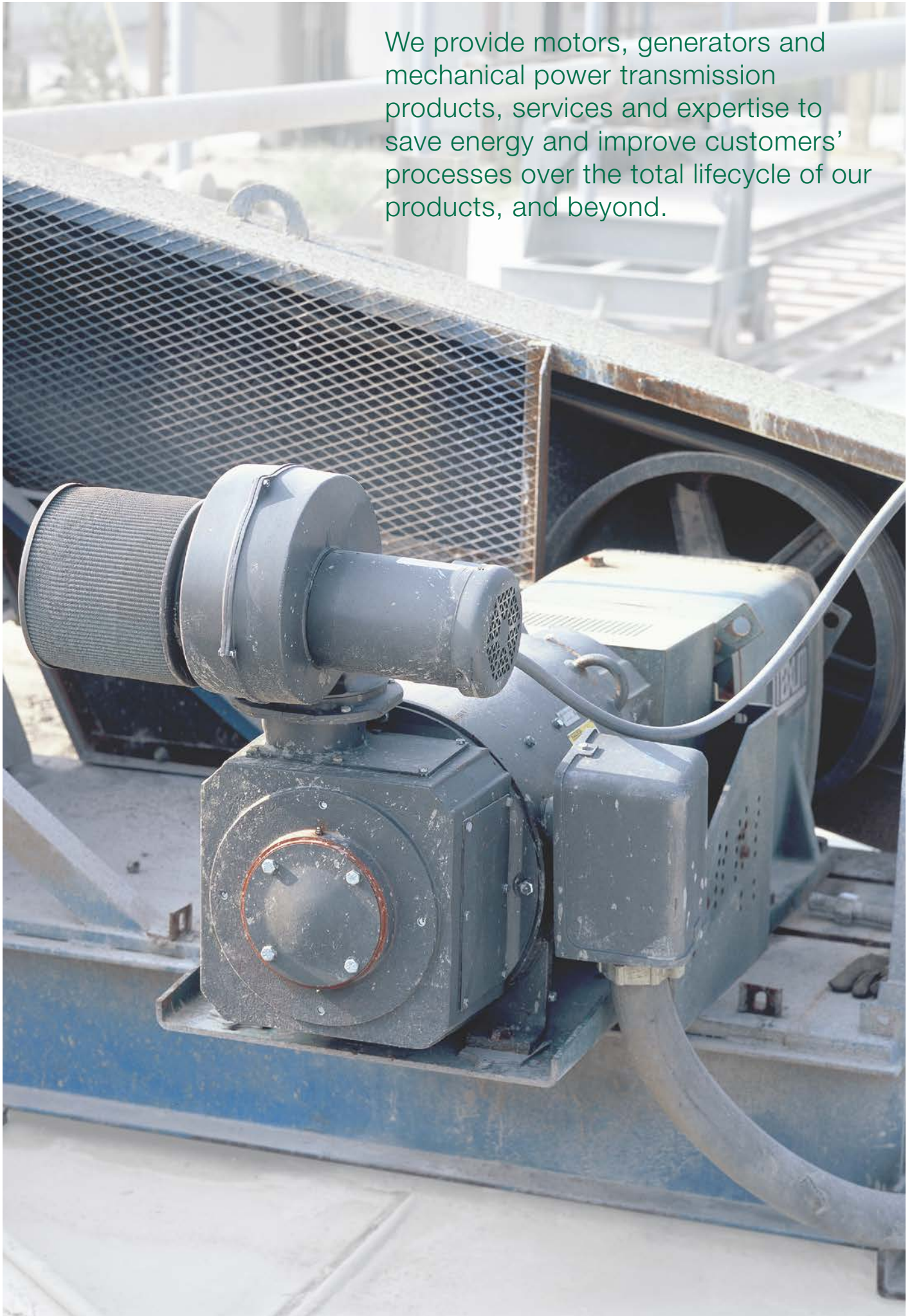


Product brochure

Direct current motors and drives 1/50 - 3000 hp

We provide motors, generators and mechanical power transmission products, services and expertise to save energy and improve customers' processes over the total lifecycle of our products, and beyond.



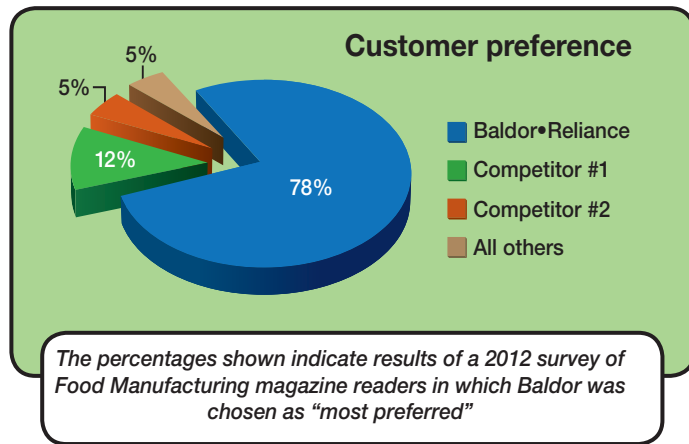
Direct current motors and drives

1/50 - 3000 hp

Contents

- 1 DC motor and control applications
- 1 Matched performance
- 2 Typical frame sizes for PMDC motors
- 4 SCR-rated PMDC motors
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Why Baldor?



For nearly a century, Baldor has strived to provide customers with the best value and reliability in industrial electric motors. That dedication shows in customer preference for Baldor•Reliance motors. To be considered as the most preferred...

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. We began lowering the energy consumption of our motors in the 1920s, long before others were even talking about it. Today, our expansive line of Baldor Super-E® premium-efficient motors ranges from 1 through 15,000 hp. Baldor's Super-E line offers customers the highest overall efficiency levels in the industry.

Continuous innovation to improve reliability. Baldor leads the motor industry in applying new technologies and materials to improve motor reliability. Recent improvements to the line of washdown duty motors are further proof that Baldor is the leader in motors for food and pharmaceutical processing and handling applications. These improvements are explained in detail on the following pages.



Industry's shortest lead times/flexible manufacturing. Baldor has the industry's shortest lead times on custom motors – just ten working days. Our unique Lean Flex Flow™ manufacturing process lets us produce any order in any quantity, quickly and efficiently.



Baldor products are available at more locations than any other brand. Our 36 district offices across North America and hundreds of ABB offices around the world offer immediate availability of Baldor products to thousands of customers.

DC motors & controls for many different applications

Baldor offers the widest variety of DC motors. From 1/50 to 3000 horsepower, our rugged industrial designs may be used to power everything from a medical blood centrifuge to the printing press for your Sunday newspaper.

DC motors are available from stock in permanent magnet designs through 5 horsepower. Wound field designs are stocked through 500 HP. DC motors with special features are available from stock for special applications:

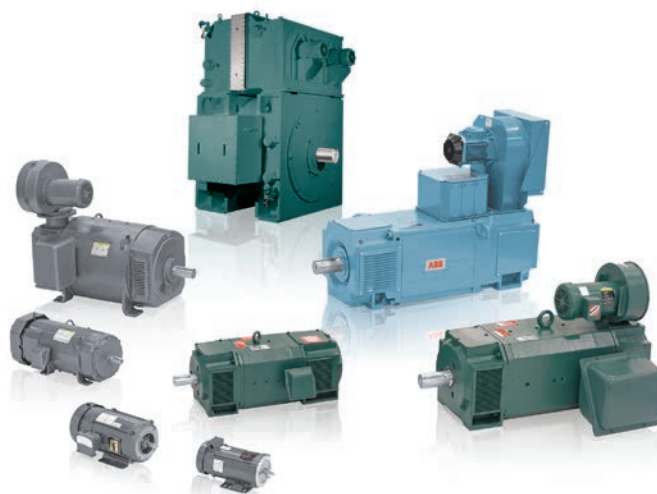
- Explosion-proof for hazardous locations
- Washdown Enclosures for food processing
- Metric mounting for replacement of motors built to IEC standards
- Permanent magnet motors with a built-in precision DC tachometer
- Right angle and parallel shaft gear motors
- 115 and 230 volt power motors built to IEEE 45 and USCG 259 standards for shipboard use

Custom motors are available through 3000 HP with special voltages, base speeds, mountings and other options. With Baldor, building a custom motor to the specifications you require can eliminate assembly time, adapters, repainting and other costly operations. You buy only what you require, and we deliver when you need it.



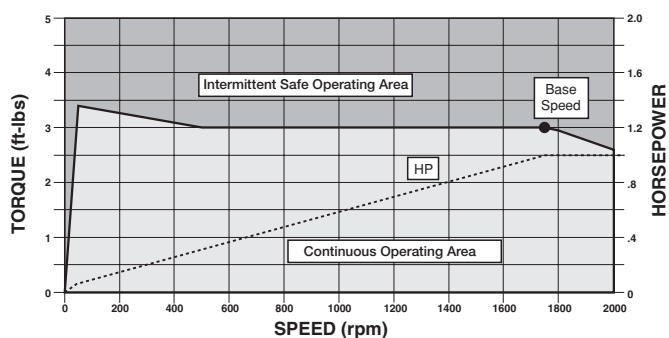
Matched performance™

We know how our DC motors and controls perform when used together. This assured performance gives you the Matched Performance™ that you need. The wide range of SCR controls we offer assures that we have the correct control for most applications. Let Baldor take the guesswork out of matching motors and controls.



Baldor offers a wide range of DC motors with up to 500 Hp available from stock.

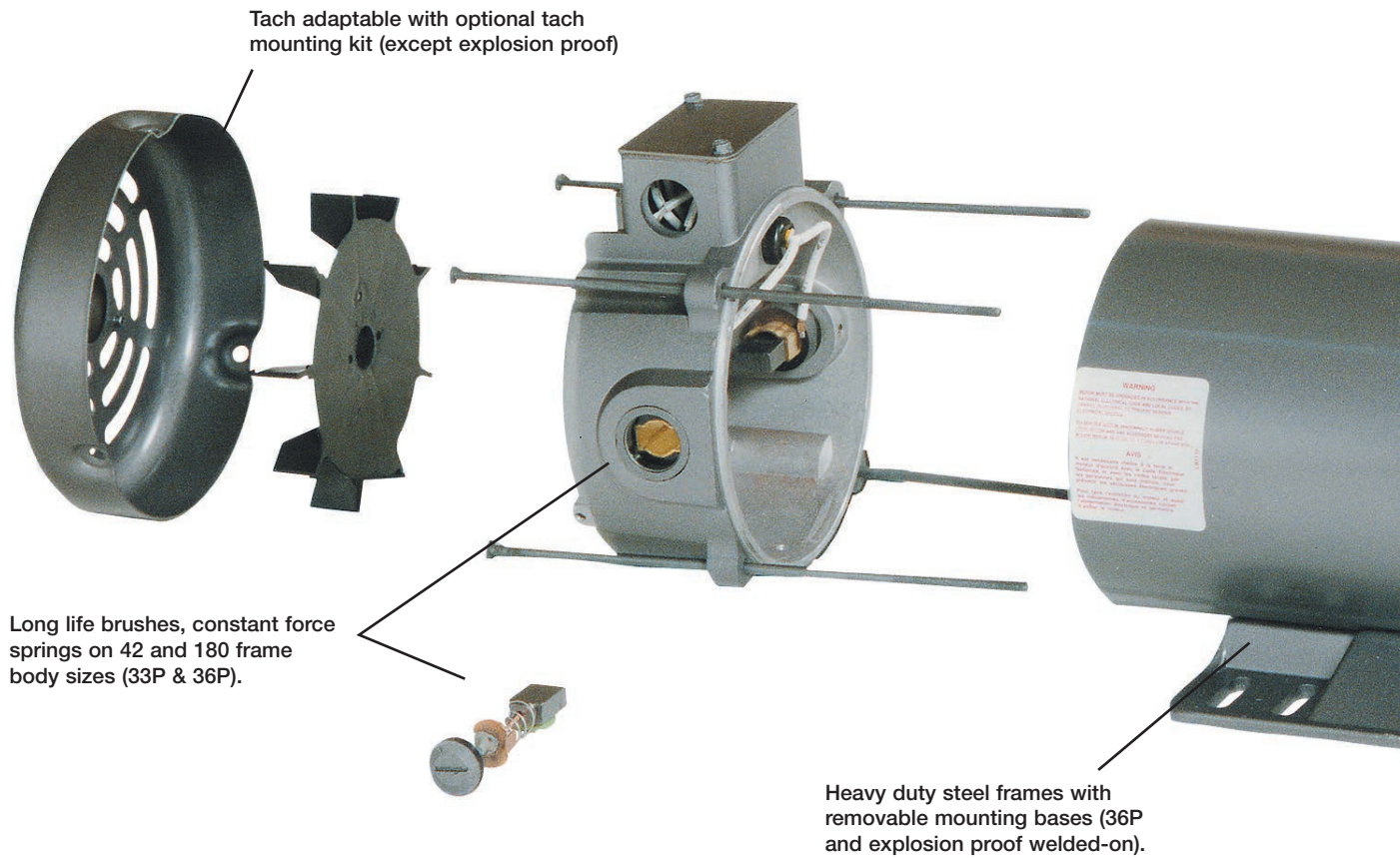
Performance specifications BC140 Control and CDP3455 Motor 1HP



Input Voltage:	230V AC 50/60 Hz 1 Phase
Base Speed:	1750 RPM
Operating Speed Range:	0-2000 RPM
Constant Torque Speed Range:	90-1750 RPM
Constant Horsepower Speed Range:	1750-2000 RPM
Speed Regulation Std. Feedback Type:	Armature 1% of Base Speed
Opt. Feedback Type:	Tachometer 1% of Set Speed
Motor Cooling:	TEFC

Baldor permanent magnet DC motor

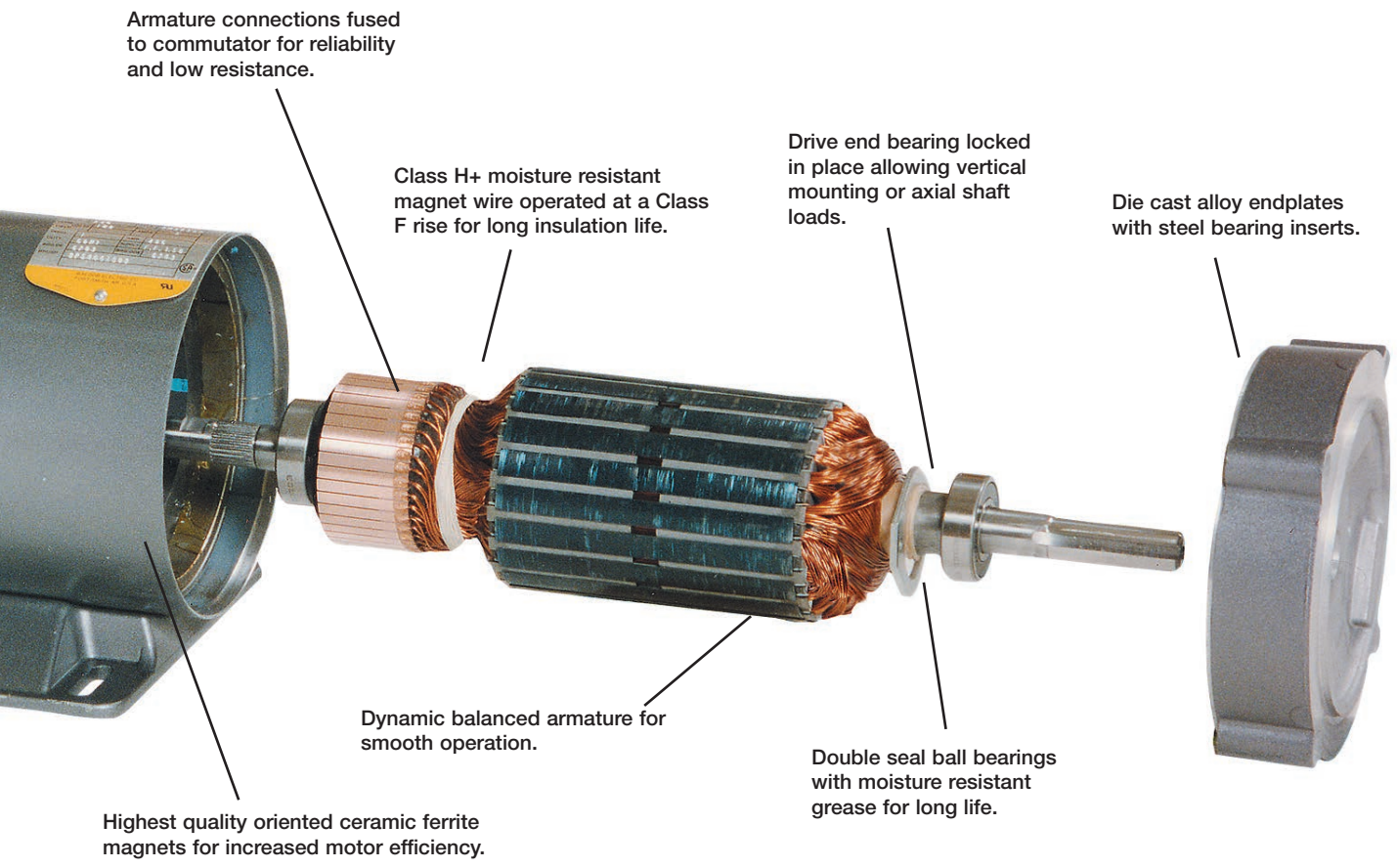
At the heart of our DC motor lineup are the many sizes of our versatile permanent magnet DC motors. These range in output from 1/50 hp to the industry's only 5 horsepower. Ruggedness, dependability and ease of use are the reasons that Baldor PMDC motors are specified by more customers than any other.



Typical frame sizes for permanent magnet DC motors

Hp	Base speed				
	1150	1750	2500	3500	5000
1/50		ABP-0	ABP-0	ABP-0	ABP-0
1/25		ABP-0	ABP-0	ABP-0	ABP-0
1/10		42C, 48C or 56C	42C, 48C or 56C	42C, 48C or 56C	42C, 48C or 56C
1/8	56C	42C, 48C or 56C	42C, 48C or 56C	42C, 48C or 56C	42C, 48C or 56C
1/6	56C	42C, 48C 56C	42C or 48C 56C	42C or 48C 56C	42C, 48C or 56C
1/4	56C	56C	42C or 48C 56C	42C or 48C 56C	42C, 48C or 56C
1/3	56C	56C	56C	56C	
1/2	56C	56C	56C	56C	
3/4	143-5TC	56C	56C	56C	
1	143-5TC	56C	56C	56C	
1-1/2	182-4TC	143-5TC	143-5TC	143-5TC	
2	182-4TC	143-5TC	143-5TC	182-4TC	
3	182-4TC	182-4TC	182-4TC	182-4TC	
5		1810ATC	182-4TC	182-4TC	

Ratings 2 HP and above designed for 180 volts only.
ABP = Non NEMA Foot Mount



Armature connections fused to commutator for reliability and low resistance.

Class H+ moisture resistant magnet wire operated at a Class F rise for long insulation life.

Drive end bearing locked in place allowing vertical mounting or axial shaft loads.

Die cast alloy endplates with steel bearing inserts.

Dynamic balanced armature for smooth operation.

Highest quality oriented ceramic ferrite magnets for increased motor efficiency.

Double seal ball bearings with moisture resistant grease for long life.

SCR - Rated permanent magnet DC motors

Baldor chooses to make a wide variety of SCR-Rated PMDC motors, each specifically designed to a horsepower range. This optimizes the motor's commutator, brushes and inertia to assure the best performance possible. We further modify these designs for specific applications, washdown, explosion proof, metric mountings and integral DC tachometer. Only Baldor offers the choice of such a wide range of DC motors from stock, so you can be assured of having the best motor for your application.



TEFC
1/8 - 5 HP
90 or 180 volt armature
42 - 1810AT frame



TENV
1/8 - 1 HP
90 or 180 volt armature
48 - 145TC Frame



Metric face or flange
.15 - 3.7 kW, 1/5 - 5 HP
180 volt armature
IEC D63D - D112D



Washdown duty
Washdown white design 1/4 - 5 HP
Paint-free design 1/4 - 1 HP
48 - 1810AT frame



Explosion proof
1/4 - 1-1/2 HP
90 or 180 volt armature
56 - 145TC frame



Integral DC tach
1/4 - 5 HP
Integral 50 V/1000 RPM DC tachometer
90 or 180 volt armature
48 - 1810AT frame

Performance data

TENV & TEFC PMDC motors*							
HP	RPM	NEMA frame	Enclosure	Catalog number	Arm volts	Full load amps	Rated torq. lb-ft
1/4	1750	56C	TENV	CDP3310	90	2.5	0.75
1/4	1750	56C	TENV	CDP3306	180	1.3	0.75
1/3	1750	56C	TENV	CDP3320	90	3.2	1.0
1/3	1750	56C	TENV	CDP3316	180	1.6	1.0
1/2	1750	56C	TENV	CDP3330	90	4.8	1.5
1/2	1750	56C	TENV	CDP3326	180	2.5	1.5
1/2	2500	56C	TENV	CDP3335	90	5.0	1.05
3/4	1750	56C	TEFC	CDP3440	90	7.6	2.25
3/4	1750	56C	TEFC	CDP3436	180	3.7	2.25
3/4	2500	56C	TEFC	CDP3443	90	7.5	1.58
1	1750	56C	TEFC	CDP3445	90	10.0	3.0
1	1750	56C	TEFC	CDP3455	180	5.0	3.0
1	2500	56C	TEFC	CDP3450	90	9.7	2.1
1	2500	56C	TEFC	CDP3460	180	4.9	2.1
1-1/2	1750	145TC	TEFC	CDP3575	180	7.7	4.5
1-1/2	2500	145TC	TEFC	CDP3580	180	7.0	3.15
2	1750	145TC	TEFC	CDP3585	180	9.6	6.0
2	2500	145TC	TEFC	CDP3590	180	10.0	4.2
3	1750	184TC	TEFC	CDP3603	180	14.0	9.0
3	1750	182C	TEFC	CDP3604	180	14.0	9.0
5	1750	1810ATC	TEFC	CDP3605	180	21.6	15.0
Explosion proof PMDC motors							
1/4	1750	56C	TEFC	CDPX3410	90	2.7	0.75
1/4	1750	56C	TEFC	CDPX3406	180	1.3	0.75
1/3	1750	56C	TEFC	CDPX3420	90	3.6	1.0
1/3	1750	56C	TEFC	CDPX3416	180	1.7	1.0
1/2	1750	56C	TEFC	CDPX3430	90	5.2	1.5
1/2	1750	56C	TEFC	CDPX3426	180	2.5	1.5
3/4	1750	56C	TEFC	CDPX3440	90	7.0	2.25
3/4	1750	56C	TEFC	CDPX3436	180	3.5	2.25
1	1750	56C	TEFC	CDPX3545	90	9.6	3.0
1	1750	56C	TEFC	CDPX3555	180	4.9	3.0
1-1/2	1750	145TC	TEFC	CDPX3575	180	7.1	4.5
kW/HP	IEC metric frame PMDC motors**						
.15-.20	1800	D63D	TENV	VP7424D	180	1.1	.60
.18-.25	1750	D71D	TENV	VP3311D	180	1.3	.75
.25-.33	1750	D71D	TENV	VP3316D	180	1.6	1.0
.37-.5	1750	D71D	TENV	VP3326D	180	2.5	1.5
.37-.5	3000	D71D	TEFC	VP3428D	180	2.5	0.9
.57-.75	1750	D80D	TEFC	VP3436D	180	3.7	2.25
.57-.75	3000	D80D	TEFC	VP3439D	180	3.6	1.31
.75-1.0	1750	D80D	TEFC	VP3455D	180	5.0	3.0
.75-1.0	3000	D80D	TEFC	VP3458D	180	5.1	1.75
1.1-1.5	1750	D90D	TEFC	VP3575D	180	7.7	4.5
1.1-1.5	3000	D90D	TEFC	VP3468D	180	7.7	2.63
1.5-2.0	1750	D90D	TEFC	VP3585D	180	9.6	6.0
1.5-2.0	3000	D90D	TEFC	VP3588D	180	10.0	3.5
2.2-3.0	1750	D112D	TEFC	VP3603D	180	14.0	9.0
3.7-5.0	1750	D112D	TEFC	VP3605D	180	24.5	15.0

NOTE: * Additional motors are available with washdown enclosures and with integral DC tachometers – same performance data.

** Additional motors are available with B14 face

Baldor DC motor construction

Baldor's broad line of DC motors continues to lead the industry with choices of permanent magnet or wound field designs. Many different configurations are available from stock or Baldor can design and build a motor to meet exact application requirements with our short lead time.

DC motor construction features						
Features	Clarksville	Westville	Gainesville	Gainesville	Kings Mtn.	Shelby
Design			Round frame NEMA	RPMIII NEMA	Super RPM NEMA	DMI IEC
HP range	1/50 - 1/4 HP	1/8 - 5 HP	1-500 HP	1-500 HP	600-3000 HP	22-1300 kW
Class F insulation	S	S	F	F	F	H
1.0 Service factor	S	S	S	S	S	S
Long life brush system	S	S	S	S	S	S
Precision turned commutator with fused armature connections	S	S	S	S	S	S
Permanent magnet designs	S	S				
Wound field designs		S	S	S	S	S
Operation above base speed with field weakening			S	S	S	S
2 electrical pole designs	S	S	180-320	180		
4 electrical pole designs			360-500	210-440	500-840	180-280
6 electrical pole designs					960-1200	315-400
8 electrical pole designs					1400-1600	
Overload thermostat		0	S-stock motors	S-stock motors	0	S-stock motors
Mechanical features						
NEMA frame sizes	42 - 56	48 - 1810AT	182-5012AT	C180ATZ- C440ATZ	B500ATZ- B1600AT	
IEC frame sizes	63	71 - 112	112-315	112-280		180-400
TENV and TEFC enclosures	S	S	S	S		
TEFC enclosures			0	0	0	0
DPPG - open enclosures	0	0	S	S		
DPBV - drip proof - blower cooled enclosures			S	S	S	S
Washdown and paint free washdown models		S				
Explosion proof enclosure		S		0	0	
MSHA - mine safety and health administration models		0	0	0		
Integral DC tachometer models		S				
Tach adaptable	0	S	S	S	S	S
Steel band - Die cast aluminum endplates, steel fan cover	S	S				
Heavy rolled steel frame - cast iron endplates & fan cover			S			
Laminated steel frame-cast iron end plates & fan cover				S	S	S
Die cast aluminum conduit box	S	S				
Stamped steel conduit box				S		
Cast iron conduit box			S	0		
Mill type fabricated conduit box				0	S	S
Double sealed ball bearings	S	S	S			
Open bearings with inner and outer caps				S	S	S
Hardware - cad plated	S	S	S	S	S	S
Motor unfiltered vibration at rated voltage & frequency < 0.15 in/sec velocity	S	S	S	S	S	
Motor unfiltered vibration at rated voltage & frequency < 0.08 in/sec velocity	0	0	0	0	0	
Non-sparking external cooling fan on TEFC		S	S	S	S	
Limited warranty	12 months	24 months	24 months	24 months	24 months	24 months

Note: Contact your Baldor district office for certified data, dimensions and features of a specific motor.

Subfractional Hp permanent magnet DC motors and gearmotors

In addition to our larger DC motors, Baldor has a complete line of subfractional permanent magnet DC motors – alone or with either right angle or parallel shaft gear reduction. Both in SCR-Rated and low voltage designs.

A wide variety of styles and mounting configurations of right angle gearmotors cover the range from 1/50 to 1/2 horsepower. Sealed gearbox housings with lifetime lubrication allow mounting in any position*. Their compact design and broad selection of speeds make these units ideal for direct coupling to the load. In many cases, additional equipment such as chain and sprockets can be eliminated. These units are well suited for all types of conveyORIZED equipment, mixers, feeders, gate and door operators and many other applications.

Standardized mountings and optional bases make parallel shaft gearmotors ideal for original equipment as well as replacement applications. These compact efficient gearmotors provide high output torque in a small package. They are well suited to many applications such as all types of conveyORIZED equipment, food processing, printing and packaging machines.



**Subfractional HP motors
1/100 - 1/4 HP**



**Right angle gearmotors output
Torques to 250 lb-in**



**Parallel shaft gearmotors output
Torques to 400 lb-in**



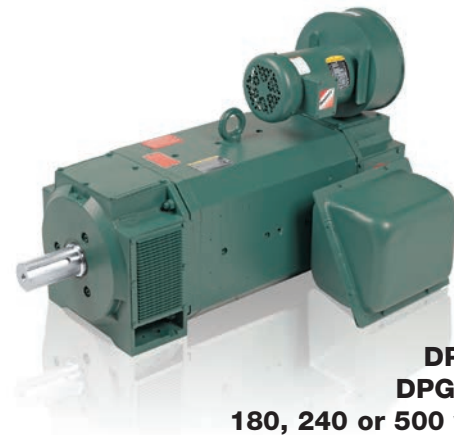
**Low voltage
1/50 - 1/4 HP**

NOTE: * Vertical motor below gearhead is not recommended. Avoiding this position will provide greater protection against oil leakage back into the motor. Contact Baldor if this position cannot be avoided.

Baldor's family of wound field DC motors

Baldor also makes a wide variety of wound field DC motors. These range from a 48 frame 1/8 HP motor to a large B1610AT frame rated at 3000 HP. We know that some customers still prefer the reliable Baldor wound field motors that have been available for over 75 years. Baldor continues to expand our product range so we can be your primary supplier of DC motors and drives.

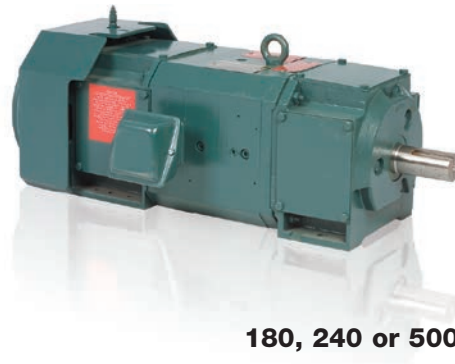
Low voltage Baldor wound field motors are available with either a series or compound wound field. Special designs are available for traction applications or hydraulic pumps. Power motors are designed for operation from a generator or batteries.



RPMIII
DPFG 1-250 HP
DPG-FV 1-500 HP
180, 240 or 500 volt armature



TEFC 1/8-75 HP,
TEAO 5-100 HP
TEUC 15-500 HP
180 volt armature – 100/200 volt field
240 or 500 volt armature – 150/300 volt field



RPMIII
TEFC 2-75 HP
TENV 1-40 HP
180, 240 or 500 volt armature



Explosion Proof
1/2 - 3 HP
180 Volt Armature
100/200 volt field



Super RPM
DPG-FV 600-3000 HP
TEDC 600-3000 HP
500, 600, 700 volt armature



DPFG 1-250 HP
DPBV 1-500 HP
180 volt armature - 100/200 volt field
240 or 500 volt armature - 150/300 volt field



DMI IEC
IC06, IC17, IC37,
IC86W, IC666
27-1300 kW
400-815 volt armature
choice of field voltage



Metric face or flange
.09-370 kW, 1/8 - 500 HP
Choice of voltages to
meet most applications

Performance data

TENV & TEFC shunt wound DC motors									
HP	RPM	NEMA frame	Enclosure	Catalog number	Arm /	Fld volts	F.L. amperage arm / fld hi/lo		Rated torq. lb-ft
1/4	1750	56C	TEFC	CD3425	90	100/ 50	3.0	0.3/0.6	0.75
1/3	1750	56C	TEFC	CD3433	90	100/ 50	3.4	0.4/0.8	1.0
	1750	56C	TEFC	CD3434	180	200/100	1.9	0.21/0.42	1.0
	1750	56C	TEFC	CD5333	90	100/ 50	3.7	0.5/1.0	1.0
1/2	1750	56C	TEFC	CD3450	90	100/ 50	5.2	0.5/1.0	1.5
	1750	56C	TEFC	CD3451	180	200/100	2.6	0.25/0.5	1.5
	1750	56C	TEFC	CD5350	90	100/ 50	5.0	0.44/0.88	1.5
3/4	1750	56C	TEFC	CD3475	90	100/ 50	7.8	0.6/1.2	2.25
	1750	56C	TEFC	CD3476	180	200/100	3.9	0.3/0.6	2.25
	1750	56C	TEFC	CD5375	90	100/ 50	8.0	0.6/1.2	2.25
1	1750	56C	TEFC	CD5319	90	100/ 50	10.0	0.6/1.2	3.0
	1750	56C	TEFC	CD5318	180	200/100	5.0	0.3/0.6	3.0
	1750	184C	TEFC	CD6219	90	100/ 50	9.6	0.55/1.1	3.0
	1750	184C	TEFC	CD6218	180	200/100	5.0	0.25/0.5	3.0
1-1/2	1750	184C	TEFC	CD6215	180	200/100	7.5	0.25/0.5	4.5
2	1750	184C	TEFC	CD6202	180	200/100	9.5	0.4/0.8	6.0
	1750	213C	TEFC	CD7502	180	200/100	9.5	0.3/0.6	6.0
3	1750	184TC	TEFC	CD6203	180	200/100	14.7	0.6/1.2	9.0
	1750	215C	TEFC	CD7503	180	200/100	14.7	0.4/0.8	9.0
Explosion proof wound field motors									
1/2	1750	182CZ	TEFC	CDX1850	90	100/50	4.9	0.55/1.1	1.5
3/4	1750	182CZ	TEFC	CDX1875	90	100/50	7.0	0.55/1.1	2.25
1	1750	182CZ	TEFC	CDX2001	180	200/100	5.0	0.25/0.5	3.0
	1750	182C	TEFC	CDX7100	180	200/100	5.0	0.25/0.5	3.0
1-1/2	1750	184C	TEFC	CDX7150	180	200/100	7.5	0.25/0.5	4.5
2	1750	184C	TEFC	CDX7200	180	200/100	9.5	0.4/0.8	6.0

Baldor's extensive line of integral HP wound field DC motors

DC motors continue to be an important product at Baldor. Our extensive stock of integral HP ratings allows you to obtain the motor required from our inventory. If the motor isn't available from stock, our DC motor plants have the capability to build a custom motor with the industries shortest lead times.

We offer a variety of motor designs, ratings and enclosures for any application including process lines, extruders, machine tools, stamping presses, crane and hoist, test stands, metals and paper industry applications. In addition, our DC motors can be provided with the custom features your application demands including feedback devices, special shafts and mounting requirements.

The following charts provide an overview of Baldor's Integral HP manufacturing capabilities.

Integral HP custom motor capabilities

Round frame SCR rated DC motors feature a rugged rolled steel frame designed for long life in industrial applications. Our round frame designs are direct replacements for competitive motors of similar design construction. Custom motors are available in a wide variety of enclosures including drip proof fully guarded (DPFG), drip proof blower ventilated (DPBV), totally enclosed fan cooled (TEFC), totally enclosed non ventilated (TENV), totally enclosed air over (TEAO) and totally enclosed unit cooled (TEUC).

DPFG and DPBV enclosure, 500V armature (240 volt available), typical frame sizes

HP	Base speed								
	300	400	500	650	850	1150	1750	2500	3500
1					L186AT①	L182AT①	L182AT①	L182AT①②	L182AT①②
1.5					L186AT①	L186AT①	L182AT①	L182AT①	L182AT①
2					L186AT	L186AT	L186AT	L182AT	L182AT
3	328AT①	288AT①	259AT①	2110AT①	218AT	L186AT	L186AT	L186AT	L182AT
5	365AT①	328AT①	288AT①	259AT①	2110AT	219AT	L186AT	L186AT	L186AT
7.5	368AT	366AT	328AT	288AT	259AT	2110AT	218AT	L186AT	L186AT
10	407AT	366AT	328AT	328AT	288AT	258AT	219AT	218AT	1810AT
15	409AT	407AT	368AT	365AT	328AT	288AT	258AT	219AT	218AT
20	407AT②	368AT②	366AT②	366AT	328AT	328AT	259AT	2110AT	219AT
25	508AT	409AT	368AT②	366AT②	366AT	328AT	288AT	258AT	258AT
30	506AT	506AT	407AT	366AT②	366AT	328AT②	288AT	259AT	259AT
40	508AT	504AT	504AT	368AT②	366AT②	365AT②	328AT	287AT②	288AT
50	508AT	506AT②	506AT	409AT	368AT②	366AT②	328AT	288AT	288AT②
60	506AT②	506AT②	506AT	504AT	368AT②	368AT	366AT	328AT	328AT②
75	508AT②	506AT②	506AT②	504AT②	407AT②	368AT②	366AT	329AT	328AT②
100	5011AT②	5010AT②	508AT②	506AT②	409AT②	407AT②	368AT	366AT②	366AT②
125		5010AT②	508AT②	506AT②	506AT	409AT②	368AT②	368AT②	366AT②
150		5010AT②	508AT②	506AT②	506AT②	506AT	407AT②	407AT②	366AT②
200			5011AT②	508AT②	506AT②	506AT②	409AT②	409AT②	
250			5012AT②	5011AT②	5010AT②	506AT②	504AT②		
300				5011AT②	5010AT②	508AT	506AT②		
400					5012AT②	5010AT②	508AT②		
500						5011AT②	5010AT②		

Notes: ① 240 volt armature only
 ② Blower required (DPBV)
 Totally enclosed designs also available.

RPMIII and super RPM DC motors.

RPMIII and super RPM DC motors feature a laminated frame design which provides for more power, reliability and serviceability in a smaller package. The field proven laminated frame improves commutation and heat dissipation, and requires less mounting space than conventional designs. Choose from our complete line of enclosures including: Drip proof guarded (DPG), drip proof guarded force ventilated (DPG-FV), totally enclosed fan cooled (TEFC), totally enclosed non ventilated (TENV), totally enclosed explosion proof (TEXP), totally enclosed air over (TEAO) and totally enclosed dual cooled (TEDC). A variety of ratings, enclosures and voltages are stocked through 500HP and custom designs are available through 3000HP along with a wide variety of modifications to meet your specific application requirements.

RPMIII & super RPM laminated frame, DPG-FV enclosure, 500v armature, typical frame sizes

Base speed									
HP	300	400	500	650	850	1150	1750	2500	3500
1					C1811ATZ	C1811ATZ	C1811ATZ		
1.5					C1811ATZ	C1811ATZ	C1811ATZ		
2					C1811ATZ	C1811ATZ	C1811ATZ	C1811ATZ	
3	MC2113ATZ	SC2113ATZ	C1812ATZ	C1812ATZ	C1811ATZ	C1811ATZ	C1811ATZ	C1811ATZ	
5	LC2113ATZ	MC2113ATZ	MC2113ATZ	SC2113ATZ	C1812ATZ	C1811ATZ	C1811ATZ	C1811ATZ	
7.5	LC2115ATZ	MC2115ATZ	LC2113ATZ	MC2113ATZ	SC2113ATZ	C1812ATZ	C1811ATZ	C1811ATZ	C1811ATZ
10	LC2512ATZ	MC2512ATZ	MC2115ATZ	MC2115ATZ	SC2113ATZ	SC2113ATZ	C1812ATZ	C1811ATZ	C1811ATZ
15	LC2812ATZ	C2514ATZ	LC2512ATZ	LC2115ATZ	LC2113ATZ	MC2113ATZ	SC2113ATZ	C1812ATZ	C1812ATZ
20	C2815ATZ	LC2812ATZ	C2514ATZ	LC2512ATZ	LC2115ATZ	LC2113ATZ	SC2113ATZ	SC2113ATZ	SC2113ATZ
25	C3214ATZ	C2815ATZ	LC2812ATZ	C2514ATZ	MC2512ATZ	MC2115ATZ	MC2113ATZ	SC2113ATZ	SC2113ATZ
30	C3214ATZ	C2815ATZ	C2815ATZ	C2515ATZ	LC25152ATZ	LC2115ATZ	LC2113ATZ	SC2113ATZ	SC2113ATZ
40	C3613ATZ	C3214ATZ	C2815ATZ	C2515ATZ	C2514ATZ	LC2512ATZ	MC2115ATZ	LC2113ATZ	LC2113ATZ
50	C3613ATZ	LC3612ATZ	C3214ATZ	C2815ATZ	C2515ATZ	C2514ATZ	LC2115ATZ	LC2115ATZ	MC2115ATZ
60	LC4013ATZ	C3613ATZ	LC3612ATZ	C3214ATZ	C2815ATZ	C2515ATZ	LC2512ATZ	LC2115ATZ	MC2115ATZ
75	LC4013ATZ	MC4013ATZ	MC4013ATZ	LC3612ATZ	C2815ATZ	C2815ATZ	C2514ATZ	LC2512ATZ	MC2512ATZ
100	C4414ATZ	C4413ATZ	MC4013ATZ	C3613ATZ	C3214ATZ	C2815ATZ	C2515ATZ	MC2812ATZ	MC2812ATZ
125	C4414ATZ	C4413ATZ	LC4013ATZ	MC4013ATZ	LC3612ATZ	C3214ATZ	C2813ATZ	LC2812ATZ	MC3212ATZ
150	B589ATZ	B509ATZ	C4412ATZ	MC4013ATZ	C3613ATZ	LC3612ATZ	C2815ATZ	LC3212ATZ	LC3212ATZ
200	BB5810ATZ	B589ATZ	C4414ATZ	C4413ATZ	MC4013ATZ	C3613ATZ	C3214ATZ	C3214ATZ	
250	B688ATZ	BB5810ATZ	B589ATZ	C4413ATZ	LC4013ATZ	MC4013ATZ	LC3612ATZ	MC3612ATZ	
300	B689ATZ	B688ATZ	BB5810ATZ	C4414ATZ	C4413ATZ	LC4013ATZ	LC3613ATZ		
400	B845ATZ	B689ATZ	B688ATZ	BB5810ATZ	C4414ATZ	C4413ATZ	MC4013ATZ		
500	B846ATZ	B844AT	B689ATZ	B688ATZ	B589ATZ	C4414ATZ	C4412ATZ		
600	B847AT	B846AT	B843AT	B689ATZ	BB5810ATZ	B589ATZ	B587ATZ		
700	B964AT	B847AT	B845AT	B842AT	B688ATZ	BB5810ATZ	BB587ATZ		
800	B965AT	B847AT	B846AT	B843AT	B842AT	B687ATZ	B685ATZ		
900	B966AT	B964AT	B846AT	B844AT	B842AT	B842AT	B842AT		
1000	B967AT	B965AT	B847AT	B845AT	B843AT	B842AT	B842AT		
1250	B969AT	B966AT	B966AT	B847AT	B845AT	B843AT			

Base speed												
HP	175	200	225	250	300	350	400	450	500	650	850	1150
1500					B1409AT	B969AT	B968AT	B967AT	B966AT	B964AT	B962AT	B962AT
1750				B1606AT	B1409AT	B1407AT	B1406AT	B1209AT	B969AT	B967AT	B965AT	B962AT
2000	B1610AT	B1609AT	B1607AT	B1606AT	B1604AT	B1409AT	B1408AT	B1209AT	B1208AT	B1206AT	B1204AT	B1202AT
2250		B1610AT		B1608AT	B1606AT	B1604AT	B1409AT	B1209AT	B1208AT	B1206AT	B1204AT	B1401AT
2500			B1610AT	B1609AT	B1607AT	B1605AT	B1409AT	B1408AT	B1407AT	B1405AT	B1403AT	B1401AT
3000				B1610AT	B1608AT	B1606AT	B1605AT	B1604AT	B1603AT	B1602AT	B1601AT	
600v armature												
700v armature												

DMI DC Motors

DMI DC motors also feature a laminated steel frame and are designed specifically to meet IEC standards. They are available in 180 through 400 frame sizes with power ratings from 22kW to 1300kW. This advanced DC motor design is ABB's most power dense design ever offered making DMI motors an ideal choice for new applications or replacements. DMI custom motors are available with IC06, IC17, IC37, IC86W and IC666 cooling arrangements and a complete assortment of modifications designed to satisfy your application requirements.

DMI laminated frame, IP23 enclosure, IC06 cooling, 460v armature, typical frame sizes

Base speed										
kw	250	300	400	500	650	850	1150	1750	2500	3500
22	280Y	250Y	250V	180P	180H	180E	180B	180B	180B	180B
30	280Y	250Y	250V	180P	180H	180E	180B	180B	180B	180B
37	280Y	250Y	250V	180P	180M	180H	180E	180B	180B	180B
45	280Y	250Y	200U	180S	180P	180H	180E	180B	180B	180B
56	280Y	250Y	200U	200S	180S	180P	180H	180B	180B	180B
75	280Y	250Y	250V	200U	200S	180S	180S	180H	180B	180B
93	280Y	250Y	250T	225U	200U	200S	180S	180H	180E	180B
112	250Y	250Y	225X	225X	225S	200S	200M	180M	180H	180E
149	315Y	280V	250Y	250V	225U	225S	200U	180U	180P	180H
187	315Y	315V	280V	250Y	250V	225U	225S	200P	200M	200H
224	315Z	315Y	280Y	280V	250Y	250T	225U	200S	225K	
298	400T	400R	315Z	280Y	280V	250Y	225X	225S	225N	
373	400V	400T	315Z	315Y	280Y	280V	250V	250P	250L	
448	400Z	400Y	400T	315Y	315T	280Y	280T	250P	280L	
522		400Y	400T	315Z	315Y	315T	280V	280P		
597		400Z	400Y	400V	315Z	315V	315T	315L		
671			400Y	400T	400R	315V	315T	315N		
746			400Z	400Y	400T	400R	400L			
933					400Y	400V	400R			
1119					400Y	400V	400R			
1306						400Y	400T			
620v armature										
815v armature										

Low voltage DC motors – 12-72 VDC

More and more vehicles are being powered from batteries. Baldor is a long-time supplier of energy efficient DC motors for electric vehicles.



Wound Field Motors
1/50 - 8 HP

DC power motors

Some applications require a DC motor to operate from a NEMA Type A power supply, a DC generator or back-up battery system. For these jobs, Baldor makes a lineup of DC Power Motors for either a 115 or 230 volts DC. These motors are typically compound wound, but are available in shunt or series construction. Some ratings are also available as permanent magnet.



DC Power Motors
1/50 - 500 HP

Lifting Magnet and DC Generators

Baldor's rugged industrial DC motors are used as the basis for our 230V DC lifting magnet generators. This provides a heavy duty generator with cast iron endplates and a thick steel housing. Oversized brushes and commutators, sealed ball bearings and corrosion-resistant epoxy paint ensure long life and minimum service requirements. These generators are self-excited and have a drooping voltage characteristic. These are stocked with choice of base mounting or base with C-face in 5-40 kW ratings. Larger custom ratings are also available.

DC Generators are available using our rugged Integral HP DC Motor frames. These can be designed with either external or self-excited fields. Standard output voltages are 120 or 250 DC, other voltages are available.



5 - 40 kW



3/4 - 200 kW

Tachometer Selection Guide

Catalog number	Baldor tach type	Output volt. V/1000 RPM	Ripple max. speed	Max. RMS ripple	Temp. max current	Reversing error	Cycles per rev.	Amb. temp °C	Approx. coefficient %volt/°C	Temp. compen.	Enclos.	Housing material	Weight lbs.	Inertia (lb-in ²)
PTG50XP	XPY	50	5000	0.5%	400 mA	2%	52	40	0.022	No	TENV IP54	Aluminum & Steel	5	0.93
PTG60XP-M	XPY	60	4166	0.5%	200 mA	2%	52	40	0.022	No	TENV IP54	Aluminum & Steel	5	0.93
PTG100XP	XPY	100	2500	0.5%	200 mA	2%	52	40	0.022	No	TENV IP54	Aluminum & Steel	5	0.93
CUSTOM	XPY	200	1250	0.5%	-	2%	52	40	0.022	No	TENV IP54	Aluminum & Steel	5	0.93
PTG50XPS	XPY-II	50	5000	0.35	100 mA	1%	33	65	0.045	No	TENV IP54	Cast Iron	19	0.54
PTG60XPS-M	XPY-II	60	4166	0.35	50 mA	1%	33	65	0.045	No	TENV IP54	Cast Iron	19	0.54
PRG100XPS	XPY-II	100	2500	0.35	50 mA	1%	33	65	0.045	No	TENV IP54	Cast Iron	19	0.54
PTGWD50XPS	XPY-II	50	5000	0.35	100 mA	1%	33	65	0.045	No	TENV IP65	Cast Iron	19	0.54
PTGWD100XPS	XPY-II	100	2500	0.35	50 mA	1%	33	65	0.045	No	TENV IP65	Cast Iron	19	0.54
PFTG4250XC	XC42	50	5000	0.5%	1.0 A	2%	48	65	0.012	Yes	TENV IP54	Cast Iron & Steel	25	6.47
PFTG42100X	XC42	100	2500	0.5%	0.5 A	2%	48	65	0.012	Yes	TENV IP54	Cast Iron & Steel	25	6.47
CUSTOM	XC42	200	1250	0.5%	-	2%	48	65	0.012	Yes	TENV IP54	Cast Iron & Steel	25	6.47
PFTG4650XC	XC46	50	5000	0.5%	2.0 A	2%	48	65	0.012	Yes	TENV IP54	Cast Iron & Steel	35	9.90
PFTG46100X	XC46	100	2500	0.5%	1.0 A	2%	48	65	0.012	Yes	TENV IP54	Cast Iron & Steel	35	9.90
CUSTOM	XC46	200	1250	0.5%	-	2%	48	65	0.012	Yes	TENV IP54	Cast Iron & Steel	35	9.90
BTG1000	30-AFL-0	50	5000	8.0%	-	2%	24	40	0.2		TENV IP54	Aluminum	6	
PTG1024LD	DPY	1024PPR	5000								TENV IP54	Aluminum	1	
PTG50NC	Pancake DC	7	6000	1.5%	50 mA	2%	33	65	0.02	No	TENV IP54	Aluminum & Steel	3	0.33
	Pancake DC	19	6000	1.5%	50 mA	2%	33	65	0.02	No	TENV IP54	Aluminum & Steel	3	0.33
	Pancake DC	31.5	4000	1.5%	50 mA	2%	33	65	0.02	No	TENV IP54	Aluminum & Steel	3	0.33
	Pancake DC	38	4000	1.5%	50 mA	2%	33	65	0.02	No	TENV IP54	Aluminum & Steel	3	0.33
	Pancake DC	50	4000	1.5%	50 mA	2%	33	65	0.02	No	TENV IP54	Aluminum & Steel	3	0.33
PTG4590AC	Pancake DC	22.5	5000	NA		NA	18	40	0.03	No	TENV IP54	Aluminum & Steel	4	1.65
	Pancake DC	45	5000	NA		NA	18	40	0.03	No	TENV IP54	Aluminum & Steel	4	1.65
	Pancake DC	90	3600	NA		NA	18	40	0.03	No	TENV IP54	Aluminum & Steel	4	1.65

Tachometers

Baldor offers a wide range of tachometers to meet almost any application that you may have. DC, AC and Digital Encoder-based tachs are available either as stand-alone products or mounted to permanent magnet or wound field motors.

Baldor tachometers are used in elevators, plastic extruders, printing presses, antenna drives and many other diverse applications.

Our most popular XPY DC tach is available with PY or metric flange or foot mounting, in standard TENV or washdown enclosures; all from stock.

Our newest PY style DC tach, the XPYII, is shorter in length, but full-featured in performance. Its rugged cast iron housing is suited for mill applications and has better electrical shielding. The output signal has very low ripple current. We even have a version that uses a metric mounting flange and can be made with either IP54 or IP65 enclosure.

XC tachs are used when a rugged DC tach is required. Many mill applications utilize these tachs because of their voltage stability with temperature extremes, excellent output signal and cast iron construction.



Pancake tachs with either DC, AC or Digital outputs are available for applications where space is at a premium.

Encoder-based digital tachs are available with a standard PY mounting flange for applications where new digital SCR controls are used. These easily mount to existing PY mounting adapters.

Our BTG1000 provides a 50 volt/1000 RPM DC output. This low cost tach provides basic speed indication.

Modular DC tachs are also available for OEMs that can mount them as an integral part of their products.



Contact us

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