	4	5	
38.44	45.5			1	1	1	1	2	3	3	4	5	6	
47.08	37.2	1		1	1	1	2	3	4	4	6	6		
57.67	30.4	1		1	1	2	3	3	4	5	6	6		
70.62	24.8	1		1	1	2	3	4	4	6	6	7		
86.50	20.2	1		1	2	2	3	4	5	6	7	7		
105.90	16.5	1		1	2	3	4	5	6	7	7	9		
129.70	13.5	1		2	2	3	4	6	6	7	9	9		
158.90	11.0	1		2	3	4	5	6	7	7	9	9		
194.60	9.0	2		3	3	4	6	6	7	9	9	10		
Nom Ratio	Approx Low Speed Shaft RPM	Unit Red.		MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
				30	40	50	60	75	100	125	150	200	250	
				(286T)	(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(4455T)	(447T)	(449T)	
2.25	777.8	DOUBLE		3	4	4	5 ●	5 ●	-	-	-	-	-	
2.75	636.4			3	4	4	5	5 ●	-	-	-	-	-	
3.37	519.3		3	4	4	5	5 ●	-	-	-	-	-		
4.13	423.7		3	4	4	5 ●	5 ●	-	-	-	-	-		
5.06	345.8		3	4	4	5	5 ●	7	7 ●	7 ●	7 ●	7 ●		
6.20	282.3		3	4	4	5	5 ●	7	7	7	7 ●	9 ●		
7.59	230.6		3	4	4	5	5 ●	7	7	7	7 ●	9 ●		
9.30	188.2		3	4	4	5 ●	5 ●	7	7	7 ●	9 ●	9 ●		
11.39	153.6		4	4	5	5 ●	6	7	7	7 ●	9 ●	10 ●		
13.95	125.4		4	4	5	6	7	7	7	9 ●	9 ●	10 ●		
17.09	102.4		4	5	6	6	7	7	9 ●	9 ●	10 ●	10 ●		
20.93	83.6		4	6	6	7	7	9 ●	9 ●	9 ●	10 ●	11 ●		
25.63	68.3		5	6	6	7	7	9	9 ●	10 ●	11 ●	11 ●		
31.39	55.8		TRIPLE	6	6	7	7	9	9	10 ●	10 ●	11 ●	12 ●	
38.44	45.5			6	7	7	9	9	10	10 ●	11	12 ●	-	
47.08	37.2	6		7	9	9	9	10 ●	11	11 ●	12 ●	-		
57.67	30.4	7		9	9	9	10	10 ●	11	12 ●	-	-		
70.62	24.8	7		9	9	10	10	11	12	-	-	-		
86.50	20.2	9		9	10	10	11	12	-	-	-	-		
105.90	16.5	9		10	10	11	11	-	-	-	-	-		
129.70	13.5	9		10	11	11	12	-	-	-	-	-		
158.90	11.0	10		10	11	12	-	-	-	-	-	-		
194.60	9.0	10		11	12	-	-	-	-	-	-	-		

■ Some reducers selections are oversized to accommodate scoop mounting of motor on reducers
 ● Cooling fan required + TEFC-XE Frame, Energy Efficient Motors
 Note: The suggested mounting for motors weighing 700 pounds or more is the MAXUM HD baseplate. See page G3-38

■ Sizes 1-3 discontinued. Remaining stock may be available

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EASY SELECTION



MAXUM Concentric Reducer ■

Table 11: Easy Selection - Scoop Mount Motor/Reducers - 1750 RPM - Class II Service (2.0 Service Factor)

Nom Ratio	Approx Low Speed Shaft RPM	Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)										
			1	1-1/2	2	3	5	7-1/2	10	15	20	25	
			(143T)	(145T)	(145T)	(182T)	(184T)	(213T)	(215T)	(254T)	(256T)	(284T)	
2.25	777.8	DOUBLE	1	1	1	1	1	1	1	2	2	3	
2.75	636.4		1	1	1	1	1	1	1	2	2	3	
3.37	519.3		1	1	1	1	1	1	1	2	2	3	
4.13	423.7		1	1	1	1	1	1	1	2	2	3	
5.06	345.8		1	1	1	1	1	1	1	2	2	3	
6.2	282.3		1	1	1	1	1	1	1	2	2	3	
7.59	230.6		1	1	1	1	1	1	1	2	3	3	
9.3	188.2		1	1	1	1	1	1	2	2	3	4	
11.39	153.6		1	1	1	1	1	1	2	3	3	4	
13.95	125.4		1	1	1	1	1	2	2	3	4	4	
17.09	102.4		1	1	1	1	1	2	3	3	4	4	
20.93	83.6		1	1	1	1	2	2	3	4	4	5	
25.63	68.3		1	1	1	1	2	3	3	4	5	6	
31.39	55.8	TRIPLE	1	1	1	1	2	3	4	4	6	6	
38.44	45.5		1	1	1	2	3	3	4	5	6	6	
47.08	37.2		1	1	1	2	3	4	4	6	6	7	
57.67	30.4		1	1	2	2	3	4	5	6	7	7	
70.62	24.8		1	1	2	3	4	5	6	6	7	9	
86.5	20.2		1	2	2	3	4	6	6	7	9	9	
105.9	16.5		1	2	3	4	5	6	6	7	9	9	
129.7	13.5		2	2	3	4	6	6	7	9	9	10	
158.9	11		2	3	3	4	6	7	7	9	10	10	
194.6	9		2	3	4	5	6	7	9	9	10	11	
Nom Ratio	Approx Low Speed Shaft RPM		Unit Red.	MAXUM Reducer Size Used with Motor Horsepower of: (With Frame Size References)									
				30	40	50	60	75	100	125	150	200	250
				(286T)	(324T)	(326T)	(364T)	(365T)	(405T)	(444T)	(4455T)	(447T)	(449T)
2.25	777.8	DOUBLE	3	4	4	5●	5●	-	-	-	-	-	
2.75	636.4		3	4	4	5	5●	-	-	-	-	-	
3.37	519.3		3	4	4	5	6	-	-	-	-	-	
4.13	423.7		3	4	4	5●	5●	-	-	-	-	-	
5.06	345.8		3	4	4	5	5●	7	7	7●	7●	9●	
6.2	282.3		4	4	5	5	6	7	7	7	9●	10●	
7.59	230.6		4	4	5	5	6	7	7	7	9●	10●	
9.3	188.2		4	5	5	6	7	7	7	9●	10●	10●	
11.39	153.6		4	5	6	7	7	7	9●	9●	10●	11●	
13.95	125.4		5	6	6	7	7	9	9	10●	10●	11●	
17.09	102.4		5	6	7	7	7	9	10	10●	11●	11●	
20.93	83.6		6	7	7	7	9	9	10●	10●	11●	12●	
25.63	68.3		6	7	7	9	9	10	10●	11●	12●	-	
31.39	55.8	TRIPLE	7	7	9	9	9	10	11	11	12●	-	
38.44	45.5		7	9	9	9	10	10	11	11	12	-	
47.08	37.2		7	9	9	10	10	11	12	-	-	-	
57.67	30.4		9	9	10	10	11	12	-	-	-	-	
70.62	24.8		9	10	10	11	11	-	-	-	-	-	
86.5	20.2		9	10	10	11	12	-	-	-	-	-	
105.9	16.5		10	10	11	12	-	-	-	-	-	-	
129.7	13.5		10	11	12	-	-	-	-	-	-	-	
158.9	11		11	12	-	-	-	-	-	-	-	-	
194.6	9		11	-	-	-	-	-	-	-	-	-	

■ Some reducers selections are oversized to accommodate scoop mounting of motor on reducers
 ● Cooling fan required + TEFC-XE Frame, Energy Efficient Motors
 Note: The suggested mounting for motors weighing 700 pounds or more is the MAXUM HD baseplate. See page G3-38

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