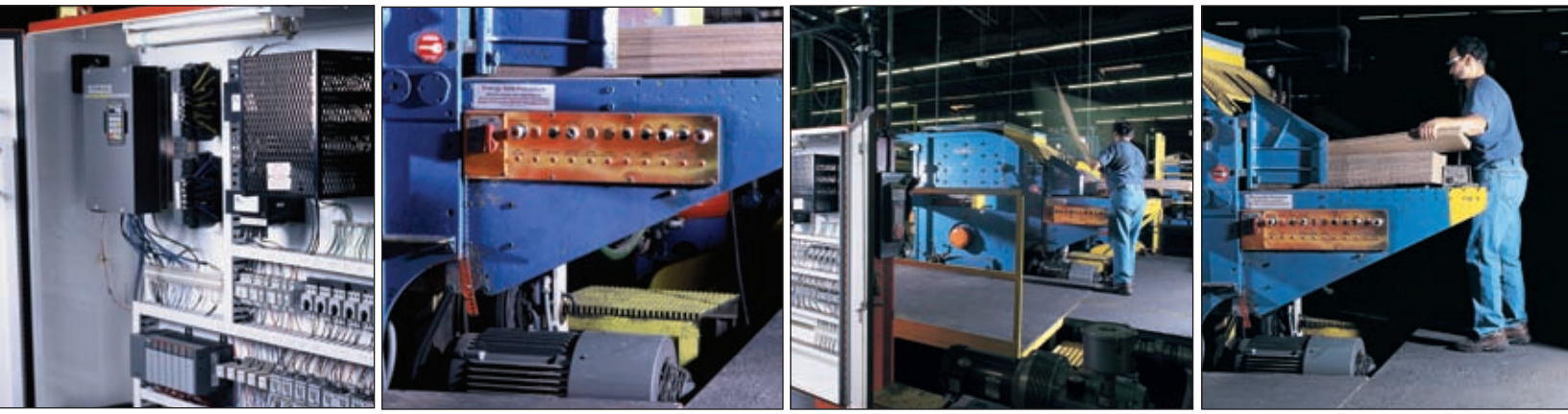


**BALDOR • RELIANCE**

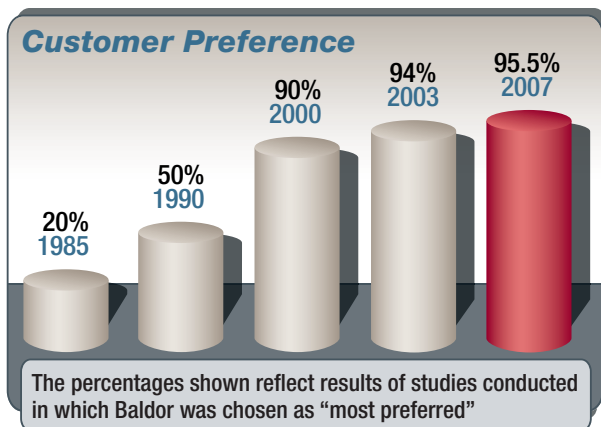


## **Variable Speed Motor Products**



**BALDOR**

## Why Baldor?



For nearly 100 years, Baldor has strived to provide customers with the best value and reliability in industrial electric motors. That kind of dedication results in satisfied customers and a strong preference for Baldor•Reliance motors, as the chart above shows. Here are just a few of the things Baldor does to earn such recognition:



**Baldor offers the industry's broadest line of stock products.** Save valuable time with just one call to Baldor. We offer more than 10,000 stock motors, drives and gearboxes.

**Energy-efficiency leader.** Baldor began lowering the energy consumption of our motors in the 1920's, long before others were even talking about it. Today,

the Baldor•Reliance expansive line of Premium Efficiency motors extends from 1 through 15,000 Hp. Baldor•Reliance motors offer customers the highest overall efficiency levels in the industry, including Super-E® (1 through 500 Hp) motors that exceed NEMA Premium® efficiencies.



**Baldor products are available at more locations than any other brand.** Our 35 district offices across North America and offices around the world, offer immediate availability of Baldor products and support to thousands of customers.

### Industry's shortest lead times/Flexible manufacturing.

Baldor•Reliance has the industry's shortest lead times on custom Above NEMA Motors. Our unique LEAN FLEX FLOW™ manufacturing process lets us produce any order in any quantity, quickly and efficiently.

**Industry's best access to information.** Only Baldor offers customers so many choices for product information with a wide variety of catalogs and product brochures, the Baldor website at [www.baldor.com](http://www.baldor.com), or you may talk to a Baldor customer service person at one of our sales offices.

## Table of Contents

	Page
<b>Variable Speed Motor Product Lines</b> .....	1
<b>Inverter Drive® and Vector Motors®</b> .....	4
Electrical Performance Data.....	5
Electrical Design Characteristics.....	8
Mechanical Design Characteristics.....	9
Performance Data.....	10
575 Volt Vector Drive.....	12
IEC Frame 50 Hertz Vector Drive Motors.....	13
Washdown Duty Inverter Drive® and Vector Drive® Motors.....	14
Paint Free.....	15
Explosion Proof.....	16
Gearmotors – Inverter Drive.....	18
Feedback Options.....	19
Blower Specifications.....	20
Blower Kits.....	20
Accessories.....	21
<b>RPM AC</b> .....	22
Product Line Features.....	22
Drip-Proof Guarded Force Ventilated.....	23
Totally Enclosed – Fan Cooled and Blower Cooled.....	24
IEC and Specific Applications.....	25
RPM AC Wizard – Motor Design and Selection Tool.....	26
<b>RPM AC – NEMA Permanent Magnet Ratings</b> .....	27
Totally Enclosed Blower Cooled Permanent Magnet Rotor.....	27
Drip-Proof Guarded Force Ventilated – Permanent Magnet Rotor.....	28
<b>RPM AC – NEMA Induction Ratings</b> .....	29
Drip-Proof Guarded Force Ventilated (DPG-FV).....	29
Totally Enclosed Blower Cooled (TEBC).....	31
Totally Enclosed Fan Cooled (TEFC).....	33
Totally Enclosed Fan Cooled (TEFC) 4:1 CT – Induction.....	34
Totally Enclosed Non-Ventilated (TENV).....	35
Totally Enclosed Non-Ventilated (TENV-60M).....	36
Wide Constant Horsepower Range (DPG-FV).....	38
Wide Constant Horsepower Range (TEBC).....	39
Extruder Duty (DPG-FV) – Induction.....	40
Medium and Low Inertia (DPG-FV) Induction Servo.....	42
Class 1 Division 2 Group D, CSA Certified (DPG-FV) – Induction.....	43
Class 1 Division 2 Group D, CSA Certified (TEBC) – Induction.....	44
Class 1 Division 2 Groups A, B, C & D, CSA Certified (TENV) – Induction.....	45
Class 1 Division 2 Groups A, B, C & D, CSA Certified (TEFC) – Induction.....	46
<b>RPM AC – IEC Induction Ratings</b> .....	47
IEC Drip-Proof Guarded Force Ventilated (DPG-FV) – Induction.....	47
IEC Totally Enclosed Blower Cooled (TEBC) (IP44-IC416) – Induction.....	49
IEC Totally Enclosed Fan Cooled (TEFC) – Induction.....	51
IEC Totally Enclosed Fan Cooled (TEFC) 4:1 Induction.....	52
IEC Totally Enclosed Non-Ventilated (TENV) – Induction.....	53
IEC Totally Enclosed Non-Ventilated (TENV), S2 – Induction.....	55
IEC Wide Constant Power Range (DPG-FV) – Induction.....	57
IEC Wide Constant Power Range (TEBC) – Induction.....	59
IEC Extruder Duty (DPG-FV) – Induction.....	60
IEC Medium and Low Inertia Induction Servo (DPG-FV) – Induction.....	61
<b>V*S Master</b> .....	62
V*S Master – Totally Enclosed Fan Cooled (TEFC) and.....	63
Non-Ventilated (TENV) – Induction.....	63
V*S Master – Totally Enclosed Fan Cooled (TEFC) 4:1 B Rise – Induction.....	65
V*S Master – Totally Enclosed Fan Cooled (FCXP) – Induction.....	66
V*S Master – IEC Totally Enclosed Fan Cooled (TEFC).....	67
<b>FL Frame Dimension Sheet Index Table</b> .....	68
<b>RL Frame Dimension Sheet Index Table</b> .....	71
<b>L Frame Dimension Sheet Index Table – NEMA and IEC</b> .....	73
<b>Motor Dimensions</b> .....	75
<b>Connection Diagrams</b> .....	84
Main Motor Power Leads.....	84
Blower Motor.....	85
<b>V*S Master Dimension Sheet Index</b> .....	86
<b>Feedback Options</b> .....	89

## World Leader In Variable Speed Motor Products

Baldor offers the widest, most comprehensive product line of motors designed specifically for variable speed control. More products and more capability than any other motor manufacturer. From the smallest servo to the largest industrial motors Baldor has the right variable speed product for just about any application.

Baldor•Reliance Inverter Drive motors for open loop control and Vector Drive motors for closed loop control are available in standard NEMA frame sizes from 1/3 Hp – 200 Hp in totally enclosed non-vent and blower cooled design. These motors are designed for constant torque as well as variable torque applications and are suitable for across the line operation in drive by pass mode.



V\*S Master motors provide continuous constant torque performance across the entire speed range from zero speed to base speed in standard NEMA frame sizes in TEFC designs from 1/3 Hp – 500 Hp.



The RPM AC product line provides the ultimate in power density performance in either enclosed or open construction. From 2 – 1000 Hp, the RPM AC product line provides continuous constant torque performance from zero speed to base speed in one to four frame sizes smaller than NEMA. RPM AC motors can be designed for specific horse powers and speeds to provide the ultimate in system matched performance using a unique laminated steel square frame construction. RPM AC motors are available in both induction and PM designs.



## Variable Speed Motor Product Selection Guide

	BSM & Linear	Inverter/Vector	V*S Master	RPM AC
Continuous CT base speed to 0 speed		X	X	X
Suitable for sine wave operation		X		
NEMA Frame Size		X	X	
Blower cooling acceptable		X		X
TEFC – no blower desired, NEMA frame			X	
Compact power dense design	X			X
Low inertia	X			X
High speed	X			X
Severe duty		X	X	X
Paint free, stainless steel	X	X		
Division 1 Explosion Proof		X	X	
Division 2 CSA certified			X	X
IEC	X	X	X	X
Servo performance and motion control	X			X
Linear positioning	X			
Synchronous PM technology	X			X
Induction technology		X	X	X

### Special Duty Designs

Elevator duty		X		
Washdown		X		
Cooling tower				X
Gear motor	X	X		
TENV 30 minute and 60 minute duty				X
Extruder duty				X
Crane and hoist				X
High vibration press duty				X
Winder duty with wide CHP speed range				X

## AC Motor Variable Speed Range Capabilities

### Inverter Drive, Vector Drive, V\*S Master and RPMAC Motors

Inverter Drive, Vector Drive, V\*S Master and RPMAC Motors exceed all requirements of NEMA MG-1 Parts 30 and 31 for AC induction motors powered from adjustable speed inverter control. Satisfactory motor performance depends on proper drive setup.

#### Super-E® Motors

Super-E motors are Inverter-Ready and meet NEMA MG 1 Part 31.4.4.2. Super-E motors are suitable for use with inverter drives. Motor inverter setup is unique to each specific application. Proper setup and wiring procedures must be closely followed.

#### Application Considerations

It is necessary that motor-drive applications are commissioned by persons familiar with the operation and setup of adjustable speed drives, applicable electrical codes and any other regulations.

Each drive must be tuned to the motor for the specific application. System operating parameters must be checked, including voltage at motor power leads, to insure that motor/drive setup has been successfully completed.

Applications that are not properly setup can lead to substandard performance and failure of system components. In some installations, shaft grounding and isolated bearings may prevent bearing fluting and are available as an option or through Mod Express.

Reference the chart below for constant torque and variable torque capabilities for each product family. Torque performance depends upon proper drive setup.

Motors 48 body style and smaller are suitable for maximum 230V inverter operation.

#### Efficiency Savings

Significant energy savings can be achieved when applying Inverter Ready motors such as the Baldor Super-E to centrifugal load applications (fan and centrifugal pump) and running at reduced speed taking advantage of the affinity laws.

Motor load and corresponding energy consumption is reduced by the cube of the speed.

Family	Enclosure	Frame Size	Constant Torque	Variable Torque	Comments
<b>Super E Motors 230, 460 and 575 Volts</b>					
EM	TEFC	56-210(1)	20:1	20:1	General Purpose Premium Efficient
		250-320	10:1	20:1	
		360-445	4:1(2)	20:1	
		447-449	2:1(2)	20:1	
EM	ODP	56-210(1)	10:1	20:1	General Purpose Premium Efficient
		250-320	5:1	20:1	
		360 - 449	2:1	20:1	
ECP/XEX and ECP8/841XL (4)	TEFC	140	20:1	20:1	Severe Duty Premium Efficient
		180-210	10:1	10:1	
		250-449	4:1(2)	10:1	
EWDM	TENV,TEFC	56-256(1)	20:1	20:1	Washdown Duty Premium Efficient
<b>Inverter Duty and Vector Duty Motors 230, 460 and 575 Volts</b>					
IDCSWDM	TENV	56-140	5:1	10:1	Inverter Duty, Paint Free
IDCSWDM	TEFC	56-215	3:1	10:1	Inverter Duty, Paint Free
IDM	TEBC	143-5009	1000:1	1000:1	Inverter Duty, Blower Cooled
IDNM	TENV	143-256	1000:1	1000:1	Inverter Duty, Totally Enclosed Non-Ventilated
ZDM	TEBC	143-5009	1000:1	1000:1	Vector Duty, Blower Cooled
ZDNM	TENV	143-256	1000:1	1000:1	Vector Duty, Non-Ventilated
IDXM	TEXP	182-405	2:1	10:1	Inverter Duty, Explosion Proof
(2 families)		56-405	10:1	10:1	
IDWNM	TENV	143-254	1000:1	1000:1	Inverter Duty, Washdown, Non-Ventilated
ZDWNM	TENV	143-254	1000:1	1000:1	Vector Duty, Washdown, Non-Ventilated
<b>V*S Master Motors 230 &amp; 460 Volts</b>					
IDNVSM	TENV	56-256	1000:1	1000:1	Inverter Duty, TENV, V*S Master
IDVSM	TEFC	182-449	1000:1	1000:1	Inverter Duty, TEFC, V*S Master
ZDNVSM	TENV	56-256	1000:1	1000:1	Vector Duty, TENV, V*S Master
ZDVSM	TEFC	182-449	1000:1	1000:1	Vector Duty, TEFC, V*S Master
ZDVSCP	TEFC-XT	143-326	1000:1	1000:1	Vector Duty, TEFC-XT, V*S Master
<b>RPMAC Motors 230 &amp; 460</b>					
IDRPMN	TENV	FL180-FL210	1000:1	1000:1	Inverter Duty, TENV, RPMAC
IDRPMN	TEFC, TEBC, DPG-FV	FL180-FL440	1000:1	1000:1	Inverter Duty, TEFC, TEBC, DPG-FV, RPMAC
ZDRPM	TENV	FL180-FL210	1000:1	1000:1	Vector Duty, TENV, RPMAC
ZDRPM	TEFC, TEBC	FL180-L400	1000:1	1000:1	Vector Duty, TEFC & TEBC, RPMAC
ZDPM	TEBC	FL180 - FL440	1000:1	1000:1	Vector Duty, TEBC, PM, RPMAC

(1) Baldor type 35M frames and larger

(2) CT, 10:1 available most ratings with fan change thru Mod Express

(3) CT, 2:1 available with fan change thru Mod Express. Specific ratings may be capable of greater CT range

(4) May not meet IEEE-841 temperature rise limits when applied to adjustable frequency power

## Inverter Drive and Vector Drive Motors

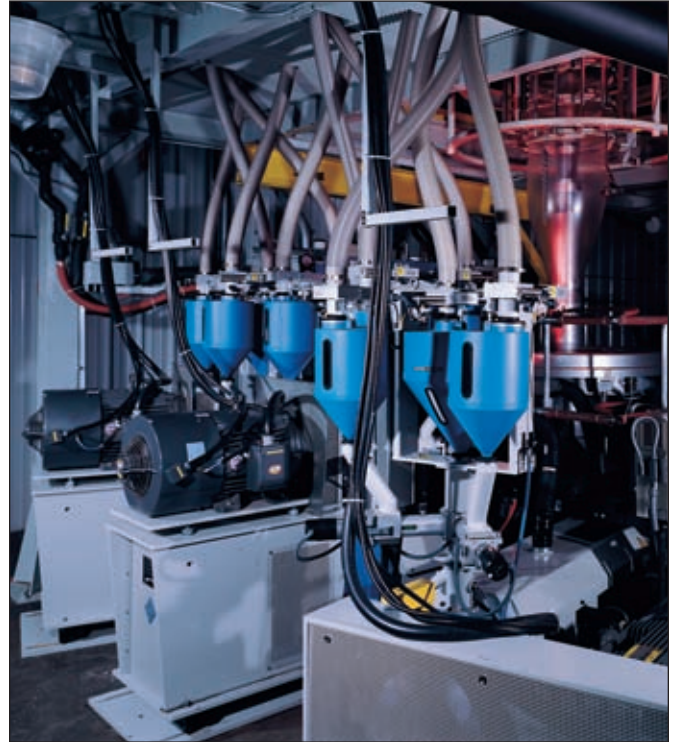
Years ago, when Baldor began making Inverter and Vector Drive motors, we spent a lot of time in the field. We talked in depth with plant maintenance and design engineers. We asked about tough applications like pulp and paper manufacturing, printing and automotive dyno test stands. We took the opportunity to learn in great detail what capabilities and characteristics people like and need. And most important, learned what not to do.

One of the frequent suggestions was the need for a motor with an outstanding insulation system to hold up to the PWM wave forms of adjustable speed controls. Our use of Class H insulation with Class F (or lower) temperature rise, and our new Mobil Polyrex<sup>®</sup>EM grease all result in a more reliable and longer lasting motor.

Today, Baldor•Reliance makes tough, reliable motors from 1/50 to 1500 Hp for many different applications. And we continue to listen and follow through on what customers want. That's why you can count on Baldor•Reliance for superior value.

Baldor•Reliance Inverter Drive<sup>®</sup> and Vector Drive<sup>®</sup> motors feature:

- The widest variety of definite-purpose Inverter and Vector Drive motors available from stock. Motors are available in a wide range of horsepower, speeds, and enclosures for specific environments.
- Standard enclosures are available for many applications. Washdown and Paint-Free ratings for applications with high pressure cleaning and caustic solutions, plus Explosion-Proof ratings for use in hazardous locations.
- Premium efficiency designs increase energy savings, lower temperature rise, and increase motor life.
- Baldor•Reliance integral horsepower designs feature cast iron construction for extra durability.
- Mobil Polyrex<sup>®</sup>EM grease is used to provide longer life at high temperatures. This new grease is also more moisture-resistant than other polyurea greases.
- Baldor•Reliance Inverter Drive and Vector Drive motors are designed for adjustable speed applications where over a 1000:1 constant torque speed range may be required.
- Totally-Enclosed Non-Ventilated (TENV) and Totally-Enclosed Blower-Cooled (TEBC) motors are designed and tested for use on adjustable speed controls to ensure maximum performance and adequate cooling over a wide speed range.



**Baldor•Reliance vector drive on a blown film extruder.**

- Baldor•Reliance offers a wide range of Explosion-Proof Inverter Drive Motors, approved for use in hazardous locations with Baldor H2 Series Inverters, as well as, inverters manufactured by other companies.
- Low inertia, induction servo motors are available for use with inverters and vector controls where motor dynamics and high performance are critical.
- Baldor•Reliance Inverter Drive and Vector Drive motors meet NEMA MG 1-2003, Part 31 requirements.
- Matched Performance<sup>™</sup> curves are available to show the amount of torque available at various speeds from a given motor and control.
- Choice of all popular enclosures, voltages, and frequency as custom orders with Baldor's two-week lead times.

There are many other advantages of choosing Baldor•Reliance Inverter Drive and Vector Drive motors. You'll find them on the following pages - as well as all the specs you need to make the right decision for your application.

## Matched Performance Curves Inverter/Vector Drive®

**Matched Performance** is Baldor's solution to the concern, "What kind of constant torque and constant horsepower speed range will I get with this combination of motor and motor control?" Only Baldor provides Matched Performance® curves that go beyond the "typical performance" curves and instead provides actual laboratory dynamometer test results.

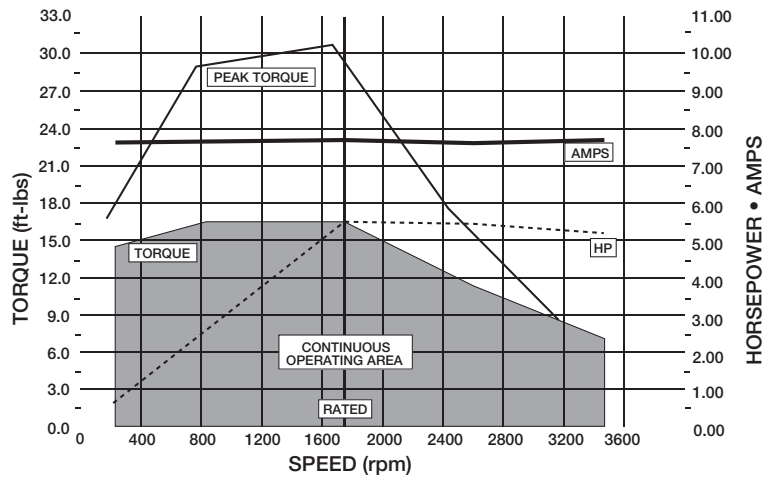
Each test is performed in Baldor's own engineering testing laboratory using advanced dynamometer equipment and digital power measurements. A typical Matched Performance™ test requires 2-4 days of continuous testing. This painstaking effort is another example of Baldor's commitment to providing customers the extra value to make our products easy to apply to your specific application needs.

These curves show the **continuous operating** constant torque speed range that can be produced without exceeding Class F temperature rise in the motor. The lower Class F rise is selected to provide long life, even when a Class H insulation system is used in Baldor•Reliance Inverter Drive and Vector Drive motors.

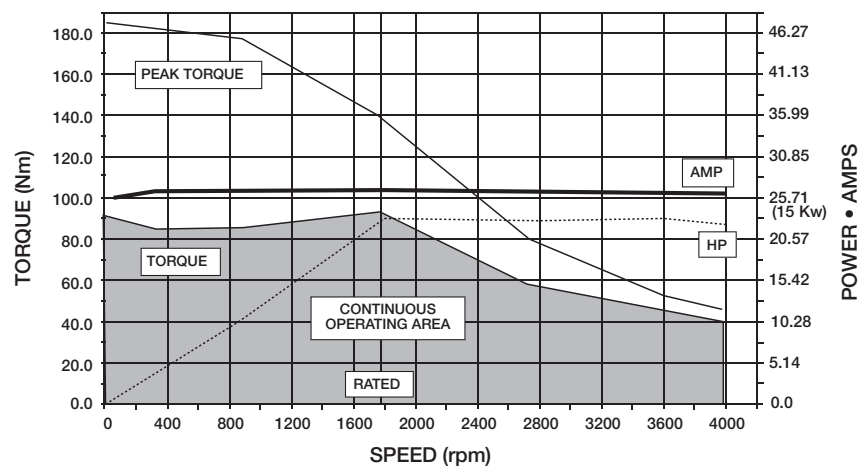
**Peak Torque** is the maximum amount of torque a Baldor•Reliance H2® Inverter or Vector Drive can produce. This may be limited by the breakdown torque of the motor or the control's current-limited peak torque. Peak torque is available for momentary overloads or acceleration and deceleration requirements.

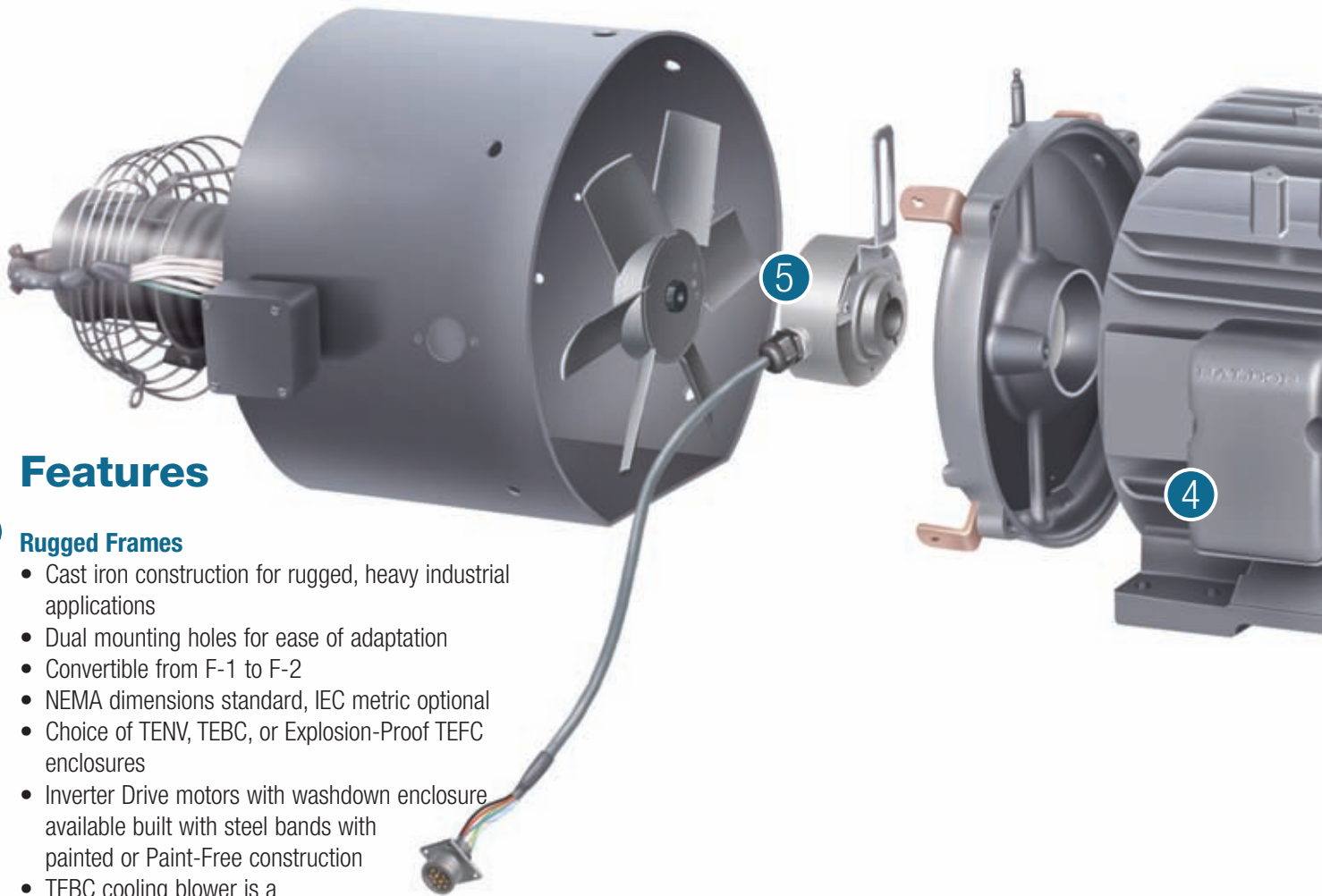
The **horsepower** curve is simply a representation of how much power is available from the motor at any given operating speed. The horsepower curve can be used to size applications requiring constant horsepower operation.

**Motor:** IDM3665T - 5 Hp  
**Drive:** VS1GV45-1B - 5 Hp H2 Inverter/Encoderless Vector



**Motor:** ZDM2334T - 20 Hp  
**Drive:** VS1GV420-1B - 20 Hp H2 Vector





## Features

### 1 Rugged Frames

- Cast iron construction for rugged, heavy industrial applications
- Dual mounting holes for ease of adaptation
- Convertible from F-1 to F-2
- NEMA dimensions standard, IEC metric optional
- Choice of TENV, TEBC, or Explosion-Proof TEFC enclosures
- Inverter Drive motors with washdown enclosure available built with steel bands with painted or Paint-Free construction
- TEBC cooling blower is a Baldor•Reliance industrial motor with cast iron endplates built to Chemical Processing standards

### 2 Premium-efficiency windings

- Low energy usage and ability to utilize lower drive current ratings
- Standard Baldor•Reliance ISR® (Inverter Spike Resistant) copper magnet wire
- Non-hygroscopic, Class H insulation system allows windings to withstand higher temperatures to extend motor life
- Low-loss electrical steel

### 3 High strength rotor and shaft assembly

- High pressure die cast aluminum rotors through 449T frame, fabricated copper bar rotors 5007L frame and up
- Operates throughout allowable speed range (including above base speed) below the 1st critical speed by at least 15% margin
- Precision dynamic balancing

### 4 Easy to connect

- Diagonally split, oversize conduit box is rotatable in 90 degree increments through 360 degrees - standard on all Baldor•Reliance cast iron frames - and is easily convertible to F-2 mounting (cast iron frames)
- Provision for grounding is included in the conduit box
- Overload sensing thermostat leads are provided in the main conduit box
- An auxiliary conduit box is provided for the cooling blower motor on TEBC motors
- Encoder connections on Vector Drive motors are with a twist-lock connector with the mating plug supplied. Pre-made cable assemblies are available in several lengths





- 5 Rugged industrial encoders on Vector Drive motors:**
- 1024 PPR optical encoder standard on Vector Drive motors - HS25 size through 215TC, HS35 size 254TC - up
  - Encoders mount directly on the motor shaft, eliminating the coupling
  - Inverter Drive motors are encoder-ready for stocked encoder kits
  - Encoder kits are stocked allowing the mounting of optical encoders and magnetic pulse generators from Avtron, NorthStar (LakeShore), Dynapar and BEI

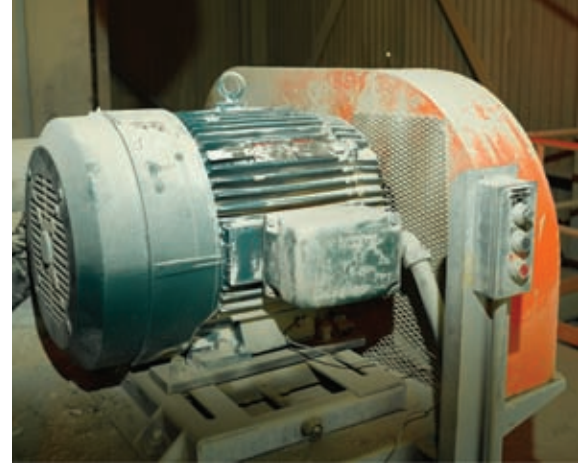
## Which drive technology do I choose?

The application, load and desired speed regulation will influence your decision on which drive technology will be selected. The following table will indicate which drive technology may be best suited for your application requirements. Inverter Duty or Vector Duty motors would be selected.

Performance Feature	Inverter Drive	Vector Drive
Variable torque loads — fans and centrifugal pumps	X	X
1000:1 constant torque speed range	X	X
Speed regulation ~ 2-3% of base speed	X	—
Precise speed regulation ± 1 RPM of set speed	—	X
Full torque at zero RPM	—	X
Positioning capability	—	X
Speed control	—	X
Torque control	—	X
Constant HP operation above base speed	X	X
PID control	X	X
Leader-follower mode	X	X

## Industrial quality Baldor•Reliance Inverter Drive® and Vector Drive® Motors are in stock thru 500 Hp and ready for immediate shipment.

Baldor•Reliance has a broad line of adjustable speed AC motors are stocked in over 40 world-wide warehouses and in our Fort Smith distribution center. Same day shipping is available on both Inverter Drive® and Vector Drive® Motors, as well as over 5500 other products. For motors or drives, Baldor products are the best value.



Baldor•Reliance motor working in a cement plant.

## Electrical Design Characteristics (for all configurations)

Specification	Description	Frames	
		56C-447T	449T-5810
Voltage	230,460 or 575 volts	s	s
	380, 415 volts - 50 Hz	s	s
Frequency	60 Hz standard, 50 Hz optional	s	s
Service Factor	1.0 standard	s	s
Ratings	Nema Design B	s	s
Duty Cycle	Continuous duty	s	s
	Special duty cycles	o	o
Ambient Temperature	40°C ambient temperature	s	s
	Higher or lower ambient temperature	o	o
Temperature Rise	Class F rise at 1.0 rated load on PWM power	s	s
Laminations	Low-loss electrical grade steel	s	
Windings	Low-loss electrical grade steel, C-5 core plate		s
	Class H+ (200°C) ISR (Inverter Spike Resistant®) copper magnet wire	s	s
Insulation Class	Class H+, Non-hygroscopic varnish	s	
	Class H, Non-hygroscopic epoxy VPI		s
End Turn Bracing	Surge rings laced to end-turns and VPI epoxy impregnated for structural integrity		s
Stator Insulation	Nomex Class H slot liner	s	s
Phase Insulation	Woven Class H glass phase insulation	s	s
Lead Material	Non-wicking cross-linked polyethylene	s	s
Insulation System	Meets NEMA Standards MG 1 - 2003, Part 31	s	s
Thermal Protection	Winding thermostats (normally closed contacts)	s	s
	Thermistors	o	o
Space Heaters	120 volt standard, other voltages optional	o	o
Feedback Devices	1024 PPR electrically isolated through-shaft BEI optical encoder standard on vector drive motors (Other PPR available)	s	s
	NorthStar (LakeShore) or Avtron pulse generators available	o	o
Testing	Short commercial test (no-load amps, speed, balance and hi-pot test per NEMA MG 1)	s	
	Standard test supplied with motor ( Balance test, winding resistance, no load, full load, amps and speed, power factor, torque and hi-pot test per NEMA MG 1)		s
	Heat run and complete efficiency testing at temperature	o	o
	Either of above tests as witnessed	o	o
Approvals	CSA recognized components through 449T (File LR2262); 5000 and 5800 TEFC frames through 800 Hp, 4 pole and up to 600 volts (File LR 36841-7)	s	s

**Note:** Specifications and Dimensions are subject to change without notice, please contact Baldor for certified information. s= standard, o= optional.

## Inverter Drive® and Vector Drive® Motors (Non-Explosion-Proof) Mechanical Design Characteristics (TENV & TEBC)

Specification	Description	Frames						
		56C	143T-215T	254T-365T	404T-447T	449T	5007L-5011L	5810
Nameplate	Includes base volts and frequency, correction diagram, blower rating (volts, hertz, phase, and amps), maximum motor speed, rotor inertia, and magnetization current	s	s	s	s	s	s	s
Frame Dimensions	NEMA	s	s	s	s	s	s	s
	IEC	o	o	o	o	o	o	o
Frame Construction	Steel band	s						
	Cast iron		s	s	s	s	s	s
Multiple Mounting Holes in Base	Multiple mounting holes standard	s	s	s	s	s	s	s
Endplates	Die cast aluminum with steel bearing inserts	s						
	Cast iron		s	s	s	s	s	s
Face Mounting	Horizontal	o	o	o	o	o	s	s
	C-Face (standard on stock motors 56C-256TC)	s	s	s ①	o	o	o	o
	D-Flange	o	o	o	o	o	o	o
Conduit Box & Cover	Die cast aluminum	s						
	Cast iron		s	s	s	s	s	s
Ground Provisions	Inside conduit box for convenience	s	s	s	s	s	s	s
Lifting Provisions	Eyebolt in frame	s	s	s	s			
	Integrally-cast lifting lugs					s	s	s
Enclosure	Totally-enclosed non-vented (TENV)	o	s	s	o	o	o	o
	Totally-enclosed blower-cooled (TEBC)		s	s	s	s	s	s
	Totally-enclosed fan-cooled (TEFC)	o	o	o	o	o	o	o
Cooling Fan	Non-sparking	s	s	s	s	s	s	s
Rotor Construction	Special high pressure aluminum die cast with low loss electrical steel and special slot configuration	s	s	s	s	s		
	Fabricated copper-bar construction						s	s
Balance	Dynamically balanced better than NEMA MG 1-2003 specifications	s	s	s	s	s	s	s
Shaft Material	C1035 high strength steel	s	s					
	C1137 high strength steel			s	s			
	1045 high strength steel					s	s	
	4140 high strength steel							s
Paint	Grey lacquer over primer coat	s	s	s	s	s	s	s
Bearings	Premium grade, ball bearings, double shielded	s	s					
	Premium grade, ball bearings, open w/ Lube Lock®			s	s	s	s	s
	Roller bearing on drive end	o	o	o	o	o	o	o
Bearing Retention	Locked bearings for universal mounting	s	s	s	s	s	s	s
Bearing Lubrication	Mobil Polyrex®EM polyurea grease	s	s	s	s	s	s	s
Shaft Grounding Brush	SGS shaft grounding brush (stock motors)	o	o	o	o	s	s	o
Bearing Isolation	Ceramic outer race, ceramic balls or insulated insert in endplate available based on application	o	o	o	o	o	o	o
Grease Provisions	Regreaseable without removal of fan cover	s	s	s	s	s	s	s
Limited Warranty	18 months-motor only months when used with Baldor control	s	s	s	s	s	s	s

s= standard, o= optional  
① to 256TC

## Inverter Drive® and Vector Drive® Motors



### Totally-Enclosed Non-Vented (TENV)

3 Hp TENV Inverter Drive Motor Catalog # IDNM3661T



### Totally-Enclosed Blower-Cooled (TEBC)

20 Hp TEBC Vector Drive Motor Catalog # ZDM4102T

Baldor•Reliance Inverter Drive® and Vector Drive® motors are suited for operation on conveyors, pumps, fans, metal processing, compressors, test stands, and material handling equipment. These motors are designed for adjustable speed applications where up to 1000:1 constant torque speed range may be required.

## Performance Data 230/460 Volt Ratings-TENV Enclosure

60 Hz		Base Speed	Max. Speed	NEMA Frame	Inverter	Vector	"C" Dim	460 V Amps		Output Torque Lb-Ft			% Eff.	Wk <sup>2</sup> Lb-Ft <sup>2</sup>	Approx. Weight Lbs	Bearings	
Hp	kW				Catalog No.	Catalog No.		Idle	F.L.	F.L.	L.R.	B.D.				DE	ODE
0.33	0.25	1725	6000	56C	IDNM3534	Custom	13.84	0.45	0.6	1	3.4	3.8	76	.0771	29	6205	6203
0.5	0.37	1725	6000	56C	IDNM3538	Custom	13.84	0.50	0.8	1.5	5.2	6.5	75.5	.0949	32	6205	6203
0.75	0.56	1725	6000	56C	IDNM3542	Custom	13.84	0.65	1.1	2.3	6.5	8.3	80	.1420	35	6205	6203
1	0.75	1725	6000	143TC	IDNM3581T	ZDNM3581T	14.65	0.92	1.6	3	9.5	11	81.5	.1420	59	6205	6203
1.5	1.1	1725	6000	145TC	IDNM3584T	ZDNM3584T	14.65	1.05	2.0	4.5	14	17	82.5	.1900	65	6205	6203
2	1.5	1740	6000	145TC	IDNM3587T	Custom	14.65	1.4	2.7	6	24	25	84	.2080	64	6205	6203
2	1.5	1725	6000	182TC	IDNM3669T	ZDNM3669T	17.21	1.7	2.9	6	25	30	84	.2630	94	6206	6205
3	2.2	1750	6000	184TC	IDNM3661T	ZDNM3661T	17.21	2.0	4.0	9	22.9	37.1	88.5	.3190	108	6206	6205
5	3.7	1760	6000	184TC	IDNM3665T	Custom	17.21	3.6	6.6	15	43	60	89.5	.3700	115	6206	6205
5	3.7	1760	6000	213TC	IDNM3767T	ZDNM3767T	20.40	3.4	6.5	14.9	48	52	89.5	.7340	167	6307	6206
7.5	5.6	1760	5000	254TC	IDNM2237T	ZDNM2237T	24.05	5.3	9.8	22.2	63	85	89.5	1.400	250	6309	6208
10	7.5	1770	5000	256TC	IDNM2238T	ZDNM2238T	24.05	5.6	13.0	29.8	71.1	133	91.7	2.100	289	6309	6208
15	11.2	1765	5000	256TC	IDNM2333T	ZDNM2333T	24.05	8.9	18.5	45	102	176	94.1	.2630	286	6309	6208
20	14.9	1780	5000	284T	IDNM2334T	ZDNM2334T	27.36	15.5	25.5	60	143	256	94.5	4.460	437	6311	6309

For Dimensions refer to page 80.

Shaded ratings are cast iron frames.

## Performance Data 230/460 Volt Ratings-TEBC Enclosure

60 Hz		Base Speed	Max. Speed	NEMA Frame	Inverter	Vector	"C" Dim	460 V Amps		Output Torque Lb-Ft			% Eff.	Wk <sup>2</sup> Lb-Ft <sup>2</sup>	Approx. Weight Lbs	Bearings	
Hp	kW				Catalog No.	Catalog No.		Idle	F.L.	F.L.	L.R.	B.D.				DE	ODE
1	0.7	1750	6000	143TC	IDM3581T	ZDM3581T	19.15	0.76	1.4	3	10	14.5	86.5	.1420	65	6205	6203
1	0.7	1150	6000	145TC	IDM3582T	ZDM3582T	19.15	1.2	1.8	4.5	9.2	12	82.5	.1660	69	6205	6203
1.5	1.1	1750	6000	143TC	IDM3584T	ZDM3584T	19.15	1.16	2.1	4.5	14	22	87.5	.1660	68	6205	6203
1.5	1.1	1160	6000	182TC	IDM3667T	ZDM3667T	21.71	1.8	2.6	6.8	12	18.5	86.5	.3000	110	6206	6205
2	1.5	1750	6000	145TC	IDM3587T	ZDM3587T	19.15	1.2	2.5	6	21	24	86.5	.2080	72	6205	6203
2	1.5	1160	6000	184TC	IDM3664T	ZDM3664T	21.71	2.5	3.6	9	15.4	29	87.5	.3800	123	6206	6205
3	2.2	1760	6000	182TC	IDM3661T	ZDM3661T	21.71	2.2	4.0	9	22	31	89.5	.2600	109	6206	6205
3	2.2	1160	6000	213TC	IDM3764T	ZDM3764T	29.14	3.3	5.0	13.5	23	45	89.5	.7460	174	6307	6206
5	3.7	1750	6000	184TC	IDM3665T	ZDM3665T	21.71	3.4	6.5	15	32	50	90.2	.3700	125	6206	6205
5	3.7	1160	6000	215TC	IDM3768T	ZDM3768T	29.14	4.9	8.0	22.6	57	83	88.5	.9950	200	6307	6206
7.5	5.6	1760	6000	213TC	IDM3770T	ZDM3770T	29.14	4.3	9.9	22.5	35	83	89.5	.7410	177	6307	6206
7.5	5.6	1180	5000	254TC	IDM2276T	ZDM2276T	33.07	5.52	10.7	33.3	58.4	99.5	91.7	4.340	282	6309	6208
10	7.5	1760	6000	215TC	IDM3774T	ZDM3774T	29.14	5.5	12.5	30	56	121	91.7	1.230	196	6307	6206
10	7.5	1180	5000	256TC	IDM2332T	ZDM2332T	33.07	7.15	14.2	44.4	75	144	91.7	4.820	324	6309	6208
15	11.2	1765	5000	254TC	IDM2333T	ZDM2333T	33.07	8.33	18.5	44.6	79.1	165	92.4	1.570	236	6309	6208
15	11.2	1180	4000	284T	IDM4100T	ZDM4100T	36.48	8.39	18.7	66.7	198	209	92.4	6.650	426	6311	6309
20	14.9	1765	5000	256TC	IDM2334T	ZDM2334T	33.07	9.79	24.0	59.5	116	199	93	2.100	286	6309	6208
20	14.9	1175	4000	286T	IDM4102T	ZDM4102T	36.48	10.12	25.0	89.3	278	272	92.4	7.360	476	6311	6309
25	18.7	1770	4000	284T	IDM4103T	ZDM4103T	36.48	11.43	30.0	74.2	125	238	93.6	3.660	432	6311	6309
25	18.7	1180	3900	324T	IDM4111T	ZDM4111T	39.24	12.6	32.0	111	292	323	93	9.210	619	6312	6311
30	22.4	1780	4000	286T	IDM4104T	ZDM4104T	36.48	14.5	36.0	90	143	256	94.1	4.460	458	6311	6309
30	22.4	1180	3900	326T	IDM4117T	ZDM4117T	39.24	16	38.0	134	359	416	93	10.40	654	6312	6311
40	29.8	1775	3900	324T	IDM4110T	ZDM4110T	39.24	16.01	47.0	118	207	385	94.5	7.460	578	6312	6311
40	29.8	1185	3600	364T	IDM4308T	ZDM4308T	41.58	19.14	49.0	177	270	520	94.1	18.20	780	6313	6312
50	37.3	1775	3900	326T	IDM4115T	ZDM4115T	39.24	19.13	57.0	148	290	451	94.5	8.260	679	6312	6311
50	37.3	1185	3600	365T	IDM4312T	ZDM4312T	41.58	24	61.0	221	379	700	94.1	21.10	823	6313	6312
60	45.0	1780	3600	364T	IDM4314T	ZDM4314T	41.58	23.5	69.0	177	278	556	95	11.70	808	6313	6312
60	45.0	1185	2800	405T	Custom	ZDM4403T	46.68	30	72.0	265	393	735	94.5	30.10	1,152	6316	6313
75	56.0	1780	3600	365T	IDM4316T	ZDM4316T	41.58	29.3	84.0	221	338	738	95.4	15.50	842	6313	6312
75	56.0	1185	2800	404T	IDM4404T	ZDM4404T	46.68	32.4	88.0	331	514	877	95	38.90	1,172	6316	6313
100	74.6	1780	2800	404T	IDM4400T-4	ZDM4400T-4	46.68	29.3	109	295	402	1000	95.4	28.60	1,251	6316	6313
100	74.6	1180	2400	444T	IDM4409T-4	ZDM4409T-4	51.98	44	120	445	528	1200	95.4	58.8	1,550	6319	6314
125	93.3	1780	2400	444T	IDM4410T-4	ZDM4410T-4	51.98	40	139	368	485	1130	95.4	32.7	1,550	6319	6314
150	112	1785	2400	445T	IDM4406T-4	ZDM4406T-4	51.98	55	173	442	485	1162	95.8	42.3	1,630	6319	6314
200	150	1785	2400	447T	IDM4407T-4	ZDM4407T-4	55.49	65	224	588	1020	2010	96.2	65.4	2,111	6319	6314
250	187	1785	2400	449T	Custom	Custom	63.63	64	275	735	929	2405	95.8	81.30	2,340	6319	6314
300	224	1785	2400	449T	Custom	Custom	63.63	90.2	333	883	1393	2630	95.8	90.70	2,292	6319	6314
350	261	1780	2400	449T	Custom	Custom	63.63	97	388	1032	1640	3450	95.4	95.0	2,390	6319	6314
400	298	1785	2000	5007L	Custom	Custom	68.06	97	432	1172	1047	2518	96.2	194	3,600	6322	6222
450	336	1790	2000	5007L	Custom	Custom	68.06	117	492	1320	1221	2988	96.5	209	3,600	6322	6222
500	373	1790	2000	5009L	Custom	Custom	74.06	130	540	1465	1394	3388	96.8	243	5,400	6322	6222

For Dimensions refer to pages 81-82.

Shaded ratings are cast iron frames.

## 575 Volt Inverter Drive® and Vector Drive® Motors

Baldor•Reliance Inverter Drive® and Vector Drive® motors are suited for operation on conveyors, pumps, fans, metal processing, compressors, test stands, and material handling equipment. These motors are designed for adjustable speed applications where up to 1000:1 constant torque speed range may be required.



20 Hp TEFC Vector Drive Motor Catalog # ZDM2334T-5

### Performance Data 575 Volt Ratings - TEBC Enclosure

60 Hz		Base Speed	Max. Speed	NEMA Frame	Inverter	Vector	“C” Dim	460 V Amps		Output Torque Lb-Ft			% Eff.	Wk <sup>2</sup> Lb-Ft <sup>2</sup>	Approx. Weight Lbs	Bearings	
Hp	kW				Catalog No.	Catalog No.		Idle	F.L.	F.L.	L.R.	B.D.				DE	ODE
1	0.75	1750	6000	143TC	IDM3581T-5	ZDM3581T-5	19.15	0.61	1.1	3	10	14.5	86.5	.1420	64	6205	6203
1.5	1.1	1750	6000	145TC	IDM3584T-5	ZDM3584T-5	19.15	0.93	1.7	4.5	14	22	87.5	.1660	68	6205	6203
2	1.5	1750	6000	145TC	IDM3587T-5	ZDM3587T-5	19.15	0.96	2.0	6	21	24	86.5	.2080	73	6205	6203
3	2.2	1760	6000	182TC	IDM3661T-5	ZDM3661T-5	21.71	1.8	3.2	9	22	31	89.7	.2600	109	6206	6205
5	3.7	1750	6000	184TC	IDM3665T-5	ZDM3665T-5	21.71	2.7	5.2	15	32	50	90.2	.3700	123	6206	6205
7.5	5.6	1760	6000	213TC	IDM3770T-5	ZDM3770T-5	30.07	3.9	7.8	22.4	39	69.9	90.2	.8400	169	6307	6206
10	7.5	1760	6000	215TC	IDM3774T-5	ZDM3774T-5	30.07	4.4	10.0	30	56	121	91.7	1.230	196	6307	6206
15	11.2	1765	4000	254TC	IDM2333T-5	ZDM2333T-5	34.15	6.6	14.8	44.5	79	165	92.4	1.570	310	6309	6208
20	14.9	1765	4000	256TC	IDM2334T-5	ZDM2334T-5	34.15	7.6	19.0	59	114	195	93.0	2.100	286	6309	6208

For Dimensions refer to page 81.

Shaded ratings are cast iron frames.

## IEC Frame 50 Hertz Vector Drive® Motors

Baldor•Reliance IEC Vector Drive motors are designed for 415 volt - 50 Hz operation on conveyors, material handling and other process industry applications.

These motors are designed for applications requiring constant torque speed ranges of 1000:1 or better. Motors through 600 kW are available as custom motors with Baldor's short lead time. These motors are usually stocked by Baldor's international offices.



3.7 kW TEBC Vector Drive Motor Catalog # ZDMM3665

## Performance Data 415 Volt 50 Hz Ratings - TENV & TEBC Enclosures

50 Hz		Base Speed	Max. RPM	IEC Frame	Mounting Style	Enclosure	Vector Catalog No.	Amp F.L.	Output Torque Nm			% Eff.	Inertia Kg-cm <sup>2</sup>	Approx. Weight Kg	Bearings	
kW	Hp								F.L.	L.R.	B.D.				DE	ODE
0.75	1	1500	6000	D80-B5	D90-B3 Foot	TENV	ZDMM3581	1.7				80.0	72	29	6205	6203
1.5	2	1500	6000	D90-B5	D112-B3 Foot	TENV	ZDMM3669	3.0				82.5	110	48	6205	6203
2.2	3	1500	6000	D100-B5	D112-B3 Foot	TENV	ZDMM3661	4.7	14.5	40.7	63.7	89.5	169	53	6205	6203
3.7	5	1500	6000	112M	B3 Foot	TEBC	ZDMM3665	7.1	24.4	54.2	85.4	89.5	156	62	6205	6203
3.7	5	1500	6000	112D	B5 Flange	TEBC	ZDMM3665D	7.1	24.4	54.2	85.4	89.5	156	65	6205	6203
5.5	7.5	1500	6000	132M	B3 Foot	TEBC	ZDMM3770	11.4	36.3	61	127.4	89.5	308	92	6208	6206
5.5	7.5	1500	6000	132D	B5 Flange	TEBC	ZDMM3770D	11.4	36.6	132.8	153.2	89.5	308	98	6208	6206
7.5	10	1500	6000	132M	B3 Foot	TEBC	ZDMM3774	14.4	49.6	135.6	170.8	90.2	440	98	6208	6206
7.5	10	1500	6000	132D	B5 Flange	TEBC	ZDMM3774D	14.4	49.6	135.6	170.8	90.2	440	102	6208	6206
11	15	1500	5000	160M	B3 Foot	TEBC	ZDMM2333	21.0	73.2	176.2	265.7	92.4	885	127	6305	6208
11	15	1500	5000	160D	B5 Flange	TEBC	ZDMM2333D	21.0	73.2	176.2	265.7	92.4	885	133	6305	6208
15	20	1500	5000	160L	B3 Foot	TEBC	ZDMM2334	27.0	98.3	172.2	306.4	92.4	969	141	6305	6208
15	20	1500	5000	160D	B5 Flange	TEBC	ZDMM2334D	27.0	98.3	172.2	306.4	91.7	969	142	6305	6208
18.5	25	1500	4000	180M	B3 Foot	TEBC	ZDMM4103	33.5	112.6	158.6	314.5	91.7	1879	187	6311	6309
22.5	30	1500	4000	180L	B3 Foot	TEBC	ZDMM4104	41.0	146.4	240	404	92.4	1955	216	6312	6311
30	40	1500	4000	200L	B3 Foot	TEBC	ZDMM4110	53.0	193.8	279	414	93.6	3285	250		
37	50	1500	4000	225S	B3 Foot	TEBC	ZDMM4115	67.0	241	875	793	94.5	4591	306	6313	6312
45	60	1500	4000	225M	B3 Foot	TEBC	ZDMM4314	78.0					4888	362		
56	75	1500	4000	250S	B3 Foot	TEBC	ZDMM4316	101					8546	465		
75	100	1500	3000	250M	B3 Foot	TEBC	ZDMM4400	128					11399	537		

Contact Baldor for current information and drawings on the above motors.

Shaded ratings are cast iron frames.

## Washdown Duty Inverter Drive® and Vector Drive® Motors

Baldor•Reliance AC Inverter Drive® and Vector Drive® Washdown Duty Motors range from 1 to 10 Hp and are suitable for use on conveyors, pumps, and other equipment in the food processing industry. Specifically designed for high pressure washdown applications.



1.5 Hp TENV Washdown Vector Drive Motor  
Catalog # ZDWNM3554T

## Mechanical Design Characteristics

Specification	Description	Frames		
		56	143T 215T	254T 256TC
Nameplate	Nameplate and fasteners stainless steel. Includes base volts and frequency, connection diagrams, blower rating (volts, hertz, phase, and amps), maximum motor speed, rotor inertia and magnetization current	S	S	S
Frame Dimensions	NEMA	S	S	S
Frame Construction	Steel band	S	S	S
	Stainless steel band (Paint Free only)	S	S	S
Multiple Mounting	Multiple mounting holes standard	S	S	S
Holes in Base		S	S	S
Endplates	Die cast aluminum with steel bearing inserts	S	S	S
	Treated die cast aluminum with steel bearing inserts (Paint Free only)	S	S	S
Face Mounting	Horizontal	0	0	0
	C-Face (standard on stock motors 56C-256TC)	S	S	S
	D-Flange	0	0	0
Conduit Box & Cover	Die cast aluminum	S		
	Treated die cast aluminum (Paint Free only)		S	S
Gaskets & Sealing	Neoprene gaskets prevent entrance of moisture between the conduit box and frame as well as the lid and conduit box. Joint between the endplates and motor frame is sealed to prevent water entry	S	S	S
Ground Provisions	Inside conduit box for convenience	S	S	S
Lifting Provisions	Eyebolt in frame	S	S	S
Cooling Fan	Non-sparking glass	S	S	S
Rotor Construction	Special high pressure aluminum die cast with low loss electrical steel and special slot configuration. Coated with 2-part epoxy for resistance to corrosion	S	S	S
Balance	Dynamically balanced better than NEMA MG 1-2003 specifications	S	S	S
Shaft Material	Entire shaft is made of 300 series stainless steel for prevention of rust and corrosion	S	S	S
Shaft Seals	A contact lip seal and V-ring type Forsheda rotating seal are provided on the drive-end shaft to prevent entrance of contamination into the bearings	S	S	S
Drains	Multiple drain hole locations with removable plugs to maximize drainage & minimize water entry	S	S	S
Paint	FDA approved two-part epoxy coated inside and outside to extend motor life and prevent internal corrosion	S	S	S
	No internal or external paint (Paint Free only)	S	S	S
Bearings	Premium grade ball bearings, double shielded	S	S	
	Premium grade ball bearings, open with Lube Lock			S
	Roller bearing on drive end	0	0	0
Bearing Retention	Locked bearings for universal mounting	S	S	S
Bearing Lubrication	Mobil Polyrex® EM for use in wet environments with resistance to wash-out	S	S	S
Grease Provisions	Regreasable with addition of grease fittings	S	S	S
Limited Warranty	18 months - motors only; 24 months when used with Baldor control	S	S	S

**Note:** Specifications and Dimensions are subject to change without notice, please contact Baldor for certified information.  
s= standard, o= optional



## Washdown Duty Inverter Drive® and Vector Drive® Motors Performance Data 230/460 Volt Ratings-TENV Enclosure

60 Hz		Base Speed	Max. Speed	NEMA Frame	Inverter	Vector	"C" Dim	460 V Amps		Output Torque Lb-Ft				% Eff.	Wk <sup>2</sup> Lb-Ft <sup>2</sup>	Approx. Weight Lbs	Bearings	
Hp	kW				Catalog No.	Catalog No.		Idle	F.L.	F.L.	L.R.	B.D.	DE				ODE	
1	0.75	1750	6000	143TC	IDWNM3546T	ZDWNM3546T	14.90	0.8	1.4	3.0	10.0	14.5	86.5	0.142	39	6205	6203	
1 1/2	1.1	1750	6000	145TC	IDWNM3554T	ZDWNM3554T	15.78	1.2	2.1	4.5	19.8	20.5	87.5	0.210	53	6205	6203	
2	1.5	1725	6000	182TC	IDWNM3609T	ZDWNM3609T	17.77	1.7	2.9	6.0	25.0	30.0	84.0	0.260	69	6206	6205	
3	2.2	1750	6000	184TC	IDWNM3611T	ZDWNM3611T	17.77	1.8	4.0	9.0	22.0	32.0	88.5	0.319	80	6206	6205	
5	3.7	1760	6000	213TC	IDWNM3707T	ZDWNM3707T	19.84	3.4	6.7	14.9	48.0	52.0	89.5	0.790	122	6307	6206	
7 1/2	5.6	1765	5000	254TC	IDWNM22937T	ZDWNM22937T	23.92	4.0	9.1	22.5	48.6	86.0	91.0	1.750	242	6309	6208	
10	7.5	1765	5000	254TC	IDWNM22938T	ZDWNM22938T	23.92	4.4	12.0	30.0	58.0	114	91.7	2.450	291	6309	6208	

For Dimensions refer to page 85.

## Inverter Drive® and Vector Drive® Paint-Free Washdown Duty Motors



3 Hp Paint-Free Washdown Duty Inverter Drive Motor  
Catalog # IDVSWDM3611T

## Performance Data 230/460 Volt Ratings-TEFC Enclosure

60 Hz		Base Speed	Max. Speed	NEMA Frame	Inverter Catalog No.	"C" Dim	460 V Amps		Output Torque Lb-Ft				% Eff.	Wk <sup>2</sup> Lb-Ft <sup>2</sup>	Approx. Weight Lbs	Bearings	
Hp	kW						Idle	F.L.	F.L.	L.R.	B.D.	DE				ODE	
1/2	0.4	1750	6000	56C	IDCSWDM3538	11.07	0.50	0.8	1.5	5.6	6.7	82.5	0.095	32	6205	6203	
3/4	0.6	1750	6000	56C	IDCSWDM3542	12.07	0.70	1.0	2.3	8.5	9.0	78.5	0.142	39	6205	6203	
1	0.75	1740	3600	56C	IDCSWDM3546	12.07	0.80	1.4	3.0	12.0	12.0	82.5	0.166	39	6205	6203	
1	0.75	1740	3600	143TC	IDCSWDM3546T	12.12	0.80	1.4	3.0	12.0	12.0	82.5	0.166	42	6205	6203	
1 1/2	1.1	1750	4000	56C	IDCSWDM3554	13.24	1.16	2.1	4.5	14.0	22.0	87.5	0.166	45	6205	6203	
1 1/2	1.1	1750	4000	145TC	IDCSWDM3554T	13.30	1.16	2.1	4.5	14.0	22.0	87.5	0.166	47	6205	6203	
2	1.5	1750	3600	56C	IDCSWDM3558	14.12	1.20	2.5	6.0	21.0	24.0	86.5	0.208	48	6205	6203	
2	1.5	1750	3600	145TC	IDCSWDM3558T	14.18	1.20	2.5	6.0	21.0	24.0	86.5	0.208	52	6206	6205	
3	2.2	1760	6000	182TC	IDCSWDM3611T	16.56	2.20	4.0	9.0	22.0	31.0	89.5	0.260	78	6206	6205	
5	3.7	1750	6000	184TC	IDCSWDM3615T	18.06	3.20	6.5	15.0	32.0	52.0	89.5	0.370	93	6206	6205	
7 1/2	5.6	1760	6000	213TC	IDCSWDM3710T	19.81	5.70	10.0	22.0	67.0	79.0	86.5	0.988	140	6206	6205	
10	7.5	1760	6000	215TC	IDCSWDM3714T	20.56	8.40	13.0	29.9	99.0	119	89.5	1.230	158	6206	6205	

**Note:** These Inverter motors do not have provision to add encoders. 20:1 CTSR; 1000:1 VTSR.  
For Dimensions refer to page 85.

## Inverter Drive® Explosion-Proof Motors

UL and CSA approved for use in hazardous locations. 1/2 through 2 Hp Class I, Group D, Class II, Group F & G. Temperature rating T3C (160°C). 3 Hp and larger Class I, Group D only. Temperature Code 72A (280°C). 1.0 service factor. Class F insulation. All ratings constant horsepower 60 to 90 Hz.



## Mechanical Design Characteristics

Specification	Description	Frames				
		56-145T	182T-215T	254T-365T	405T	449T
Explosion-Proof Classifications	Class I, Group D, Class II, Group F & G. Temperature Code T3C (160°C)	S				
	Class I, Group D only. Temperature Code T2A, (280°C)		S	S	S	S
Nameplate	UL / CSA listed nameplate. Includes base volts and frequency, connection diagram	S	S	S	S	S
Frame Dimensions	NEMA	S	S	S	S	S
Frame Construction	Steel band	S				
	Cast iron		S	S	S	S
Multiple Mounting Holes in Base	Multiple mounting holes standard	S	S	S	S	S
Endplates	Die cast aluminum with steel bearing inserts	S				
	Cast iron		S	S	S	S
Face Mounting	Horizontal	O	O	O	O	O
	C-Face (standard on stock motors 56C-256TC)	S	S	S	O	O
	D-Flange	O	O	O	O	O
Conduit Box & Cover	UL approved die cast aluminum	S				
	UL approved cast Iron		S	S	S	S
Ground Provisions Lifting Provisions	Inside conduit box for convenience	S	S	S	S	S
	Eyebolt in frame	S	S	S	S	
	Integrally-cast lifting lugs					S
Enclosure	Totally-enclosed fan-cooled (TEFC)	S	S	S	S	S
Cooling Fan Rotor Construction	Non-sparking, glass-filled polypropylene	S	S	S	S	S
	Special high pressure aluminum die cast with low loss electrical steel and special slot configuration	S	S	S	S	S
Balance	Dynamically balanced better than NEMA MG1-1998 specifications	S	S	S	S	S
Shaft Material	C1035 high strength steel	S	S			
	C1137 high strength steel			S	S	
	1045 high strength steel					S
Paint	Grey lacquer over primer coat	S	S	S	S	S
Bearings	Premium grade, double shielded	S	S			
	Premium grade, open with Lube Lock			S	S	S
Bearing Retention	Locked bearings for universal mounting	S	S	S	S	S
Bearing Lubrication	Mobil Polyrex® EM	S	S	S	S	S
Grease Provisions	Regreaseable without removal of fan cover	S	S	S	S	S
Limited Warranty	18 months-motor only	S	S	S	S	S
	24 months when used with Baldor control					

**Note:** Specifications and Dimensions are subject to change without notice, please contact Baldor for certified information.  
s= standard, o= optional

## AC Inverter Drive® Explosion-Proof Motors Performance Data 230/460 Volt Ratings

### 2:1 Constant Torque - 10:1 Variable Torque Ratings

60 Hz		Base Speed	Max. Speed	NEMA Frame	Inverter Catalog No.	"C" Dim	460 V Amps		Output Torque Lb-Ft			% Eff.	WK <sup>2</sup> Lb-Ft <sup>2</sup>	Approx. Weight Lbs	Bearings	
Hp	kW						Idle	F.L.	F.L.	L.R.	B.D.				DE	ODE
3	2.2	1760	2700	182TC	IDXM7142T	18.24	2.2	4.0	9	22.0	31.0	89.5	0.26	144	6206	6205
5	3.7	1750	2700	184TC	IDXM7144T	18.24	3.4	6.5	15	32.0	50.0	89.5	0.40	158	6206	6205
7 1/2	5 3/5	1760	2700	213TC	IDXM7147T	20.69	4.9	9.7	22	42.9	69.9	90.2	0.85	228	6307	6206
10	7.5	1760	2700	215TC	IDXM7170T	20.69	5.5	12.5	30	56.0	121	91.7	1.14	196	6307	6206
15	11.2	1765	2700	254TC	IDXM7054T	26.00	6.95	18.0	45	88.0	143	92.4	1.84	356	6309	6208
20	14.9	1765	2700	256TC	IDXM7056T	26.00	8.5	24.0	60	120	183	93.0	2.27	393	6309	6208
25	18.7	1780	2700	284T	IDXM7058T	28.61	11.9	30.5	74	137	226	93.6	3.98	494	6311	6309
30	22.4	1780	2700	286T	IDXM7060T	28.61	14.5	36.0	90	143	256	94.1	4.46	555	6311	6309
40	29.8	1780	2700	324T	IDXM7062T	32.12	15.3	46.0	118	221	285	94.5	7.50	782	6312	6311
50	37.3	1780	2700	326T	IDXM7064T	32.12	22.9	57.0	148	367	450	94.5	9.64	772	6312	6311
60	44.8	1780	2700	364T	IDXM7066T	33.25	24.0	69.0	178	440	500	94.5	11.70	1006	6313	6312
75	56	1780	2700	405T	IDXM7068T	38.75	25.6	85.0	222	524	510	93.6	22.40	1369	6316	6313

### 10:1 Constant Torque - 10:1 Variable Torque Ratings

60 Hz		Base Speed	Max. Speed	NEMA Frame	Inverter Catalog No.	"C" Dim	460 V Amps		Output Torque Lb-Ft			% Eff.	WK <sup>2</sup> Lb-Ft <sup>2</sup>	Approx. Weight Lbs	Bearings	
Hp	kW						Idle	F.L.	F.L.	L.R.	B.D.				DE	ODE
1/2	0.37	1750	2700	56C	IDXM7006	14.30	0.5	0.8	2	5.6	6.7	82.5	0.09	42	6205	6203
3/4	0.56	1750	2700	56C	IDXM7010	14.30	0.61	1.1	2	8.4	8.8	82.5	0.12	46	6205	6203
1	0.75	1750	2700	143TC	IDXM7014T	15.23	0.81	1.4	3	10.0	14.5	85.5	0.14	50	6205	6203
1 1/2	1.1	1750	2700	145TC	IDXM7034T	15.23	1.13	2.1	5	19.0	23.0	88.5	0.17	53	6205	6203
2	1.5	1750	2700	145TC	IDXM7037T	17.48	1.3	2.6	6	25.3	27.4	88.5	0.24	67	6205	6203
3	2.2	1760	2700	182TC	IDXM7542T	18.24	2.2	4.0	9	22.0	31.0	89.5	0.26	144	6206	6205
5	3.7	1750	2700	213TC	IDXM7544T	20.65	2.6	6.3	15	29.4	41.2	90.2	0.61	212	6307	6206
7 1/2	5 3/5	1760	2700	215TC	IDXM7547T	20.65	4.9	9.7	22	42.9	69.9	90.2	0.84	225	6307	6206
10	7.5	1760	2700	254TC	IDXM7570T	26.00	5.4	13.0	30	75.0	110	92.4	2.09	378	6309	6208
15	11.2	1765	2700	256TC	IDXM7554T	26.00	7.0	17.0	45	93.0	151	92.4	2.10	381	6309	6208
20	14.9	1760	2700	284T	IDXM7556T	28.61	8.6	24.5	59	96.0	167	90.2	3.50	516	6311	6309
25	18.7	1775	2700	324T	IDXM7558T	32.12	10.6	30.0	74	114	226	91.7	6.16	705	6312	6311
30	22.4	1760	2700	326T	IDXM7560T	32.12	13.3	35.0	89	147	276	94.5	7.46	731	6312	6311
40	29.8	1780	2700	364T	IDXM7562T	33.25	12.2	46.0	118	218	297	92.4	11.70	913	6313	6312
50	37.3	1780	2700	365T	IDXM7564T	33.25	12.2	61.0	147	266	343	92.4	11.70	971	6313	6312
60	44.8	1780	2700	405T	IDXM7566T	38.75	17.8	69.0	177	332	425	93.6	22.40	1341	6316	6313

For Dimensions refer to page 83.

Shaded ratings are cast iron frames.

## Closed Loop Explosion Proof Inverter Drive® Motors

For those applications requiring precise speed regulation or positioning, Baldor•Reliance has the capability to build a custom TEFC explosion-proof motor with a UL approved feedback device allowing closed loop motor operation. The motor will be UL Listed for Class I, Group D to operate in the constant torque or variable torque speed range like the Inverter Drive® Explosion Proof motors shown above. Contact Baldor with your application requirements.

## Inverter Drive® Gear Motors

Ideally suited for conveyors, material handling and packaging equipment applications requiring adjustable speed operation and reduced maintenance. Available in a broad range of gear ratios to meet demanding application requirements. Gearboxes are lubed for life and require no routine maintenance.



3/8 Hp Inverter Drive Gear Motor Catalog # IDGM2509

## Performance Data 230 Volt Ratings – Right Angle – TEFC Enclosure

Hp	kW	Output Base Speed	Speed Range	Gear Ratio	Max Torque lb.-in.	Catalog Number	Full Load Amps	Approx Wt-Lbs
3/8	0.28	22	3.4-33	75	315	IDGM2509	1.5	22
3/8	0.28	28	4.5-41	60	252	IDGM2508	1.5	22
3/8	0.28	41	6.6-62	40	228	IDGM2506	1.5	22
3/8	0.28	83	12-123	20	138	IDGM2503	1.5	22
3/8	0.28	165	23-246	10	105	IDGM2501	1.5	22
3/8	0.28	330	43-490	5	68	IDGM2500	1.5	22

## Performance Data 230 Volt Ratings – Parallel Shaft – TEFC Enclosure

Hp	kW	Output Base Speed	Speed Range	Gear Ratio	Max Torque lb.-in.	Catalog Number	Full Load Amps	Approx Wt-Lbs
3/8	0.28	55	8-82	30	350	IDGMP2506	1.5	20
3/8	0.28	83	12-123	20	223	IDGMP2503	1.5	20
3/8	0.28	165	23-246	10	116	IDGMP2501	1.5	20
3/8	0.28	330	43-490	5	58	IDGMP2500	1.5	20

For Dimensions refer to page 87.

## Baldor•Reliance offers a selection of feedback options

Inverter Drive motors are available for open loop applications where no feedback is required. Baldor•Reliance Inverter Drive® motors can be easily upgraded; adding feedback by using an encoder kit available from stock.

Baldor•Reliance standard Vector Drive motors use an industrial quality optical encoder. This encoder is now supplied with mounting directly to the motor shaft without a coupling. This “hollow shaft” method ensures reliability, shortens overall length, and allows easy substitution with other feedback devices.

For very rugged and dirty applications such as paper mills, use of a magnetic pulse device is often preferred over an optical encoder. With the Baldor•Reliance encoder mounting system, use of a magnetic pulse generator from Avtron, BEI or NorthStar (LakeShore) Technologies is a simple bolt-on installation.



Standard Vector Drive Encoder Feedback (BEI)

## Feedback Device for Vector Drive Motors\*

		56C	143TC-215TC	254TC-256TC	404TC 447TC	449TC	5007L-5009L
Type	Incremental optical encoder	s	s	s	s	s	s
Connection	M.S. connector (plug & receptacle supplied)	s	s	s	s	s	s
Encoder Size	H25 hollow shaft	s	s				
	H35 hollow shaft			s	s	s	s
Encoder Bearings	ABEC-7	s	s	s	s	s	s
Frequency Response	100 Kilohertz standard	s	s	s	s	s	s
Isolation	Encoder electrically isolated from motor to prevent motor noise interference	s	s	s	s	s	s
Pulses per Revolution	1024 PPR standard	s	s	s	s	s	s
Signal	Dual quadrature channels with index and compliments	s	s	s	s	s	s
Voltage	5 - 15 VDC standard	s	s	s	s	s	s

\*= May be retrofitted to a TENV or TEBC Inverter Drive Motor (except paint-free washdown and explosion proof). s= standard.



Avtron M4 Magnetic Pulse Generator



Dynapar HS35 Optical Encoder



NorthStar HS35 Magnetic pulse generator



Typical feedback mounting shaft opposite pulley end

## Optional Feedback for Inverter Drive or Vector Drive Motors

Catalog No.	Enclosure	Description	Type	56C	143TC-145TC	213TC-215TC	254TC-256TC	324TC-447TC	404TC-447TC
ENC00NV-B1	TENV	HS25 BEI	Optical	s	s	s			
ENC01NV-B1	TENV	HS25 BEI	Optical				s	s	s
ENC00NV-B3	TENV	HS25 BEI	Magnetic	s	s	s			
ENC01NV-B3	TENV	HS35 BEI	Magnetic				s	s	s
ENC00NV-D1	TENV	HS35 Dynapar	Optical		s	s			
ENC01NV-D1	TENV	HS35 Dynapar	Optical				s		
ENC00NV-N1	TENV	HS35 NorthStar	Magnetic		s	s			
ENC01NV-N1	TENV	HS35 NorthStar	Magnetic				s		
ENC00NV-A1	TENV	M4 Avtron	Magnetic			s			
ENC01NV-A1	TENV	M4 Avtron	Magnetic				s		
ENC01BC-B1	TEBC	HS25 BEI	Optical		s	s			
ENC02BC-B2	TEBC	HS35 BEI	Optical				s	s	s
ENC02BC-B3	TEBC	HS35 BEI	Magnetic				s	s	s
ENC02BC-A1	TEBC	M4 Avtron	Magnetic				s	s	s
ENC02BC-D1	TEBC	HS35 Dynapar	Optical				s	s	s
ENC02BC-N1	TEBC	HS35 NorthStar	Magnetic				s	s	s

# TEBC Blower Motor Specifications for TEBC Inverter Drive and Vector Drive Motors

For TEBC Inverter Drive and Vector Drive Motors

Main Motor Frame	Blower Motor Specifications					
	Hp	Poles	Volts	Ph	Hz	Amps Full Load
143/145TC	0.05	2	115/230	1	60	0.54/0.27
182/184TC	0.05	2	115/230	1	60	0.27/0.13
213/215TC	0.1	2	230/460* 207/415	3	60 50	0.4/0.25 0.46/0.27
254/256TC						
284/286TC						
324/326TC						
364/365TC	0.20		230/460* 207/415	3	60 50	0.68/0.33 0.7/0.38
404/405TC						
444/445TC						
447-449TC	CONSULT BALDOR					
5007L						
5009L						
5810						

**Note:** TENV motors do not require blower cooling.  
 Above blowers are standard on 230/460v stock motors.  
 575 volt motor ratings use a 115/230v, 1 phase blower motor  
 Blower motors may be changed from 3 phase to 1 phase using the blower kits shown below.

V\*S Product Line

Inverter/Vector Motors

RPM AC

RPM AC NEMA Permanent Magnet

RPM AC NEMA Induction

RPM AC IEC Induction

V\*S Master

Dimensions and Connections

Encoders

## Blower Kits – Single Phase

Blower kits include blower motor, housing, and mounting hardware.  
Designed for use as spares or when wanting to change blower input voltage.

Catalog No.	Voltage	Phase	Hz	Frame Size	Approx. Weight
BLWL05-L	115	1	50/60	143T-145T	7
BLWL06-L	115	1	50/60	182T-184T	8
BLWL07-L	115	1	50/60	213T-215T	13
BLWL09-L	115	1	50/60	254T-256T	15
BLWL10-L	115	1	50/60	284T-286T	35
BLWL12-L	115	1	50/60	324T-326T	46
BLWL14-L	115	1	50/60	364T-365T	55

## Blower Kits – Three Phase

Blower Motor housing and mounting hardware for spare units or different power supplies.

Catalog No.	Voltage	Phase	Hz	Frame Size	Approx. Weight
BLWM07-F	230/380-460	3	60/50-60	213T-215T	13
BLWM09-F	230/380-460	3	60/50-60	254T-256T	27
BLWM10-F	230/380-460	3	60/50-60	284T-286T	35
BLWM12-F	230/380-460	3	60/50-60	324T-326T	46
BLWM14-F	230/380-460	3	60/50-60	364T-365T	55
BLWM16-F	230/415-460	3	60/50-60	404T-405T	70
BLWM18-F	230/415-460	3	60/50-60	444T-447T	120

**Note:** Contact Baldor for information for blower information on 449T, 5000, and 5800 frames.

## Inverter/Vector Optional Accessories Cable Assembly Kits

For the convenience of our customers, we offer a cable with a wired motor-end M.S. connector mating plug for feedback from Vector Drive Motors.

Catalog No.	Cable Length	Approx. Weight
CBL015ZD-2	5 FEET = 1.5 METERS	2
CBL030ZD-2	10 FEET = 3.0 METERS	2
CBL046ZD-2	15 FEET = 4.6 METERS	4
CBL061ZD-2	20 FEET = 6.1 METERS	5
CBL091ZD-2	30 FEET = 9.1 METERS	7
CBL152ZD-2	50 FEET = 15.2 METERS	10
CBL229ZD-2	75 FEET = 22.9 METERS	14
CBL305ZD-2	100 FEET = 30.5 METERS	19
CBL379ZD-2	125 FEET = 38.1 METERS	24
CBL455ZD-2	150 FEET = 45.7 METERS	29
CBL606ZD-2	200 FEET = 61.0 METERS	34



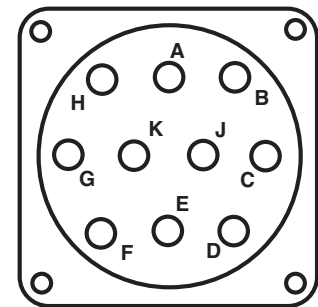
## Connection Diagram for Cable Assembly Kit

Encoder Connection	MS Connection Pin Out	Wire Color	Resolver Connection
A	A	GREY	SINE (+)
A	H	VIOLET	SINE (-)
B	B	YELLOW	COS (+)
B	J	ORANGE	COS (-)
Z (or C)	C	BLUE	-
Z (or C)	K	GREEN	-
+5VDC	D	WHITE	EXCITATION (REF HIGH)
SHIELD	E	SHIELD	SHIELD
CIRCUIT GROUND	F	BLACK	COMMON (REF LOW)
CASE GROUND	G	-	-

## Inverter/Vector Encoder Receptacle Connections

Pin	Function
A	A
B	B
C	Z(C)
D	VDC (5-15 VDC Standard)
E	Shield

Pin	Function
F	Circuit Ground
G	Case Ground
H	A Compliment (A)
J	B Compliment (B)
K	Z (C) Compliment (Z or C)



Standard Receptacle MS3112E12-10P (Baldor Part # WD1434)  
 Standard Plug MS3116J12-10S (Baldor Part # WD1435)

Both receptacle and plug are provided with the motor. Note that together these connections are weatherproof.

## Conduit Box Volumes

Motor Frame Size	Baldor Volume In <sup>3</sup>	NEMA Minimum Volume In <sup>3</sup>	NPT Hole Size
56C	8.2	7.5	0.875
143TC/145TC	20.6	12	0.75
182TC/184TC	20.6	16	0.75
213TC/215TC	48	26	1.0
254TC/256TC	48	26	1.25
284TC/286TC	221	26	1.5
324TC/326TC	221	55	2.0
364TC/365TC	221	100	2.0
404TC/405TC	388	180	2.5
444TC/445TC	600	600	2.5
445TC/447TC	600	600	2.5
447TC/449TC	1500	840	4.0
5007L-5009L	2100	1540	4.0

## RPM AC

### Power Density

When space is at a premium, the Baldor•Reliance RPM AC induction motor is answer. RPM AC induction motors pack maximum torque into a small space. Avail totally enclosed and drip-proof guarded designs, the RPM AC motor can be up to three frame sizes smaller than the traditional NEMA or IEC motor. Leveraging our knowledge of variable speed DC motors the RPM AC motor combines square fran design, efficient cooling and premium insulation systems to prove ultimate torque performance in a compact package.

### Features

- Designed for optimized performance and longer life on adjustable frequency pr
- Provides continuous constant torque down to zero speed in addition high overload torque
- Custom designs for any base speed and extended top speeds using optimum pole technology
- Capable of handling the most demanding applications from 1/3 to 1000 Hp.

The laminated steel frame design in the 210 frame and larger offers the advantage of improved active material space utilization by replacing the common heavy cast iron frame with a rugged steel structure utilizing 100% of the active material. This is the same proven design technology that has been used in DC motors for generations.

### CCT –Continuous Constant Torque to Zero Speed

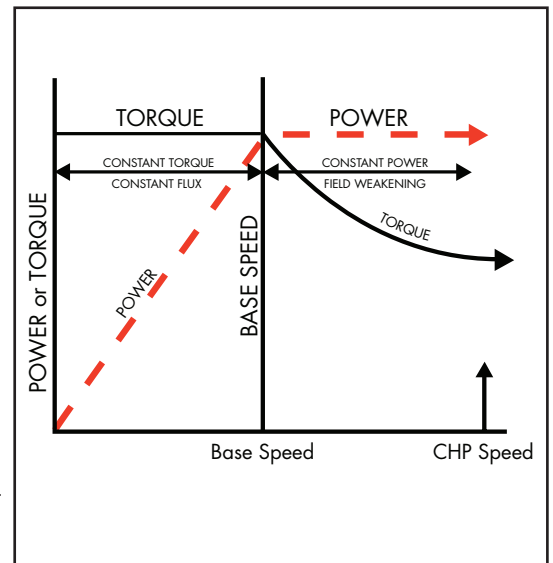
All RPM AC motors are designed to provide continuous constant torque from base speed down to and including zero speed. Unlike conventional sine wave motors, this means that at any speed below base speed, the RPM AC motor will generate full rated torque, run continuously and not over heat. Almost unbelievable – but true. Above base speed the RPM AC motor produces constant horsepower up to its' maximum speed capability.

### Optimum Pole Design

RPM AC motors are designed to utilize the best available winding designs for use on adjustable frequency power. By utilizing the best winding configuration (number of poles) the efficiency, power factor and current requirements can be optimized. Lower current draws resulting from the optimum pole design means that the adjustable frequency controller size can be minimized. The motor nameplate clearly defines the proper volts and frequency controller settings at the base speed to assure proper motor performance.

### Premium Adjustable Frequency Insulation System

It takes a total insulation system to make a motor suitable for adjustable frequency power on today's high switching PWM wave form inverters. The insulation systems found in RPM AC motors are a combination of; high film copper magnet wire, high build resin varnish, slot and phase insulation, sleeving, extensive coil head ties and power lead materials all engineered to provide superior performance on adjustable frequency power. These systems meet or exceed NEMA MG-1 part 31 for adjustable frequency power operation and have CIV (corona inception voltage) ratings above 1600 volts for 460 volt motors. Baldor guarantees RPM AC motors corona free operation. This is your assurance of a trouble free, long life electrical system.



## RPM AC – Drip-Proof Guarded Force Ventilated

### Drip-Proof Guarded Force Ventilated

The RPM AC DPG-FV is the ultimate power dense machine. Utilizing laminated square frame technology, up the 1000 horsepower can be packed into a 440 frame. Commonly used in some of the most demanding industrial applications such as paper and converting, steel processing, extruders, traction, or oil well drilling, the RPM AC force ventilated design is the motor choice.



### Features

- The most compact and lowest weight design
- Continuous constant torque from zero speed to base speed (greater than 1000:1 turn down)
- 150% maximum overload torque from zero speed to base speed for 1 minute
- High torque to inertia ratio – up to 80% less inertia than the corresponding standard NEMA frame motor.
- Class H insulation standard on most ratings
- Surpasses NEMA MG-1 part 31 insulation system requirements for AF power
- PLS bearing system
- Encoder mounting provisions
- Thermal protection, three thermostats (1 N.C. per phase)
- Insulated ODE bearing on 440 frames
- Numerous modifications available
- Top or side mount blower construction

Industry	Application
Pulp & Paper, Converting	Winding and Unwinding
	Web process control
	DC conversions to AC
Petroleum, Chemical	Pump – process control
	Division 2
Drilling	Top Drive (high shock, high vibration, high peak torque, and extreme environmental conditions)
Metal	Winding and Unwinding
	Stamping press
Automotive & Aviation	Test stands
Plastic	Extrusion and injection molding

### Open Drip Proof Power Density Chart (Hp By Frame Size, 1800 RPM) Induction Designs

Horsepower	3	5	7.5	10	15	20	25	30	40	50	60	75	100	125	150	200	250	300	350	400	500	600	700	800	900	1000	
NEMA Std ODP	180		210		250		280		320		360		400		440							–					
RPM AC DPFV	–	180						210			250			280		320		360		400		440					

## RPM AC – Totally Enclosed

### Fan Cooled and Blower Cooled

For applications requiring totally enclosed protection, RPM AC motors are available in non-ventilated, fan cooled and in-line blower cooled construction.

Extra Tough – XT construction is available for outdoor, wash down, corrosive or harsh environments.

### Features:

- Small compact power density design
- Continuous constant torque from zero to base speed greater than 1000:1 turn down
- 200% maximum overload torque from zero speed to base speed for 1 minute
- 2:1 constant horsepower above base speed on most ratings
- Class H insulation standard on most ratings
- Surpasses NEMA MG-1 part 31 insulation system requirements for AF power
- PLS bearing system
- Available in full IEC metric construction
- Encoder mounting provisions
- Thermal protection, (1 N.C. per phase)
- Insulated ODE bearing on 440 frames
- Numerous modifications available
- Available pipe-in pipe-out for hazardous environments (IP23/IC17 or IP23/IC37)
- IEC, top mounted conduit with terminal block is standard



Industry	Application
Pulp & Paper, Converting	Winding and Unwinding
	Spindles (TEBC)
	Web process control
	Power servo
	Conveyors
	DC conversions to AC
Petroleum, Chemical	Pump - process control
	Division 2
	Hazardous location (pipe in pipe out)
Metal	Winding and Unwinding
	Roll out table
	DC conversions to AC
Food	Pump - wash down
	High speed fan-drying
	Cutter knife (low inertia & high cyclic duty)
	Conveyors
	Food process equipment
Machine Tool	Spindles
Automotive	Traction (total electric and hybrid)
	Test stands
	Conveyors, pumps and fans

### Totally Enclosed Power Density Chart (Hp By Frame Size, 1800 RPM) Induction Designs

Horsepower	1/3	1	3	5	7.5	10	15	20	25	30	40	50	60	75	100	125	150	200	250	300	500
NEMA Std TEFC	56	140	180	210	250	280	320	360	400	-											
RPM AC TENV/ TEFC	-	180	210	250	280	320	360	400	440												
RPM AC TEBC	-	180	210	250	280	320	360	400	440												

## RPM AC – IEC and Specific Applications

### IEC – Totally Enclosed Motors

"The Global Motor Solution"

RPM AC IEC motors are true metric designs. Mounting dimensions and electrical designs meet IEC global standards. All motor hardware is a hard metric including bolts and conduit box connections. These motors are CE compliant and meet IEC standards for your high performance IEC applications. IEC flange mounting is also available.

### Features

- IEC 34 and IEC 72 mechanical and electrical specifications
- CE compliant, ratings up to 725 KW
- IEC nameplate
- IEC terminal connection block
- Enclosures IP23, IP44 and IP 55
- Continuous constant torque from zero speed to base speed (greater than 1000:1 turn down)
- 200% maximum overload torque from zero speed to base speed for 1 minute
- Class H insulation standard on most ratings

### Division 2

RPM AC motors are designed for locations in areas classified by NEC for Class 1, Division 2 Groups A, B, C and D and also marked for Class 1, Zone 2 locations. Temperature code capabilities are offered from T1 through T3A. CSA certification is provided for both US and Canadian requirements. Enclosure options include TENV, TEFC, TEBC and DPG-FV.

### Extruder Duty

Designed to provide cool operating temperatures for extended motor life these motors meet Class B (80° C) temperature rise over the entire speed range from base speed, down to and including, zero speed. Shutdown and warning thermostats are standard. These motors are specifically designed for the high peak torque performance demands required by extruder duty applications. DPG-FV enclosure designs are available up to 700 Hp.

### Wide Constant Horsepower

Winder applications in paper mill and steel mill applications require a motor with a wide constant horsepower range capability. These RPM AC motors are designed for demanding horsepower requirements of both winding and unwind applications. Available enclosures include separately ventilated or blower cooled designs. These motors include man features to withstand the harsh conditions typically found in mill service. They are the ideal solution when converting from DC to AC power control.



- Surpasses NEMA MG-1 part 31 insulation system requirements for AF power
- PLS bearing system
- Encoder mountings provisions
- Thermal protection, three thermostats (1 N.C. per phase)
- Insulated ODE bearing on 440 frames
- Numerous modifications available including DIN flange, IEC brakes and encoders
- Top mounted conduit box mounting with terminal block is standard.



## RPM AC Wizard – Motor Design and Selection Tool

### The RPM AC Wizard – Design Tool

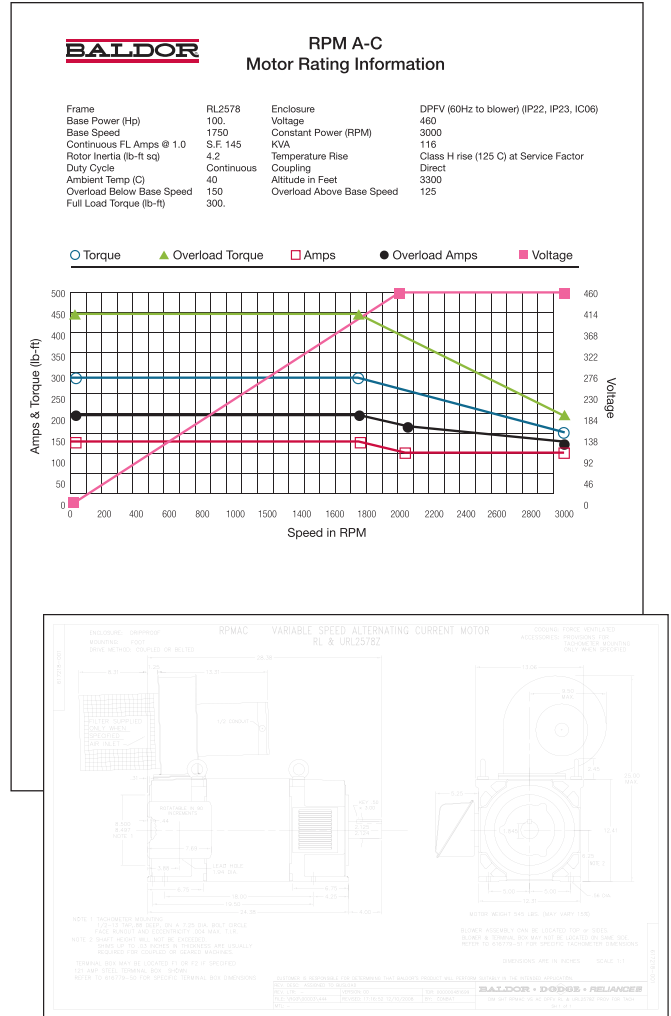
You are no longer limited to conventional NEMA or IEC ratings. With the RPM AC Wizard tool, you design the motor that best satisfies your application requirements. You can select or input your unique horsepower, base speed, top speed, and overload requirements. With one click, the Wizard will design a motor that best fulfills your needs. The frame size and full load current rating are immediately defined. With another click, you get complete electrical design curves and performance data. Another click and you have a dimension sheet. The Wizard will even give you a couple of design options if a larger frame design could provide a lower full load current draw. Got an unusual duty cycle? No problem. The Wizard can handle that too. This is a true motor design tool and not just a table look up program. You can design either NEMA or full IEC compliant motors. Get performance and dimensional data in standard or metric formats. Because the Wizard runs on your local PC, response is in seconds. To download your Wizard just go on line to [www.baldor.com](http://www.baldor.com).

### High Speed

RPM AC motors are capable of high speeds due to their lower rotor inertias and high power density. The chart below depicts the current speed capability for the RPM AC product line by frame size.

Frame Size	IEC Frame	Maximum RPM Speed Capability
56	N/A	12,000
140	N/A	12,000
WE180 WF180	N/A	12,000
*FL180	*FDL112	11800
*FL210 RL210	*FDL130 DL130	8800
*FL250 RL250	*FDL160 DL160	7900
L280	DL180	6800
L320	DL200	5700
L360	DL225	5000
L400	DL250	4400
L440	DL280	3800

\*Finned Frame Technology



## Totally Enclosed Blower Cooled (TEBC) – Permanent Magnet Rotor

10-700 Hp  
 3-Phase, 460V (1)  
 Continuous Constant Torque to Zero Speed



### Features:

- Interior salient pole permanent magnet (PM) rotor construction
- Synchronous speed performance matched with Baldor PM drive control
- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 100% above Base Speed
- Optimum Pole Design - 4 or 8 Pole Designs (2)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box
- Resolver with twist lock connector for closed loop vector control
- Low Noise Over Wide Speed Range

Hp	Speed		Enclosure	Frame	Catalog Number	FLA (3) @ 460V	Eff (3) Full Load	Electrical Design
	Base	CHp						
10	1800	3000	TEBC	FL1831	ZDPM18010C-BV	10.3	94.0	PM3923A
15	1800	3000	TEBC	FL1838	ZDPM18015C-BV	15.6	94.6	PM3924A
20	1800	3000	TEBC	FL1844	ZDPM18020C-BV	21.2	94.7	PM3925A
25	1800	3000	TEBC	FL1852	ZDPM18025C-BV	25.9	95.1	PM3926A
30	1800	3000	TEBC	FL1852	ZDPM18030C-BV	32.0	94.7	PM3756A
40	1800	3000	TEBC	FL2162	ZDPM21040-BV	43.0	94.5	PM3927A
50	1800	3000	TEBC	FL2168	ZDPM21050-BV	53.7	94.8	PM3928A
60	1800	3000	TEBC	FL2173	ZDPM21060-BV	66.5	94.8	PM3757A
75	1800	3000	TEBC	FL2578	ZDPM25075-BV	81.2	95.8	PM3929A
100	1800	3000	TEBC	FL2586	ZDPM25100-BV	111.7	96.8	PM3758A
125	1800	3000	TEBC	FL2882	ZDPM28125-BV	136.0	95.9	PM4056A
150	1800	3000	TEBC	FL2890	ZDPM28150-BV	166.0	96.0	PM4057A
200	1800	2700	TEBC	FL4413		232.0	96.7	PM4404A
250	1800	2700	TEBC	FL4413		260.0	96.8	PM4405A
300	1800	2700	TEBC	FL4413		318.0	97.0	PM4406A
350	1800	2700	TEBC	FL4413		341.5	97.0	PM4407A
400	1800	2700	TEBC	FL4421		401.8	97.0	PM4408A
450	1800	2700	TEBC	FL4429		444.0	97.1	PM4409A
500	1800	2700	TEBC	FL4440		499.1	97.1	PM4410A
600	1800	2700	TEBC	FL4461		598.5	97.0	PM4411A
700	1800	2700	TEBC	FL4473		706.5	97.2	PM4412A

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (2) All RPM AC PM motors are Optimum pole four pole designs, with the exception of L440 frames which are Optimum Pole eight pole designs.
- (3) FLA and efficiency is for fundamental sinewave components of amps and volts and does not include losses due to AF power.

## Drip Proof Guarded Forced Ventilated – Permanent Magnet Rotor

10-250 Hp, 3-Phase, 460V (1)  
Continuous Constant Torque to Zero Speed



### Features:

- Interior salient pole permanent magnet (PM) rotor construction
- Synchronous speed performance matched with Baldor PM drive control
- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 100% above Base Speed
- Optimum Pole Design - 4 or 8 Pole Designs (2)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box
- Resolver with twist lock connector for closed loop vector control
- Low Noise Over Wide Speed Range

Hp	Speed		Enclosure	Frame	FLA (3) @ 460V	Eff (3) Full Load	Electrical Design
	Base	CHp					
10	1800	3000	DPFV	L1831	10.2	94.3	PM4435A
15	1800	3000	DPFV	L1831	16.3	93.5	PM4436A
20	1800	3000	DPFV	L1838	21.7	94.4	PM4437A
30	1800	3000	DPFV	L1844	34.4	94.2	PM4438A
40	1800	3000	DPFV	L1852	43.4	94.3	PM4439A
50	1800	3000	DPFV	RL2162	55.8	94.4	PM4440A
60	1800	3000	DPFV	RL2168	65.0	94.8	PM4441A
75	1800	3000	DPFV	RL2173	85.2	94.7	PM4442A
100	1800	3000	DPFV	RL2578	110.5	95.7	PM4443A
125	1800	3000	DPFV	RL2586	144.5	95.8	PM4444A
150	1800	3000	DPFV	RL2882	167.1	95.7	PM4445A
200	1800	3000	DPFV	RL2890	228.3	95.7	PM4446A
250	1800	3000	DPFV	RL2898	276.7	95.9	PM4447A

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (2) All RPM AC motors are optimum pole four pole designs, with the exception of L440 frames which are Optimum Pole eight pole designs.
- (3) FLA and efficiency is for fundamental sinewave components of amps and volts and does not include losses due to AF power



## Drip-Proof Guarded Force Ventilated (DPG-FV) - Induction

5 - 1000 Hp  
 3-Phase, 460V (1)  
 Continuous Constant Torque to Zero Speed



### Features:

- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 150% below Base Speed
  - 110% above Base Speed
- Optimum Pole Design - 4 or 6 Pole Designs (2)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Machined Bracket & tapped shaft for stub shaft for encoder

Hp	Speed		Frame	Catalog Number	FLA (3) @ 460V
	Base	CHp			
5	1750	2000	FL1831		7
	1450	1650	FL1831		7
	1150	2300	FL1831		7
	850	1700	FL1831		7
	650	850	FL1838		7
	500	650	FL1844		7
7.5	1750	2000	FL1831		11
	1450	1650	FL1831		11
	1150	1300	FL1831		11
	850	1050	FL1838		11
	650	850	FL1844		11
	500	650	FL1852		11
10	3550	4000	FL1831		14
	1750	3000	FL1831		14
	1450	1650	FL1831		14
	1150	2000	FL1838		14
	850	1050	FL1844		14
	650	850	FL1852		14
15	3550	3850	FL1831		21
	2500	3000	FL1831		21
	1750	2000	FL1838		21
	1450	1650	FL1838		21
	1150	1300	FL1844		21
	850	1050	FL1852		21
20	3550	3850	FL1831		27
	2500	3000	FL1831		27
	1750	2000	FL1838		27
	1450	1650	FL1844		27
	1150	1300	FL1852		27
	850	1050	RL2162		27
25	3550	4000	FL1831		34
	2500	3000	FL1838		34
	1750	2000	FL1844	IDDRPM18254C	34

Hp	Speed		Frame	Catalog Number	FLA (3) @ 460V
	Base	CHp			
25	1450	1650	FL1852		34
	1150	1300	RL2162		34
	850	1050	RL2168		34
	650	850	RL2570		34
	500	650	RL2586		34
	30	3550	3850	FL1838	
2500		3000	FL1844		40
1750		2000	FL1852	IDDRPM18304C	39
1450		2000	RL2162		39
1150		1300	RL2168		38
850		1050	RL2173		40
40	650	850	RL2578		40
	500	650	RL2586		40
	3550	3850	FL1844		52
	2500	3000	FL1852		52
	1750	2000	RL2162	IDDRPM21404	52
	1450	2000	RL2168		52
50	1150	1300	RL2168		51
	850	1050	RL2578		53
	650	850	RL2586		52
	500	650	RL2882		52
	3550	3850	FL1852		65
	2500	3000	RL2168		65
60	1750	2000	RL2168	IDDRPM21504	65
	1450	2000	RL2168		65
	1150	1300	RL2570	IDDRPM25506	65
	850	1050	RL2578		65
	650	850	RL2882		65
	500	650	RL2898		65
75	3550	3850	RL2168		77
	2500	3000	RL2168		77
	1750	2000	RL2168	IDDRPM21604	74
	1450	2000	RL2570		77
	1150	1300	RL2578	IDDRPM25606	73
	850	1050	RL2586		77
100	650	850	RL2890		77
	500	650	RL2898		77

## Drip-Proof Guarded Force Ventilated (DPG-FV) - Induction

Hp	Speed		Frame	Catalog Number	FLA (3) @ 460V
	Base	CHp			
75	3550	3850	RL2168		96
	2500	3000	RL2173		96
	1750	2000	RL2570	IDDRPM25754	96
	1450	2000	RL2578		96
	1150	1300	RL2586	IDDRPM25756	91
	850	1050	RL2882		96
	650	850	RL2898		96
	500	650	L3213		96
100	3550	3850	RL2570		124
	2500	3000	RL2578		124
	1750	2000	RL2578	IDDRPM251004	119
	1450	1900	RL2586		120
	1150	1300	RL2882	IDDRPM281006	124
	850	1050	RL2898		124
	650	850	L3213		124
	500	650	L3614		124
125	3550	3850	RL2578		156
	2500	3000	RL2578		156
	1750	2000	RL2586	IDDRPM251254	148
	1450	1850	RL2882		156
	1150	1300	RL2898	IDDRPM281256	151
	850	1050	L3203		156
	650	850	L3614		156
	500	650	L4034		156
150	3550	3850	RL2586		180
	2500	3000	RL2586		180
	1750	2000	RL2882	IDDRPM281504	180
	1450	2000	RL2898		180
	1150	1300	L3203	IDDRPM321506	180
	850	1050	L3213		180
	650	850	L3614		180
	500	650	L4046		180
200	3550	3850	RL2882		240
	2500	3000	RL2890		240
	1750	2000	RL2898	IDDRPM282004	237
	1450	2000	L3203		240
	1150	1300	L3213	IDDRPM322006	236
	850	1050	L3614		240
	650	850	L4046		240
	500	650	L4429 ❖		260
250	3550	3850	RL2898		300
	2500	3000	RL2898		300
	1750	2000	L3203	IDDRPM322504	290
	1450	2000	L3213		300
	1150	1300	L3614	IDDRPM362504	289
	850	1350	L4034		290
	650	850	L4429 ❖		325
	500	650	L4451 ❖		325
300	3550	3850	L3203		360
	2500	3000	L3213		360
	1750	2000	L3213	IDDRPM323004	350
	1450	2000	L3614		355
	1150	1300	L4034	IDDRPM403006	345
	850	1050	L4046		350
	650	850	L4440 ❖		390
	500	650	L4461 ❖		450

Hp	Speed		Frame	Catalog Number	FLA (3) @ 460V
	Base	CHp			
350	3550	3850	L3203		415
	2500	3000	L3213		415
	1750	2000	L3614	IDDRPM363504	401
	1450	2800	L4034		405
	1150	1300	L4046		399
	850	1050	L4429 ❖		450
	650	850	L4461 ❖		450
	500	650	L4461 ❖		450
400	3550	3850	L3213		477
	2500	3000	L3213		477
	1750	2000	L3614	IDDRPM364004	477
	1450	2200	L4034		455
	1150	1300	L4046	IDDRPM404006	451
	850	1050	L4440 ❖		505
	650	850	L4461 ❖		510
	500	650	L4461 ❖		510
450	3550	3850	L3213		534
	2500	3000	L3614		534
	1750	2000	L4034		534
	1450	2000	L4046		534
	1150	1300	L4429 ❖		572
	850	1050	L4451 ❖		568
	650	850	L3614		590
	500	3000	L4034		590
500	1750	2000	L4034	IDDRPM405004	557
	1450	2000	L4429 ❖		625
	1150	1300	L4440 ❖	IDDRPM445006	625
	850	1050	L4461 ❖		625
	3550	3550	L4034		708
	2500	3000	L4034		708
	1750	2000	L4046	IDDRPM406004	666
	1450	2200	L4440 ❖		747
600	1150	1300	L4451 ❖		750
	1000	1200	L4461 ❖		750
	1750	2000	L4429 ❖	IDDRPM447004	875
	1450	2200	L4451 ❖		865
	1200	1750	L4461 ❖		875
	1750	2000	L4440 ❖		975
	1450	1650	L4461 ❖		980
	900	1750	2000	L4451 ❖	1095
1000(4)	1750	2000	L4461 ❖	IDDRPM4410004	1202
	1450	1650	L4473 ❖		1202
1100(4)	1750	2000	L4473 ❖		1300

**Notes:**

(1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.

(2) All RPM AC motors are Optimum Pole four pole designs, with the exception of L440 frames which are Optimum Pole six pole designs.

(3) For estimating purposes only.

(4) Requires a minimum inverter carrier frequency of 4 KHz.

❖ All RPM AC L440 frames include as standard Premium VPI Insulation, an Insulated opposite drive end bearing, Mill conduit box and PLS Bearing system.

## Totally Enclosed Blower Cooled (TEBC) – Induction

5-500 Hp  
 3-Phase, 460V (1)  
 Continuous Constant Torque to Zero Speed



### Features:

- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 or 6 Pole Designs (2)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box
- Machined Bracket & tapped shaft for stub shaft for encoder
- Low Noise Over Wide Speed Range (5)



Hp	Speed		Enclosure	Frame	Catalog Number	FLA @ 460V
	Base	CHp				
5	1750	3500	TEBC	FL1831		8
	1450	2900	TEBC	FL1831		8
	1150	2300	TEBC	FL1831		8
	850	1700	TEBC	FL1838		8
	650	1300	TEBC	FL1838		8
	500	1000	TEBC	FL1852		8
7.5	1750	3500	TEBC	FL1831		11
	1450	2900	TEBC	FL1838		11
	1150	2300	TEBC	FL1838		11
	850	1700	TEBC	FL1844		11
	650	1300	TEBC	FL1852		11
	500	1000	TEBC	FL2162		11
10	3500	3850	TEBC	FL1831		14
	1750	3500	TEBC	FL1838		14
	1450	2900	TEBC	FL1844		14
	1150	2300	TEBC	FL1844		14
	850	1700	TEBC	FL1852		14
	650	1300	TEBC	FL2162		14
	500	1000	TEBC	FL2168		14
15	3550	3850	TEBC	FL1831		21
	2500	3500	TEBC	FL1838		21
	1750	3500	TEBC	FL1844	IDBRPM18154C	21
	1450	2900	TEBC	FL1852		21
	1150	2300	TEBC	FL2162		21
	850	1700	TEBC	FL2162		21
	650	1300	TEBC	FL2168		21
	500	1000	TEBC	FL2570		21
20	3550	3850	TEBC	FL1838		27
	2500	3500	TEBC	FL1838		27
	1750	3500	TEBC	FL1852	IDBRPM18204C	27
	1450	2900	TEBC	FL2162		27
	1150	2300	TEBC	FL2162		27
	850	1700	TEBC	FL2168		27
	650	1300	TEBC	FL2570		27
	500	1000	TEBC	FL2578		27

Hp	Speed		Enclosure	Frame	Catalog Number	FLA @ 460V
	Base	CHp				
25	3550	3850	TEBC	FL1838		34
	2500	3500	TEBC	FL1852		34
	1750	3500	TEBC	FL2162	IDBRPM21254C	34
	1750 (7)	3500	TEAO-IL	FL1852		34
	1450	2900	TEBC	FL2162		34
	1150	2300	TEBC	FL2168		34
	850	1700	TEBC	FL2173		34
	650	1300	TEBC	FL2578		34
	500	1000	TEBC	FL2586		34
	30	3550	3850	TEBC	FL1844	
2500		3500	TEBC	FL2162		40
1750		3500	TEBC	FL2162	IDBRPM21304C	39
1450		2900	TEBC	FL2173		39
1150		2300	TEBC	FL2173		40
850		1700	TEBC	FL2578		40
650		1300	TEBC	FL2586		40
500		1000	TEBC	FL2890		40
40	3550	3850	TEBC	FL2162		52
	2500	3500	TEBC	FL2162		52
	1750	3500	TEBC	FL2173	IDBRPM21404	52
	1450	2900	TEBC	FL2570		52
	1450 (6)	2900	TEAO-P/B	FL2173		52
	1150	2300	TEBC	FL2578		52
	850	1700	TEBC	FL2586		52
	650	1300	TEBC	FL2890		52
	500	1000	TEBC	L3213		52
	50	3550	3850	TEBC	FL2162	
2500		3500	TEBC	FL2168		65
1750		3500	TEBC	FL2570	IDBRPM25504	61
1750 (6)		3500	TEAO-P/B	FL2173		61
1450		2900	TEBC	FL2578		61
1150		2300	TEBC	FL2586		65
850		1700	TEBC	FL2890		65
650		1300	TEBC	L3213		65
500		1000	TEBC	L4022		65

## Totally Enclosed Blower Cooled (TEBC) – Induction

Hp	Speed		Enclosure	Frame	Catalog Number	FLA @ 460V	Hp	Speed		Enclosure	Frame	Catalog Number	FLA @ 460V	
	Base	CHp						Base	CHp					
60	3550	3850	TEBC	FL2168		77	200	3550	3850	TEBC	L3213		240	
	2500	3500	TEBC	FL2173		77		2500	3500	TEBC	L3698		230	
	1750	3500	TEBC	FL2578	IDBRPM25604	74		1750	3500	TEBC	L3614	IDBRPM362004	227	
	1450	2900	TEBC	FL2586		75		1450	2900	TEBC	L4034		240	
	1150	2300	TEBC	FL2890		77		1150	2300	TEBC	L4046		240	
	850	1700	TEBC	FL2898		77		850	1700	TEBC	FL4429 ♦		245	
	650	1300	TEBC	L3698		77		650	1300	TEBC	FL4440 ♦		250	
	500	1000	TEBC	L3614		77		500	1000	TEBC	FL4461 ♦			
75	3550	3850	TEBC	FL2173		96	250	3550	3850	TEBC	L3614		300	
	2500	3500	TEBC	FL2578		96		2500	3500	TEBC	L3614		300	
	1750	3500	TEBC	FL2586	IDBRPM25754	94		1750	3500	TEBC	L4034	IDBRPM402504	300	
	1450	2900	TEBC	FL2890		96		1450	2900	TEBC	L4046		300	
	1150	2300	TEBC	FL2898		96		1150	2300	TEBC	FL4429 ♦		305	
	850	1700	TEBC	L3213		96		850	1700	TEBC	FL4440 ♦		306	
	650	1300	TEBC	L3614		96		650	1300	TEBC	FL4461 ♦			
	500	1000	TEBC	L4046		96								
100	3550	3850	TEBC	FL2578		124	300	2500	3500	TEBC	L4046		360	
	2500	3500	TEBC	FL2586		124		1750	3500	TEBC	L4046	IDBRPM403004	360	
	1750	3500	TEBC	FL2890	IDBRPM281004	124		1450	2900	TEBC	FL4429 ♦		362	
	1450	2900	TEBC	FL2898		124		1150	2300	TEBC	FL4440 ♦		370	
	1150	2300	TEBC	L3213		124		850	1700	TEBC	FL4461 ♦		365	
	850	1700	TEBC	L3614		124		650	1300	TEBC	FL4473 ♦		375	
	650	1300	TEBC	L4046		124		2500	2700	TEBC	FL4429 ♦		415	
	500	1000	TEBC	FL4429 ♦		130		1750	2700	TEBC	FL4429 ♦		415	
125	3550	3850	TEBC	FL2586		156	350	1450	2900	TEBC	FL4440 ♦		420	
	2500	3500	TEBC	FL2890		156		1150	2300	TEBC	FL4451 ♦		425	
	1750	3500	TEBC	FL2898	IDBRPM321254	156		850	1700	TEBC	FL4473 ♦		425	
	1450	2900	TEBC	L3213		156		2500	2700	TEBC	FL4429 ♦		475	
	1150	2300	TEBC	L3614		156		1750	2700	TEBC	FL4429 ♦		477	
	850	1700	TEBC	L4034		156		1450	1650	TEBC	FL4451 ♦		481	
	650	1300	TEBC	FL4429 ♦		158		1150	2300	TEBC	FL4461 ♦		486	
	500	1000	TEBC	FL4429 ♦		160		2500	2700	TEBC	FL4440 ♦		525	
150	3550	3850	TEBC	L3203		180	400	1750	2700	TEBC	FL4440 ♦		541	
	2500	3500	TEBC	L3213		180		1450	2700	TEBC	FL4461 ♦		537	
	1750	3500	TEBC	L3213	IDBRPM321504	177		1150	2300	TEBC	FL4473 ♦		540	
	1450	2900	TEBC	L3614		180		2500(4)	2700	TEBC	FL4451 ♦		585	
	1150	2300	TEBC	L3614		180		1750(4)	2700	TEBC	FL4451 ♦		592	
	850	1700	TEBC	L4046		180		1450(4)	2700	TEBC	FL4461 ♦		610	
	650	1300	TEBC	FL4429 ♦		190		600	1750(4)	2700	TEBC	FL4473 ♦		713
	500	1000	TEBC	L4440 ♦		190		700 - 800	See TEBC PM product offering for increased rating capability					

**Notes:**

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (2) All RPM AC motors are Optimum Pole four pole designs, with the exception of L440 frames which are Optimum Pole six pole designs.
- (4) Requires a minimum inverter carrier frequency of 4 KHz.
- (5) See application data or contact Baldor for dbA values.
- (6) These ratings in FL2173 frame require TEAO-Piggyback blower (3/4 HP 56 Frame). Contact Baldor Electric for dimensions.
- (7) This rating requires oversized 3/4 HP 56 frame blower.
- ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## Totally Enclosed Fan Cooled (TEFC) – Induction

1000:1 Constant Torque Below Base Speed  
 7.5 - 200 Hp, 3-Phase, 460V (1)  
 Continuous Constant Torque to Zero Speed

### Features:

- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 Pole Designs
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box



Hp	Speed		Frame	Catalog Number	FLA (2) @ 460V
	Base	CHp			
5	1750	3500	FL1831		8
	1450	2900	FL1838		8
	1150	2300	FL1844		8
	850	1700	FL1852		8
	650	1300	FL2168		8
	500	1000	FL2173		8
7.5	2500	3500	FL1838		11
	1750	3500	FL1838		11
	1450	2900	FL1844		11
	1150	2300	FL1852		11
	850	1700	FL2162		11
	2500	3500	FL1844		14
10	1750	3500	FL1844	IDFRPM18104C	14
	1450	2900	FL2162		14
	1150	2300	FL2162		14
	850	1700	FL2162		14
	3550	3550	FL1844		21
	2500	3500	FL1852		21
15	1750	3500	FL2162	IDFRPM21154C	21
	1450	2900	FL2162		21
	1150	2300	FL2168		21
	850	1700	FL2578		21
	3550	3550	FL1852		27
	2500	3500	FL2162		27
20	1750	3500	FL2162	IDFRPM21204C	27
	1450	2900	FL2173		27
	1150	2300	FL2578		27
	850	1700	FL2586		27
	3550	3550	FL2162		34
	2500	3500	FL2162		34
25	1750	3500	FL2173	IDFRPM21254C	34
	1450	2900	FL2578		34
	1150	2300	FL2586		34
	850	1700	FL2882		34
	3550	3550	FL2168		40
	2500	3500	FL2168		40
30	1750	3500	FL2570	IDFRPM25304C	40
	1450	2900	FL2586		40
	1150	2300	FL2882		40
	850	1700	FL2890		40
	3550	3550	FL2173		52
	2500	3500	FL2570		52
40	1750	3500	FL2586	IDFRPM25404C	52
	1450	2500	FL2882		52
	1150	2300	FL2890		52
	850	1700	L3213		52
	3550	3550	FL2570		65
	2500	3500	FL2578		65
50	1750	2500	FL2882	IDFRPM28504	65
	1450	2500	FL2890		65
	1150	2300	FL2898		65
	850	1700	L3213		65
	3550	3550	FL2578		77
	2500	2500	FL2586		77
60	1750	2500	FL2890	IDFRPM28604	77
	1450	2500	FL2898		77
	1150	2300	L3213		77

Hp	Speed		Frame	Catalog Number	FLA (2) @ 460V
	Base	CHp			
60	850	1700	L3698		77
	650	1300	L4034		77
	500	1000	FL4429 ♦		77
	3550	3550	FL2586		96
	2500	2500	FL2882		96
	1750	2500	FL2898	IDFRPM28754	96
75	1450	2500	L3213		96
	1150	2300	L3698		96
	850	1700	L3614		96
	650	1300	L4046		96
	500	1000	FL4429 ♦		98
	2500	2500	FL2898		124
100	1750	2500	L3213		124
	1450	2500	L3698		124
	1150	2300	L3614		124
	850	1700	L4034		124
	650	1300	FL4429 ♦		127
	500	1000	FL4461 ♦		130
125	2500	2500	L3213		155
	1750	2500	L3698		155
	1450	2500	L3614		155
	1150	2300	L4034		155
	850	1700	FL4429 ♦		156
	650	1300	FL4451 ♦		158
150	500	1000	FL4473 ♦		164
	2500	2500	L3698		180
	1750	2500	L3614		180
	1450	2500	L4034		180
	1150	2300	FL4429 ♦		185
	850	1700	FL4440 ♦		186
200	650	1300	FL4473 ♦		196
	2500	2500	L4046		302
	1750	2500	FL4429 ♦		
	1450	2500	FL4429 ♦		245
	1150	2300	FL4440 ♦		246
	850	1700	FL4461 ♦		252
250	2500		FL4429 ♦		
	1750	2500	FL4429 ♦		305
	1450	2500	FL4440 ♦		305
	1150	2300	FL4461 ♦		305
	2500		FL4429 ♦		
	1750	2500	FL4440 ♦		370
300	1450	2500	FL4461 ♦		370
	1150	2300	FL4473 ♦		380
	2500	2500	FL4429 ♦		425
	1750	2500	FL4451 ♦		430
350	1450	2500	FL4473 ♦		430
	2500	2500	FL4440 ♦		478
	1750	2500	FL4473 ♦		480
	450	2500	2500	FL4451 ♦	535
400	2500	2500	FL4473 ♦		585

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) For estimating purposes only.
- ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## Totally Enclosed Fan Cooled (TEFC) 4:1 CT – Induction

4:1 Constant Torque Below Base Speed  
15 - 250 Hp, 3-Phase, 460V (1)



### Features:

- Continuous Duty
- 4:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 Pole Designs
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box



Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
7.5	2500	3500	FL1831	11
	1750	3500	FL1838	11
	1450	2900	FL1844	11
	1150	2300	FL1852	11
	850	1700	FL2162	11
10	2500	3500	FL1838	14
	1750	3500	FL1844	14
	1450	2900	FL1852	14
	1150	2300	FL2162	14
	850	1700	FL2162	12
15	3550	3550	FL1838	21
	2500	3500	FL1844	21
	1750	3500	FL2162	21
	1450	2900	FL2162	21
	1150	2300	FL2168	21
20	850	1700	FL2578	21
	3550	3550	FL1844	27
	2500	3500	FL1852	27
	1750	3500	FL2162	27
	1450	2900	FL2168	27
25	1150	2300	FL2173	27
	850	1700	FL2586	27
	3550	3550	FL1852	34
	2500	3500	FL2162	34
	1750	3500	FL2168	34
30	1450	2900	FL2173	34
	1150	2300	FL2578	34
	850	1700	FL2882	34
	3550	3550	FL2162	40
	2500	3500	FL2168	40
40	1750	3500	FL2173	40
	1450	2900	FL2578	40
	1150	2300	FL2586	40
	850	1700	FL2890	40
	3550	3550	FL2168	52
50	2500	3500	FL2173	52
	1750	3500	FL2578	52
	1450	2500	FL2586	52
	1150	2300	FL2890	52
	850	1700	FL2898	52
60	3550	3550	FL2173	65
	2500	3500	FL2570	65
	1750	2500	FL2586	65
	1450	2500	FL2882	65
	1150	2300	FL2898	65
75	850	1700	L3203	65
	3550	3550	FL2570	77
	2500	3550	FL2578	77
	1750	2500	FL2882	77
	1450	2500	FL2890	77
100	1150	2300	L3203	77
	850	1700	L3213	77

Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
75	3550	3550	FL2578	96
	2500	3550	FL2586	96
	1750	2500	FL2890	96
	1450	2500	FL2898	96
	1150	2300	L3607	96
100	850	1700	L3614	96
	3550	3550	FL2586	124
	2500	3500	FL2890	124
	1750	2500	L3203	124
	1450	2900	L3698	124
125	1150	2300	L3614	124
	850	1700	L4034	124
	3550	3550	FL2586	156
	2500	3500	FL2898	156
	1750	2500	L3213	156
150	1450	2500	L3614	156
	1150	2300	L3614	156
	850	1700	L4034	156
	2500	2500	L3213	180
	1750	2500	L3614	180
200	1450	2500	L4034	180
	1150	2300	L4046	180
	850	1700	L4046	180
	2500	2500	L3614	240
	1750	2500	L4034	240
250	1450	2500	L4046	240
	1150	2300	FL4440 ♦	245
	850	1700	FL4461 ♦	252
	2500	2500	L4034	302
	1750	2500	L4046	302
300	1450	2500	FL4440 ♦	300
	1150	2300	FL4451 ♦	307
	2500	2500	L4046	361
	1750	2500	FL4429 ♦	360
	1450	2500	FL4451 ♦	362
350	1150	2300	FL4461 ♦	370
	2500	2500	FL4429 ♦	420
	1750	2500	FL4440 ♦	426
	1450	2500	FL4461 ♦	416
	2500	2500	FL4440 ♦	475
400	1750	2500	FL4451 ♦	480
	1450	2500	FL4473 ♦	478
	2500	2500	FL4451 ♦	532
450	1750	2500	FL4461 ♦	537
	2500	2500	FL4461 ♦	591
500	1750	2500	FL4473 ♦	595

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) For estimating purposes only.
- ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## Totally Enclosed Non-Ventilated (TENV) – Induction

Continuous Duty, Continuous Constant Torque to Zero Speed  
2 - 100 Hp, 3-Phase, 460V (1)

### Features:

- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 or 6 Pole Designs (3)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box



Hp	Speed (3)		Frame	Catalog Number	FLA (2) @ 460V
	Base	CHp			
2	1450	2900	FL1831		3
	1150	2300	FL1831		3
	850	1700	FL1838		3
	650	1300	FL1838		3
	500	1000	FL1852		3
3	3550	3850	FL1831		5
	2500	3500	FL1831		5
	1750	2900	FL1831		5
	1450	2900	FL1831		5
	1150	2300	FL1831		5
	850	1700	FL1838		5
	650	1300	FL1852		5
5	500	1000	FL2168		5
	3500	3850	FL1831		7
	2500	3500	FL1831		7
	1750	3500	FL1838	IDNRPM18054C	7
	1450	2900	FL1844		7
	1150	2300	FL1852		7
	850	1700	FL2162		8
7.5	650	1300	FL2168		8
	500	1000	FL2173		8
	3550	3850	FL1838		11
	2500	3500	FL1844		11
	1750	3500	FL1852	IDNRPM18074C	11
	1450	2900	FL2162		11
	1150	2300	FL2162		11
10	850	1700	FL2168		12
	650	1300	FL2173		12
	500	1000	FL2578		12
	3550	3850	FL1844		14
	2500	3500	FL1852		14
	1750	3500	FL2162	IDNRPM21104C	14
	1450	2900	FL2162		14
15	1150	2300	FL2168		14
	850	1700	FL2570		14
	650	1300	FL2578		14
	500	1000	FL2890		14
	3550	3850	FL2162		21
	2500	3500	FL2162		21
	1750	3500	FL2173		21
20	1450	2900	FL2570		21
	1150	2300	FL2578		21
	850	1700	FL2586		21
	650	1300	FL2890		21
	500	1000	L3203		21
	3550	3850	FL2168		27
	2500	3500	FL2173		27
25	1750	3500	FL2570		27
	1450	2900	FL2578		27
	1150	2300	FL2586		27
	850	1700	FL2890		27
	650	1300	FL3203		27
	500	1000	L3213		27
	500	1000	L3213		27

Hp	Speed (3)		Frame	Catalog Number	FLA (2) @ 460V
	Base	CHp			
25	3550	3850	FL2173		34
	2500	3500	FL2570		34
	1750	3500	FL2578		34
	1450	2900	FL2586		34
	1150	2300	FL2898		34
	850	1700	L3203		34
	650	1300	L3213		34
30	500	1000	L3698		34
	3550	3850	FL2570		40
	2500	3500	FL2578		40
	1750	3500	FL2882		40
	1450	2900	FL2898		40
	1150	2300	L3203		40
	850	1700	L3213		40
40	650	1300	L3698		40
	500	1000	L4022		40
	3550	3850	FL2586		52
	2500	3500	FL2890		52
	1750	3500	FL2898		52
	1450	2900	L3203		52
	1150	2300	L3213		52
50	850	1700	L3698		52
	650	1300	L3614		52
	500	1000	L4046		52
	3550	3850	L2898		65
	2500	3500	L3203		65
	1750	3500	L3203		65
	1450	2900	L3213		65
60	1150	2300	L3698		65
	850	1700	L3614		65
	650	1300	L4034		65
	500	1000	FL4451 ♦		65
	3550	3850	L3203		77
	2500	3500	L3213		77
	1750	3500	L3607		77
75	1450	2900	L3698		77
	1150	2300	L3614		77
	850	1700	L4046		77
	650	1300	FL4451 ♦		79
	500	1000	FL4461 ♦		79
	3550	3850	L3203		96
	2500	3500	L3607		96
100	1750	3500	L3614		96
	1450	2900	L4034		96
	1150	2300	L4046		96
	850	1700	FL4451 ♦		96
	650	1300	FL4461 ♦		96
	2500	3500	L3614		124
	1750	3500	L4046		124
125	1450	2900	FL4451 ♦		123
	1150	2300	FL4461 ♦		128
	2500	2800	FL4451 ♦		152
	1750	2800	FL4461 ♦		158

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) For estimating purposes only.
  - (3) All RPM AC motors will be Optimum Pole 4 Pole Designs, with the exception of L440 Frames (6 Pole Optimum Pole Designs), regardless of the base speed.
- ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## Totally Enclosed Non-Ventilated (TENV-60M) – Induction

60 Minute Duty  
2 - 500 Hp, 3-Phase, 460V (1)

### Features:

- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 or 6 Pole Designs (3)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box



Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
2	1450	2900	FL1831	3
	1150	2300	FL1831	3
	850	1700	FL1831	3
	650	1300	FL1831	3
	500	1000	FL1844	3
3	1750	3500	FL1831	5
	1450	2900	FL1831	5
	1150	2300	FL1831	5
	850	1700	FL1838	5
	650	1300	FL1844	5
5	500	1000	FL1852	5
	3550	3850	FL1831	7.6
	2500	3500	FL1831	7.6
	1750	3500	FL1831	7.6
	1450	2900	FL1838	7.6
7.5	1150	2300	FL1838	7.6
	850	1700	FL1844	7.6
	650	1300	FL1852	7.6
	500	1000	FL2162	7.6
	10	3550	3850	FL1831
2500		3500	FL1831	11
1750		3500	FL1838	11
1450		2900	FL1844	11
1150		2300	FL1844	11
850		1700	FL1852	11
650		1300	FL2162	11
500		1000	FL2173	11
3550		3850	FL1831	14
2500		3500	FL1838	14
15	1750	3500	FL1844	14
	1450	2900	FL1852	14
	1150	2300	FL1852	14
	850	1700	FL2162	14
	650	1300	FL2173	14
	500	1000	FL2570	14
	3550	3850	FL1838	21
	2500	3500	FL1844	21
20	1750	3500	FL1852	21
	1450	2900	FL2162	21
	1150	2300	FL2168	21
	850	1700	FL2173	21
	650	1300	FL2578	21
	500	1000	FL2586	21

Hp	Speed		Frame	FLA (2) @ 460V	
	Base	CHp			
20	3550	3850	FL1844	27	
	2500	3500	FL1852	27	
	1750	3500	FL2162	27	
	1450	2900	FL2168	27	
	1150	2300	FL2173	27	
	850	1700	FL2578	27	
	650	1300	FL2586	27	
	500	1000	L2882	27	
	25	3550	3850	FL1852	34
		2500	3500	FL2162	34
1750		3500	FL2168	34	
1450		2900	FL2173	34	
1150		2300	FL2578	34	
850		1700	FL2578	34	
650		1300	FL2882	34	
30	500	1000	FL2890	34	
	3550	3850	FL2162	40	
	2500	3500	FL2168	40	
	1750	3500	FL2173	40	
	1450	2900	FL2578	40	
	1150	2300	FL2578	40	
	850	1700	FL2586	40	
40	650	1300	FL2890	40	
	500	1000	FL2898	40	
	3550	3850	FL2168	52	
	2500	3500	FL2173	52	
	1750	3500	FL2578	52	
	1450	2900	FL2578	52	
	1150	2300	FL2586	52	
50	850	1700	FL2882	52	
	650	1300	FL2898	52	
	500	1000	L3203	52	
	3550	3850	FL2173	65	
	2500	3500	FL2578	65	
	1750	3500	FL2578	65	
	1450	2900	FL2586	65	
60	1150	2300	FL2882	65	
	850	1700	FL2890	65	
	650	1300	L3203	65	
	500	1000	L3203	65	



## Totally Enclosed Non-Ventilated (TENV-60M) – Induction

Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
60	3550	3850	FL2578	77
	2500	3500	FL2586	77
	1750	3500	FL2586	77
	1450	2900	FL2882	77
	1150	2300	FL2890	77
	850	1700	FL2898	77
	650	1300	L3203	77
	500	1000	L3213	77
75	3550	3850	FL2882	96
	2500	3500	FL2882	96
	1750	3500	FL2882	96
	1450	2900	FL2890	96
	1150	2300	FL2898	96
	850	1700	L3203	96
	650	1300	L3213	96
	500	1000	L3614	96
100	3550	3850	FL2890	124
	2500	3500	FL2890	124
	1750	3500	FL2890	124
	1450	2900	FL2898	124
	1150	2300	L3203	124
	850	1700	L3213	124
	650	1300	L3614	124
	500	1000	L4034	124
125	3550	3850	FL2890	156
	2500	3500	FL2890	156
	1750	3500	FL2898	156
	1450	2900	L3203	156
	1150	2300	L3213	156
	850	1700	L3614	156
	650	1300	L4034	156
	500	1000	FL4429 ♦	167
150	3550	3850	FL2898	180
	2500	3500	FL2898	180
	1750	3500	FL2898	180
	1450	2900	L3607	180
	1150	2300	L3698	180
	850	1700	L4046	180
	650	1300	FL4429 ♦	198
	500	1000	FL4429 ♦	198
200	3550	3850	L3213	240
	2500	3500	L3698	240
	1750	3500	L3698	240
	1450	2900	L3614	240
	1150	2300	L4046	240
	850	1700	FL4429 ♦	261
	650	1300	FL4429 ♦	261
	500	1000	FL4440 ♦	261

Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
250	3550	3850	L3698	302
	2500	3500	L3698	305
	1750	3500	L3614	315
	1450	2900	L4046	302
	1150	2300	FL4429 ♦	330
	850	1700	FL4429 ♦	323
	650	1300	FL4440 ♦	323
	500	1000	FL4461 ♦	323
300	3550	3850	L3614	390
	2500	3500	L3614	390
	1750	3500	L4046	361
	1450	2900	FL4429 ♦	398
	1150	2300	FL4429 ♦	385
	850	1700	FL4440 ♦	385
	650	1300	FL4451 ♦	385
	500	1000	FL4461 ♦	385
350	2500	3200	FL4429 ♦	440
	1750	3200	FL4429 ♦	440
	1450	2900	FL4429 ♦	455
	1150	2300	FL4440 ♦	454
	850	1700	FL4451 ♦	454
	650	1300	FL4461 ♦	454
400	2500	3200	FL4429 ♦	536
	1750	3200	FL4429 ♦	536
	1450	2900	FL4429 ♦	565
	1150	2300	FL4451 ♦	565
	850	1700	FL4461 ♦	565
450	2500	3200	FL4429 ♦	568
	1750	3200	FL4429 ♦	568
	1450	2900	FL4440 ♦	568
	1150	2300	FL4461 ♦	568
500	2500	3200	FL4440 ♦	613
	1750	3200	FL4440 ♦	613
	1450	2900	FL4451 ♦	613
600	1750	2800	FL4461 ♦	720

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) For estimating purposes only.
  - (3) All RPM AC motors will be Optimum Pole 4 Pole Designs, with the exception of L440 Frames (6 Pole Optimum Pole Designs), regardless of the base speed.
- ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## Wide Constant Horsepower Range (DPG-FV) – Induction

1000:1, Continuous Constant Torque to Zero Speed

Drip-Proof Guarded Force Ventilated (DPG-FV); For Center Winders, Payoff and Tension Reels

5 - 500 Hp, 3-Phase, 460V (2)



### Features:

- Continuous Duty
- Standard 1 Minute Overload
  - 150% below Base Speed
  - 125% above Base Speed
- Class H Insulation
- 40° C Ambient / 1.0 SF.
- 60 Hz Blower Motor
- Three Thermostats (1 N.C. per Phase)

Hp	Speed (1) (3)		Frame	FLA (4) @ 460V
	Base	CHp		
5	1150	3450	FL1831	8
	850	2550	FL1838	8
	850	3400	FL1838	9
	650	1950	FL1838	9
	650	2600	FL1838	10
7.5	500	2000	FL1844	11
	1150	3450	FL1838	8
	850	2550	FL1838	13
	850	3400	FL1838	15
	650	1950	FL1844	13
10	650	2600	FL1844	16
	500	2000	FL1852	16
	1150	3450	FL1844	15
	850	2550	FL1844	17
	850	3400	FL1844	20
15	650	1950	FL1852	17
	650	2600	FL1852	20
	500	2000	RL2162	25
	1150	3450	FL1852	15
	850	2550	FL1852	28
20	850	3400	FL1852	32
	650	1950	RL2162	35
	650	2600	RL2162	40
	500	2000	RL2173	32
	1150	3450	FL1852	36
25	850	2550	RL2162	44
	850	3400	RL2162	51
	650	1950	RL2168	41
	650	2600	RL2168	47
	500	2000	RL2570	49
30	1150	3450	RL2162	54
	850	2550	RL2173	45
	850	3400	RL2173	52
	650	1950	RL2570	52
	650	2600	RL2570	61
40	500	2000	RL2586	50
	1150	3450	RL2168	56
	850	2550	RL2173	58
	850	3400	RL2173	67
	650	1950	RL2578	55
50	650	2600	RL2578	63
	500	2000	RL2586	65
	1150	3450	RL2168	84
	850	2550	RL2578	72
	850	3400	RL2578	83
60	650	1950	RL2586	74
	650	2600	RL2586	85
	500	2000	RL2882	94
	1150	3450	RL2570	107
	850	2550	RL2586	90
80	850	3400	RL2586	104
	650	1950	RL2882	100
	650	2600	RL2882	116
	500	2000	RL2898	112
	1150	3450	RL2578	113
100	850	2550	RL2586	117
	850	3400	RL2586	136
	650	1950	RL2890	122
	650	2600	RL2890	141
	500	2000	RL2898	145

Hp	Speed (1) (3)		Frame	FLA (4) @ 460V
	Base	CHp		
75	1150	3450	RL2586	141
	850	2550	RL2882	158
	850	3400	RL2882	183
	650	1950	RL2898	153
	650	2600	RL2898	177
100	500	2000	L3213	141
	1150	3450	RL2882	205
	850	2550	RL2898	199
	850	3400	RL2898	230
	650	1950	L3213	159
125	650	2600	L3213	183
	500	2000	L3614	199
	1150	3450	L2898	240
	850	2550	L3203	235
	850	3400	L3203	271
150	650	1950	L3614	212
	650	2600	L3614	245
	500	2000	L4034	250
	1150	3450	L3203	257
	850	2550	L3213	243
200	850	3400	L3213	281
	650	1950	L3614	268
	650	2600	L3614	310
	500	2000	L4046	289
	1150	3450	L3213	325
250	850	2550	L3614	361
	850	3400	L3614	417
	650	1950	L4046	338
	650	2600	L4046	390
	500	2000	L4429	450
300	1150	3450	L3614	440
	850	2550	L4034	454
	850	3400	L4034	525
	650	1950	L4429	462
	650	2600	L4429	533
350	500	2000	L4451	548
	1150	3450	L4034	515
	850	2550	L4046	544
	650	1950	L4451	528
	650	2600	L4451	610
400	1150	3450	L4046	583
	850	2550	L4440	594
	650	1950	L4461	627
	650	2600	L4461	724
	1150	3450	L4046	718
450	850	2550	L4440	722
	650	1950	L4461	726
	850	3400	L4451	803
	650	2600	L4473	820
	850	2550	L4461	887
500	650	1950	L4473	889

### Notes:

- (1) Other speed ranges and base speeds available. Use the RPM AC Wizard program for specific application requirements.
- (2) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (3) All RPM AC motors ARE Optimum Pole 4 Pole Designs and all L440 Frames are Optimum Pole 6 Pole Designs for all base speeds.
- (4) For estimating purposes only. Motor amps may be reduced with a larger frame size motor. Use the RPM AC Motor Wizard Program to facilitate optimal economic matching of motor and controller sizes.

## Wide Constant Horsepower Range (TEBC) – Induction

1000:1 Constant Torque

Totally Enclosed Blower Cooled (TEBC); For Center Winders, Payoff and Tension Reels

5 - 250 Hp - TEBC, 3-Phase, 460V (2); Continuous Constant Torque to Zero Speed



### Features:

- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Designs -
  - 4 or 6 Pole Designs (3)
- Class H Insulation
- 40° C Ambient / 1.0 SF.
- 60 Hz Blower Motor
- Three Thermostats (1 N.C. per Phase)
- Low Noise Throughout Speed Range (5)

Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
5	1150	3450	FL1838	8
	850	2550	FL1838	8
	850	3400	FL1838	9
	650	1950	FL1838	9
	650	2600	FL1838	11
7.5	500	2000	FL1844	11
	1150	3450	FL1838	13
	850	2550	FL1844	13
	850	3400	FL1844	15
	650	1950	FL1852	13
10	650	2600	FL1852	15
	500	2000	FL2168	14
	1150	3450	FL1844	16
	850	2550	FL1852	17
	850	3400	FL1852	19
15	650	1950	FL2168	16
	650	2600	FL2168	18
	500	2000	FL2173	19
	1150	3450	FL2162	26
	850	2550	FL2162	26
20	850	3400	FL2162	29
	650	1950	FL2570	25
	650	2600	FL2570	29
	500	2000	FL2578	29
	1150	3450	FL2168	31
25	850	2550	FL2570	33
	850	3400	FL2570	38
	650	1950	FL2578	33
	650	2600	FL2578	38
	500	2000	FL2586	35
30	1150	3450	FL2173	42
	850	2550	FL2578	40
	850	3400	FL2578	47
	650	1950	FL2578	42
	650	2600	FL2578	49
40	500	2000	FL2586	49
	1150	3450	FL2578	46
	850	2550	FL2586	47
	850	3400	FL2578	54
	650	1950	FL2586	49
50	650	2600	FL2586	57
	500	2000	FL2589	60
	1150	3450	FL2586	62
	850	2550	L2890	60
	850	3400	FL2586	67
60	650	1950	FL2586	78
	650	2600	FL2898	65
	500	2000	FL2898	75
	1150	3450	FL2586	81
	850	2550	FL2890	83
75	850	3400	FL2890	96
	650	1950	L3213	70
	650	2600	L3213	81
	500	2000	L3698	91
	1150	3450	FL2890	97
100	850	2550	FL3203	98
	850	3400	FL2898	114

Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
60	650	1950	L3698	88
	650	2600	L3698	98
	500	2000	L3614	101
	1150	3450	FL2898	15
75	850	2550	L3213	109
	850	3400	L3213	126
	650	1950	L3614	116
	650	2600	L3614	132
	500	2000	L4046	125
100	1150	3450	L3213	142
	850	2550	L3614	141
	850	3400	L3614	162
	650	1950	L4046	141
	650	2600	L4046	163
125	500	2000	FL4429 ♦	193
	1150	3450	L3614	166
	850	2550	L4034	191
	850	3400	L4034	230
	650	1950	FL4429 ♦	210
150	650	2600	FL4429 ♦	240
	500	2000	FL4440 ♦	243
	1150	3450	L3614	210
	850	2550	L4046	220
	850	3400	L4046	260
200	650	1950	FL4429 ♦	250
	650	2600	FL4429 ♦	288
	500	2000	FL4440 ♦	297
	1150	3450	L4046	295
	850	2550	FL4429 ♦	320
250	650	1950	FL4440 ♦	347
	650	2600	FL4440 ♦	380
	500	2000	FL4461 ♦	400
	1150	2800	FL4440 ♦	357
	850	2550	FL4451 ♦	397
300	650	1950	FL4461 ♦	418
	650	2600	FL4461 ♦	493
	1150	2800	FL4451 ♦	356
350	850	2550	FL4461 ♦	383
	1150	2800	FL4461 ♦	413
	850	2550	FL4473 ♦	427

### Notes:

- (1) Other speed ranges and base speeds available. Use the RPM AC Wizard program for specific application requirements.
- (2) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (3) All RPM AC motors will be 4 Pole Designs, with the exception of L440 Frames (6 Pole Designs), regardless of the base speed.
- (4) For estimating purposes only. Motor amps may be reduced with a larger frame size motor. Use the RPM AC Motor Wizard Program to facilitate optimal economic matching of motor and controller sizes.
- (5) Contact Baldor Electric for dba data.
  - ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## Extruder Duty (DPG-FV) – Induction

Drip-Proof Guarded Force Ventilated – Without Encoder (2)

Class B Temperature Rise at Zero RPM Full Torque

Continuous Constant Torque to Zero Speed

When your inverter duty applications require premium performance, and low class B temperature rise, RPM AC DPFV Extruder Duty motors are the perfect solution.

These designs meet Class B temperature rise as noted even with full load torque applied at zero speed.

They are still more compact and weigh less than most NEMA frame AC or DC motors.

Also, available in IEC frames.



### Features:

- Continuous constant torque to zero speed
- 200% starting and overload torque - for hard to start applications NEMA Class B temperature rise even at zero speed full load torque. Four times the insulation life of class F motors
- Standard Class H insulation system – premium epoxy (VPI is standard on L440 frames)
- Two sets of thermostats , warning and shutdown (three of each per phase, total six) for improved uptime and motor protection
- Washable Filter
- Encoder mounting provisions – machined flange and tapped shaft for stub shaft
- All L440 frames have insulated opposite drive end bearing
- Wide constant Hp range allows multiple base speed use with one motor
- More compact and less weight than standard NEMA cast iron frames
- F-1 mounting is standard.
- Suitable for 50 Hz blower rating Class F Rise, no Hp derating required.

Hp	Speed Base	CHp	Frame	FLA @ 460 V	Weight (Lbs)	Dimension Sheet
10	1750	3500	FL1831	14	153	617528-1
	1450	2150	FL1838	14	178	617230-1
	1150	2300	FL1844	14	201	617233-1
15	1750	3000	FL1844	21	201	617233-1
	1450	2150	FL1844	21	201	617233-1
	1150	2300	FL1852	21	230	617236-1
20	1750	3000	FL1852	27	230	617236-1
	1450	2150	FL1852	27	230	617236-1
	1150	1800	RL2162	27	305	617202-1
25	1750	3500	RL2158	34	278	617259-1
	1450	2150	RL2168	34	345	617206-1
	1150	2300	RL2168	34	345	617206-1
30	1750	3510	RL2162	40	305	617202-1
	1450	2150	RL2168	40	345	617206-1
	1150	1730	RL2168	40	345	617206-1
40	1750	3230	RL2168	52	345	617206-1
	1450	2150	RL2570	52	480	617214-1
	1150	1800	RL2570	52	480	617214-1
50	1750	2550	RL2173	65	375	617210-1
	1450	2150	RL2578	65	545	617218-1
	1150	2000	RL2578	65	545	617218-1
60	1750	2600	RL2570	77	480	617214-1
	1450	2150	RL2586	77	615	617222-1
	1150	2200	RL2882	77	775	616760-1
75	1750	3000	RL2578	96	545	617218-1
	1450	2150	RL2882	95	775	616760-1
	1150	1750	RL2882	96	775	616760-1
100	1750	2650	RL2882	124	775	616760-1
	1450	2150	RL2898	124	1065	616760-1
	1150	1400	RL2898	124	1065	616760-1

## Extruder Duty (DPG-FV) – Induction

Hp	Speed Base	CHp	Frame	FLA @ 460 V	Weight (Lbs)	Dimension Sheet
125	1750	2950	RL2890	157	915	616760-1
	1450	2150	RL2898	157	1065	616760-1
	1150	2350	L3203	156	1185	616764-1
150	1750	2650	RL2898	180	1065	616760-1
	1450	2150	L3203	180	1185	616764-1
	1150	2350	L3213	180	1325	616764-1
200	1750	2500	L3203	240	1185	616764-1
	1450	2150	L3698	240	1395	609998-1
	1150	2000	L3614	240	1715	609998-1
250	1750	2500	L3698	300	1395	609998-1
	1450	2150	L3614	302	1715	609998-1
	1150	2000	L4034	302	2050	609998-1
300	1750	3000	L3614	360	1715	609998-1
	1450	2150	L4034	361	2000	609998-1
	1150	2000	L4034	361	2000	609998-1
350	1750	2700	L4034	414	2000	609998-1
	1450	2150	L4046	414	2100	609998-1
	1150	2500	L4046	398	2050	609998-1
400	1750	2500	L4034	449	2000	609998-1
	1450	2150	L4046	450	2050	609998-1
	1150	1700	L4429(1)	507	3000	615917-1
450	1750	2650	L4046	530	2050	609998-1
	1450	2150	L4440	568	3307	615917-1
	1150	2000	L4461(1)	580	3889	615917-1
500	1750	3000	L4046	560	3000	609998-1
	1450	2150	L4440	631	3307	615917-1
	1150	2380	L4461(1)(4)	669	3889	615917-1
600	1750	2700	L4451(1)	747	3612	615917-1
	1450	2150	L4461	747	3889	615917-1
700	1750	2700	L4461(1)	864	3889	615917-1
	1450	2150	L4473(1)	864	4225	
800	1750	2700	L4473(1)	962	4225	

**Notes:**

- (1) All L440 frames include premium class H insulation with VPI, and an insulated opposite drive end bearing.
- (2) For other flange mounting options and TEFC or TEBC options, contact Baldor Electric.
- (3) Non-stock Model
- (4) Class F rise

V\*S Product Line

Inverter/Vector Motors

RPM AC

RPM AC NEMA Permanent Magnet

RPM AC NEMA Induction

RPM AC IEC Induction

V\*S Master

Dimensions and Connections

Encoders

## Medium and Low Inertia (DPG-FV) Induction Servo

Drip-Proof Guarded Force Ventilated (DPG-FV), IP23/IC06  
3-Phase, 460V (1)  
Continuous Constant Torque to Zero Speed

Standard RPM AC DPFV motors inherently have the lowest inertia (highest torque to inertia ratio) of any induction motor.

Medium Inertia Induction Servo Motors use the standard DPFV rotor inertia with high vibration feature enhancements for use in fast response applications.

Extra Low Inertia RPM AC DPFV motors are available in frames AL360 and AL400. These AL frames have been designed specifically to offer the lowest induction motor inertia for even faster response than the Medium Inertia motors.

RPM AC motors have been successfully applied to various types of positioning systems in the automotive, metals, paper, corrugating and printing industries. Typical applications include transfer presses, flying die shears, carriage cut off and cyclic cutter knife drives.

Induction servo motors are rated in continuous torque instead of HP. To determine the frame size and full load amps, select the continuous torque in units desired (lbs-ft or Newton-Meters) at the required base speed from the table below.

### Features:

- Base Speeds: See Rating Table (2)
- High Vibration Duty Features:
  - Braced Blower Assembly
  - Lockwashers and Loctite™ on All Fasteners
  - VPI Insulation System



### Non-Stock Custom Built Motors

Medium Inertia Servo Motors - 60 Hz Blower

Frame NEMA	Motor Inertia			Torque				FLA (4) @ 460V at Base Speed			
	WK2	GD2	MR2	Cont.	Pk (3)	Cont.	Pk (3)	Base RPM			
	LB-FT2	KG-M2	KG-M2	LB-FT	LB-FT	N-M	N-M	500	850	1500	1750
FL1831	0.392	0.066	0.016	40	60	54	81	6	10	16	17
FL1838	0.53	0.088	0.022	60	90	81	121	9	14	24	27
FL1844	0.645	0.108	0.027	70	125	95	170	10	17	29	34
FL1852	0.8	0.136	0.034	90	135	123	185	12	20	35	40
RL2162	1.92	0.32	0.08	120	180	162	244	16	26	45	52
RL2168	2.32	0.392	0.098	150	225	203	305	23	38	56	65
RL2173	2.64	0.444	0.111	200	300	271	407	26	43	74	85
RL2570	3.5	0.59	0.147	225	338	305	458	29	48	83	96
RL2578	4.2	0.708	0.177	289	434	392	588	37	61	105	120
RL2586	4.9	0.84	0.21	375	562	508	762	47	78	133	156
RL2882	8.3	1.4	0.35	450	675	610	915	53	88	150	180
RL2890	9.7	1.64	0.41	510	765	692	1038	63	105	176	204
RL2898	11.1	1.88	0.47	600	900	813	1220	74	121	206	240
L3203	21	3.56	0.89	750	1,475	1017	1526	91	152	258	289
L3213	24	4.04	1.01	900	1,620	1220	2196	108	176	310	350
L3698	35	5.88	1.47	920	1,578	1248	1872	110	178	316	368
L3614	45	7.6	1.9	1200	2,160	1627	2928	142	233	406	477
L4034	73	12.32	3.08	1500	2,925	2035	3968	173	293	509	590
L4046	85	14.32	3.58	1800	3,420	2440	4630	206	351	607	695
L4429	150	25.28	6.32	2100	3,675	2847	4270	261	434	747	875
L4440	169	28.48	7.12	2400	3,800	3250	4890	296	493	847	979
L4451	189	31.84	7.96	2700	4,050	3660	5500	332	552	947	1095
L4461	207	34.88	8.72	3000	4,500	4067	6105	367	611	1045	1202
L4473	230	38.76	9.69	3235	4,850	4386	6575	397	662	1130	1302
AL3698	19	3.2	0.8	850	1,529	1153	2073	103	167	290	335
AL3614	24.5	4.12	1.03	1105	1,988	1498	2695	132	215	370	429
AL4022	37.8	6.36	1.59	1260	2,519	1709	3415	148	238	421	490
AL4034	45.5	7.68	1.92	1550	3,098	2102	4201	181	293	506	590
AL4046	52.4	8.84	2.21	1830	3,658	2481	4959	211	346	593	695

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (2) Other base speeds available.
- (3) Peak Torque, is the One-Minute Overload Torque available from 0 RPM to the maximum speed at which the inverter can maintain constant flux at this overload. In some cases this value may be less than base speed.
- (4) For estimating purposes only.

## Class 1 Division 2 Group D, CSA Certified (DPG-FV) - Induction

For Temperature Code T2A (280° C) (4)

Drip-Proof Guarded Force Ventilated

7.5 - 800 Hp

3-Phase, 460V (1) - 60 Hz Blower Frequency

Continuous Constant Torque to Zero Speed

### Features:

- Standard 1 Minute Overload
  - 150% Below Base Speed
  - 110% Above Base Speed
- Optimum Pole Design - 4 Or 6 Pole Designs (2)
- Class H Insulation / Class F Rise
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)



Hp	Speed (2)		Frame	FLA (3) @ 460V
	Base	CHp		
7.5	850	1700	FL1838	12
	650	1300	FL1844	11
10	850	1700	FL1844	14
	650	1300	RL2162	14
15	3550	3850	FL1831	21
	1750	3500	FL1838	21
	1150	2300	FL1852	21
	850	1700	RL2162	21
20	650	1300	RL2168	21
	3550	3850	FL1831	27
	1750	3500	FL1844	27
	1150	2300	RL2162	27
25	850	1700	RL2168	27
	650	1300	RL2173	27
	3550	3850	FL1838	34
	1750	3500	RL2162	34
30	1150	2300	RL2168	34
	850	1700	RL2173	34
	650	1300	RL2578	34
	3550	3850	FL1844	40
35	1750	3500	RL2162	39
	1150	2300	RL2168	38
	850	1700	RL2570	40
	650	1300	RL2578	40
40	3550	3850	FL1852	52
	1750	3500	RL2168	52
	1150	2300	RL2570	51
	850	1700	RL2578	53
50	650	1300	RL2586	52
	3550	3850	FL1852	65
	1750	3500	RL2168	65
	1150	2300	RL2578	65
60	850	1700	RL2586	69
	650	1300	RL2890	65
	3550	3850	RL2168	77
	1750	3500	RL2570	74
75	1150	2300	RL2586	73
	850	1700	RL2882	77
	650	1300	RL2898	77
	3550	3850	RL2570	96
100	1750	3500	RL2578	96
	1150	2300	RL2882	91
	850	1700	RL2898	96
	650	1300	L3203	96
125	3550	3850	RL2578	124
	1750	3500	RL2586	119
	1150	2300	RL2890	124
	850	1700	L3203	124
150	650	1300	L3213	124
	3550	3850	RL2578	156
	1750	3500	RL2882	148
	1150	2300	L3203	151
200	850	1700	L3213	156
	650	1300	L3614	156

Hp	Speed (2)		Frame	FLA (3) @ 460V
	Base	CHp		
150	3550	3850	RL2586	180
	1750	3500	RL2890	180
	1150	2300	L3213	180
	850	1700	L3614	180
200	650	1300	L4034	180
	3550	3850	RL2890	240
	1750	3500	L3203	237
	1150	2300	L3614	236
250	850	1700	L4034	240
	650	1300	L4429*	261
	3550	3850	L3203	300
	1750	3500	L3213	300
300	1150	2300	L4034	300
	850	1700	L4046	305
	650	1300	L4440*	325
	3550	3850	L3203	360
350	1750	3500	L3614	360
	1150	2300	L4046	360
	850	1700	L4429 ❖	385
	650	1300	L4461 ❖	390
400	3550	3850	L3213	415
	1750	3500	L4034	415
	1150	2300	L4429 ❖	446
	850	1700	L4451 ❖	450
450	3550	3850	L3213	477
	1750	3500	L4034	477
	1150	2300	L4429 ❖	507
	850	1700	L4461 ❖	507
500	3550	3850	L3614	534
	1750	3500	L4046	534
	1150	2300	L4440 ❖	572
	3000	3500	L4034	590
600	1750	3500	L4046	557
	1150	2300	L4451 ❖	625
	3000	3500	L4046	708
700	1750	3500	L4429 ❖	747
	1750	3500	L4451 ❖	875
800	1750	3500	L4461 ❖	975

### Notes:

All accessories, including blower motors, must either be CSA certified for Class 1 Group D Division 2, or Division 1 Listed.

(1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.

(2) All RPM AC motors will be 4 Pole Designs, with the exception of L440 Frames (6 Pole Designs), regardless of the base speed.

(3) For estimating purposes only.

(4) For Class 1 Division 2 Group C T2A, a blower motor with Group C listing is required.

Add as follows:

- ❖ All L440 frames include as standard features an Insulated O.D.E. Bearing, VPI Insulation System, Oversized Conduit Box and PLS / Ball Bearing Lubrication System.

## Class 1 Division 2 Group D, CSA Certified (TEBC) – Induction

For Temperature Code T2A (280° C) (4)  
Totally Enclosed Blower Cooled (TEBC)  
7.5 - 400 Hp  
3-Phase, 460V (1) - 60 Hz Blower Frequency  
Continuous Constant Torque to Zero Speed



### Features:

- Continuous Duty
- 1000:1 Constant Torque Below Base Speed
- Standard 1 Minute Overload
  - 200% Below Base Speed
  - 125% Above Base Speed
- Optimum Pole Design - 4 Or 6 Pole Designs (2)
- Class H Insulation / Class F Rise
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)

Hp	Speed (2)		Frame	FLA (3) @ 460V
	Base	CHp		
5	850	1700	FL1838	8
	650	1300	FL1844	8
7.5	1150	2300	FL1838	11
	850	1700	FL1844	11
10	650	1300	FL2162	11
	1150	2300	FL1844	14
15	850	1700	FL2162	14
	650	1300	FL2162	14
20	3550	3850	FL1831	21
	1750	3500	FL1844	21
25	1150	2300	FL2162	21
	850	1700	FL2162	21
30	650	1300	FL2168	21
	3550	3850	FL1838	27
40	1750	3500	FL2162	27
	1150	2300	FL2162	27
50	850	1700	FL2173	27
	650	1300	FL2570	27
60	3550	3850	FL1844	34
	1750	3500	FL2162	34
75	1150	2300	FL2173	34
	850	1700	FL2570	34
100	650	1300	FL2586	34
	3550	3850	FL1852	40
150	1750	3500	FL2162	39
	1150	2300	FL2570	40
200	850	1700	FL2578	40
	650	1300	FL2586	40
250	3550	3850	FL2162	52
	1750	3500	FL2173	52
300	1150	2300	FL2578	52
	850	1700	FL2898	54
400	650	1300	L3203	52
	3550	3850	FL2162	65
500	1750	3500	FL2570	65
	1150	2300	FL2586	65
600	850	1700	FL2898	68
	650	1300	L4022	65
700	3550	3850	FL2168	77
	1750	3500	FL2578	74
800	1150	2300	FL2898	77
	850	1700	L3213	77
900	650	1300	L4022	77

Hp	Speed (2)		Frame	FLA (3) @ 460V	
	Base	CHp			
75	3550	3850	FL2570	96	
	1750	3500	FL2586	94	
100	1150	2300	L3213	96	
	850	1700	L4022	96	
150	650	1300	L4034	96	
	3550	3850	FL2578	124	
200	1750	3500	FL2898	124	
	1150	2300	L4022	124	
250	850	1700	L4034	124	
	650	1300	L4429 ❖	124	
300	3550	3850	FL2890	156	
	1750	3500	L3607	150	
400	1150	2300	L4034	156	
	850	1700	L4046	156	
500	650	1300	L4440 ❖	168	
	3550	3850	L3213	180	
600	1750	3500	L4022	177	
	1150	2300	L4046	180	
700	850	1700	L4429 ❖	198	
	650	1300	L4451 ❖	200	
800	3000	3500	L4022	240	
	1750	3500	L4034	240	
900	1150	2300	L4429 ❖	236	
	850	1700	L4451 ❖	240	
1000	3000	3500	L4034	300	
	1750	3500	L4046	300	
1200	1150	2300	L4451 ❖	325	
	3000	3500	L4046	360	
1500	1750	3500	L4440 ❖	385	
	350	1750	3500	L4451 ❖	446
2000	400	1750	3500	L4461 ❖	536

### Notes:

- All accessories, must either be CSA certified for Class 1 Group D Division 2, or Division 1 Listed.
- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) All RPM AC motors will be 4 Pole Designs, with the exception of L440 Frames (6 Pole Designs), regardless of the base speed.
  - (3) For estimating purposes only.
  - (4) For Class 1 Division 2 Group C T2A, a special blower motor with Group C listing is required.
- ❖ All L440 frames include as standard features an Insulated O.D.E. Bearing, VPI Insulation System, Oversized Conduit Box and PLS / Ball Bearing Lubrication System.



## Class 1 Division 2 Groups A, B, C & D, CSA Certified (TENV) – Induction

For Temperature Code T2A (280° C)  
 Totally Enclosed Non-Ventilated (TENV)  
 2 - 75 Hp  
 3-Phase, 460V (1)  
 Continuous Constant Torque to Zero Speed



### Features:

- Continuous Duty
- 1000:1 Constant Torque Below Base Speed
- Standard 1 Minute Overload
  - 200% Below Base Speed
  - 125% Above Base Speed
- Optimum Pole Design - 4 Pole Designs
- Class H Insulation / Class F Rise
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box

Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
2	1150	2300	FL1838	3
	850	1700	FL1838	3
	650	1300	FL1844	3
3	1150	2300	FL1831	5
	850	1700	FL1852	5
	650	1300	FL2162	5
5	3550	3850	FL1831	6.8
	1750	3500	FL1844	6.8
	1150	2300	FL2162	5
	850	1700	FL2162	8
	650	1300	FL2168	8
7.5	3550	3850	FL1844	11
	1750	3500	FL2162	11
	1150	2300	FL2162	11
	850	1700	FL2173	12
	650	1300	FL2578	12
10	3550	3850	FL2162	14
	1750	3500	FL2162	14
	1150	2300	FL2173	14
	850	1700	FL2578	14
	650	1300	FL2898	14
15	3550	3850	FL2162	21
	1750	3500	FL2570	21
	1150	2300	FL2586	21
	850	1700	FL2898	21
	650	1300	L3203	21
20	3550	3850	FL2173	27
	1750	3500	FL2578	27
	1150	2300	FL2898	27
	850	1700	L3203	27
	650	1300	L3213	27
25	3550	3850	FL2570	34
	1750	3500	FL2890	34
	1150	2300	L3203	34
	850	1700	L3213	34
	650	1300	L3607	34

Hp	Speed		Frame	FLA (2) @ 460V
	Base	CHp		
30	3550	3850	FL2586	40
	1750	3500	FL2898	40
	1150	2300	L3203	40
	850	1700	L3607	40
	650	1300	L4022	40
40	3550	3850	FL2898	52
	1750	3500	L3203	52
	1150	2300	L4022	52
	850	1700	L4022	52
	650	1300	L4034	52
50	3550	3850	L3203	65
	1750	3500	L3607	65
	1150	2300	L4034	65
	850	1700	L4046	65
60	3550	3850	L3213	77
	1750	3500	L4022	77
	1150	2300	L4034	77
75	2500	3500	L4034	96
	1750	3500	L4034	96

### Notes:

All accessories must either be CSA certified for Class 1 Group D Division 2, or Division 1 Listed.

(1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.

(2) For estimating purposes only.

## Class 1 Division 2 Groups A, B, C & D, CSA Certified (TEFC) – Induction

For Temperature Code T2A (280° C)  
 Totally Enclosed Fan Cooled (TEFC) - Variable Torque (1)  
 15 - 250 Hp  
 3-Phase, 460V (2)



### Features:

- Continuous Duty
- Variable Torque - HP Varies as Cube of RPM
- Standard 1 Minute Overload
  - 200% Below Base Speed
  - 125% Above Base Speed
- Optimum Pole Design - 4 Pole Designs
- Class H Insulation / Class F Rise
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box

Hp	Speed		Frame	FLA (3) @ 460V
	Base	CHp		
7.5	2500	3500	See TENV for Cl 1, Gp D T2A	
	1750	3500		
	1150	2300		
	850	1700		
10	2500	3500	See TENV for Cl 1, Gp D T2A	
	1750	3500		
	1150	2300		
	850	1700		
15	2500	3500	FL1844	21
	1750	3500	FL1852	21
	1150	2300	FL2168	21
	850	1700	FL2173	21
20	2500	3500	FL1852	27
	1750	3500	FL2162	27
	1150	2300	FL2173	27
	850	1700	FL2570	27
25	2500	3500	FL2162	34
	1750	3500	FL2168	34
	1150	2300	FL2570	34
	850	1700	FL2578	34
30	2500	3500	FL2168	40
	1750	3500	FL2173	40
	1150	2300	FL2578	40
	850	1700	FL2586	40
40	2500	3500	FL2173	52
	1750	3500	FL2570	52
	1150	2300	FL2586	52
	850	1700	L3213	52

Hp	Speed		Frame	FLA (3) @ 460V
	Base	CHp		
50	2500	3500	FL2570	65
	1750	2500	FL2578	65
	1150	2300	L3203	65
	850	1700	L3213	65
60	2500	3500	FL2578	77
	1750	2500	FL2586	77
	1150	2300	L3213	77
	850	1700	L3698	77
75	2500	3500	FL2586	96
	1750	2500	L3203	96
	1150	2300	L3698	96
	850	1700	L3614	96
100	2500	2500	L3203	124
	1750	2500	L3213	124
	1150	2300	L3614	124
	850	1700	L4034	124
125	2500	2500	L3213	155
	1750	2500	L3698	155
	1150	2300	L4034	155
150	2500	2500	L3698	180
	1750	2500	L3614	180
200	2500	2500	L3614	238
	1750	2500	L4034	238

### Notes:

All accessories must either be CSA certified for Class 1 Group D Division 2, or Division 1 Listed.

- (1) Contact Baldor for constant torque speed range availability
- (2) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (3) For estimating purposes only.

## IEC Drip-Proof Guarded Force Ventilated (DPG-FV) – Induction

IP23 - IC06  
 5.6 - 707 kW  
 3-Phase, 380V (1)  
 50 Hz Blower  
 Continuous Constant Torque to Zero Speed



### Features:

- S1 Duty {Continuous}
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 150% below Base Speed
  - 110% above Base Speed
- Optimum Pole Design - 4 or 6 Pole Designs (2)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Side Mounted Conduit Box with Terminal Block

kW	Speed		Frame	FLA (3) @ 380V
	Base	CkW		
5.6	850	950	FDL1108	13
	650	650	FDL1110	13
7.5	850	950	FDL1110	17
	650	650	FDL1112	17
	500	650	FDL1307	17
11	3550	3850	FDL1106	25
	2950	3500	FDL1106	25
	2500	3000	FDL1106	25
	1750	3000	FDL1108	25
	1450	2300	FDL1110	25
	1150	1300	FDL1110	25
	850	1000	RDL1305	25
	650	1150	RDL1308	25
15	3550	3850	FDL1106	33
	2950	3500	FDL1108	33
	2500	3000	FDL1108	33
	1750	2500	FDL1110	33
	1450	2200	FDL1112	33
	1150	1750	RDL1307	33
	850	1450	RDL1308	33
	650	850	RDL1308	33
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550	3850	FDL1106	41
	2950	3500	FDL1108	41
	2500	3000	FDL1110	41
	1750	2500	FDL1112	41
	1450	1750	RDL1305	41
	1150	1300	RDL1307	41
	850	950	RDL1308	41
	650	650	RDL1609	41
18.6	3550			

## IEC Drip-Proof Guarded Force Ventilated (DPG-FV) – Induction

kW	Speed		Frame	FLA (3) @ 380V
	Base	CkW		
56	2950	3600	RDL1310	116
	2500	3000	RDL1310	116
	1750	2600	RDL1611	116
	1450	1650	RDL1611	116
	1150	1300	RDL1613	116
	850	1150	RDL1813	116
	650	1000	DL2010	116
	500	850	DL2012	116
75	2950	3600	RDL1611	151
	2500	3450	RDL1611	151
	1750	2450	RDL1613	151
	1450	2100	RDL1811	151
	1150	1600	RDL1813	151
	850	1500	DL2010	151
	650	1150	DL2012	151
	500	800	DL2212	151
91	2950	2950	RDL1611	184
	2500	3450	RDL1613	184
	1750	2600	RDL1811	184
	1450	2000	RDL1813	184
	1150	1600	RDL1815	184
	850	1450	DL2012	184
	650	1150	DL2212	184
	500	800	DL2510	184
110	2950	3600	RDL1613	215
	2500	3600	RDL1811	215
	1750	2700	RDL1813	215
	1450	2000	RDL1815	215
	1150	1800	DL2010	215
	850	1500	DL2212	215
	650	1150	DL2510	215
	500	800	DL2512	215
132	2950	3600	RDL1811	257
	2500	3600	RDL1813	257
	1750	2600	RDL1815	257
	1450	2200	DL2010	257
	1150	2000	DL2012	257
	850	1300	DL2212	257
	650	1150	DL2512	257
	500	650	DL2808 ❖	281
150	2950	3600	RDL1813	292
	2500	3100	RDL1813	292
	1750	2650	DL2010	292
	1450	2200	DL2012	292
	1150	2000	DL2212	292
	850	1450	DL2510	292
	650	1000	DL2512	292
	500	650	DL2810 ❖	315
186	2950	3600	RDL1815	365
	2500	3600	DL2010	365
	1750	2700	DL2012	365
	1450	2400	DL2212	365
	1150	1750	DL2212	365
	850	1200	DL2512	365
	650	1000	DL2810 ❖	390
	500	700	DL2814 ❖	390

kW	Speed		Frame	FLA (3) @ 380V
	Base	CkW		
224	2950	3600	DL2010	436
	2500	3600	DL2012	436
	1750	2650	DL2212	436
	1450	2200	DL2212	436
	1150	1750	DL2510	436
	850	950	DL2808 ❖	465
	650	900	DL2812 ❖	465
	2950	3600	DL2012	499
260	2500	3600	DL2012	499
	1750	2650	DL2212	499
	1450	2200	DL2510	499
	1150	1750	DL2512	499
	850	1200	DL2810 ❖	538
	650	850	DL2814 ❖	538
300	2950	3600	DL2012	581
	2500	3600	DL2212	581
	1750	2650	DL2510	581
	1450	2200	DL2512	581
	1150	1450	DL2808 ❖	618
336	850	1200	DL2812 ❖	618
	2950	3600	DL2212	647
	2500	3600	DL2212	647
	1750	2650	DL2510	647
	1450	2000	DL2512	647
373	1150	1450	DL2810 ❖	688
	850	1200	DL2814 ❖	688
	2950	2950	DL2510	714
	2500	3000	DL2510	714
	1750	2650	DL2512	714
447	1450	2000	DL2808 ❖	761
	1150	1500	DL2810 ❖	761
	2950	2950	DL2512	856
	2500	3000	DL2512	856
	1750	2650	DL2808 ❖	904
522 (6)	1450	2000	DL2810 ❖	904
	1150	1500	DL2814 ❖	904
	2500	3000	DL2808 ❖	1100
	1750	2600	DL2810 ❖	1046
	1450	2000	DL2812 ❖	1046
600 (6)	2500	3000	DL2808 ❖	1193
	1750	2600	DL2812 ❖	1193
	2500	3000	DL2810 ❖	1150
672 (4) (6)	1750	2000	DL2814 ❖	1095
	2500	3000	DL2810 ❖	1202
707 (4) (5) (6)	1750	2000	DL2814 ❖	1147
746 (4) (5) (6)	1750	2000	DL2816 ❖	1194

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) All RPM AC motors are 4 Pole Designs, with the exception of L440 Frames (6 Pole Designs), regardless of the base speed.
  - (3) For estimating purposes only.
  - (4) Limited to 460v - 575v input.
  - (5) Requires a minimum inverter carrier frequency of 4 KHz.
  - (6) Foot mounted coupled duty
- ❖ Also included, are all of the typical features of the RPM AC DPFV motor in addition to an Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / ball bearing lubrication system.

## IEC Totally Enclosed Blower Cooled (TEBC) (IP44 - IC416) – Induction

3.7 - 336 kW  
 3-Phasae, 380V (1)  
 50 Hz Blower  
 Continuous Constant Torque to Zero Speed



### Features:

- S1 Duty {Continuous}
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 or 6 Pole Designs (2)
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box with Terminal Block (FDL112 - DL250)
- Side Mounted Conduit Box with Terminal Block (DL280)

kW	Speed		Enclosure	Frame	FLA (3) @ 380V
	Base	CkW			
3.7	1750	3500	TEBC	FDL1106	9
	1450	2900	TEBC	FDL1106	9
	1150	2300	TEBC	FDL1106	9
	850	1700	TEBC	FDL1108	9
	650	1300	TEBC	FDL1110	9
	500	1000	TEBC	FDL1112	9
5.6	1750	3500	TEBC	FDL1106	12
	1450	2900	TEBC	FDL1106	12
	1150	2300	TEBC	FDL1108	12
	850	1700	TEBC	FDL1110	12
	650	1300	TEBC	FDL1112	13
	500	1000	TEBC	FDL1307	12
7.5	3550	3550	TEBC	FDL1106	17
	2950	3500	TEBC	FDL1106	17
	2500	3500	TEBC	FDL1106	17
	1750	3500	TEBC	FDL1108	17
	1450	2900	TEBC	FDL1110	17
	1150	2300	TEBC	FDL1110	17
	850	1700	TEBC	FDL1112	17
	650	1300	TEBC	FDL1307	17
	500	1000	TEBC	FDL1310	17
	3550	3550	TEBC	FDL1106	25
11	2950	3500	TEBC	FDL1108	25
	2500	3500	TEBC	FDL1108	25
	1750	3500	TEBC	FDL1110	25
	1450	2900	TEBC	FDL1112	25
	1150	2300	TEBC	FDL1307	25
	850	1700	TEBC	FDL1307	25
	650	1300	TEBC	FDL1308	25
	500	1000	TEBC	FDL1609	25

kW	Speed		Enclosure	Frame	FLA (3) @ 380V
	Base	CkW			
15	3550	3550	TEBC	FDL1108	33
	2950	3500	TEBC	FDL1110	33
	2500	3500	TEBC	FDL1110	33
	1750	3500	TEBC	FDL1112	33
	1450	2900	TEBC	FDL1307	33
	1150	2300	TEBC	FDL1307	33
	850	1700	TEBC	FDL1310	33
	650	1300	TEBC	FDL1609	33
	500	1000	TEBC	FDL1611	33
	18.6	3550	3550	TEBC	FDL1108
2950		3500	TEBC	FDL1110	41
2500		3500	TEBC	FDL1112	41
1750		3500	TEBC	FDL1307	41
1450		2900	TEBC	FDL1308	41
1150		2300	TEBC	FDL1308	41
850		1700	TEBC	FDL1609	41
650		1300	TEBC	FDL1611	41
500		1000	TEBC	FDL1813	41
22		3550	3550	TEBC	FDL1110
	2950	3500	TEBC	FDL1112	48
	2500	3500	TEBC	FDL1307	48
	1750	3500	TEBC	FDL1307	48
	1450	2900	TEBC	FDL1308	48
	1150	2300	TEBC	FDL1310	48
	850	1700	TEBC	FDL1611	48
	650	1300	TEBC	FDL1613	48
	500	1000	TEBC	DL2010	48
	30	3550	3550	TEBC	FDL1307
2950		3500	TEBC	FDL1307	63
2500		3500	TEBC	FDL1307	63
1750		3500	TEBC	FDL1310	63
1450		2900	TEBC	FDL1609	63
1450		2900	TEAO-P/B	FDL1310	63
1150		2300	TEBC	FDL1611	63
850		1700	TEBC	FDL1613	63
650		1300	TEBC	FDL1815	66
500		1000	TEBC	DL2012	63

## IEC Totally Enclosed Blower Cooled (TEBC) (IP44 - IC416) - Induction

kW	Speed		Enclosure	Frame	FLA (3) @ 380V	
	Base	CkW				
37	3550	3550	TEBC	FDL1307	78	
	2950	3500	TEBC	FDL1307	78	
	2500	3500	TEBC	FDL1308	78	
	1750	3500	TEBC	FDL1609	78	
	1750 (5)	3500	TEAO-P/B	FDL1310	78	
	1450	2900	TEBC	FDL1611	78	
	1150	2300	TEBC	FDL1613	78	
	850	1700	TEBC	FDL1815	78	
	650	1300	TEBC	DL2012	78	
	500	1000	TEBC	DL2212	78	
45	3550	3550	TEBC	FDL1308	94	
	2950	3500	TEBC	FDL1310	94	
	2500	3500	TEBC	FDL1310	94	
	1750	3500	TEBC	FDL1611	94	
	1450	2900	TEBC	FDL1613	94	
	1150	2300	TEBC	FDL1815	94	
	850	1700	TEBC	DL2010	94	
	650	1300	TEBC	DL2508	94	
	500	1000	TEBC	DL2510	94	
	56	3550	3550	TEBC	FDL1310	116
2950		3500	TEBC	FDL1609	116	
2500		3500	TEBC	FDL1611	116	
1750		3500	TEBC	FDL1613	116	
1450		2900	TEBC	FDL1813	117	
1150		2300	TEBC	FDL1815	116	
850		1700	TEBC	DL2208	116	
650		1300	TEBC	DL2508	116	
500		1000	TEBC	DL2512	116	
75		3550	3550	TEBC	FDL1611	164
	2950	3500	TEBC	FDL1613	151	
	2500	3500	TEBC	FDL1811	151	
	1750	3500	TEBC	FDL1813	157	
	1450	2900	TEBC	FDL1815	155	
	1150	2300	TEBC	DL2212	151	
	850	1700	TEBC	DL2510	151	
	650	1300	TEBC	DL2512	151	
	500	1000	TEBC	FDL2808 ♦	158	
	91	2950	3500	TEBC	FDL1613	184
2500		3500	TEBC	FDL1813	184	
1750		3500	TEBC	FDL1815	189	
1450		2900	TEBC	DL2208	184	
1150		2300	TEBC	DL2508	184	
850		1700	TEBC	DL2510	184	
650		1300	TEBC	FDL2808 ♦	191	
500		1000	TEBC	FDL2808 ♦	194	
110		2950	3500	TEBC	FDL1815	215
		2500	3500	TEBC	DL2012	215
	1750	3500	TEBC	DL2208	215	
	1450	2900	TEBC	DL2212	215	
	1150	2300	TEBC	DL2510	215	
	850	1700	TEBC	DL2512	215	
	650	1300	TEBC	FDL2808 ♦	230	
	500	1000	TEBC	FDL2810 ♦	230	
	500	650	TEBC	FDL2810 ♦	230	

kW	Speed		Enclosure	Frame	FLA (3) @ 380V
	Base	CkW			
132	2950	3500	TEBC	DL2012	257
	2500	3500	TEBC	DL2208	257
	1750	3500	TEBC	DL2212	257
	1450	2900	TEBC	DL2510	257
	1150	2300	TEBC	DL2512	257
	850	1700	TEBC	FDL2808 ♦	267
	650	1300	TEBC	FDL2810 ♦	264
	500	900	TEBC	FDL2814 ♦	270
	2950	3500	TEBC	DL2212	290
	2500	3500	TEBC	DL2212	290
149	1750	3500	TEBC	DL2508	290
	1450	2900	TEBC	DL2510	290
	1150	2300	TEBC	DL2512	290
	850	1700	TEBC	FDL2808 ♦	296
	650	1300	TEBC	FDL2810 ♦	303
	500	1000	TEBC	FDL2816 ♦	307
	186	2950	3500	TEBC	DL2510
2500		3500	TEBC	DL2510	366
1750		3500	TEBC	DL2510	366
1450		2900	TEBC	DL2512	366
1150		2300	TEBC	FDL2808 ♦	370
850		1700	TEBC	FDL2810 ♦	370
650		1300	TEBC	FDL2816 ♦	370
223	2950	3500	TEBC	DL2510	436
	2500	3500	TEBC	DL2512	436
	1750	3500	TEBC	DL2512	436
	1450	2700	TEBC	FDL2808 ♦	438
	1150	2300	TEBC	FDL2810 ♦	448
	850	1700	TEBC	FDL2816 ♦	438
	2500	2700	TEBC	FDL2808 ♦	502
260	1750	2700	TEBC	FDL2808 ♦	502
	1450	2700	TEBC	FDL2810 ♦	508
	1150	2300	TEBC	FDL2812 ♦	514
	2500	2700	TEBC	FDL2810 ♦	570
300	1750	2700	TEBC	FDL2810 ♦	582
	1450	2700	TEBC	FDL2812 ♦	582
	1150	2300	TEBC	FDL2816 ♦	576
	2500	2700	TEBC	FDL2812 ♦	629
336	1750	2700	TEBC	FDL2812 ♦	629
	1450	2700	TEBC	FDL2816 ♦	641
373	2500 (4)	2700	TEBC	FDL2814 ♦	702
	1750 (4)	2700	TEBC	FDL2816 ♦	713

**Notes:**

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) All RPM AC motors are 4 Pole Designs, with the exception of L440 Frames (6 Pole Designs), regardless of the base speed.
  - (3) For estimating purposes only.
  - (4) Requires a minimum inverter carrier frequency of 4 KHz.
  - (5) These ratings in FDL1310 frames require TEAO Piggyback oversized blower (3/4 HP). Contact Baldor Electric for dimensions
- ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## IEC Totally Enclosed Fan Cooled (TEFC) – Induction

1000:1 Constant Torque Below Base Speed, Continuous Constant Torque to Zero Speed  
IP44 - IC411

5.6 - 150 kW, 3-Phase, 380V (1)

### Features:

- S1 Duty {Continuous}
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 Pole Designs
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box with Terminal Block



kW	Speed		Frame	FLA (2)
	Base	CkW		
5.6	3550	3550	FDL1106	13
	2500	3500	FDL1108	13
	1750	3500	FDL1108	13
	1450	2900	FDL1110	13
	1150	2300	FDL1112	13
	850	1700	FDL1307	13
	650	1300	FDL1310	13
7.5	500	1000	FDL1611	13
	3550	3550	FDL1108	17
	2500	3500	FDL1110	17
	1750	3500	FDL1110	17
	1450	2900	FDL1307	17
	1150	2300	FDL1307	17
11	850	1700	FDL1307	17
	650	1300	FDL1611	17
	500	1000	FDL1613	17
	3550	3550	FDL1110	26
	2500	3500	FDL1112	26
	1750	3500	FDL1307	26
15	1450	2900	FDL1307	26
	1150	2300	FDL1308	26
	850	1700	FDL1611	26
	650	1300	FDL1613	26
	3550	3550	FDL1112	33
	2500	3500	FDL1307	33
	1750	3500	FDL1307	33
18.6	1450	2900	FDL1310	33
	850	1700	FDL1613	33
	3550	3550	FDL1307	42
	2500	3500	FDL1307	42
	1750	3500	FDL1310	42
	1450	2900	FDL1611	42
22	1150	2300	FDL1613	42
	850	1700	FDL1811	41
	3550	3550	FDL1308	49
	2500	3500	FDL1308	49
	1750	3500	FDL1609	49
	1450	2900	FDL1613	49
30	1150	2300	FDL1811	48
	850	1700	FDL1813	48
	3550	3550	FDL1310	63
	2500	3500	FDL1609	63
	1750	3500	FDL1613	63
	1450	2900	FDL1811	63
37	1150	2300	FDL1813	63
	850	1700	DL2012	63
	3550	3550	FDL1609	79
	2500	3500	FDL1611	79
	1750	3500	FDL1811	78
	1450	2900	FDL1813	78
45	1150	2300	FDL1815	78
	850	1700	DL2012	79
	3550	3550	FDL1611	93
	2500	3500	FDL1613	93
	1750	3500	FDL1813	94
	1450	2900	FDL1815	94
	1150	2300	DL2012	93

kW	Speed		Frame	FLA (2)
	Base	CkW		
45	850	1700	DL2210	93
	650	1300	DL2510	93
	500	1000	FDL2808 ♦	93
56	3550	3550	FDL1613	116
	2500	3500	FDL1813	116
	1750	3500	DL2010	116
	1450	2900	DL2012	116
	1150	2300	DL2210	116
	850	1700	DL2212	116
75	650	1300	DL2512	116
	500	1000	FDL2808 ♦	119
	2500	3500	DL2010	150
	1750	3500	DL2012	150
	1450	2900	DL2210	150
	1150	2300	DL2212	150
93	850	1700	DL2510	150
	650	1300	FDL2808 ♦	154
	500	1000	FDL2814 ♦	157
	2500	3500	DL2012	189
	1750	3500	DL2210	189
	1450	2900	DL2212	189
110	1150	2300	DL2510	189
	850	1700	FDL2808 ♦	189
	650	1300	FDL2812 ♦	191
	500	1000	FDL2816 ♦	198
	2500	3500	DL2210	218
	1750	3500	DL2212	218
150	1450	2900	DL2510	218
	1150	2300	FDL2808 ♦	224
	850	1700	FDL2810 ♦	225
	650	1300	FDL2816 ♦	237
	2500	2500	DL2512	291
	1750	2500	FDL2808 ♦	296
186	1450	2900	FDL2808 ♦	296
	1150	2300	FDL2810 ♦	298
	850	1700	FDL2814 ♦	305
	2500	2500	FDL2808 ♦	369
	1750	2500	FDL2808 ♦	369
	1450	2900	FDL2810 ♦	369
224	1150	2300	FDL2814 ♦	369
	2500	2500	FDL2808 ♦	448
	1750	2500	FDL2810 ♦	448
	1450	2900	FDL2814 ♦	448
260	1150	2300	FDL2816 ♦	460
	2500	2500	FDL2808 ♦	514
	1750	2500	FDL2812 ♦	520
	1450	2900	FDL2816 ♦	520
300	2500	2500	FDL2810 ♦	578
	1750	2500	FDL2816 ♦	581
	336	2500	2500	FDL2812 ♦
373	2500	2500	FDL2816 ♦	708

### Notes:

(1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.

(2) For estimating purposes only.

♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## IEC Totally Enclosed Fan Cooled (TEFC) 4:1 Induction

4:1 Constant Torque Below Base Speed  
 IP44 - IC411  
 11 - 186 kW, 3-Phase, 380V (1)

### Features:

- S1 Duty {Continuous}
- 4:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 Pole Designs
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box with Terminal Block



kW	Speed		Frame	FLA (2)
	Base	CkW		
5.6	3550	3550	FDL1106	13
	2500	3500	FDL1106	13
	1750	3500	FDL1108	13
	1450	2900	FDL1110	13
	1150	2300	FDL1112	13
	850	1700	FDL1307	13
	650	1300	FDL1310	13
7.5	500	1000	FDL1611	13
	3550	3550	FDL1106	17
	2500	3500	FDL1108	17
	1750	3500	FDL1110	17
	1450	2900	FDL1112	17
	1150	2300	FDL1307	17
	850	1700	FDL1307	17
11	650	1300	FDL1611	17
	500	1000	FDL1613	17
	3550	3550	FDL1108	26
	2500	3500	FDL1110	26
	1750	3500	FDL1307	26
	1450	2900	FDL1307	26
	1150	2300	FDL1308	26
15	850	1700	FDL1611	26
	650	1300	FDL1613	26
	3550	3550	FDL1110	33
	2500	3500	FDL1112	33
	1750	3500	FDL1307	33
	1450	2900	FDL1307	33
	1150	2300	FDL1310	33
18.6	850	1700	FDL1613	33
	3550	3550	FDL1112	42
	2500	3500	FDL1307	42
	1750	3500	FDL1308	42
	1450	2900	FDL1310	42
	1150	2300	FDL1611	42
	850	1700	FDL1811	41
22	3550	3550	FDL1307	49
	2500	3500	FDL1308	49
	1750	3500	FDL1310	49
	1450	2900	FDL1611	49
	1150	2300	FDL1613	49
	850	1700	FDL1813	48
	3550	3550	FDL1308	63
30	2500	3500	FDL1310	63
	1750	3500	FDL1611	63
	1450	2900	FDL1613	63
	1150	2300	FDL1813	63
	850	1700	FDL2010	63
	3550	3550	FDL1310	79
	2500	3500	FDL1609	79
37	1750	3500	FDL1613	79
	1450	2900	FDL1813	78
	1150	2300	FDL1815	78
	850	1700	DL2010	79
	3550	3550	FDL1609	93
	2500	3500	FDL1611	93
	1750	3500	FDL1811	94

kW	Speed		Frame	FLA (2)
	Base	CkW		
45	1450	2900	FDL1813	94
	1150	2300	DL2010	93
	850	1700	DL2012	93
56	3550	3550	FDL1611	116
	2500	3500	FDL1613	116
	1750	3500	FDL1813	116
	1450	2900	DL2010	116
	1150	2300	DL2208	116
	850	1700	DL2212	116
	3550	3550	FDL1613	150
75	2500	3500	FDL1813	150
	1750	3500	DL2010	150
	1450	2900	DL2012	150
	1150	2300	DL2212	150
	850	1700	DL2510	150
	3550	3550	FDL1613	189
	2500	3500	FDL1815	188
93	1750	3500	DL2012	189
	1450	2900	DL2508	189
	1150	2300	DL2510	189
	850	1700	DL2512	189
	2500	3500	DL2010	218
	1750	3500	DL2212	218
	1450	2900	DL2510	218
110	1150	2300	DL2512	218
	2500	2500	DL2212	291
	1750	2500	DL2510	291
	1450	2500	DL2512	291
	1150	2300	FDL2810 ♦	296
	850	1700	FDL2814 ♦	305
	2500	2500	DL2510	366
186	1750	2500	DL2512	366
	1450	2500	FDL2810 ♦	363
	1150	2300	FDL2812 ♦	371
	2500	2500	DL2512	437
	1750	2500	FDL2808 ♦	436
	1450	2500	FDL2812 ♦	438
	1150	2300	FDL2814 ♦	448
260	2500	2500	FDL2808 ♦	508
	1750	2500	FDL2810 ♦	515
	1450	2500	FDL2814 ♦	503
	2500	2500	FDL2810 ♦	575
	1750	2500	FDL2812 ♦	580
	1450	2500	FDL2816 ♦	578
	2500	2500	FDL2812 ♦	644
336	1750	2500	FDL2814 ♦	650
	2500	2500	FDL2814 ♦	715
	1750	2500	FDL2816 ♦	720

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
  - (2) For estimating purposes only.
- ♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.



## IEC Totally Enclosed Non-Ventilated (TENV) – Induction

S1 Duty {Continuous}  
 IP44 - IC410  
 1.5 - 75 kW  
 3-Phase, 380V (1)



### Features:

- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design - 4 Pole Designs
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box with Terminal Block

kW	Speed		Frame	FLA (2)
	Base	CkW		
1.5	1450	2900	FDL1106	4
	1150	2300	FDL1106	4
	850	1700	FDL1108	4
	650	1300	FDL1108	4
	500	1000	FDL1112	4
2.2	3550	3850	FDL1106	6
	2950	3500	FDL1106	6
	2500	3500	FDL1106	6
	1750	3500	FDL1106	6
	1450	2900	FDL1106	6
	1150	2300	FDL1106	6
	850	1700	FDL1108	6
3.7	650	1300	FDL1112	6
	500	1000	FDL1308	6
	3550	3850	FDL1106	9
	2950	3500	FDL1106	9
	2500	3500	FDL1106	9
	1750	3500	FDL1108	9
	1450	2900	FDL1110	9
5.6	1150	2300	FDL1112	9
	850	1700	FDL1307	9
	650	1300	FDL1308	9
	500	1000	FDL1310	9
	3550	3850	FDL1108	13
	2950	3500	FDL1110	13
	2500	3500	FDL1110	13
7.5	1750	3500	FDL1112	13
	1450	2900	FDL1307	13
	1150	2300	FDL1307	13
	850	1700	FDL1308	13
	650	1300	FDL1310	13
	500	1000	FDL1611	13
	11	3550	3850	FDL1110
2950		3500	FDL1112	17
2500		3500	FDL1112	17
1750		3500	FDL1307	17
1450		2900	FDL1307	17
1150		2300	FDL1308	17
850		1700	FDL1609	17
650		1300	FDL1611	17
500		1000	FDL1815	17

kW	Speed		Frame	FLA (2)
	Base	CkW		
11	3550	3850	FDL1307	25
	2950	3500	FDL1307	25
	2500	3500	FDL1307	25
	1750	3500	FDL1310	25
	1450	2900	FDL1609	25
	1150	2300	FDL1611	25
	850	1700	FDL1613	25
	650	1300	DL2012	25
	500	1000	DL2010	25
15	3550	3850	FDL1308	33
	2950	3500	FDL1310	33
	2500	3500	FDL1310	33
	1750	3500	FDL1609	33
	1450	2900	FDL1611	33
	1150	2300	FDL1613	33
	850	1700	FDL1815	33
	650	1300	DL2010	33
	500	1000	DL2012	33
18.6	3550	3850	FDL1310	41
	2950	3500	FDL1609	41
	2500	3500	FDL1609	41
	1750	3500	FDL1611	41
	1450	2900	FDL1613	41
	1150	2300	FDL1815	41
	850	1700	DL2010	41
	650	1300	DL2012	41
	500	1000	DL2212	41
22	3550	3850	FDL1609	48
	2950	3500	FDL1611	48
	2500	3500	FDL1611	48
	1750	3500	FDL1613	46
	1450	2900	FDL1813	46
	1150	2300	FDL1815	46
	850	1700	DL2012	48
	650	1300	DL2210	48
	500	1000	DL2212	48

## IEC Totally Enclosed Non-Ventilated (TENV) – Induction

kW	Speed		Frame	FLA (2)
	Base	CkW		
30	3550	3850	FDL1613	63
	2950	3500	FDL1811	63
	2500	3500	FDL1813	63
	1750	3500	DL2010	63
	1450	2900	DL2010	63
	1150	2300	DL2012	63
	850	1700	DL2210	63
	650	1300	DL2212	63
	500	1000	DL2512	63
37	3550	3850	FDL1813	78
	2950	3500	FDL1815	78
	2500	3500	FDL1815	78
	1750	3500	DL2010	78
	1450	2900	DL2012	78
	1150	2300	DL2210	78
	850	1700	DL2212	78
	650	1300	DL2510	78
	500	1000	FDL2812 ♦	78
45	3550	3850	DL2010	94
	2950	3500	DL2010	94
	2500	3500	DL2012	94
	1750	3500	DL2208	94
	1450	2900	DL2212	94
	1150	2300	DL2212	94
	850	1700	DL2512	94
	650	1300	FDL2812 ♦	96
	500	1000	FDL2814 ♦	96
56	3550	3850	DL2208	116
	2950	3500	DL2208	116
	2500	3500	DL2208	116
	1750	3500	DL2212	116
	1450	2900	DL2510	116
	1150	2300	DL2512	116
	850	1700	FDL2812 ♦	116
	650	1300	FDL2814 ♦	116
	2950	3500	DL2212	151
75	2500	3500	DL2212	151
	1750	3500	DL2512	151
	1450	2900	FDL2812 ♦	149
	1150	2300	FDL2814 ♦	155
91	2500	3500	FDL2812 ♦	184
	1750	3500	FDL2814 ♦	191

**Notes:**

(1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.

(2) For estimating purposes only.

♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

V\*S Product Line

Inverter/Vector Motors

RPM AC

RPM AC NEMA Permanent Magnet

RPM AC NEMA Induction

RPM AC IEC Induction

V\*S Master

Dimensions and Connections

Encoders

## IEC Totally Enclosed Non-Ventilated (TENV), S2 – Induction

S2 - 60 Duty {60 Minute}  
 IP44 - IC410  
 1.5 - 336 kW  
 3-Phase, 380V (1)



### Features:

- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Design – 4 Pole Designs
- Class H Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Top Mounted Conduit Box with Terminal Block

kW	Speed		Frame	FLA (2)
	Base	CkW		
1.5	1450	2900	FDL1106	4
	1150	2300	FDL1106	4
	850	1700	FDL1106	4
	650	1300	FDL1106	4
	500	1000	FDL1110	4
2.2	3550	3850	FDL1106	6
	2950	3500	FDL1106	6
	2500	3500	FDL1106	6
	1750	3500	FDL1106	6
	1450	2900	FDL1106	6
	1150	2300	FDL1106	6
	850	1700	FDL1108	6
	650	1300	FDL1110	6
3.7	500	1000	FDL1112	6
	3550	3850	FDL1106	9
	2950	3500	FDL1106	9
	2500	3500	FDL1106	9
	1750	3500	FDL1106	9
	1450	2900	FDL1108	9
	1150	2300	FDL1108	9
	850	1700	FDL1110	9
5.6	650	1300	FDL1112	9
	500	1000	FDL1307	9
	3550	3850	FDL1106	13
	2950	3500	FDL1106	13
	2500	3500	FDL1106	13
	1750	3500	FDL1108	13
	1450	2900	FDL1110	13
	1150	2300	FDL1110	13
7.5	850	1700	FDL1112	13
	650	1300	FDL1307	13
	500	1000	FDL1310	13
	3550	3850	FDL1106	17
	2950	3500	FDL1108	17
	2500	3500	FDL1108	17
	1750	3500	FDL1110	17
	1450	2900	FDL1112	17
11	1150	2300	FDL1112	17
	850	1700	FDL1307	17
	650	1300	FDL1310	17
	500	1000	FDL1609	17
	3550	3850	FDL1106	25
	2950	3500	FDL1108	25
	2500	3500	FDL1108	25
	1750	3500	FDL1110	25

kW	Speed		Frame	FLA (2)
	Base	CkW		
11	3550	3850	FDL1108	25
	2950	3500	FDL1110	25
	2500	3500	FDL1110	25
	1750	3500	FDL1112	25
	1450	2900	FDL1307	25
	1150	2300	FDL1308	25
	850	1700	FDL1310	25
	650	1300	FDL1611	25
	500	1000	FDL1613	25
	15	3550	3850	FDL1110
2950		3500	FDL1112	33
2500		3500	FDL1112	33
1750		3500	FDL1307	33
1450		2900	FDL1308	33
1150		2300	FDL1310	33
850		1700	FDL1611	33
650		1300	FDL1613	33
500		1000	DL1811	33
18.6		3550	3850	FDL1112
	2950	3500	FDL1307	41
	2500	3500	FDL1307	41
	1750	3500	FDL1308	41
	1450	2900	FDL1310	41
	1150	2300	FDL1611	41
	850	1700	FDL1611	41
	650	1300	FDL1811	41
	500	1000	FDL1813	41
	22	3550	3850	FDL1307
2950		3500	FDL1308	48
2500		3500	FDL1308	48
1750		3500	FDL1310	48
1450		2900	FDL1611	48
1150		2300	FDL1611	48
850		1700	FDL1613	48
650		1300	FDL1813	48
500		1000	FDL1815	48

## IEC Totally Enclosed Non-Ventilated (TENV), S2 – Induction

kW	Speed		Frame	FLA (2)
	Base	CkW		
30	3550	3850	FDL1308	63
	2950	3500	FDL1310	63
	2500	3500	FDL1310	63
	1750	3500	FDL1611	63
	1450	2900	FDL1611	63
	1150	2300	FDL1613	63
	850	1700	FDL1811	63
	650	1300	FDL1813	63
	500	1000	DL2010	63
37	3550	3850	FDL1310	78
	2950	3500	FDL1611	78
	2500	3500	FDL1611	78
	1750	3500	FDL1611	78
	1450	2900	FDL1613	78
	1150	2300	FDL1811	78
	850	1700	FDL1813	78
	650	1300	DL2010	78
	500	1000	DL2012	78
45	3550	3850	FDL1611	94
	2950	3500	FDL1613	94
	2500	3500	FDL1613	94
	1750	3500	FDL1613	94
	1450	2900	FDL1811	94
	1150	2300	FDL1813	94
	850	1700	FDL1815	94
	650	1300	DL2010	94
	500	1000	DL2012	94
56	3550	3850	FDL1811	116
	2950	3500	FDL1811	116
	2500	3500	FDL1811	116
	1750	3500	FDL1811	116
	1450	2900	FDL1813	116
	1150	2300	FDL1815	116
	850	1700	DL2010	116
	650	1300	DL2012	116
	500	1000	DL2212	116
75	3550	3850	FDL1813	151
	2950	3500	FDL1813	151
	2500	3500	FDL1813	151
	1750	3500	FDL1813	151
	1450	2900	FDL1815	151
	1150	2300	DL2010	151
	850	1700	DL2012	151
	650	1300	DL2212	151
	500	1000	DL2510	151
91	3550	3850	FDL1813	188
	2950	3500	FDL1813	188
	2500	3500	FDL1813	188
	1750	3500	FDL1815	188
	1450	2900	DL2010	188
	1150	2300	DL2012	188
	850	1700	DL2212	188
	650	1300	DL2510	188
	500	1000	FDL2808 ♦	202

kW	Speed		Frame	FLA (2)
	Base	CkW		
110	3550	3850	FDL1815	218
	2950	3500	FDL1815	218
	2500	3500	FDL1815	218
	1750	3500	FDL1815	218
	1450	2900	DL2208	218
	1150	2300	DL2210	218
	850	1700	DL2512	218
	650	1300	FDL2808 ♦	240
	500	1000	FDL2808 ♦	240
149	3550	3850	DL2012	290
	2950	3500	DL2210	290
	2500	3500	DL2210	290
	1750	3500	DL2210	290
	1450	2900	DL2212	290
	1150	2300	DL2512	290
	850	1700	FDL2808 ♦	316
	650	1300	FDL2808 ♦	316
	500	1000	FDL2810 ♦	316
186	3550	3850	DL2210	366
	2950	3500	DL2210	366
	2500	3500	DL2210	375
	1750	3500	DL2212	385
	1450	2900	DL2512	366
	1150	2300	FDL2808 ♦	400
	850	1700	FDL2808 ♦	391
	650	1300	FDL2810 ♦	391
	500	1000	FDL2814 ♦	391
223	3550	3850	DL2212	472
	2950	3500	DL2212	472
	2500	3500	DL2212	472
	1750	3500	DL2512	436
	1450	2900	FDL2808 ♦	482
	1150	2300	FDL2808 ♦	466
	850	1700	FDL2810 ♦	466
	650	1300	FDL2812 ♦	466
	500	1000	FDL2814 ♦	391
260	3550	3850	DL2212	472
	2950	3500	DL2212	472
	2500	3500	DL2212	472
	1750	3500	DL2512	436
	1450	2900	FDL2808 ♦	482
	1150	2300	FDL2808 ♦	466
	850	1700	FDL2810 ♦	466
	650	1300	FDL2812 ♦	466
	500	1000	FDL2814 ♦	391
300	3550	3850	DL2212	472
	2950	3500	DL2212	472
	2500	3500	DL2212	472
	1750	3500	DL2512	436
	1450	2900	FDL2808 ♦	482
	1150	2300	FDL2808 ♦	466
	850	1700	FDL2810 ♦	466
	650	1300	FDL2812 ♦	466
	500	1000	FDL2814 ♦	391
336	3550	3850	DL2212	472
	2950	3500	DL2212	472
	2500	3500	DL2212	472
	1750	3500	DL2512	436
	1450	2900	FDL2808 ♦	482
	1150	2300	FDL2808 ♦	466
	850	1700	FDL2810 ♦	466
	650	1300	FDL2812 ♦	466
	500	1000	FDL2814 ♦	391
447	3550	3850	DL2212	472
	2950	3500	DL2212	472
	2500	3500	DL2212	472
	1750	3500	DL2512	436
	1450	2900	FDL2808 ♦	482
	1150	2300	FDL2808 ♦	466
	850	1700	FDL2810 ♦	466
	650	1300	FDL2812 ♦	466
	500	1000	FDL2814 ♦	391

**Notes:**

(1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.

(2) For estimating purposes only.

♦ Includes Insulated O.D.E. Bearing, VPI Insulation System, Large Mill Type Conduit Box and PLS / Ball Bearing Lubrication System.

## IEC Wide Constant Power Range (DPG-FV) – Induction

1000:1 Constant Torque  
 For Center Winders, Payoff and Tension Reels  
 IEC Drip-Proof Guarded Force Ventilated (DPFV)  
 3.7 - 336 kW (IP23 - IC06)  
 3-Phase, 380V (2)

### Features:

- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 150% below Base Speed
  - 125% above Base Speed
- Optimum Pole Designs - 4 or 6 Pole Designs (3)
- Class H Insulation
- 40° C Ambient / 1.0 SF.
- 50 Hz Blower Motor
- Three Thermostats (1 N.C. per Phase)



kW	Speed (1) (3)		Frame	FLA (4) @ 380V
	Base	CkW		
3.7	1150	3450	FDL1108	11
	850	2550	FDL1108	10
	850	3400	FDL1108	11
	650	1950	FDL1108	11
	650	2600	FDL1108	12
5.6	500	2000	FDL1110	15
	1150	3450	FDL1108	17
	850	2550	FDL1108	17
	850	3400	FDL1108	19
	650	1950	FDL1110	17
7.5	650	2600	FDL1110	19
	500	2000	FDL1112	19
	1150	3450	FDL1110	22
	850	2550	FDL1110	22
	850	3400	FDL1110	25
11	650	1950	FDL1112	22
	650	2600	FDL1112	25
	500	2000	RDL1307	31
	1150	3450	FDL1112	38
	850	2550	FDL1112	38
15	850	3400	FDL1112	44
	650	1950	RDL1307	34
	650	2600	RDL1307	40
	500	2000	RDL1310	45
	1150	3450	FDL1112	50
18.6	850	2550	RDL1307	45
	850	3400	RDL1307	51
	650	1950	RDL1308	51
	650	2600	RDL1308	58
	500	2000	RDL1609	61
37	1150	3450	RDL1308	56
	850	2550	RDL1310	63
	850	3400	RDL1310	73
	650	1950	RDL1609	65
	650	2600	RDL1609	75
75	500	2000	RDL1613	70

kW	Speed (1) (3)		Frame	FLA (4) @ 380V
	Base	CkW		
22	1150	3450	RDL1308	70
	850	2550	RDL1310	73
	850	3400	RDL1310	84
	650	1950	RDL1611	68
	650	2600	RDL1611	79
30	500	2000	RDL1613	81
	1150	3450	RDL1611	81
	850	2550	RDL1611	90
	850	3400	RDL1611	104
	650	1950	RDL1613	92
45	650	2600	RDL1613	107
	500	2000	RDL1811	117
	1150	3450	RDL1611	111
	850	2550	RDL1613	113
	850	3400	RDL1613	130
56	650	1950	RDL1811	125
	650	2600	RDL1811	144
	500	2000	RDL1815	139
	1150	3450	RDL1613	131
	850	2550	RDL1811	142
75	850	3400	RDL1811	163
	650	1950	RDL1815	137
	650	2600	RDL1815	159
	500	2000	DL2010	150
	1150	3450	RDL1811	171
186	850	2550	RDL1813	184
	850	3400	RDL1813	213
	650	1950	DL2010	160
	650	2600	DL2010	184
	500	2000	DL2012	176
336	1150	3450	RDL1813	234
	850	2550	DL2010	208
	850	3400	DL2010	240
	650	1950	DL2012	197
	650	2600	DL2012	228
336	500	2000	DL2212	246

## IEC Wide Constant Power Range (DPG-FV) – Induction

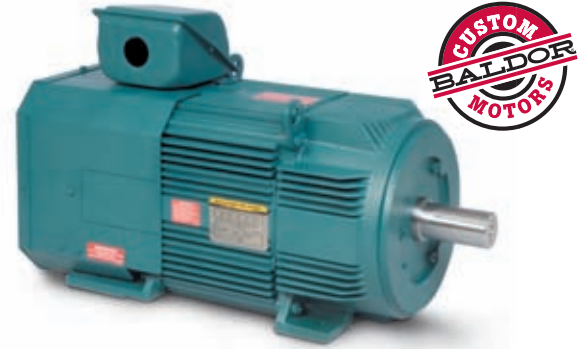
kW	Speed (1) (3)		Frame	FLA (4) @ 380V
	Base	CkW		
91	1150	3450	RDL1815	288
	850	2550	DL2012	231
	850	3400	DL2012	267
	650	1950	DL2212	253
	650	2600	DL2212	292
	500	2000	DL2510	306
110	1150	3450	DL2010	313
	850	2550	DL2212	284
	850	3400	DL2212	328
	650	1950	DL2510	298
	650	2600	DL2510	344
149	500	2000	DL2512	359
	1150	3450	DL2212	386
	850	2550	DL2510	410
	850	3400	DL2510	475
	650	1950	DL2512	429
	650	2600	DL2512	495
186	500	2000	DL2810	530
	1150	3450	DL2212	542
	850	2550	DL2512	526
	850	3400	DL2512	587
	650	1950	DL2810	542
	650	2600	DL2810	626
	500	2000	DL2814	652
223	1150	3450	DL2512	595
	850	2550	DL2808	640
	650	1950	DL2812	663
	650	2600	DL2812	765
260	1150	3000	DL2810	650
	1150	3450	DL2512	738
	850	2550	DL2810	746
	650	1950	DL2814	787
	650	2600	DL2814	909
300	1150	3000	DL2810	755
	850	2550	DL2812	856
	650	1950	DL2814	847
336	1150	3000	DL2812	835
	850	2550	DL2814	955
373	850	2550	DL2816	1006

### Notes:

- (1) Other speed ranges and base speeds available. Use the RPM AC Motor Wizard Program for your specific application needs.
- (2) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (3) All RPM AC motors will be 4 Pole Designs, with the exception of DL280 Frames (6 Pole Designs), regardless of the base speed.
- (4) For estimating purposes only. Motor amps can be reduced with a larger frame size motor. Use the RPM AC Motor Wizard Program to facilitate optimal economic matching of motor and controller sizes.

## IEC Wide Constant Power Range (TEBC) – Induction

1000:1 Constant Torque  
 For Center Winders, Payoff and Tension Reels  
 IEC Totally Enclosed Blower Cooled (TEBC)  
 3.7 - 186 kW (IP44 - IC416) (5), 3-Phase, 380V (2)  
 Continuous Constant Torque for Zero Speed



### Features:

- Continuous Duty
- 1000:1 Constant Torque below Base Speed
- Standard 1 Minute Overload
  - 200% below Base Speed
  - 125% above Base Speed
- Optimum Pole Designs - 4 or 6 Pole Designs (3)
- Class H Insulation
- 40° C Ambient / 1.0 SF.
- 50 Hz Blower Motor
- Three Thermostats (1 N.C. per Phase)

kW	Speed (1) (3)		Frame	FLA (4) @ 380V
	Base	CkW		
3.7	850	2550	FDL1108	10
	850	3400	FDL1108	12
	650	1950	FDL1110	11
	650	2600	FDL1110	12
	500	2000	FDL1112	12
5.6	850	2550	FDL1110	16
	850	3400	FDL1110	18
	650	1950	FDL1112	16
	650	2600	FDL1112	18
	500	2000	FDL1308	17
7.5	850	2550	FDL1112	21
	850	3400	FDL1112	24
	650	1950	FDL1308	19
	650	2600	FDL1308	23
	500	2000	FDL1310	23
11	850	2550	FDL1307	31
	850	3400	FDL1307	35
	650	1950	FDL1609	30
	650	2600	FDL1609	35
	500	2000	FDL1611	36
15	850	2550	FDL1609	40
	850	3400	FDL1609	46
	650	1950	FDL1613	40
	650	2600	FDL1611	46
	500	2000	FDL1811	45
18.6	850	2550	FDL1611	50
	850	3400	FDL1611	58
	650	1950	FDL1613	47
	650	2600	FDL1613	54
	500	2000	FDL1813	57
22	850	2550	FDL1613	58
	850	3400	FDL1613	68
	650	1950	FDL1613	55
	650	2600	FDL1613	54
	500	2000	FDL1813	68
30	850	2550	FDL1613	84
	850	3400	FDL1613	97
	650	1950	FDL1815	81
	650	2600	FDL1815	93
	500	2000	DL2012	82
37	850	2550	FDL1815	92
	850	3400	FDL1815	106
	650	1950	DL2012	87
	650	2600	DL2012	100
	500	2000	DL2508	103

kW	Speed (1) (3)		Frame	FLA (4) @ 380V
	Base	CkW		
45	850	2550	DL2010	105
	850	3400	DL2010	122
	650	1950	DL2508	100
	650	2600	DL2508	116
	500	2000	DL2510	119
56	850	2550	DL2208	142
	850	3400	DL2208	163
	650	1950	DL2508	140
	650	2600	DL2508	162
	500	2000	DL2512	151
75	850	2550	DL2508	183
	850	3400	DL2510	194
	650	1950	DL2512	171
	650	2600	DL2512	197
	500	2000	FDL2808	241
91	850	2550	DL2510	222
	850	3400	DL2512	266
	650	1950	FDL2808	263
	650	2600	FDL2808	300
	500	2000	FDL2810	304
110	850	2550	DL2512	261
	850	3400	DL2512	303
	650	1950	FDL2808	313
	650	2600	FDL2808	360
	500	2000	FDL2810	371
149	850	2550	FDL2808	400
	650	1950	FDL2812	415
	650	2600	FDL2812	475
	500	2000	FDL2816	502
	850	2550	FDL2814	488
186	650	1950	FDL2816	485
	650	2600	FDL2816	560
	850	2550	FDL2816	570

### Notes:

- (1) Other speed ranges and base speeds available. Use the RPM AC Motor Wizard Program for your specific application needs.
- (2) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (3) All RPM AC motors will be 4 Pole Designs, with the exception of DL280 Frames (6 Pole Designs), regardless of the base speed.
- (4) For estimating purposes only. Motor amps can be reduced with a larger frame size motor. Use the RPM AC Motor Wizard Program to facilitate optimal economic matching of motor and controller sizes.
- (5) Larger kW ratings available with IC666 and IC66W7 heat exchangers. Contact Baldor for quotation.

## IEC Extruder Duty (DPG-FV) – Induction

IP23/IC06 -Drip-Proof Guarded Force Ventilated (DPG-FV) With Filter (6)  
Class B Temperature Rise at zero RPM with full load torque

When your inverter duty applications require premium performance, beyond standard DPV motors, RPM AC Extruder Duty motors are the perfect solution.

These designs meet Class B temperature rise as noted even with full load torque applied at zero speed. They are still more compact and less weight than most conventional frame AC or DC motors.

### Features:

- Continuous constant torque to zero speed
- 200% minimum starting and overload torque to base speed - for hard to start applications (3)
- NEMA Class B temperature rise (80 Degrees C) even at zero speed full load torque. Four times the insulation life of class F motors
- Standard Class H insulation system – premium epoxy (VPI is standard on L440 frames)
- Two sets of thermostats, warning and shutdown (three of each per phase, total six)
- Washable Filter
- Encoder mounting provisions – machined flange and tapped shaft for stub shaft
- All DL280 frames have insulated opposite drive end bearing
- Wide constant Hp range allows multiple base speed use with one motor
- More compact and less weight than conventional motor construction.
- 50 Hz blower rating



kW	Speed (2)		Frame	FLA @ 400V (1) (4)
	Base	CkW		
3.7	1750	2450	FDL1106	9
	1450	2000	FDL1106	9
5.6	1750	2450	FDL1106	13
	1450	2150	FDL1108	13
7.5	1750	2450	FDL1108	16
	1450	2150	FDL1110	16
11	1750	2450	FDL1112	24
	1450	3500	RDL1303	24
15	1750	2450	RDL1305	31
	1450	2150	RDL1307	31
18.5	1750	2450	RDL1308	39
	1450	2150	RDL1308	39
22	1750	2450	RDL1307	45
	1450	2450	RDL1308	45
30	1750	2450	RDL1310	60
	1450	2000	RDL1609	60
37	1750	2450	RDL1609	74
	1450	2000	RDL1611	74
45	1750	2450	RDL1611	89
	1450	2000	RDL1613	89
56	1750	2450	RDL1613	111
	1450	1850	RDL1613	105
75	1750	2450	RDL1811	143
	1450	2000	RDL1813	143
90	1750	2350	RDL1813	174
	1450	2500	RDL1815	174
112	1750	2450	RDL1815	207
	1450	2000	DL2010	207

kW	Speed (2)		Frame	FLA @ 400V (1) (4)
	Base	CkW		
150	1750	2450	DL2012	278
	1450	2000	DL2212	278
187	1750	2450	DL2212	348
	1450	2000	DL2212	339
224	1750	2450	DL2510	416
	1450	2000	DL2512	416
261	1750	2450	DL2510	476
	1450	2000	DL2512	476
300	1750	2450	DL2512	552
	1450	2000	DL2808(1)	587
336	1750	2450	DL2808(1)	654
	1450	2000	DL2810(1)	654
373	1750	2700	DL2808(1)	723
	1450	2000	DL2812(1)	723
448	1750	2450	DL2812(1)	860
	1450	2000	DL2814(1)	860
525	1750	2450	DL2814(1)	999

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (2) Other base speeds available.
- (3) Peak Torque, is the One-Minute Overload Torque available from 0 RPM to the maximum speed at which the inverter can maintain constant flux at this overload. In some cases this value may be less than base speed.
- (4) For estimating purposes only.
- (5) All DL280 frames include premium class H insulation with VPI, and an insulated opposite drive end bearing.
- (6) For flange mounting options, and TEFC or TEBC options, contact Baldor Electric.



## IEC Medium and Low Inertia Induction Servo (DPG-FV) – Induction

Drip-Proof Guarded Force Ventilated (DPFV), IP23/IC06  
3-Phase, 380V (1), Continuous Constant Torque to Zero Speed

Standard RPM AC DPFV motors inherently have the lowest inertia (highest torque to inertia ratio) of any induction motor. MEDIUM INERTIA INDUCTION SERVO MOTORS use the standard DPFV rotor inertia with high vibration feature enhancements for use in fast response applications.

EXTRA LOW INERTIA RPM AC DPFV motors are available in frames ADL220 and ADL250. These AL frames have been designed specifically to offer the lowest induction motor inertia for even faster response than the MEDIUM INERTIA motors. Typical applications include transfer presses, flying die shears, carriage cut off and cyclic cutter knife drives. RPM AC motors have been successfully applied to various types of positioning systems in the automotive, metals, paper, corrugating and printing industries.

Induction Servo motors are rated in continuous torque instead of HP. To determine the frame size and FLA, select the continuous torque rating in units desired (Lbs-Ft. or Newton Meters) at the required base speed from the table below.

### Features:

- S1 Duty {Continuous}
- 1000:1 Constant Torque Below Base Speed
- Base Speeds: See Rating Table (2)
- Optimum Pole Designs:
  - FDL112 - DL250 Frames - 4 Pole
  - DL280 Frames - 6 Pole
- 40° C Ambient / 1.0 S.F.
- Class H Insulation
- Three Thermostats (1 N.C. per Phase)
- High Vibration Duty Features:
  - Braced Blower Assembly
  - Lockwashers and Loctite™ on All Fasteners
  - VPI Insulation System



Medium Inertia Servo Motors - 50 Hz Blower

Frame	Rotor Inertia			Torque				FLA 1,(4) 380V @ Base Speed					
	WK2	GD2	MR2	Cont	Pk (3)		Cont	Pk (3)	Base RPM (2)				
	LB-FT2	KG-M2	KG-M2	LB-FT	LB-FT	N-M	N-M	500	850	1150	1500	1750	
FDL1106	0.092	0.066	0.016	40	72	54	98	7	12	16	20	23	
FDL1108	0.530	0.088	0.022	55	100	75	135	10	16	21	27	30	
FDL1110	0.645	0.108	0.027	70	125	95	170	12	19	25	39	39	
FDL1112	0.800	0.136	0.034	82	146	111	198	15	24	31	41	47	
RDL1307	1.92	0.320	0.080	92	166	125	225	16	25	33	44	50	
RDL1308	2.32	0.392	0.098	140	251	190	340	23	38	50	63	74	
RDL1310	2.64	0.444	0.111	151	272	205	369	24	40	53	68	79	
RDL1609	3.50	0.590	0.147	200	300	270	405	31	52	69	89	103	
RDL1611	4.20	0.708	0.177	260	390	353	530	41	66	89	166	132	
RDL1613	4.90	0.840	0.210	330	495	447	670	50	84	112	142	115	
DL1811	8.30	1.40	0.350	420	631	570	855	63	105	139	181	206	
DL1813	9.70	1.64	0.410	483	726	655	985	73	121	159	205	234	
DL1815	11.1	1.88	0.470	590	885	800	1200	87	144	194	245	286	
DL2010	21	3.56	0.890	700	1,050	950	1425	104	171	223	291	341	
DL2012	24	4.04	1.01	848	1,526	1150	2070	123	203	270	355	413	
DL2210	35	5.88	1.47	870	1,305	1180	1770	128	209	279	366	426	
DL2212	45	7.60	1.90	1069	1,925	1450	2610	153	252	343	396	511	
DL2510	73	12.32	3.08	1254	2,508	1700	3400	180	295	401	513	602	
DL2512	85	14.32	3.58	1564	3,127	2120	4240	217	370	491	683	792	
DL2808	150	25.28	6.32	1770	2,655	2400	3600	268	446	598	769	890	
DL2810	169	28.48	7.12	2200	3,300	2980	4470	337	561	797	964	1,115	
DL2812	189	31.84	7.96	2400	3,800	3258	4880	360	600	762	1,026	1,186	
DL2814	207	34.88	8.72	2508	4,499	3400	6100	374	623	832	1,070	-	
DL2816	230	38.76	9.69	2650	4,770	3593	6467	423	704	940	1,208	-	
ADL2210	19	3.2	0.8	850	1,529	1153	2073	125	202	271	353	406	
ADL2212	24.5	4.12	1.03	1105	1,988	1498	2695	159	260	347	444	519	
ADL2508	37.8	6.36	1.59	1260	2,519	1709	3415	179	288	390	508	593	
ADL2510	45.5	7.68	1.92	1550	3,098	2102	4201	219	351	476	613	724	
ADL2512	52.4	8.84	2.21	1830	3,658	2481	4959	256	419	562	718	855	

### Notes:

- (1) Standard voltages available: 230, 380, 400, 415, 460 & 575V. Other special voltages available. For FLA sizing use the RPM AC Wizard.
- (2) Other base speeds available.
- (3) Peak (Pk) Torque, is the One-Minute Overload Torque available from 0 RPM to the maximum speed at which the inverter can maintain constant flux at this overload. In some cases this value may be less than base speed.
- (4) For estimating purposes only.

## V\*S Master

- 1000:1 Constant Torque Inverter Duty AC Motors
- TEFC Enclosures in Standard NEMA Frame Ratings
- 2 to 500 Hp

The V\*S Master Inverter Duty AC Motors are designed to provide full load torque continuously from 0 to base speed, often referred to as a 1000:1 constant torque rating. All V\*S Master motors are in standard NEMA frame sizes, smaller ratings in TENV or TEFC enclosures and larger ratings are TEFC.

V\*S Master Inverter Duty AC Motors are specifically designed for operation on inverter power. The V\*S Master has Baldor's inverter duty insulation system which exceeds NEMA's recommendation for Inverter-fed AC motors. This unique insulation system eliminates the formation of corona which can greatly shorten the insulation life of an AC motor that is connected to a PWM inverter. Baldor's Corona-Free insulation system provides much longer motor insulation life. The V\*S Master motors provide an insulated bearing as standard on all 440 frames.

### Features:

- Ratings (Hp) in NEMA standard frame sizes - TENV or TEFC. Blower cooling not required
- Continuous constant rated torque from 0 to base speed (1000:1)
- TEFC enclosures provide class B rise over the 4:1 constant torque speed range
- Cast Iron frames and end shields
- Large selection of different types of encoders available on production orders
- Many modifications available through production or stock modification
- Encoder mounting kits available from stock for hollow shaft encoders
- 200% overload torque for 1 minute below base speed
- Standard base speeds available: 900, 1200 and 1800 RPM.
- Constant horsepower operation to 1.5 times base speed
- Three normally closed thermostats
- Hole drilled and tapped in shaft for encoder mounting
- Opposite drive end insulated bearing on all 440T frames
- Stocked ratings from 2 Hp to 300 Hp
- C-face with feet stocked from 2 Hp to 20 Hp
- Inverter Duty insulation system
- Optimized electrical design for inverter power, not for "across the line" power
- Class F insulation
- 40°C ambient temperature
- Continuous duty
- 1.0 service factor on inverter power
- Re-greaseable bearings
- Stainless steel nameplates
- Hex head hardware

### Applications:

Inverter Duty Applications that require variable or constant torque over 2:1, 4:1, 10:1 or 1000:1 speed ranges. Best solution for Extruders, Web Processing, Paper Machines, Paper Converting, Metal Processing and other applications that require a large constant torque speed range.

### Applications:

- Autotron; HS35M, M4, M685, M485, AV85, AV56
- BEI; HS35
- Dynapar; H20, H56, HS35, X25
- Northstar/Lakeshore; HS35, HSD35, HSD38, HS56, RIM8500, SL85

For more information on encoders, see page 93.



## V\*S Master - Totally Enclosed Fan Cooled (TEFC) & Non-Ventilated (TENV) – Induction

1000:1 Constant Torque (1)  
 2 - 500 Hp  
 3-Phase, 460V (2)

### Features:

- Continuous Duty
- Inverter Duty – Not For “Across the Line” Operation
- Standard 1 Minute Overload 200% below Base Speed
- Class F Insulation
- 40° C Ambient / 1.0 S.F.
- Constant Horsepower Speed Range - 1.5 Times Base Speed (3)
- Three Thermostats (1 N.C. per Phase)
- F-1 Mounting as Standard
- Cast Iron Frame & End Brackets
- Encoder Provisions (4)
- Insulated O.D.E. Bearing as Standard on All 440 Frames
- Optimum Pole designs



Hp	Synch RPM	Frame	Enclosure	Catalog Number	FLA (5) @ 460V
2	1200	184T	TENV		3.4
	1200	184T	TEFC		3.4
	900	213T	TEFC		3.4
3	1800	182T	TENV	IDVSNM3661T	4.8
	1800	182T	TEFC	IDVSM3661T	4.8
	1500	182T	TEFC		4.8
	1200	215T	TENV		3.9
	1200	213T	TEFC		4.8
5	900	L215T	TEFC		4.8
	1800	L184T	TENV	IDVSNM3665T	7.6
	1800	L184T	TEFC	IDVSM3665T	7.6
	1500	L184T	TEFC		7
	1200	L215T	TENV		6.2
7.5	1200	L215T	TEFC		7.6
	900	254T	TEFC		6.7
	1800	L215T	TENV	IDVSNM2237T	11
	1800	213T	TEFC	IDVSM3770T	11
	1500	213T	TEFC		10
10	1200	254T	TEFC		9.5
	900	256T	TEFC		11
	1800	254T	TENV	IDVSNM2238T	14
	1800	L215T	TEFC	IDVSM3774T	12.4
	1500	L215T	TEFC		14
15	1200	256T	TEFC		12.6
	900	284T	TEFC		13
	1800	256T	TENV	IDVSNM2333T	21
	1800	254T	TEFC	IDVSM2333T	21
	1500	254T	TEFC		21
20	1200	284T	TEFC		19.2
	900	286T	TEFC		21
	1800	284T	TENV		24.3
	1800	256T	TEFC	IDVSM2334T	25.6
	1500	284T	TEFC		25.6
20	1200	286T	TEFC		25.3
	900	324T	TEFC		27

Hp	Synch RPM	Frame	Enclosure	Catalog Number	FLA (5) @ 460V
25	1800	324T	TENV		30.6
	1800	284T	TEFC	IDVSM4103T	31
	1500	284T	TEFC		32
	1200	324T	TEFC		31.6
30	900	326T	TEFC		34
	1800	326T	TENV		36.4
	1800	286T	TEFC	IDVSM4104T	38.3
	1500	324T	TEFC		38.3
40	1200	326T	TEFC		37.5
	900	364T	TEFC		40
	1800	364T	TENV		48.2
	1800	324T	TEFC	IDVSM4110T	49.8
50	1500	324T	TEFC		50.7
	1200	364T	TEFC		49.6
	900	365T	TEFC		52
	1800	404T	TENV		57.9
60	1800	326T	TEFC	IDVSM4115T	62.6
	1500	364T	TEFC		64.1
	1200	365T	TEFC		60.7
	900	404T	TEFC		65
75	1800	364T	TEFC	IDVSM4314T	71.4
	1500	364T	TEFC		74
	1200	404T	TEFC		71.1
	900	405T	TEFC		77
100	1800	365T	TEFC	IDVSM4316T	89.4
	1500	405T	TEFC		91
	1200	405T	TEFC		85.1
	900	444T	TEFC		89
125	1800	405T	TEFC	IDVSM4400T-4	116
	1500	444T	TEFC		118
	1200	444T	TEFC		115
	900	445T	TEFC		124
125	1800	444T	TEFC	IDVSM4410T-4	151
	1500	445T	TEFC		152
	1200	445T	TEFC		142
125	900	447T	TEFC		156

## V\*S Master - Totally Enclosed Fan Cooled (TEFC) & Non-Ventilated (TENV) - Induction

Hp	Synch RPM	Frame	Enclosure	Catalog Number	FLA (5) @ 460V
150	1800	445T	TEFC	IDVSM4406T-4	178
	1500	445T	TEFC		178
	1200	447T	TEFC		180
	900	449T	TEFC		180
200	1800	447T	TEFC	IDVSM4407T-4	226
	1500	447T	TEFC		231
	1200	449T	TEFC		224
	900	L449T	TEFC		240
250	1800	449T	TEFC	IDVSM4408T-4	279
	1500	449T	TEFC		288
	1200	449T	TEFC		283
	900(6)	L449T	TEFC		302
300	1800	449T	TEFC	IDVSM44304T-4	339
	1500	L449T	TEFC		348
	1200	L449T	TEFC		341
350	1800	L449T	TEFC		398
	1500	L449T	TEFC		398
400	1800	L449T	TEFC		446
	1500 (7)	L449T	TEFC		458
450	1800	L449T	TEFC		502
	1500 (7)	L449T(6)	TEFC		515
500	1800(7)	L449T	TEFC		551

**Notes:**

- (1) 1000:1 constant torque is another way of stating that the motor is designed to operate from zero speed to base speed with continuous full load current and torque.  
All V\*S Master TEFC and TENV motors are designed to operate continuously at zero speed without over heating.
- (2) Standard voltages available: 230, 380, 460 & 575V.
- (3) For Constant Horsepower Speed Ranges greater than 1.5 times the motor base speed, please contact Baldor.
- (4) Encoder provisions as standard  
TEFC - Hole drilled and tapped for stub shaft  
TENV - Machined O.D.E. bracket as well as hole drilled and tapped for stub shaft
- (5) For estimating purposes only.
- (6) Class H Insulation.
- (7) Rated only for 4:1 constant torque speed range, F Rise.

## V\*S Master – Totally Enclosed Fan Cooled (TEFC) 4:1 B Rise – Induction

4:1 Constant Torque (1) with Class B Rise (80°C)  
 1000:1 Constant Torque (2) with Class F Rise (105°C)  
 2 - 450 Hp  
 3-Phase, 460V (3)

### Features:

- Continuous Duty
- Inverter Duty - Not for "Across the Line" Operation
- Standard 1 Minute Overload 200% below base speed
- Class F Insulation
- 40° C Ambient / 1.0 S.F.
- Constant Horsepower Speed Range - 1.5 Times Base Speed (4)
- Three Thermostats (1 N.C. per Phase)
- F-1 Mounting as Standard
- Cast Iron Frame & End Brackets
- Encoder Provisions (5)
- Insulated O.D.E. Bearing as Standard on All 440 Frames
- See Previous Product Page for Complete Description & Features



Hp	Synch RPM	Frame	FLA(6) @ 460V
2	1200	184T	3.4
3	1800	182T	4.8
	1200	213T	4.8
5	1800	L184T	7.6
	1200	L215T	7.6
7.5	1800	213T	11
	1200	254T	9.5
10	1800	L215T	12.4
	1200	256T	12.6
15	1800	254T	21
	1200	284T	19.2
20	1800	256T	25.6
	1200	286T	25.3
25	1800	284T	31
	1200	324T	31.6
30	1800	286T	38.3
	1200	326T	37.5
40	1800	324T	49.8
	1200	364T	49.6
50	1800	326T	62.6
	1200	365T	60.7
60	1800	364T	71.4
	1200	404T	71.1
75	1800	365T	89.4
	1200	405T	85.1
100	1800	405T	116
	1200	444T	115
125	1800	444T	151
	1200	445T	142
150	1800	445T	178
	1200	447T	180

Hp	Synch RPM	Frame	FLA(6) @ 460V
200	1800	447T	226
	1200	449T	224
250	1800	449T	279
	1200	L449T	283
300	1800	449T	339
	1200	L449T	341
350	1800	L449T	398
400	1800	L449T	446
450	1800	L449T	502

### Notes:

- (1) 4:1 constant torque with Class B Rise means that the V\*S Master motors listed above, will operate with a Class B Rise over at least a 4 to 1 speed range (for example 450 to 1800 rpm).  
 Many customers request Class B Rise for increased insulation and bearing life or have safety specifications with regard to motor skin temperature.
- (2) 1000:1 constant is another way of stating that the motor is designed to operate from zero speed to base speed with full load current and torque.  
 The V\*S Master TEFC and TENV motors are designed to operate continuously at zero speed.
- (3) Standard voltages available: 230, 380, 460 & 575v. For any other special voltage, please see voltage in modification section.
- (4) For Constant Horsepower Speed Ranges greater than 1.5 times the motor base speed, please contact Variable Speed Product Marketing for pricing.
- (5) Encoder provisions as standard, TEFC - Hole drilled and tapped for stub shaft
- (6) For estimating purposes only.
- (7) 841XL features do not necessarily mean that the Inverter Duty motor will meet Temperature Rise or Noise Levels proposed by IEEE841 fixed speed specifications. VSM-841XL will meet the mechanical features of the 841XL motor.

## V\*S Master - Totally Enclosed Fan Cooled (FCXP) – Induction

Division 1 Hazardous Location,  
 CI I Groups C & D, Class II Groups E, F & G  
 1000:1 Constant Torque (1),  
 T3C with IGBT drive @ 2kHz carrier frequency  
 1.5 - 300 Hp  
 3-PHASE, 460V (2)

### Features:

- Continuous Duty
- Inverter Duty - Not For "Across the Line" Operation
- Standard 1 Minute Overload 200% below Base Speed
- Class F Insulation
- 40° C Ambient / 1.0 S.F.
- Constant Horsepower Speed Range - 1.5 Times Base Speed (3)
- Three Thermostats (1 N.C. per Phase)
- F-1 Mounting as Standard
- Cast Iron Frame & End Brackets
- Encoder Provisions (4)
- Insulated O.D.E. Bearing as Standard on All 440 Frames
- Optimum Pole designs



Hp	Synch RPM	Frame	Enclosure	FLA (5) @ 460V
1.5	1200	L182T	TEFC	
2	1200	184T	TEFC	3.4
3	1800	L182T	TEFC	4.8
	1200	213T	TEFC	4.8
5	1800	L184T	TEFC	7.6
	1200	L215T	TEFC	7.6
7.5	1800	213T	TEFC	11
	1200	254T	TEFC	9.5
10	1800	L215T	TEFC	12.4
	1200	256T	TEFC	12.6
15	1800	254T	TEFC	21
	1200	284T	TEFC	19.2
20	1800	256T	TEFC	25.6
	1200	286T	TEFC	25.3
25	1800	284T	TEFC	31
	1200	324T	TEFC	31.6
30	1800	286T	TEFC	38.3
	1200	326T	TEFC	37.5
40	1800	324T	TEFC	49.8
	1200	364T	TEFC	49.6
50	1800	326T	TEFC	62.6
	1200	365T	TEFC	60.7
60	1800	364T	TEFC	71.4
	1200	404T	TEFC	71.1
75	1800	365T	TEFC	89.4
	1200	405T	TEFC	85.1

Hp	Synch RPM	Frame	Enclosure	FLA (5) @ 460V
100	1800	405T	TEFC	116
	1200	444T	TEFC	115
125	1800	444T	TEFC	151
	1200	445T	TEFC	142
150	1800	445T	TEFC	178
	1200	447T	TEFC	180
200	1800	447T	TEFC	226
	1200	449T	TEFC	224
250	1800	449T	TEFC	279
	1200	449T	TEFC	283
300	1800	449T	TEFC	339

### Notes:

- (1) 1000:1 constant torque is another way of stating that the motor is designed to operate from zero speed to base speed with continuous full load current and torque.  
 All V\*S Master TEFC XP motors are designed to operate continuously at zero speed without over heating.
- (2) Standard voltages available: 230, 380, 460 & 575V.
- (3) For Constant Horsepower Speed Ranges greater than 1.5 times the motor base speed, please contact Baldor.
- (4) Encoder provisions as standard  
 TEFC - Hole drilled and tapped for stub shaft  
 TENV - Machined O.D.E. bracket as well as hole drilled and tapped for stub shaft
- (5) For estimating purposes only.

## V\*S Master – IEC Totally Enclosed Fan Cooled (TEFC)

IP44 - IC411  
 1000:1 Constant Torque  
 1.5 - 335 kW  
 3-Phase, 415V (1)

### Features:

- S1 Duty (Continuous)
- Inverter Duty - Not for "Across the Line" Operation
- Standard 1 Minute Overload  
 - 200% Below Base Speed
- Class F Insulation
- 40° C Ambient / 1.0 S.F.
- Three Thermostats (1 N.C. per Phase)
- Constant Horsepower Speed Range - 1.5 Times Base Speed (2)
- IEC Standard Conduit Box (NEMA F-2)
- Cast Iron Frame & End Brackets
- Encoder Provisions (3)
- Insulated O.D.E. Bearing as Standard on All 280 Frames
- Terminal Strips for Main Power Leads in Conduit Box
- B-3 Mounting
- "CE" Label



kW	Synch RPM	Frame	FLA (4) @ 415V
1.5	1500	112S	3
2.2	1500	112S	4.4
4	1500	L112M	7.7
5.5	1500	132S	10.5
7.5	1500	L132M	16.7
11	1500	160M	20.3
15	1500	160L(5)	28
		180M	28
18.5	1500	180M	34.7
22	1500	200M	42
30	1500	200M	56.2
37	1500	225S	71
45	1500	225S	81

kW	Synch RPM	Frame	FLA (4) @ 415V
55	1500	250M	100
75	1500	250M(5)	130
		280S	130
90	1500	280S	163
110	1500	280M	192
132	1500	280K	224
150	1500	280K	256
186	1500	280H	319
224	1500	L280H	390
250	1500	L280H	423
300	1500	L280H(6)	502
335	1500	L280H(6)	567

### Notes:

- (1) Standard voltages available: 380, 400 & 415v. For any other special voltage, please see voltage in modification section.
- (2) For Constant Horsepower Speed Ranges greater than 1.5 times the motor base speed, please contact Variable Speed Product Marketing for pricing.
- (3) Encoder provisions as standard, TEFC - Hole drilled and tapped for stub shaft
- (4) For estimating purposes only.
- (5) Rated for 10:1 constant torque speed range for given frame sizes.
- (6) Rated for 4:1 constant torque. Contact Variable Speed Product Marketing for quotation on a TEBC for 1000:1 constant torque.

For modification pricing, please use the following IEC-to-NEMA frame size cross reference chart for proper pricing additions.

IEC Frame	112	132	160	200	225	250	280
NEMA Frame	180	210	250	320	360	400	440

## FL Frame Dimension Sheet Index Table

To determine dimension sheet number, select basic number from BY FRAME SIZE AND ENCLOSURE table. Use extension numbers in table for specific flange required.

**Example:** TENV FL1852C with 250TC face, 75 Ft-Lb brake, HS35 encoder: 617234-23 and 616779-52

**NEMA:** FL180, FL210, FL250 & FL440 FRAMES

**IEC:** FDL112, FDL132, FDL160, FDL180 & FDL280 FRAMES

### Dimension Sheet Extension Index for Foot/Flange Options

Extension number for Flange Mounting Enclosure

Type	Enclosure	
	TENV, TEFC, TEBC, DPFV,	TEBC - XT
FOOT MOUNTED	-1	-21
NEMA 180T C FACE	-3	-4
NEMA 210T C FACE	-13	-14
NEMA 250T C FACE	-23	-24
NEMA D FLANGE	-5	-6
IEC DIN FLANGE B3/B5 (Y SUFFIX) & IP54	-502	-522

### Accessory Dimension Sheets for FL Frames

Use Motor Basic Dimension Sheet And

Motors with Encoders	616779-55
Motors with Brakes	616779-53
Motors with Brakes & Encoders	616779-52
Conduit Box Dimensions	616779-50



# FL Frame Dimension Sheet Index Table

NEMA Frame		
Foot Mounted		
Frame	Enclosure	Dimension Sheet
FL1831	TENV	617226-1
FL1831	TEAO-BC	617227-1
FL1831	TEFC	617227-1
FL1831	TEAO-PB	617227-201
FL1831	DPFV	617528-1
FL1838	TENV	617228-1
FL1838	TEAO-BC	617229-1
FL1838	TEFC	617229-1
FL1838	TEAO-PB	617229-201
FL1838	DPFV	617230-1
FL1844	TENV	617231-1
FL1844	TEAO-BC	617232-1
FL1844	TEFC	617232-1
FL1844	TEAO-PB	617232-201
FL1844	DPFV	617233-1
FL1852	TENV	617234-1
FL1852	TEAO-BC	617235-1
FL1852	TEFC	617235-1
FL1852	TEAO-PB	617235-201
FL1852	DPFV	617236-1
FL2162	TENV	617516-1
FL2162	TEAO-BC	617517-1
FL2162	TEFC	617517-1
FL2162	TEAO-PB	617517-201
FL2162	DPFV	617518-1
FL2162	DPSV	617519-1
FL2168	TENV	617520-1
FL2168	TEAO-BC	617521-1
FL2168	TEFC	617521-1
FL2168	TEAO-PB	617521-201
FL2168	DPFV	617522-1
FL2168	DPSV	617523-1
FL2173	TENV	617524-1
FL2173	TEAO-BC	617525-1
FL2173	TEFC	617525-1
FL2173	TEAO-PB	617525-201
FL2173	DPFV	617526-1
FL2173	DPSV	617527-1
FL2570	TENV	617572-1
FL2570	TEAO-BC	617573-1
FL2570	TEFC	617573-1
FL2570	TEAO-PB	617573-201
FL2570	DPFV	617574-1
FL2570	DPSV	617575-1

NEMA Frame		
Foot Mounted		
Frame	Enclosure	Dimension Sheet
FL2578	TENV	617576-1
FL2578	TEAO-BC	617577-1
FL2578	TEFC	617577-1
FL2578	TEAO-PB	617577-201
FL2578	DPFV	617578-1
FL2578	DPSV	617579-1
FL2586	TENV	617580-1
FL2586	TEAO-BC	617581-1
FL2586	TEFC	617581-1
FL2586	TEAO-PB	617581-201
FL2586	DPFV	617582-1
FL2586	DPSV	617583-1
FL2882	TENV	617241-1
FL2882	TEAO-BC	617530-1
FL2882	TEFC	617242-1
FL2882	TEAO-PB	617530-201
FL2890	TENV	617244-1
FL2890	TEAO-BC	617531-1
FL2890	TEFC	617245-1
FL2890	TEAO-PB	617531-201
FL2898	TENV	617247-1
FL2898	TEAO-BC	617532-1
FL2898	TEFC	617248-1
FL2898	TEAO-PB	617532-201
FL4429	TENV	617533-1
FL4429	TEAO-BC	617534-1
FL4429	TEFC	617535-1
FL4429	TEAO-PB	617534-201
FL4440	TENV	617565-1
FL4440	TEAO-BC	617566-1
FL4440	TEFC	617567-1
FL4440	TEAO-PB	617566-201
FL4451	TENV	617568-1
FL4451	TEAO-BC	617569-1
FL4451	TEFC	617570-1
FL4451	TEAO-PB	617569-201
FL4461	TENV	617546-1
FL4461	TEAO-BC	617547-1
FL4461	TEFC	617548-1
FL4461	TEAO-PB	617547-201
FL4473	TENV	619613-1
FL4473	TEAO-BC	619614-1
FL4473	TEFC	619615-1
FL4473	TEAO-PB	619614-201

V\*S Product Line

Inverter/Vector Motors

RPM AC

RPM AC NEMA Permanent Magnet

RPM AC NEMA Induction

RPM AC IEC Induction

V\*S Master

Dimensions and Connections

Encoders

## FL Frame Dimension Sheet Index Table

IEC Frame		
B3 (Foot Mounted)		
Frame	Cooling & Enclosure	Dimension Sheet
FDL1106	IP44/IC410	617226-501
FDL1106	IP44/IC416-BC	617227-501
FDL1106	IP44/IC416-FC	617227-501
FDL1106	IP44/IC416-PB	617227-701
FDL1106	IP23/IC06	617528-501
FDL1108	IP44/IC410	617228-501
FDL1108	IP44/IC416-BC	617229-501
FDL1108	IP44/IC416-FC	617229-501
FDL1108	IP44/IC416-PB	617229-701
FDL1108	IP23/IC06	617230-501
FDL1110	IP44/IC410	617231-501
FDL1110	IP44/IC416-BC	617232-501
FDL1110	IP44/IC416-FC	617232-501
FDL1110	IP44/IC416-PB	617232-701
FDL1110	IP23/IC06	617233-501
FDL1112	IP44/IC410	617234-501
FDL1112	IP44/IC416-BC	617235-501
FDL1112	IP44/IC416-FC	617235-501
FDL1112	IP44/IC416-PB	617235-701
FDL1112	IP23/IC06	617236-501
FDL1307	IP44/IC410	617516-501
FDL1307	IP44/IC416-BC	617517-501
FDL1307	IP44/IC416-FC	617517-501
FDL1307	IP44/IC416-PB	617517-701
FDL1307	IP23/IC06	617518-501
FDL1308	IP44/IC410	617520-501
FDL1308	IP44/IC416-BC	617521-501
FDL1308	IP44/IC416-FC	617521-501
FDL1308	IP44/IC416-PB	617521-701
FDL1308	IP23/IC06	617522-501
FDL1310	IP44/IC410	617524-501
FDL1310	IP44/IC416-BC	617525-501
FDL1310	IP44/IC416-FC	617525-501
FDL1310	IP44/IC416-PB	617525-701
FDL1310	IP23/IC06	617526-501
FDL1609	IP44/IC410	617572-501
FDL1609	IP44/IC416-BC	617573-501
FDL1609	IP44/IC416-FC	617573-501
FDL1609	IP44/IC416-PB	617573-701
FDL1609	IP23/IC06	617574-501
FDL1611	IP44/IC410	617576-501
FDL1611	IP44/IC416-BC	617577-501
FDL1611	IP44/IC416-FC	617577-501
FDL1611	IP44/IC416-PB	617577-701
FDL1611	IP23/IC06	617578-501

IEC Frame		
B3 (Foot Mounted)		
Frame	Cooling & Enclosure	Dimension Sheet
FDL1613	IP44/IC410	617580-501
FDL1613	IP44/IC416-BC	617581-501
FDL1613	IP44/IC416-FC	617581-501
FDL1613	IP44/IC416-PB	617581-701
FDL1613	IP23/IC06	617582-501
FDL1811	IP44/IC410	617241-501
FDL1811	IP44/IC416-BC	617530-501
FDL1811	IP44/IC416-FC	617242-501
FDL1811	IP44/IC416-PB	617530-701
FDL1813	IP44/IC410	617244-501
FDL1813	IP44/IC416-BC	617531-501
FDL1813	IP44/IC416-FC	617245-501
FDL1813	IP44/IC416-PB	617531-701
FDL1815	IP44/IC410	617247-501
FDL1815	IP44/IC416-BC	617532-501
FDL1815	IP44/IC416-FC	617248-501
FDL1815	IP44/IC416-PB	617532-701
FDL2808	IP44/IC410	617533-501
FDL2808	IP44/IC416-BC	617534-501
FDL2808	IP44/IC416-FC	617535-501
FDL2808	IP44/IC416-PB	617534-701
FDL2810	IP44/IC410	617565-501
FDL2810	IP44/IC416-BC	617566-501
FDL2810	IP44/IC416-FC	617567-501
FDL2810	IP44/IC416-PB	617566-701
FDL2812	IP44/IC410	617568-501
FDL2812	IP44/IC416-BC	617569-501
FDL2812	IP44/IC416-FC	617570-501
FDL2812	IP44/IC416-PB	617569-701
FDL2814	IP44/IC410	617546-501
FDL2814	IP44/IC416-BC	617547-501
FDL2814	IP44/IC416-FC	617548-501
FDL2814	IP44/IC416-PB	617547-701
FDL2816	IP44/IC410	619613-501
FDL2816	IP44/IC416-BC	619614-501
FDL2816	IP44/IC416-FC	619615-501
FDL2816	IP44/IC416-PB	619614-701

## RL Frame Dimension Sheet Index Table

To determine dimension sheet number, select basic number from BY FRAME SIZE AND ENCLOSURE table. Use extension numbers in table for specific flange required.

**Example:** TENV FL1852C with 250TC face, 75 Ft-Lb brake, HS35 encoder: 617234-23 and 616779-52

**NEMA:** RL210 - RL280 FRAMES

**IEC:** RDL132 - RDL180 FRAMES

### Dimension Sheet Extension Index for Foot/Flange Options

Extension number for Flange Mounting Enclosure	
Type	Enclosure
NEMA 210 C FACE	-3
NEMA 250 C FACE	-13
D FLANGE	Available – Contact Sales Support
IEC FLANGE B3/B5 (Y SUFFIX)	-702

Accessory Dimension Sheets for RL Frames	
Motors with Encoders	616779-10
Motors with Brakes	616779-13
Motors with Brakes & Encoders	616779-16
Conduit Box Dimensions	616779-50

## RL Frame Size and Enclosure

NEMA Frame		
Foot Mounted		
RL2153	TENV	617254-1
RL2153	TEAO-BC	617255-1
RL2153	TEFC	617255-1
RL2153	TEAO-PB	617255-201
RL2153	DPFV	617256-1
RL2158	TENV	617257-1
RL2158	TEAO-BC	617258-1
RL2158	TEFC	617258-1
RL2158	TEAO-PB	617258-201
RL2158	DPFV	617259-1
RL2162	TENV	617200-1
RL2162	TEAO-BC	617201-1
RL2162	TEFC	617201-1
RL2162	TEAO-PB	617201-201
RL2162	DPFV	617202-1
RL2162	DPSV	617203-1
RL2168	TENV	617204-1
RL2168	TEAO-BC	617205-1
RL2168	TEFC	617205-1
RL2168	TEAO-PB	617205-201
RL2168	DPFV	617206-1
RL2168	DPSV	617207-1
RL2173	TENV	617208-1
RL2173	TEAO-BC	617209-1
RL2173	TEFC	617209-1
RL2173	TEAO-PB	617209-201
RL2173	DPFV	617210-1
RL2173	DPSV	617211-1

NEMA Frame		
Foot Mounted		
RL2570	TENV	617212-1
RL2570	TEAO-BC	617213-1
RL2570	TEFC	617213-1
RL2570	TEAO-PB	617213-201
RL2570	DPFV	617214-1
RL2570	DPSV	617215-1
RL2578	TENV	617216-1
RL2578	TEAO-BC	617217-1
RL2578	TEFC	617217-1
RL2578	TEAO-PB	617217-201
RL2578	DPFV	617218-1
RL2578	DPSV	617219-1
RL2586	TENV	617220-1
RL2586	TEAO-BC	617221-1
RL2586	TEFC	617221-1
RL2586	TEAO-PB	617221-201
RL2586	DPFV	617222-1
RL2586	DPSV	617223-1
RL2882	DPFV	617243-1
RL2882	DPSV	619617-1
RL2890	DPFV	617246-1
RL2890	DPSV	619618-1
RL2898	DPFV	617249-1
RL2898	DPSV	619619-1

## RL Frame Size and Enclosure

### IEC Frame

#### B3 (Foot Mounted)

RDL1303	IP44/IC410	617254-501
RDL1303	IP44/IC416-BC	617255-501
RDL1303	IP44/IC416-FC	617255-501
RDL1303	IP44/IC416-PB	617255-701
RDL1303	IP23/IC06	617256-501
RDL1305	IP44/IC410	617257-501
RDL1305	IP44/IC416-BC	617258-501
RDL1305	IP44/IC416-FC	617258-501
RDL1305	IP44/IC416-PB	617258-701
RDL1305	IP23/IC06	617259-501
RDL1307	IP44/IC410	617200-501
RDL1307	IP44/IC416-BC	617201-501
RDL1307	IP44/IC416-FC	617201-501
RDL1307	IP44/IC416-PB	617201-701
RDL1307	IP23/IC06	617202-501
RDL1308	IP44/IC410	617204-501
RDL1308	IP44/IC416-BC	617205-501
RDL1308	IP44/IC416-FC	617205-501
RDL1308	IP44/IC416-PB	617205-701
RDL1308	IP23/IC06	617206-501
RDL1310	IP44/IC410	617208-501
RDL1310	IP44/IC416-BC	617209-501
RDL1310	IP44/IC416-FC	617209-501
RDL1310	IP44/IC416-PB	617209-701
RDL1310	IP23/IC06	617210-501

### IEC Frame

#### B3 (Foot Mounted)

RDL1609	IP44/IC410	617212-501
RDL1609	IP44/IC416-BC	617213-501
RDL1609	IP44/IC416-FC	617213-501
RDL1609	IP44/IC416-PB	617213-701
RDL1609	IP23/IC06	617214-501
RDL1611	IP44/IC410	617216-501
RDL1611	IP44/IC416-BC	617217-501
RDL1611	IP44/IC416-FC	617217-501
RDL1611	IP44/IC416-PB	617217-701
RDL1611	IP23/IC06	617218-501
RDL1613	IP44/IC410	617220-501
RDL1613	IP44/IC416-BC	617221-501
RDL1613	IP44/IC416-FC	617221-501
RDL1613	IP44/IC416-PB	617221-701
RDL1613	IP23/IC06	617222-501
RDL1811	IP23/IC06	617243-501
RDL1813	IP23/IC06	617246-501
RDL1815	IP23/IC06	617249-501

V\*S Product Line

Inverter/Vector  
Motors

RPM AC

RPM AC NEMA  
Permanent MagnetRPM AC NEMA  
InductionRPM AC IEC  
Induction

V\*S Master

Dimensions and  
Connections

Encoders

# L Frame Dimension Sheet Index Table – NEMA and IEC

To determine dimension sheet number, select basic number from BY FRAME SIZE AND ENCLOSURE table. Use extension numbers in table for specific flange required.

**Example:** TENV FL1852C with 250TC face, 75 Ft-Lb brake, HS35 encoder: 617234-23 and 616779-52

**NEMA:** L280, L320, L360, L400, L440

**IEC:** DL180, DL200, DL220, DL250, DL280

## INDEX BY ENCLOSURE

Enclosure	Mounting	Frame Size	Dimension Sheet Index		
			Motor		
			NEMA / IEC	NEMA	IEC
DPFV IP23-IC06	Foot	L280 / DL180	616760-1	616760-601	
	NEMA 360TC C-Face & Shaft	L280	616760-6	-	
	NEMA 280TD D-Flange	L280	616760-21	-	
	Foot	L320 / DL200	616764-1	616764-601	
	NEMA 320TC C-Face & Shaft	L320	616764-13	-	
	DZ-Flange & Feet	L320	609998-9	-	
	Foot	L360 / DL220	609998-1	616457-601	
	DZ-Flange & Feet	L360	609998-9	-	
	Foot	L400 / DL250	609998-1	616467-601	
	DZ-Flange & Feet	L400	609998-9	-	
DPSV IP23-IC17		NEMA / IEC	NEMA	IEC	
	Foot	L280 / DL180	616761-1	616761-601	
	Foot	L320 / DL200	616765-1	616765-601	
	Foot	L360 / DL220	609996-1	616458-601	
	Foot	L400 / DL250	616773-1	616468-601	
	Foot	L440 / DL280	616063-1	616783-601	
	TENV IP44-IC410	Foot	L280 / DL180	616758-1	616758-601
		NEMA 280TC C-Face & Shaft	L280	616758-23	-
		Foot	L320 / DL200	616762-1	616762-601
		320TCZ C-Face & Shaft	L320	616762-4	-
Foot		L360 / DL220	609995-1	616455-601	
Foot		L400 / DL250	609995-1	616465-601	
L320TDZ D-flange		L320	616762-5	-	
TEFC IP44-IC411	Foot	L280 / DL180	616759-400	616436-601	
	Foot	L320 / DL200	616763-400	616446-601	
	Foot	L360 / DL220	609994-201	616456-601	
	Foot	L400 / DL250	609994-201	616466-601	
	Foot	L280 / DL180	616759-1	616759-601	
	NEMA 280TC C-Face & Shaft	L280 / DL180	616759-23	-	
	IEC 350mm Din Flange / Ft.	DL1811 - DL1815	-	616439-705	
	Foot	L320 / DL200	616763-1	616763-601	
TEBC IP44-IC416	Foot/CZ-Face	L320-L360	609994-3	-	
	Foot / DZ-Flange	L320-L360	609994-6	-	
	IEC 400mm Din Flange / Ft.	DL2010 - DL2012	-	616449-705	
	Foot	L360 / DL220	609994-1	616459-601	
	Foot	L400 / DL250	609994-1	616469-601	

## L Frame Dimension Sheet Index Table – NEMA and IEC

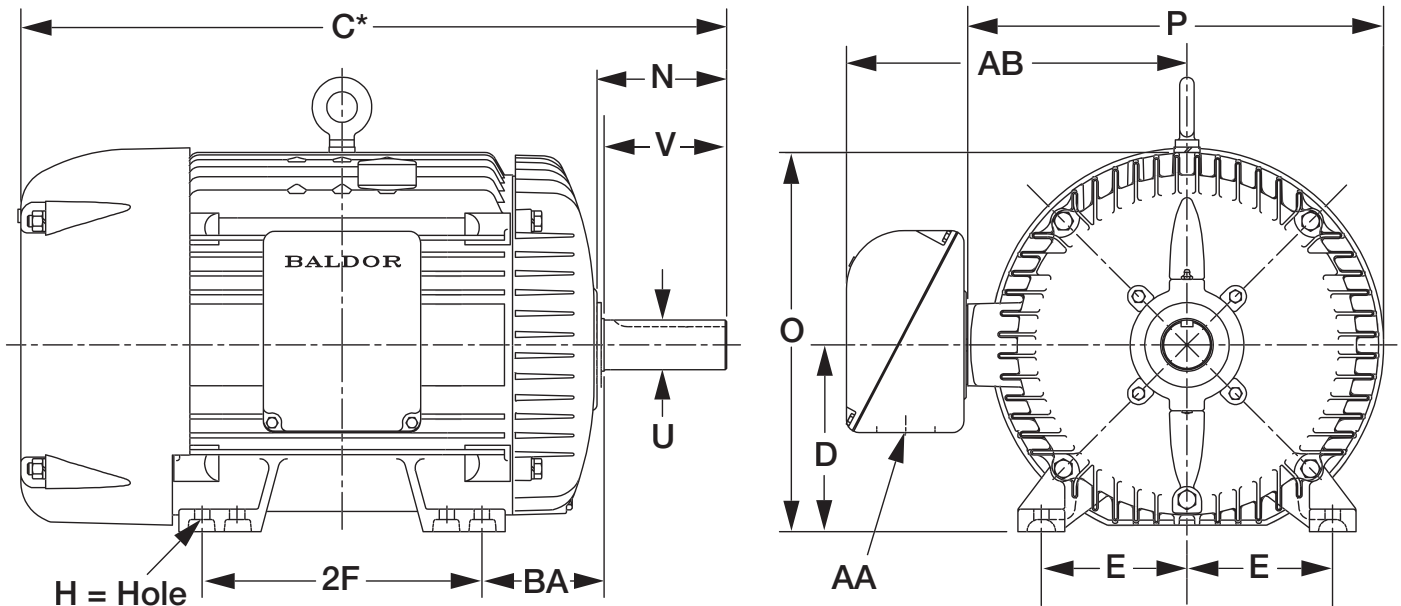
### Index by Enclosure

Enclosure	Mounting	Frame Size	Dimension Sheet Index	
			Motor	
			NEMA	IEC
TEAO-PB IP44-IC416	Foot	L280 / DL180	616759-200	
	Foot	L320 / DL200	609994-71	
	Foot	L360 / DL220	609994-71	
	Foot	L400 / DL250	609994-71	
	Foot	L440 / DL280	615919-1	616471-601
TESV IP44-IC37	Foot	L280 / DL180	616761-1	
	Foot	L320 / DL200	616765-1	
TEDC-AA IP44-IC616	Foot			
	Foot	L360 / DL220	616767-500	
	Foot	L400 / DL250	616771-500	
	Foot	L440 / DL280	615919-27	616470-625
TEDC-AW IP44-IC666	Foot	L440 / DL280	615919-28	

### Accessory Dimension Sheets for L280 - L440 (IEC DL180-DL280) Frames

		Frame	
		L280 - L440	
Conduit Box	NEMA	616779-1	
	IEC	616779-1	
Encoder	NEMA	616779-10	
	IEC	616779-10m	
Brake	NEMA	616779-13	
	IEC		
Brake & Encoder	NEMA	616779-16	
	IEC		
		Frame	
		FL180 - L280	L320 - L400
XP Conduit Box	NEMA	609959-8	609979-9

## Motor Dimensions



### 182 - 449T Frames

**Note:** Dimensions are for estimating purposes only. For the exact dimensions refer to the referenced dimension sheet by model number

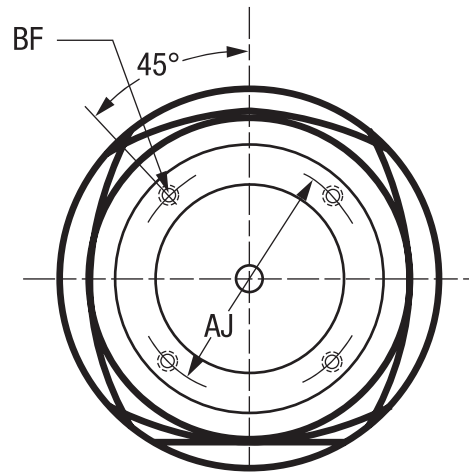
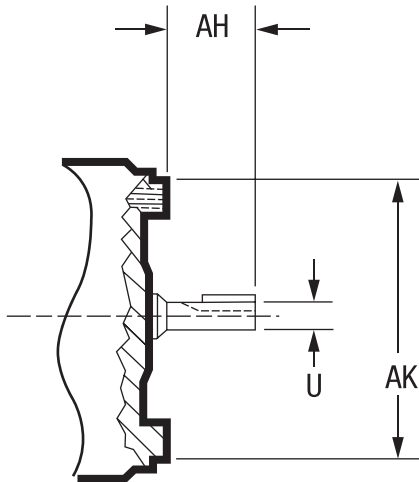
Frame Size	2F	BA	N	V	U	2E	D
182	4.50	2.75	3.00	2.50	1.125	7.50	4.50
184	5.50	2.75	3.00	2.50	1.125	7.50	4.50
213	5.50	3.50	3.62	3.12	1.375	8.50	5.25
215	7.00	3.50	3.62	3.12	1.375	8.50	5.25
254T	8.25	4.25	4.12	3.75	1.625	10.00	6.25
256T	10.00	4.25	4.12	3.75	1.625	10.00	6.25
284T	9.50	4.75	5.00	4.38	1.875	11.00	7.00
284TS	9.50	4.75	3.62	3.00	1.625	11.00	7.00
286T	11.00	4.75	5.00	4.38	1.875	11.00	7.00
286TS	11.00	4.75	3.62	3.00	1.625	11.00	7.00
324T	10.50	5.25	5.62	5.00	2.125	12.50	8.00
324TS	10.50	5.25	4.12	3.50	1.875	12.50	8.00
326T	12.00	5.25	5.62	5.00	2.125	12.50	8.00
326TS	12.00	5.25	4.12	3.50	1.875	12.50	8.00
364T	11.25	5.88	6.25	5.62	2.375	14.00	9.00
364TS	11.25	5.88	4.12	3.50	1.875	14.00	9.00
365T	12.25	5.88	6.25	5.62	2.375	14.00	9.00
365TS	12.25	5.88	4.12	3.50	1.875	14.00	9.00
404T	12.25	6.62	7.50	7.00	2.875	16.00	10.00
404TS	12.25	6.62	4.50	4.00	2.125	16.00	10.00
405T	13.75	6.62	7.50	7.00	2.875	16.00	10.00
405TS	13.75	6.62	4.50	4.00	2.125	16.00	10.00
444T	14.50	7.50	8.94	8.25	3.375	18.00	11.00
444TS	14.50	7.50	5.19	4.50	2.375	18.00	11.00
445T	16.50	7.50	8.94	8.25	3.375	18.00	11.00
445TS	16.50	7.50	5.19	4.50	2.375	18.00	11.00
447T	20.00	7.50	8.50	8.25	3.375	18.00	11.00
447TS	20.00	7.50	4.75	4.50	2.375	18.00	11.00
449T	25.00	7.50	8.50	8.25	3.375	18.00	11.00
449TS	25.00	7.50	4.75	4.50	2.375	18.00	11.00
L449T	25.00	-	8.06	8.06	3.375	18.00	11.00
L449TS	25.00	-	4.31	4.31	2.375	18.00	11.00

## Motor Dimensions

### 56C - 365TC Frames

**Note:** Dimensions are for estimating purposes only

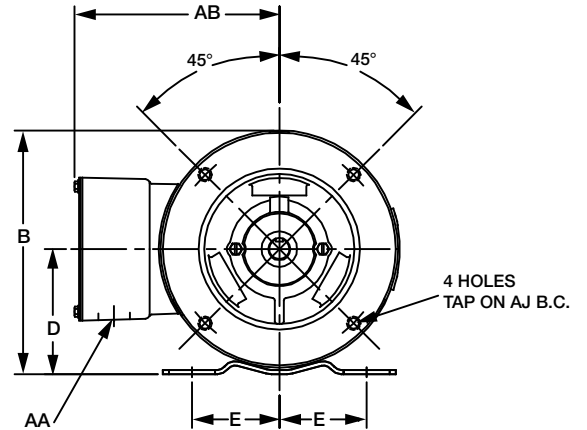
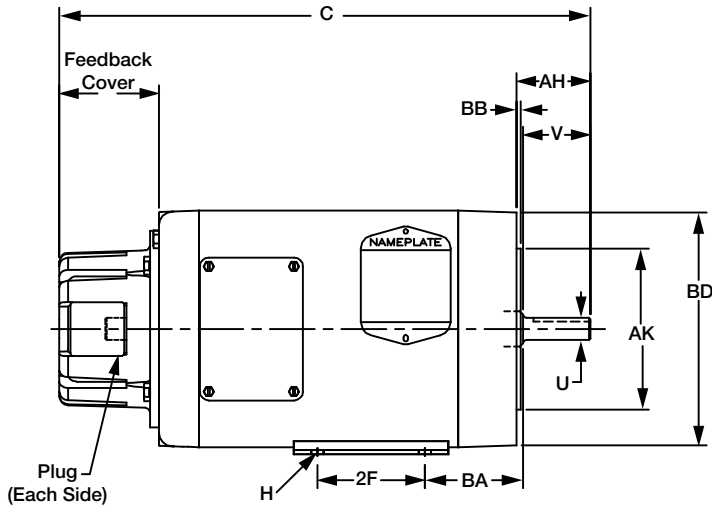
Frame Size	AH	AJ	AK	BF	No.	Depth	U	Key Sq.	Key Length
56C	2.06	5.88	4.5	3/8-16	4	0.56	0.625	0.188	1.25
140TC	2.12	5.88	4.5	3/8-16	4	0.56	0.875	0.188	1.25
182-184TC	2.62	7.25	8.5	1/2-13	4	0.75	1.125	0.25	1.75
213-215TC	3.12	7.25	8.5	1/2-13	4	0.75	1.375	0.312	2.38
254-256TC	3.75	7.25	8.5	1/2-13	4	0.75	1.625	0.375	2.88
284-286TC	4.38	9	10.5	1/2-13	4	0.75	1.875	0.5	3.25
324-326TC	5	11	12.5	5/8-11	4	0.94	2.125	0.5	3.88
364-365TC	5.62	11	12.5	5/8-11	4	0.94	2.375	0.625	4.25





## Dimensions

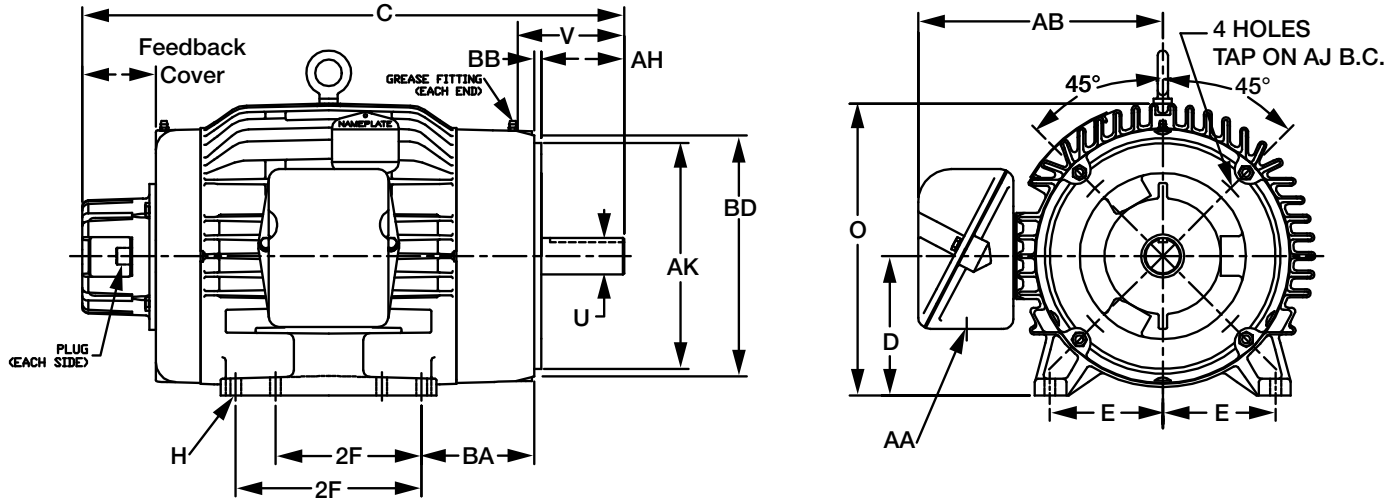
### TENV Inverter Drive® and Washdown Motors - Steel Band Construction



NEMA Frame	Feedback Shaft Exten. Cover	D	E	2F	H	AH	O	AB	BA	U	V	BD	AK	AJ	TAP	AA	BB
56C	2.78	3.50	2.44	3.00	0.34	2.06	6.81	5.73	2.75	0.625	1.88	6.51	4.50	5.88	3/8-16	0.88	0.13
143TC 145TC	2.78	3.50	2.75	4.00 5.00	0.34	2.12	6.81	5.73	2.75	0.875	2.25	6.51	4.50	5.88	3/8-16	0.50 NPT	0.12
182TC 184TC	2.78	4.50	3.75	4.50 5.50	0.41	2.62	8.44	6.87	3.5	1.125	2.75	8.86	8.50	7.25	1/2-13	0.75 NPT	0.25
213TC 215TC	2.78	5.25	4.25	5.50 7.00	0.41	3.12	10.03	8.05	4.25	1.375	3.38	9.04	8.50	7.25	1/2-13	0.75 NPT	0.25
254TC 256TC	1.79	6.25	5.00	8.25 10.00	0.53	3.75	12.00	9.72	4.75	1.625	4.00	9.44	8.50	7.25	1/2-13	1.25 NPT	0.25

## Dimensions

### TENV Inverter Drive® and Vector Drive® Motors - Cast Iron Construction

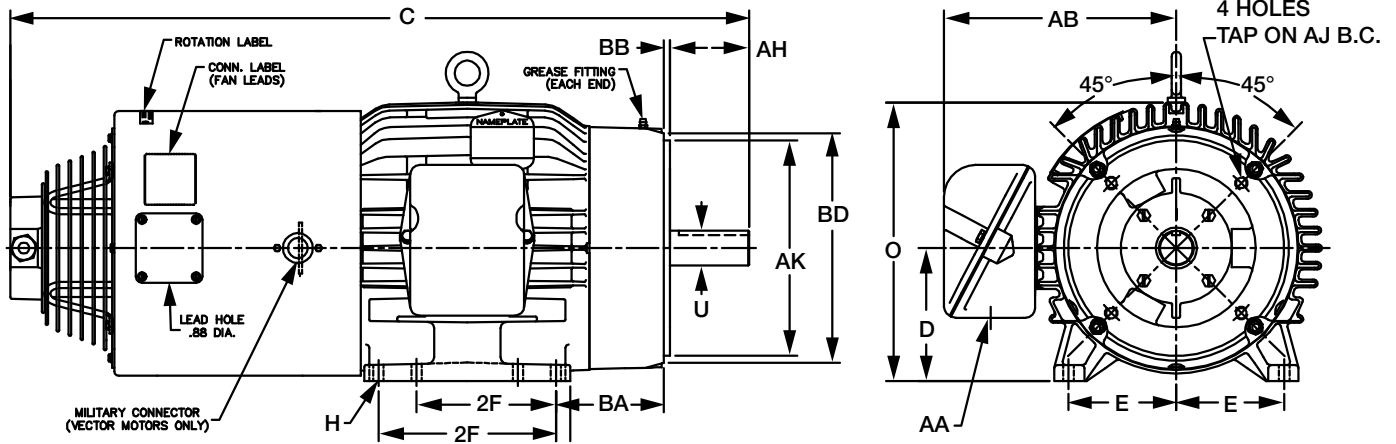


NEMA Frame	Thru Shaft Exten. Cover	D	E	2F	H	AH	O	AB	BA	U	V	BD	AK	AJ	TAP	AA	BB
143TC 145TC	2.78	3.50	2.75	4.00 5.00	0.38	2.12	7.59	6.43	2.75*	0.875	2.25	6.48	4.50	5.88	3/8-16	1.09	0.13
182TC 184TC	2.78	4.50	3.75	4.50 5.50	0.41	2.63	9.23	7.18	3.50	1.125	2.75	8.87	8.50	7.25	1/2-13	1.09	0.25
213TC 215TC	2.78	5.25	4.25	5.50 7.00	0.41	3.12	10.99	9.21	4.25	1.375	3.25	9.06	8.50	7.25	1/2-13	1.38	0.25
254TC 256TC	1.75	6.25	5.00	8.25 10.00	0.53	3.75	12.88	10.04	4.75	1.625	4.00	9.09	8.50	7.25	1/2-13	1.38	0.25
284T 286T	1.75	7.00	5.50	9.50 11.00	0.53	4.74	14.44	13.12	4.75	1.875	4.62					2.00	

**Note:** Dimensions are for reference only. Refer to specific layout drawing for detailed dimensional information. \*Non-Nema BA dimension.

## Dimensions

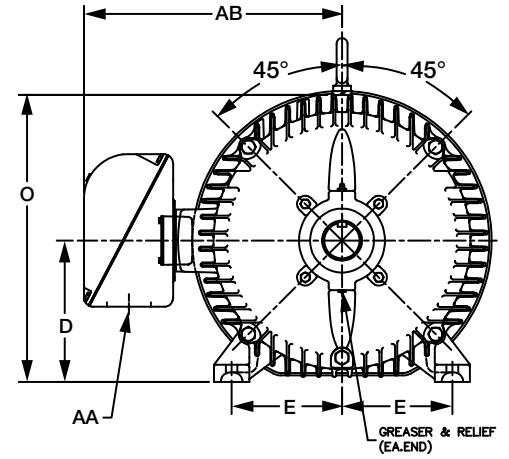
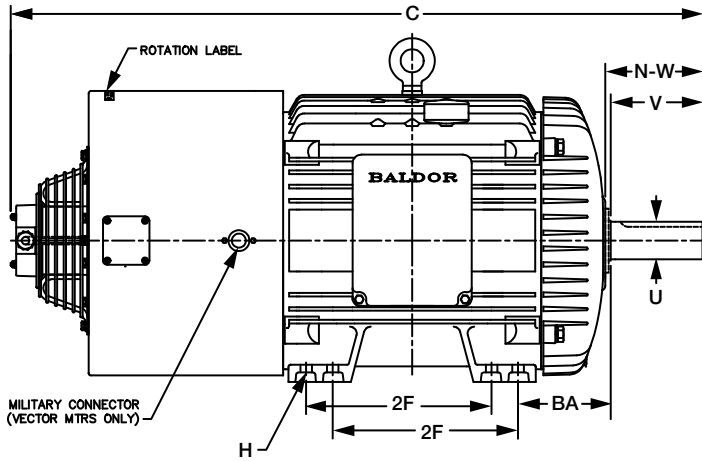
### TEBC Inverter Drive® and Vector Drive® Motors - Cast Iron Construction with C-Face and Base



NEMA Frame	D	E	2F	H	AH	O	AB	BA	U	V	BD	AK	AJ	TAP	AA	BB
143TC 145TC	3.50	2.75	4.00 5.00	0.38	2.12	7.59	6.37 6.43	2.75	0.875	2.25	6.48	4.50	5.88	3/8-16	1.09	0.13
182TC 184TC	4.50	3.75	4.50 5.50	0.41	2.62	9.23	7.18	3.50	1.125	2.75	8.87	8.50	7.25	1/2-13	1.09	0.25
213TC 215TC	5.25	4.25	5.50 7.00	0.41	3.13	10.99	9.15	4.25	1.375	3.37	9.06	8.50	7.25	1/2-13	1.38	0.25
254TC 256TC	6.25	5.00	8.25 10.00	0.53	3.75	12.88	10.04	4.75	1.625	4.00	9.09	8.50	7.25	1/2-13	1.38	0.25

## Dimensions

### TEBC Inverter Drive® and Vector Drive® Motors - Cast Iron Construction - Base

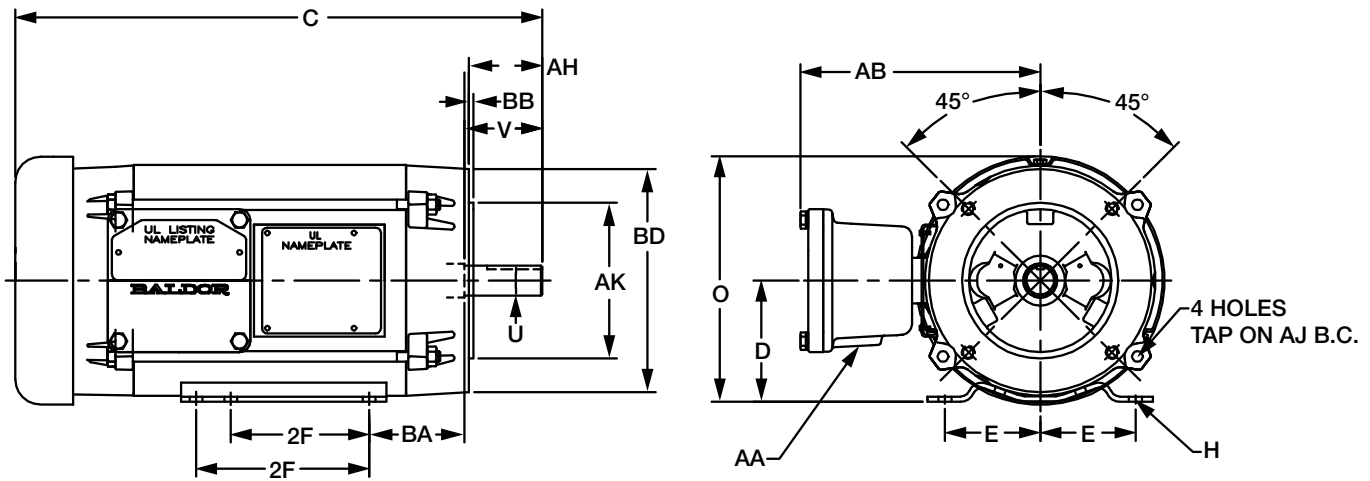


NEMA Frame	D	E	2F	H	N	O	AB	BA	U	V	AA
284T 286T	7.00	5.50	9.50 11.00	0.53	4.74 4.38	14.44	13.12	4.75	1.875	4.63	2.00
324T 326T	8.00	6.25	10.50 12.00	0.66 0.53	5.56 5.00	16.25	14.62	5.25	2.125	5.25	2.50
364T 365T	9.00	7.00	11.25 12.25	0.66	6.12 5.63	18.38	14.97	5.88	2.375	5.88	3.62
404T 405T	10.00	8.00	12.25 13.75	0.81	7.50 7.00	20.31	18.78	6.62	2.875	7.25	3.63
444T 445T	11.00	9.00	14.50 16.50	0.81	8.93 8.25	22.85	20.43	7.50	3.375	8.50	3.62
445T 447T	11.00	9.00	16.50 20.00	0.81	8.93 8.25	22.85	20.45	7.50	3.375	8.50	3.00
447T 449T	11.00	9.00	20.00 25.00	0.81	8.94 8.25	22.94	21.71	7.50	3.375	8.50	3.00
5007L	12.50	10.00	18.00 20.00 22.00	0.94	11.62	26.84	26.88	8.50	3.875	11.12	4.00 NPT
5009L	12.50	10.00	25.00 28.00	0.94	11.62	26.84	26.88	8.50	3.875	11.12	4.00 NPT

**Note:** Dimensions are for reference only. Refer to specific layout drawing for detailed dimensional information.

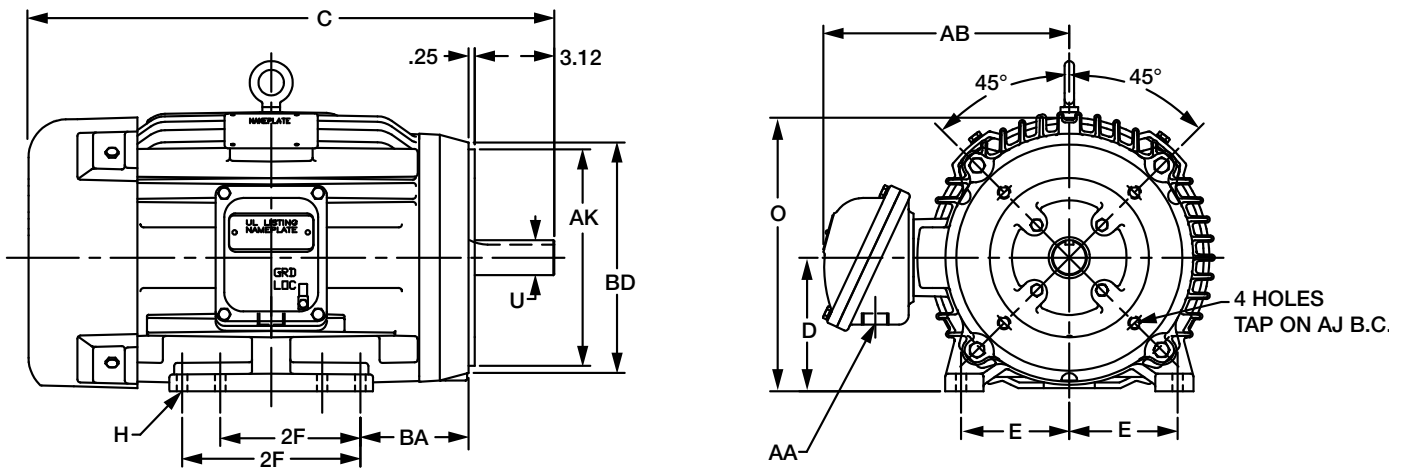
## Dimensions

### TEFC Inverter Drive® Explosion-Proof Motors - Rolled Steel Construction - C-Face



NEMA Frame	D	E	2F	H	AH	O	AB	BA	U	V	BD	AK	AJ	TAP	AA NPT	BB
56C	3.50	2.44	3.00	0.34	2.06	7.09	6.92	2.75	0.625	1.88	6.46	4.50	5.88	3/8-16	0.50	0.13
143TC 145TC	3.50	2.75	4.00 5.00	0.34	2.12	7.09	6.92	2.75	0.875	2.25	6.46	4.50	5.88	3/8-16	0.75	0.13

### TEFC Inverter Drive® Explosion-Proof Motors - Cast Iron Construction - C-Face

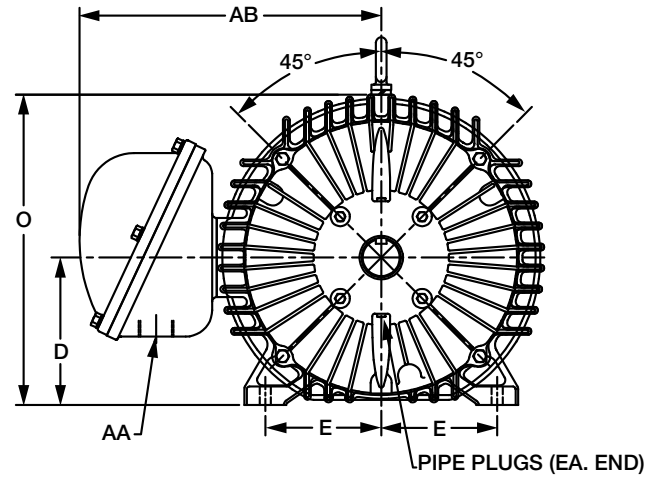
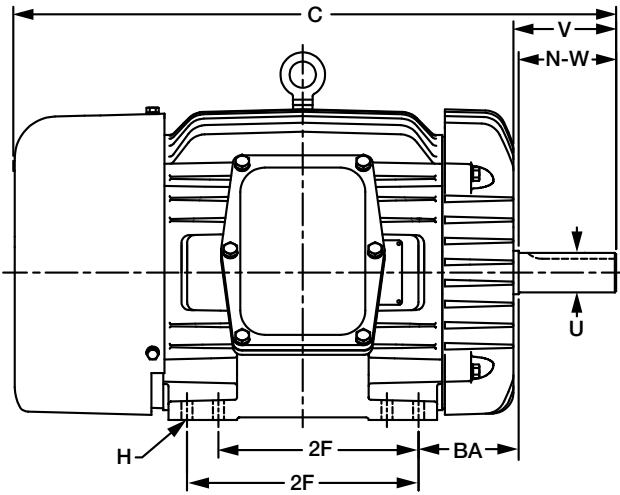


NEMA Frame	D	E	2F	H	AH	O	AB	BA	U	V	BD	AK	AJ	TAP	AA NPT	BB
182TC 184TC	4.50	3.75	4.50 5.50	0.41	2.62	9.56	8.55	3.50	1.125	2.75	8.96	8.50	7.25	1/2-13	0.75	0.13
213TC 215TC	5.25	4.25	5.50 7.00	0.41	3.12	10.75	9.66	4.25	1.375	3.37	9.05	8.50	7.25	1/2-13	0.75	0.25
254TC 246TC	6.25	5.00	8.25 10.00	0.53	3.75	12.94	11.25	4.75	1.625	4.00	9.13	8.50	7.25	1/2-13	1.25	0.25

**Note:** Dimensions are for reference only. Refer to specific layout drawing for detailed dimensional information.

## Dimensions

### TEFC Inverter Drive® Explosion-Proof Motors - Cast Iron Construction, Non C-Face

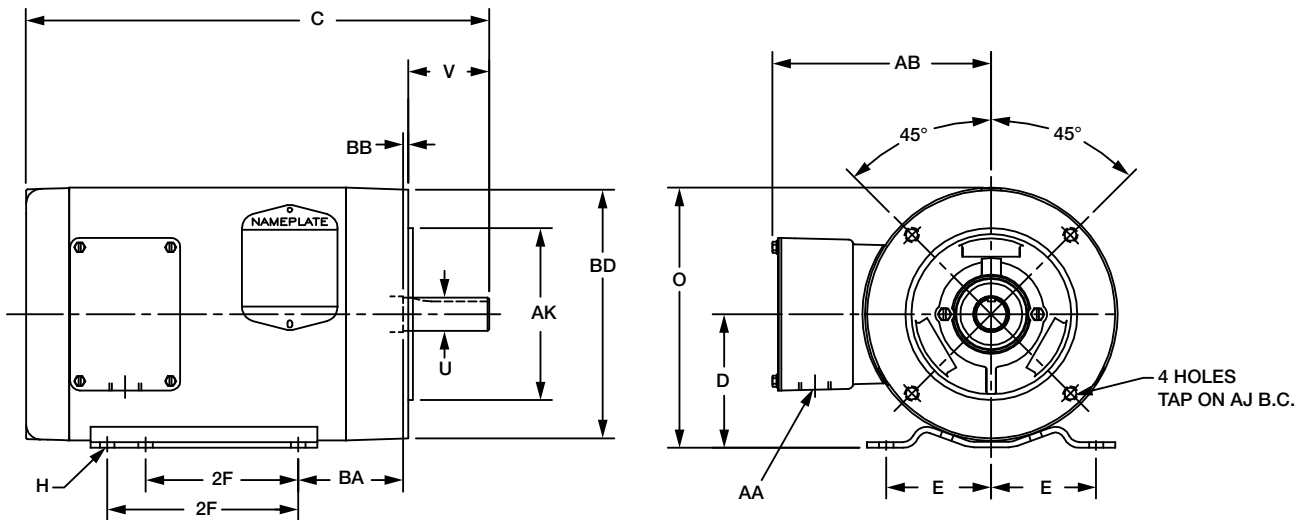


NEMA Frame	D	E	2F	H	N-W	O	AB	BA	U	V	AA NPT
284T 286T	7.00	5.50	9.50 11.00	0.53	4.88	14.74	14.32	4.75	1.875	4.63	1.25
324T 326T	8.00	6.25	10.50 12.00	0.66	5.44	16.68	15.18	5.25	2.125	5.25	1.50
364T 365T	9.00	7.00	11.25 12.25	0.66	6.13	18.50	17.60	5.88	2.375	5.88	2.50
404T 405T	10.00	8.00	12.25 13.75	0.81	7.56	20.88	18.73	6.62	2.875	7.25	2.50

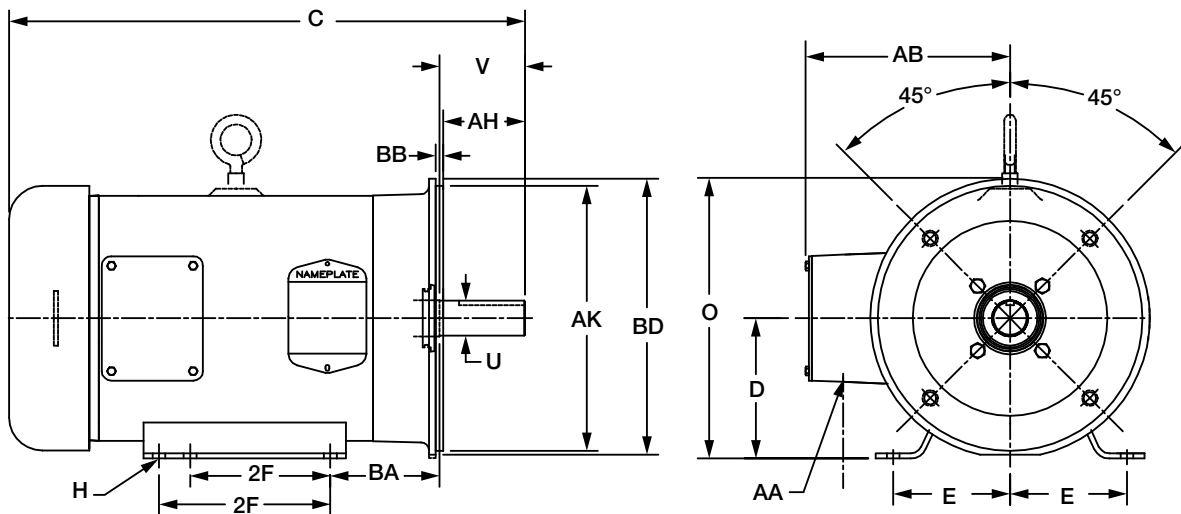
**Note:** Dimensions are for reference only. Refer to specific layout drawing for detailed dimensional information.

## Dimensions

### TENV Washdown Paint Free Inverter Drive® Motors



### TEFC Washdown Paint Free Inverter Drive® Motors

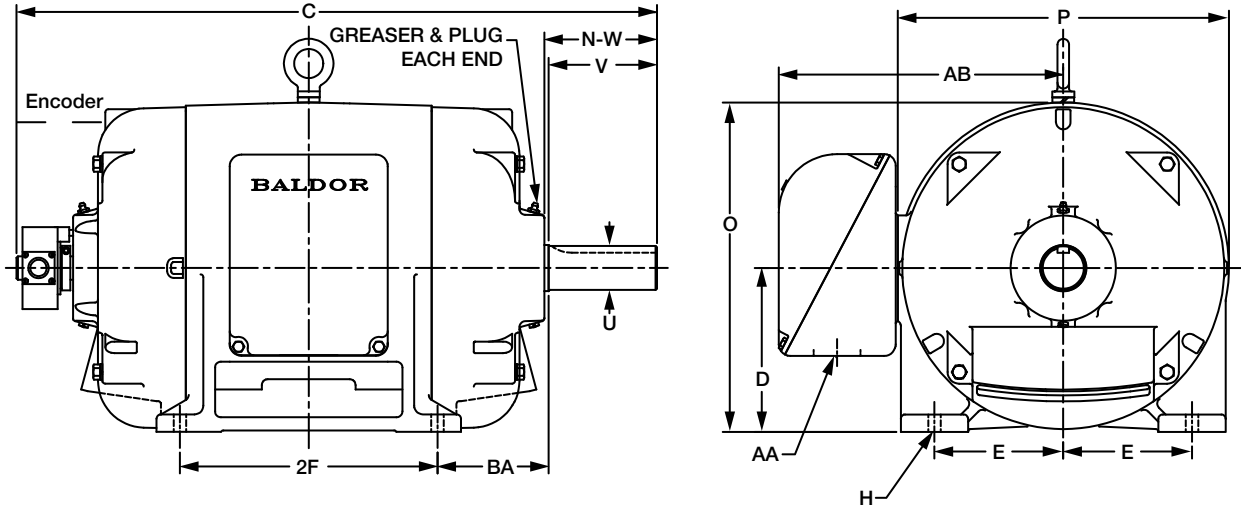


NEMA Frame	D	E	2F	H	N	O	P	U	V	AA	AB	AH	AJ	AK	BA	BB	BD	XO	TAP
56	3-1/2	2-7/16	3	11/32 SLOT	2-7/16	6-7/8	6-5/8	5/8	1-7/8	1/2	5	2-1/16	5-7/8	4-1/2	2-3/4	1/8	6-1/2	2-1/4	3/8-16
143T 145T	3-1/2	2-3/4	4 5	11/32 SLOT	2-1/2	6-7/8	6-5/8	7/8	2-1/4	3/4	5-1/4	2-1/8	5-7/8	4-1/2	2-1/4	1/8	6-1/2	2-1/4	3/8-16
182T 184T	4-1/2	3-3/4	4-1/2 5-1/2	13/32	3-9/16	8-11/16	7-7/8	1-1/8 1-1/8	2-3/4 2-3/4	3/4	5-7/8	2-5/8 2-5/8	7-1/4 7-1/4	8-1/2 8-1/2	2-3/4	1/4 1/4	9 9	2-3/8	1/2-13 1/2-13
213T 215T	5-1/4	4-1/4	5-1/2 7	13/32	3-7/8	10-1/4	9-9/16	1-3/8 1-3/8	3-3/8 3-3/8	3/4	7-3/8	3-1/8 3-1/8	7-1/4	8-1/2	3-1/2	1/4	9	2-3/4	1/2-13

**Note:** Dimensions are for reference only. Refer to specific layout drawing for detailed dimensional information. These motors are not designed to have an encoder added.

## Dimensions

### ODP Elevator Vector Drive® Motors



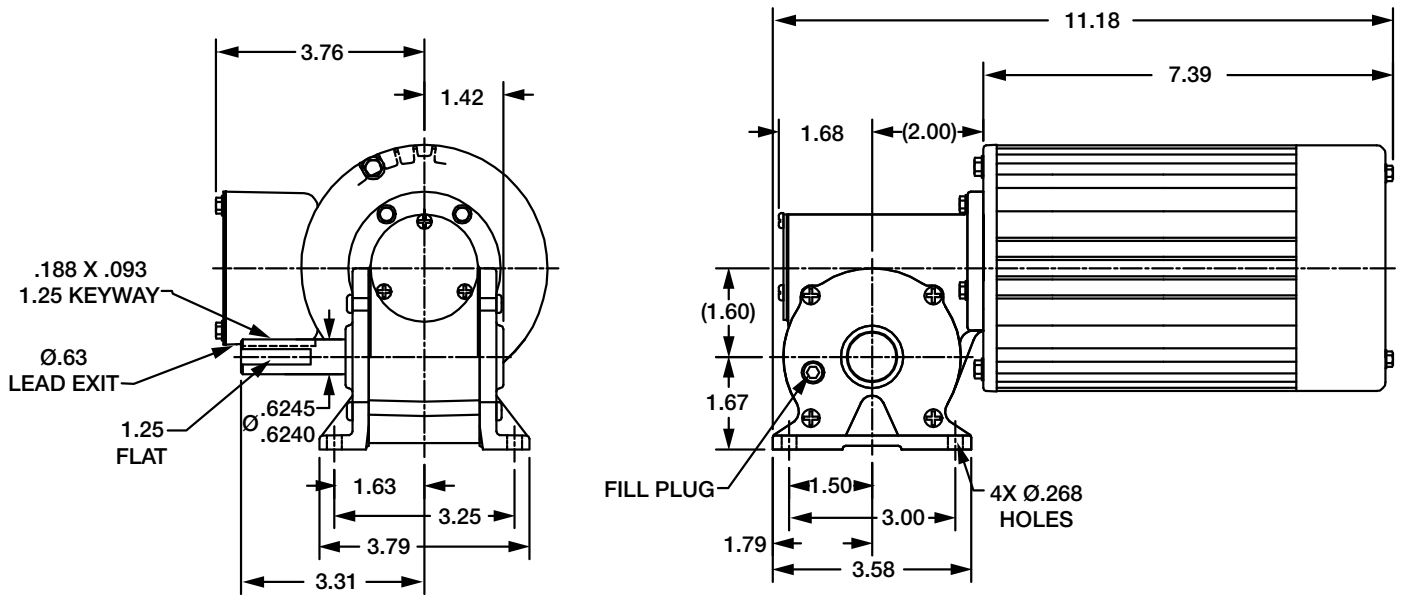
NEMA Frame	C	Encoder	D	E	2F	H	N-W	O	P	U	V	AA	AB	BA
256T	24.70	2.80	6.25	5.00	10.00	0.53	4.22	12.54	12.87	1.625	4.00	1.38	10.29	4.25
286T	27.35	2.80	7.00	5.50	11.00	0.53	4.81	14.07	14.14	1.875	4.63	2.00	12.15	4.75
324T	28.54	2.80	8.00	6.25	10.50	0.66	5.38	16.10	16.21	2.125	5.25	2.50	13.20	5.25
326T	30.04	2.80	8.00	6.25	12.00	0.66	5.38	16.10	16.21	2.125	5.25	2.50	13.20	5.25
364T-365T	32.49	2.80	9.00	7.00	11.25 & 12.25	0.66	6.06	18.18	18.35	2.375	5.88	3.63	15.01	5.88
404T-405T	36.80	2.80	10.00	8.00	12.25 & 13.75	0.81	7.50	20.14	20.89	2.875	7.25	3.00	17.58	6.62

**Note:** Dimensions are for reference only. Refer to specific layout drawing for detailed dimensional information.

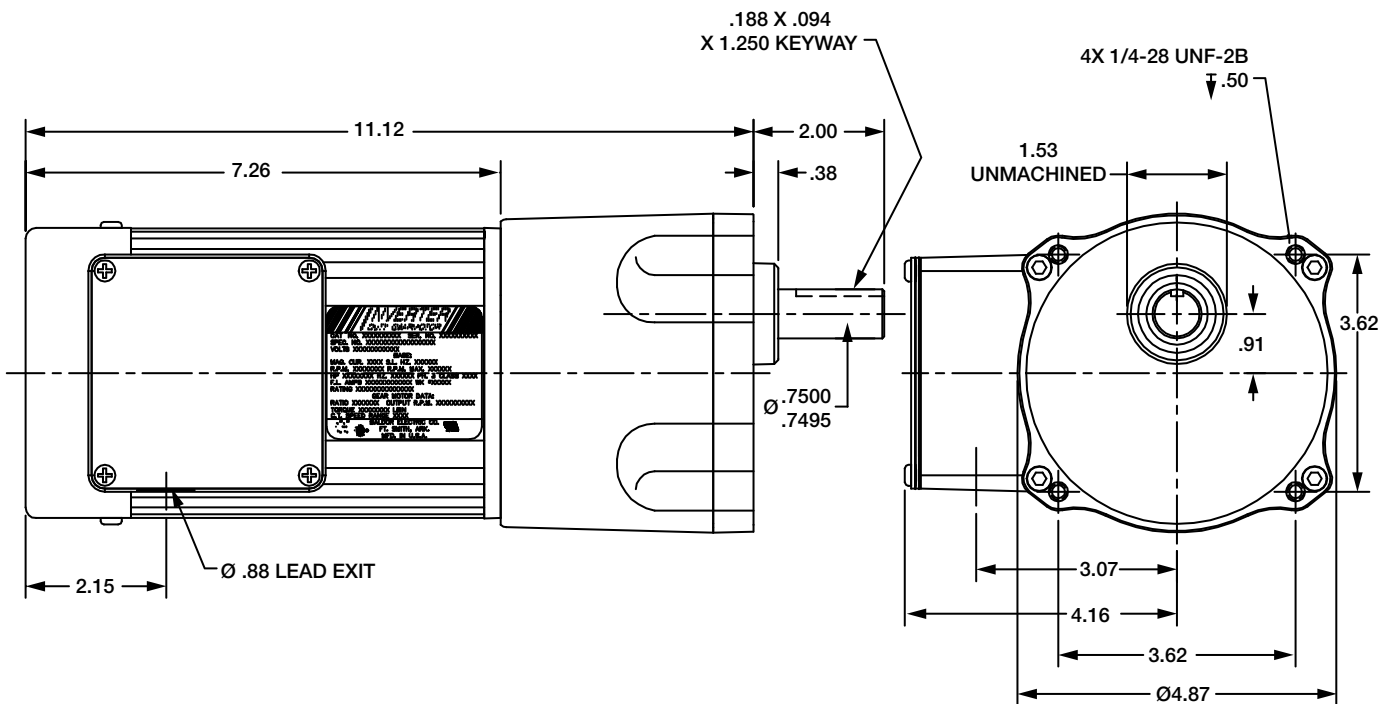


## Dimensions

### Right Angle Inverter Drive® Gearmotor



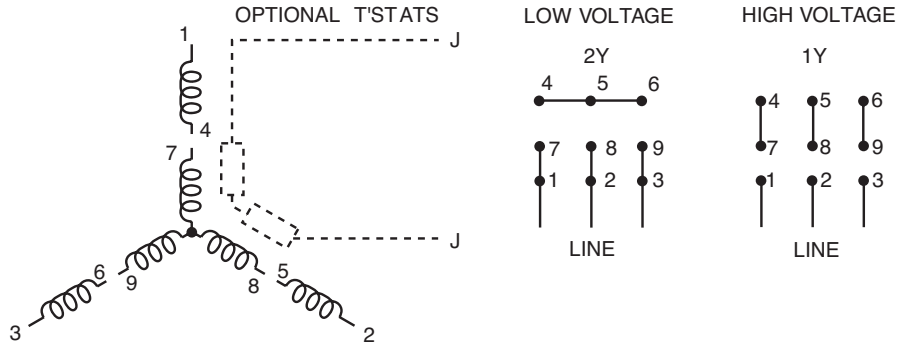
### Parallel Shaft Inverter Drive® Gearmotor



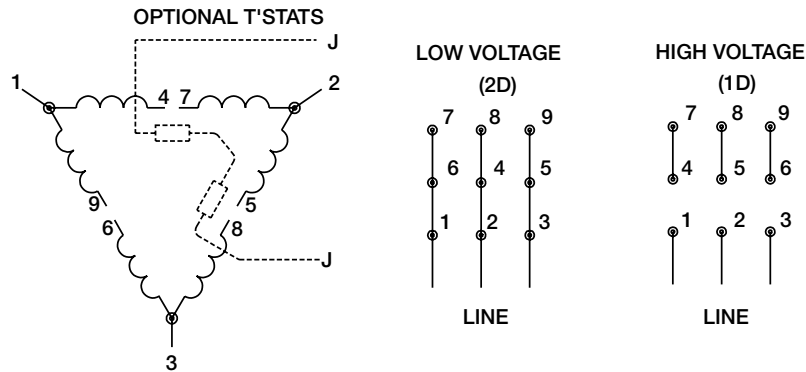
**Note:** Dimensions are for reference only. Refer to specific layout drawing for detailed dimensional information.

## Connection Diagrams Main Motor Power Leads

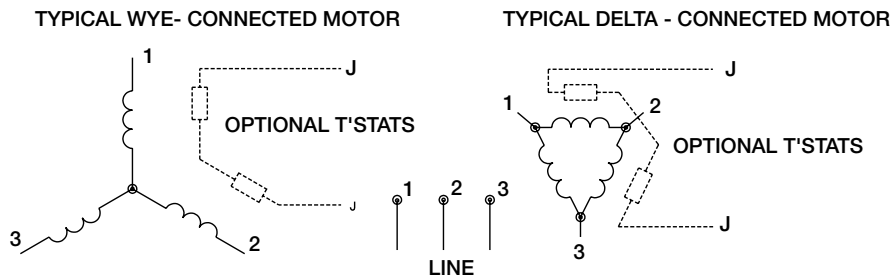
### 9 Lead Wye-Connected Motor



### 9 Lead Delta-Connected Motor



### 3 Lead

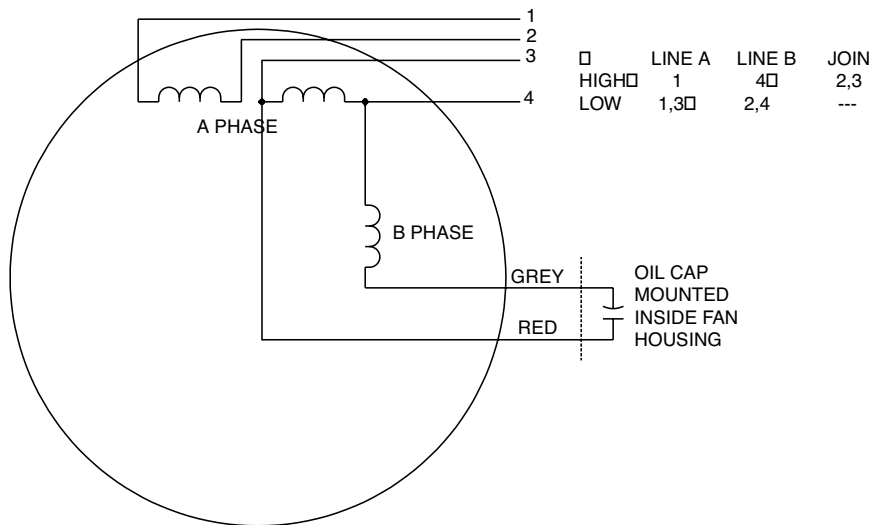


#### Notes:

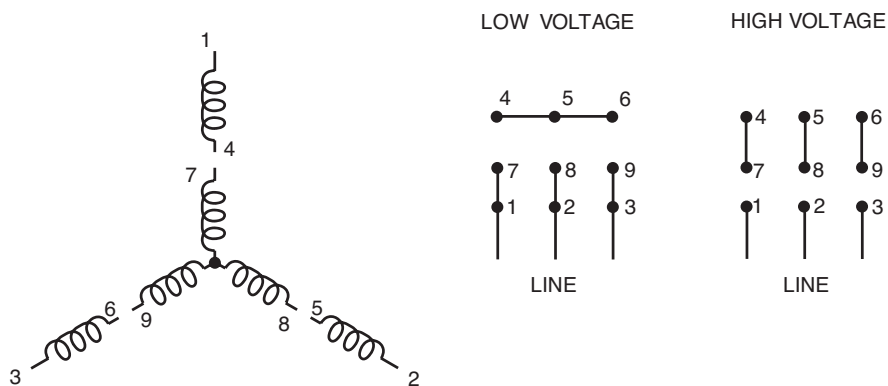
1. Three lead motors may be designed as either wye-connected or delta-connected.
2. Interchange any two line leads to reverse rotation.
3. Optional thermostats are provided when specified.
4. Actual number of internal parallel circuits may vary.

## Connection Diagrams Blower Motor

### Single Phase



### Three Phase



**Notes:**

Single Phase: CCW from Opposite Drive End of fan motor.

Three Phase: Interchange any two line leads to reverse rotation to direct air flow.

Blower motor should be connected to line (mains) power for proper operation. Do not connect blower to variable frequency output of control to inverter or vector drive motor. Allow sufficient clearance for air flow into blower. Restrictions and blockage from debris may cause motor overheating.

## V\*S Master Dimension Sheet Index

### TEFC (Totally Enclosed Fan Cooled)

Description	Accessories	Frames	D/S Number
Foot	Encoder Provisions (M12 hole)	180T - 210T	616545-596
Foot	DynaPar HS35	180T - 210T	616545-602
Foot	Avtron M285 Encoder	180T - 210T	616545-595
Foot	Provisions Only for Avtron M285	210T	617269-013
C-face with feet	DynaPar HS35	182TC - L215TC	616545-605
C-face with feet	BEI HS35 Encoder	180TC - 210TC	613051-317
C-face with feet	Provisions Only Avtron M285	210TC	617269-011
C-face with feet	LakeShore HS56 Encoder	180TC - 210TC	616545-597
C-face with feet	Stearns Brake & BEI HS35 Encoder	180TC - 210TC	613051-342
C-face with feet	Stearns Brake & DynaPar H20	180TC - 210TC	613051-253
C-face with feet	Stearns Brake & LakeShore HS56	180TC - 210TC	617269-25
C-face footless	Stearns Brake & DynaPar HS35	180TC - 210TC	617269-20
C-face footless	140TC (AK = 4.5 inches)	182TY - L184T	616545-594
C-face footless	BEI HS35 Encoder	180TC - 250TC	616545-592
C-face footless	DynaPar HS35	180TC - 210TC	613051-356
180TC C-face footless	BEI HS35 Encoder	210TCZ	613051-341
D-flange with feet	Stearns Brake, XT & BEI HS35 Encoder	180TD - 210TD	616545-514
Foot	Provisions Only Avtron M285	210T	617269-013
Foot	Complete Prov Only for 56 C-face encoder	250T - 440T	611740-632
Foot	BEI HS35 Encoder	250T - 440T	611740-200
Foot	BEI HS35 Encoder / Top Conduit Box	250T - 440T	616555-524
Foot	Avtron M285 Encoder	250T - 440TS	611760-541
Foot	Avtron M3 / M4 Aux C/B	250T - 440T	611760-644
Foot	Avtron M3 / M4 / Top Conduit Box	250T - 440TS	616555-552
Foot	DynaPar HS35	250T - 440TS	611760-63
Foot	LakeShore HS56	250T - 440T	616555-594
Foot	LakeShore HS56 / Oversize CB	250T - 440T	616555-573
Foot	LakeShore HS56 / Top Conduit Box	250T - 440T	616555-600
Foot	Prov Only M285 / 841XL Features	250T - 360TS	611760-573
Foot	Stearns Brake & BEI HS35 Encoder	250T - 445TS	616555-553
Foot	Stearns Brake & Avtron M3 / M4	250T - 440T	616555-545
Foot	Stearns Brake & LakeShore HS35M	250T - 440T	616555-584
Foot	Stearns Brake & LakeShore HS56	250T - 440T	616555-595
C-face with feet	Provisions Only Avtron M285	210TC	617269-011
C-face with feet	Provisions Only LakeShore SL56	210TC	617269-009
C-face with feet	BEI HS35 Encoder	250TC - 440TC	611740-199
C-face with feet	DynaPar HS35	250TC - 440TC	611760-60
C-face with feet	Lakeshore HS35M	250TC - 440TC	616555-523
C-face with feet	Avtron M3 / M4 Encoder	250TC - 440TC	611760-014
C-face with feet	BEI HS35 Encoder - Top C/B	250TC - 440TC	611760-698
C-face with feet	Stearns Brake / BEI HS35 / Top C/B	250TC - 440TC	611760-58
C-face with feet	Stearns Brake & BEI HS35 Encoder	250TC - 440TC	611760-61
C-face with feet	Stearns Brake & Lakeshore HS56	250TC - 440TC	616555-596
D-flange with feet	Avtron M3 / M4	250TD - 440TD	616555-551
C-face footless	BEI HS35 Encoder	250TC - 440TC	616555-741

### TEFC (Totally Enclosed Fan Cooled)

DESCRIPTION	ACCESSORIES	FRAMES	D/S NUMBER
C-face footless	Avtron M3 / M4 Encoder	250TC - 360TC	611760-842
Foot	BEI HS35 Encoder	447T - 449TS	616524-93
Foot	Lakeshore HS56	447T - 449TS	616524-181
Foot	Avtron M3 / M4 - 841XL Features	447T - 449TS	616524-98
Foot	Avtron M3 / M4	447T - 449TS	616524-126
Foot	841XL Mech Features Avtron M3 / M4	447T - 449TS	616524-98
Foot	Avtron Coupled M4 Encoder	447T - 449TS	616524-92
C-face with feet	Lakeshore HS56	447TC - 449TSC	616524-94
C-face with feet	BEI HS35 Encoder	447TC - 449TSC	616524-159
Foot	BEI HS35 Encoder	L449T - L449TY	611747-105
Foot	Avtron M3 / M4 - Shaft Ground Brush	L449T - L449TY	611747-103

# V\*S Master Dimension Sheet Index

## TENV (Totally Enclosed Non Vent)

Description	Accessories	Frames	D/S Number
Foot	XT with Prov for Encoder	180T - 210T	613050-670
Foot	XT with BEI HS35	180T - 210T	613050-673
Foot	XT with DynaPar HS35	180T - 210T	613050-709
Foot	XT with Prov for Encoder, Top C/B	180T - 210T	613050-678
Foot	XT with DynaPar H56	180T - 210T	613050-719
Foot	XT with Avtron M285	180T - 210T	613050-720
Foot	XT with DynaPar H20	180T - 210T	613050-667
Foot	Stearns Brake & BEI HS35 Encoder	180T - 210T	613050-708
Foot	XT Stearns Brake & SL85 Sandwich	210T	613050-614
C-face with feet	Provisions for Encoder	180TC - 210TC	613050-145
C-face with feet	XT Provisions for Encoder	180TC - 210TC	613050-705
C-face with feet	Provisions Only for SL56	210TC	617269-009
C-face with feet	LakeShore SL56	180TC - 210TC	613050-608
C-face with feet	LakeShore SL85	180TC - 210TC	613050-706
C-face with feet	BEI HS35 Encoder	180TC - 210TC	613050-665
C-face with feet	Avtron M3 / M4 Encoder	180TC - 210TC	613050-666
C-face with feet	XT with LakeShore HS56	180TC - 210TC	613050-679
C-face with feet	DynaPar HS35	180TC - 210TC	613050-718
C-face with feet	XT Avtron M485	180TC - 210TC	613050-721
C-face with feet	XT Avtron M485, Top Conduit Box	180TC - 210TC	613050-724
C-face with feet	LakeShore SL85 / Top Conduit Box	180TC - 210TC	613050-722
C-face with feet	XT, Lakeshore HS35M	180TC - 210TC	613050-729
C-face footless	LakeShore SL85	180TC - 210TC	613050-723
C-face footless	XT with Avtron M3 / M4 encoder	180TC - 210TC	613050-668
C-face with feet	Stearns Brake & BEI HS35 Encoder	180TC - 210TC	613050-707
C-face with feet	Stearns Brake & DynaPar HS35 Encoder	180TC - 210TC	617558-001
C-face with feet	Stearns Brake & SL85 Sandwich	180TC - 210TC	613050-617
C-face with feet	Stearns Brake & HS56 Encoder	180TC - 210TC	617558-005
C-face footless	Stearns Brake / Vert / DynaPar HS35	180TC	613050-611
C-face footless	Stearns Brake / DynaPar HS35	180TC - 210TC	617558-002
C-face footless	Stearns Brake & SL85 Sandwich	180TC - 210TC	613050-716
C-face footless	Stearns Brake & BEI HS35 Encoder	180TC - 210TC	617558-002

## TENV (Totally Enclosed Non Vent)

DESCRIPTION	ACCESSORIES	FRAMES	D/S NUMBER
D-flange with feet	Cone Drive Shaft	180TDZ	613050-677
Foot	Prov for Encoder	250T - 440T	611741-118
Foot	XT with Prov for Encoder	250T - 440T	611741-649
Foot	XT with Prov for Encoder / Top C/B	250T - 440T	611741-658
Foot	BEI HS35 Encoder	254T - 326TS	611741-123
Foot	LakeShore SL85	250T - 360T	611741-633
Foot	Provisions Only Avtron M285	250 T	611741-642
Foot	Avtron M285 / Encoder Ground Brush	250T - 440T	611741-644
Foot	XT Avtron M485, Top C/B	250T - 326TS	611741-666
Foot	Avtron M3 / M4 10 Pin connector	254T - 326TS	611741-641
Foot	Stearns Brake & Avtron HS M3	250T - 320T	611741-632
Foot	Stearns Brake & BEI HS35 Encoder	250T	611741-124
Foot	Stearns Brake & Lakeshore SL85 Encoder	250T - 360T	611741-576
Foot	Stearns Brake & Avtron M285	324T - 365T	611741-651
C-face with feet	Prov for Encoder	250TC - 440TC	611741-267
C-face with feet	BEI HS35 Encoder	250TC - 326TC	611741-630
C-face with feet	BEI HS35 Encoder	250TC - 286TSC	611741-102
C-face with feet	BEI HS35 Encoder - Top C/B	250TC - 326TSC	611741-647
C-face with feet	Avtron M3 / M4 Encoder	250TC - 326TSC	611741-648
C-face with feet	Avtron M485	250TC - 440TC	611741-665
C-face with feet	BEI H25 Encoder	250TZ - 256TZ	611741-645
C-face with feet	RIM 8500 Encoder	250TC - 286TSC	611741-125
C-face with feet	DynaPar HS35 / Cone Drive / 841XL Feat	250TC - 440TC	611741-637
C-face with feet	Stearns Brake & BEI HS35 Encoder	250TC	611741-107
D-flange with feet	Avtron M3 / M4 Encoder	250TD	611741-628

## V\*S Master Dimension Sheet Index

### TENV (Totally Enclosed Non Vent) Continued...

Description	Accessories	Frames	D/S Number
C-face footless	Prov for Encoder	250TC - 440TC	611741-772
C-face footless	Stearns Brake & SL85 Encoder	250TC - 360TC	611741-770
Foot	Double Shaft Extension	445TY - 449TS	616546-001
Foot	Double Shaft Extension	445T - 449TS	616546-002
Foot	Cast Iron NEMA F1 Mtg	112 - 132	616556-502
Foot	SL85 Encoder; Top Conduit Box	112S - L132M	613071-534
Foot	BEI HS35; IEC Std Conduit Box Location	112S - L132M	613071-543
FF Flange with Feet	F1 Mounting	112S - 132M	616545-593
FF Flange Footless	General Dimension Sheet	112S/M - L132S/M	616556-503
FF Flange Footless	DynaPar H20	112 - 132	617269-019
B5 Flange Footless	Stearns Brake & DynaPar H20	112S - 132M	617269-18
Foot	Standard IEC Frame	160 - 280M	611770-501
Foot	BEI HS35 NEMA F1 Mtg	160 - 280	611770-011
Foot	BEI HS35 NEMA F2 Mtg	160 - 280	611770-010
Foot	SL85 Oversized Conduit Box	160 - 280	611770-516
Foot	SL85 Top Conduit Box	160 - 280	611770-546
Foot	LakeShore RIM 8500; Top C/B	160-280	611770-515
Foot	LakeShore SL56	160-280	611770-516
Foot	SL85 NEMA F1 Mtg	160 - 280	616557-516
Footless FF Flange	SL85 / OSCB	250S - 250M	611770-726
Foot	Aux Conduit Box	280K - 280H	611770-512

### TENV (Totally Enclosed Non Vent)

DESCRIPTION	ACCESSORIES	FRAMES	D/S NUMBER
Foot	BEI HS35; Top Conduit Box	280H	616524-132
Foot	DynaPar RD-62; Aux C/B	280H	611770-514
Foot	BEI HS35; Top Conduit Box	L280G	611747-106
Foot	BEI HS35	280K, 280H, L280H	611770-012
Foot	BEI HS35 NEMA F1 Mtg	280K, 280H, L280H	611770-009
FF Flange with Feet	Cast Iron	280K - 280H	611770-513

# Popular Feedback Devices Available For Custom Motors

**Hollowshaft Encoders** – Mounts directly on motor stub shaft without coupling and has a locking tether arm to prevent rotation.

Encoder	PPR Specify	Power VDC(1)	Max Oper. Temp.	Max Op. Speed	Output	Connector Types (6)
Dynapar HS-20 (2)	Up to 2540	5-26v	70° C	6000 rpm	Single Output	MS-ST, MS-TL
BEI HS-35 (2)	Up to 5000	5-15v	70° C	6000 rpm	Single Output	MS-ST, MS-TL
Dynapar HS-35 (2)	Up to 2500	5-26v	70° C	3600 rpm	Single or Dual	MS-ST, MS-TL
Avtron HS-35M	1024 or 2048	5-24v	85° C	3600 rpm	Single Output	MS-ST, MS-TL, LT
Northstar/Lakeshore HSD35	Up to 2500	5-26v	70° C	3600 rpm	Single Output	LT
Northstar/Lakeshore HS-56 (3)	Up to 2048	5-15v	80° C	3600 rpm	Single or Dual	LT
Avtron HS-M4	Up to 1200	5-18v	85° C	5000 rpm	Single or Dual	MS-ST, MS-TL, LT
Avtron M685 (3)	up to 2048	5-18v	70° C	3600 rpm	Single or Dual	MS-ST, MS-TL, LT

**Coupled Encoders** - Mounts on stub shaft with flexible coupling and flange adapter.

Dynapar H20	1024 / 2048	5-15v	85° C	5000 (2)	Single Output	MS-ST
Dynapar H56 (3)	1024 / 2048	5-26v	80° C	3600 rpm	Single or Dual	MS-ST, LT
Avtron M4 (3)	1024/2048	5-18v	85° C	5000 rpm	Single or Dual	MS-ST, MS-TL, LT
Avtron M485 (3)	512 / 1024	12-15v	70° C	3600 rpm	Single or Dual	MS-ST, MS-TL, LT

**Bearingless Encoders** - Pulse wheel mounts directly to stub shaft, encoder mounts directly to motor end bracket.

Northstar/Lakeshore RL67 (4)	1024 / 2048	5-15v	90° C	7000 rpm	Single Output	MS-ST, LT
Northstar/Lakeshore SL56	1024 / 2048	5-15v	90° C	7000 rpm	Single or Dual	MS-ST, LT
Avtron AV85	Up to 5000	5-24v	-40° to 100° C	5000 rpm	Single or Dual	MS-ST, MS-TL, LT
Avtron AV56	1024/2048/4096	5-24v	-40° to 100° C	5000 rpm	Single or Dual	MS-ST, MS-TL, LT
Northstar/Lakeshore SL85	Up to 2048	5-15v	90° C	6000 rpm	Single or Dual	MS-ST, LT
Northstar/Lakeshore RIM8500 (3)	512 / 1024	5-15v	80° C	7000 rpm	Single or Dual	MS-ST, LT
Northstar/Lakeshore SL or RIM1250 (3)	1024 / 2048	5-15v	80° C	7000 rpm	Single or Dual	MS-ST, LT

**Explosion-Proof Encoder** - Coupled mounting, Division 1, Class 1 & II, Groups C,D,E,F & G U/L listed

Dynapar X25 (3,4)	512 / 5000 max	5-26v	70° C	5000 rpm	Single Output	Terminal block
<b>Resolver</b>	Industrial and Heavy Duty Industrial available					MS-ST

**Notes:**

- (1) Encoder output voltage will be equal to the input voltage unless otherwise specified.
- (2) Suitable for 10,000 rpm for PPR not to exceed 1024
- (3) RPMAC requires piggy back blower for TEBC frames FL180 - FL440
- (4) Can not be used with the opposite drive end brake
- (5) RPMAC FL180 frame TEBC requires piggy back blower
- (6) MS-ST (Screw Tight 10 pin), MS-TL (Twist Lock 10 pin), LT (EPIC Latch Type).

## Contact your nearest Baldor Sales Office at these World Wide Locations, or visit [www.baldor.com](http://www.baldor.com)

### UNITED STATES

#### ARIZONA

**PHOENIX**  
4211 S 43RD PLACE  
PHOENIX, AZ 85040  
PHONE: 602-470-0407  
FAX: 602-470-0464

#### ARKANSAS CLARKSVILLE

1001 COLLEGE AVENUE  
CLARKSVILLE, AR 72830  
PHONE: 479-754-9108  
FAX: 479-754-9205

#### CALIFORNIA LOS ANGELES

6480 FLOTTILLA STREET  
COMMERCE, CA 90040  
PHONE: 323-724-6771  
FAX: 323-721-5859

#### HAYWARD

21056 FORBES AVENUE  
HAYWARD, CA 94545  
PHONE: 510-785-9900  
FAX: 510-785-9910

#### COLORADO DENVER

3855 FOREST STREET  
DENVER, CO 80207  
PHONE: 303-623-0127  
FAX: 303-595-3772

#### CONNECTICUT WALLINGFORD

65 SOUTH TURNPIKE ROAD  
WALLINGFORD, CT 06492  
PHONE: 203-269-1354  
FAX: 203-269-5485

#### FLORIDA

**TAMPA/PUERTO RICO/  
VIRGIN ISLANDS**  
3906 EAST 11TH AVENUE  
TAMPA, FL 33605  
PHONE: 813-248-5078  
FAX: 813-247-2984

#### GEORGIA

**ATLANTA**  
62 TECHNOLOGY DRIVE  
ALPHARETTA, GA 30005  
PHONE: 770-772-7000  
FAX: 770-772-7200

#### ILLINOIS

**CHICAGO**  
4 SAMMONS COURT  
BOLINGBROOK, IL 60440  
PHONE: 630-296-1400  
FAX: 630-226-9420

#### INDIANA

**INDIANAPOLIS**  
5525 W. MINNESOTA STREET  
INDIANAPOLIS, IN 46241  
PHONE: 317-246-5100  
FAX: 317-246-5110

#### IOWA

**DES MOINES**  
1800 DIXON STREET, SUITE C  
DES MOINES, IA 50316  
PHONE: 515-263-6929  
FAX: 515-263-6515

#### MARYLAND

**BALTIMORE**  
6660 SANTA BARBARA RD.  
SUITES 22-24  
ELKRIDGE, MD 21075  
PHONE: 410-579-2135  
FAX: 410-579-2677

#### MASSACHUSETTS

**BOSTON**  
6 PULLMAN STREET  
WORCESTER, MA 01606  
PHONE: 508-854-0708  
FAX: 508-854-0291

#### MICHIGAN DETROIT

5993 PROGRESS DRIVE  
STERLING HEIGHTS, MI 48312  
PHONE: 586-978-9800  
FAX: 586-978-9969

#### MINNESOTA MINNEAPOLIS

21080 134TH AVENUE NORTH  
ROGERS, MN 55374  
PHONE: 763-428-3633  
FAX: 763-428-4551

#### MISSOURI

**ST LOUIS**  
422 INDUSTRIAL DRIVE  
MARYLAND HEIGHTS, MO 63043  
PHONE: 314-298-1800  
FAX: 314-298-7660

#### KANSAS CITY

1501 BEDFORD AVENUE  
NORTH KANSAS CITY, MO 64116  
PHONE: 816-587-0272  
FAX: 816-587-3735

#### NEW YORK

**AUBURN**  
ONE ELLIS DRIVE  
AUBURN, NY 13021  
PHONE: 315-255-3403  
FAX: 315-253-9923

#### NORTH CAROLINA

**GREENSBORO**  
1220 ROTHERWOOD ROAD  
GREENSBORO, NC 27406  
PHONE: 336-272-6104  
FAX: 336-273-6628

#### OHIO

**CINCINNATI**  
2929 CRESCENTVILLE ROAD  
WEST CHESTER, OH 45069  
PHONE: 513-771-2600  
FAX: 513-772-2219

#### CLEVELAND

8929 FREEWAY DRIVE  
MAGEDONIA, OH 44056  
PHONE: 330-468-4777  
FAX: 330-468-4778

#### OKLAHOMA

**TULSA**  
7170 S. BRADEN, SUITE 140  
TULSA, OK 74136  
PHONE: 918-366-9320  
FAX: 918-366-9338

#### OREGON

**PORTLAND**  
20393 SW AVERY COURT  
TUALATIN, OR 97062  
PHONE: 503-691-9010  
FAX: 503-691-9012

#### PENNSYLVANIA

**PHILADELPHIA**  
1035 THOMAS BUSCH  
MEMORIAL HIGHWAY  
PENNSAUKEN, NJ 08110  
PHONE: 856-661-1442  
FAX: 856-663-6363

#### PITTSBURGH

159 PROMINENCE DRIVE  
NEW KENSINGTON, PA 15068  
PHONE: 724-889-0092  
FAX: 724-889-0094

#### TENNESSEE

**MEMPHIS**  
4000 WINCHESTER ROAD  
MEMPHIS, TN 38118  
PHONE: 901-365-2020  
FAX: 901-365-3914

#### TEXAS

**DALLAS**  
3040 QUEBEC STREET  
DALLAS, TX 75247  
PHONE: 214-634-7271  
FAX: 214-634-8874

#### HOUSTON

10355 W. LITTLE YORK ROAD  
SUITE 300  
HOUSTON, TX 77041  
PHONE: 281-977-6500  
FAX: 281-977-6510

#### UTAH

**SALT LAKE CITY**  
2230 SOUTH MAIN STREET  
SALT LAKE CITY, UT 84115  
PHONE: 801-832-0127  
FAX: 801-832-8911

#### WISCONSIN

**MILWAUKEE**  
1960 SOUTH CALHOUN ROAD  
NEW BERLIN, WI 53151  
PHONE: 262-784-5940  
FAX: 262-784-1215

#### INTERNATIONAL SALES

**FORT SMITH, AR**  
P.O. BOX 2400  
FORT SMITH, AR 72902  
PHONE: 479-646-4711  
FAX: 479-648-5895

#### CANADA

**EDMONTON, ALBERTA**  
4053-92 STREET  
EDMONTON, ALBERTA T6E 6R8  
PHONE: 780-434-4900  
FAX: 780-438-2600

#### TORONTO

**OAKVILLE, ONTARIO**  
2750 COVENTRY ROAD  
OAKVILLE, ONTARIO L6H 6R1  
PHONE: 905-829-3301  
FAX: 905-829-3302

#### MONTREAL, QUEBEC

5155 J-ARMAND BOMBARDIER  
SAINT-HUBERT, QUEBEC  
CANADA J3Z 1G4  
PHONE: 514-933-2711  
FAX: 514-933-8639

#### VANCOUVER, BRITISH COLUMBIA

1538 KEBET WAY  
PORT COQUITLAM,  
BRITISH COLUMBIA V3C 5M5  
PHONE: 604-421-2822  
FAX: 604-421-3113

#### WINNIPEG, MANITOBA

54 PRINCESS STREET  
WINNIPEG, MANITOBA R3B 1K2  
PHONE: 204-942-5205  
FAX: 204-956-4251

#### AUSTRALIA

UNIT 3, 6 STANTON ROAD  
SEVEN HILLS, NSW 2147, AUSTRALIA  
PHONE: (61) (2) 9674 5455  
FAX: (61) (2) 9674 2495

UNIT 8, 5 KELLETTS ROAD  
ROWVILLE, VICTORIA, 3178 AUSTRALIA  
PHONE: (61) (3) 9753 4355  
FAX: (61) (3) 9753 4366

#### EL SALVADOR

RESIDENCIAL PINARES DE SUIZA  
POL. 15 #44,  
NVA. SAN SALVADOR, EL SALVADOR  
PHONE: +503 2288-1519  
FAX: +503 2288-1518

#### CHILE

LUIS THAYER OJEDA 166,  
OF 402 - PROVIDENCIA  
SANTIAGO, CHILE  
PHONE: +56 2 816 9900

#### CHINA

160 SONG SHENG ROAD  
SONGJIANG INDUSTRY ZONE  
SHANGHAI 201613, CHINA  
PHONE: +86 21 5760 5335  
FAX: +86 21 5760 5336

#### GERMANY

HERMANN-HEINRICH - GOSSEN 3  
50858 KÖLN, GERMANY  
PHONE: 49-2234379410  
FAX: 49-22343794164

DIESELSTRASSE 22  
D-85551 KIRCHHEIM  
MÜNCHEN, GERMANY  
PHONE: +49 89 90 5080  
FAX: +49 89 90 50 8492

#### INDIA

14, COMMERCE AVENUE  
MAHAGANESH COLONY  
PAUD ROAD  
PUNE - 411038  
MAHARASHTRA, INDIA  
PHONE: +91 20 25 45 27 17 / 18  
FAX: +91 20 25 45 27 19

#### INDONESIA

TALAVERA OFFICE PARK,  
28TH FLOOR, SUITE M18  
JI. T.B. SIMATUPANG, KAV. 22-26  
JAKARTA 12430, INDONESIA  
PHONE: +62 21 7599 9879  
FAX: +62 21 7599 9878

#### ITALY

VIA SOTTOBISIO 30  
BALERNA - CH-6828  
PHONE: +41 91 683 6161  
FAX: +41 91 630 2633

#### JAPAN

DIA BLDG 802,  
2-21-1 TSURUYA-CHO,  
KANAGAWA-KU  
YOKOHAMA, 221-0835, JAPAN  
PHONE: 81-45-412-4506  
FAX: 81-45-412-4507

#### MEXICO

**LEON, GUANAJUATO**  
KM. 2.0 BLVD. AEROPUERTO  
LEÓN 37545, GUANAJUATO, MÉXICO  
PHONE: +52 477 761 2030  
FAX: +52 477 761 2010

#### MIDDLE EAST & NORTH AFRICA

VSE INTERNATIONAL CORP.  
P. O. BOX 5618  
BUFFALO GROVE, IL 60089-5618  
PHONE: 847 590 5547  
FAX: 847 590 5587

#### PANAMA

AVE. RICARDO J. ALFARO  
EDIFICIO SUN TOWERS MALL  
PISO 2, LOCAL 55  
CIUDAD DE PANAMÁ, PANAMÁ  
PHONE: +507 236-5155  
FAX: +507 236-0591

#### SINGAPORE

18 KAKI BUKIT ROAD 3, #03-09  
ENTREPRENEUR BUSINESS CENTRE  
SINGAPORE 415978  
PHONE: (65) 6744 2572  
FAX: (65) 6747 1708

#### SWITZERLAND

POSTFACH 73  
SCHUTZENSTRASSE 59  
CH-8245 FEUERTHALEN  
SWITZERLAND  
PHONE: +41 52 647 4700  
FAX: +41 52 659 2394

#### TAIWAN

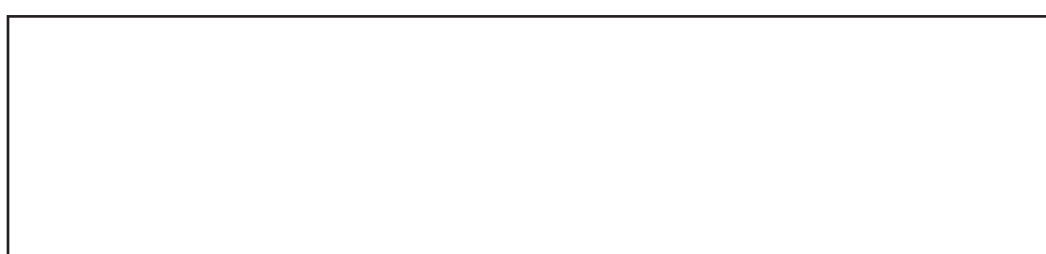
1F, NO. 126 WENSHAN 3RD STREET,  
NANTUN DISTRICT,  
TAICHUNG CITY 408  
TAIWAN R.O.C.  
PHONE: (886) 4 238 04235  
FAX: (886) 4 238 04463

#### UNITED KINGDOM

6 BRISTOL DISTRIBUTION PARK  
HAWKLEY DRIVE  
BRISTOL BS32 0BF U.K.  
PHONE: +44 1454 850000  
FAX: +44 1454 859001

#### VENEZUELA

AV. ROMA, QTA EL MILAGRO. URB.  
CALIFORNIA NORTE  
CARACAS, 1070  
VENEZUELA  
PHONE/FAX: +58 212 272 7343  
MOBILE: +58 414 114 8623



**Baldor Electric Company**

P.O. Box 2400

Fort Smith, AR 72902-2400 U.S.A.

Ph (479) 646-4711 • Fax (479) 648-5792

International Fax (479) 648-5895

[www.baldor.com](http://www.baldor.com)