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Motor Mod Express®

Ordering Information

Note: Motors made for sale in the U.S. by Baldor must comply with the Energy Independence and Security Act of 2007 (EISA) including those modified from stock. After any modification, the motor must comply with the Energy Independence and Security Act of 2007 (EISA) or the applicable regulations such as Natural Resources Canada if used in that country.

For example, it is not permissible to take a footless VM3615T and add a base to it. Such a base-mounted motor needs to comply with NEMA MG 1, table 12-12 for a premium motor which means a VEM Super-E® motor should have been used instead.

To order, specify the catalog number of the stock product and the MOD number. Use the motor discount for the motor. All modifications should be priced using the modification list price, applying the appropriate multiplier symbol for the motor. **Lead times indicated are subject to availability of stock motors in the Fort Smith Warehouse.** Customer will absorb all freight costs when motor is shipped to Fort Smith from field warehouses.

NOTE: Some modifications do not apply to explosion-proof motors. Contact Baldor for Approval.

MOD Express Cancellation Policy

Should it be necessary to cancel an order for a motor after it is modified, but before it ships – a cancellation charge of double the modification charge will be invoiced to the customer. Any MOD order cancelled before modification is completed is subject to 25% cancellation charge.

Once shipped, modified motors returned at purchaser's expense will be invoiced at double the MOD fee plus 10% restock fee.

NOTE: Mod Express for RPM AC, RPM III DC and V*S Master is available. Contact your local Baldor•Reliance District Office for details.

Note

All lead times indicated are subject to availability of stock motors and parts in the Fort Smith warehouse. Please check stock availability before quoting lead time.

Some conversions may not be allowed if they result in a change of operating parameters that affect efficiency or change the EISA or NRCAN classification of compliant motors.

Modification prices do not include the cost of the motor, speed reducer, etc.

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M1 Balance

M1A Dynamic Balance of Rotor

Re-balance stock motor to special balance NEMA 42 through G5012

TWO
DAYS

Squirrel Cage Type			
NEMA Frame	Standard Balance	Special Balance	List Price Per Motor
42 - 215T	0.15"/s	0.08"/s	234
254T - 286	0.15"/s	0.08"/s	680
324 - 364	0.15"/s	0.08"/s	1330
404 - 445	0.15"/s	0.08"/s	3983
449T	0.15"/s	0.10"/s	6944
G5008 - G5012	0.15"/s	0.10"/s	8680
DC Motor			
56	0.15"/s	0.08"/s	350
182 - 184	0.15"/s	0.08"/s	458
213 - 215	0.15"/s	0.08"/s	494

NOTE: Balance units are for velocity in inches per second.
449T - up, contact your Baldor representative.

M2 Bearings

M2A Sealed

NEMA 42 through 215T AC stock motors have double shielded bearings as standard. DC motors have sealed bearings. This modification provides the option of replacing standard bearings in AC motors with sealed bearings.

TWO
DAYS

NEMA Frame	List Price Per Motor Sealed
42	168
48	168
56	168
143 - 145T	174
182 - 184T	189
213 - 215T	202

NOTE: The above modifications are not recommended for NEMA 254T and larger TEFC motors. See M2E for 254T and larger ODP. Contact your Baldor Representative.
Grease fittings will be replaced with slotted head pipe plugs unless otherwise specified.

M2B Ball to Roller 1800 RPM or Below

Roller bearings have the capability to handle higher radial loads than ball bearings, but must have high minimum radial loads to operate correctly. Roller bearings must only be used in heavy belted loads, they are not suitable for coupled loads. Because of the heavy overhung loads, most stock motors 440 frames and smaller are not suitable for roller bearing conversion. Only the stock 5000 frame TEFC motors with "L" shafts have high strength steel shafts. Conversion may be performed on these in the Kings Mountain Plant (not FSM Mod Express Center). Contact Baldor for Freight charges to the plant for these motors.

Also see the main catalog section for motors that Baldor stocks with roller bearings already installed. These stock motors are identified with a "TR" suffix after the catalog number (ECP4408TR-4).

Does Not Apply to Explosion-Proof Motors or designs that must be built as custom motors.

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NEMA Frame	List Price Per Motor
G5008L - G5012L**	5768

NOTE: *447T - 4 pole and slower only. If belted load evaluation indicates a high strength steel shaft is required, please enter a custom order. Contact Baldor for lead time and freight charges back to plant of manufacturing.
**Applicable to G5000 4-pole designs with "L" Shaft.

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**Working Days
Required**

M2 Bearings continued...

M2C Add Thermocouple to Bearing Housing

Iron constantan thermocouples unless specified otherwise.

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NEMA Frame	List Price Per Bearing
449T - G5012	2007

NOTE: Contact Baldor for lead time and freight charges back to plant of manufacturing.

M2D Install Bearing Temperature Detector

100 OHM Platinum Standard. (10 OHM and 120 OHM available)

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NEMA Frame	List Price Per Bearing
449T - G5012	3353

NOTE: Leads for thermocouples or RTD's are brought into separate terminal housing. Price includes adder for M4E. Contact Baldor for lead time and freight charges back to plant of manufacturing.

M2E Add Double Sealed Bearings NEMA 254T Through NEMA 365T, Open Steel Band Only

Stock motors have double shielded bearings as standard.

TWO
DAYS

NEMA Frame	List Price Per Motor
254T - 256T	546
284T - 286T	604
324T - 326T	718
364T - 365T	860

NOTE: Grease fittings will be replaced with slotted head pipe plugs.

M2F Add Isolated Bearings NEMA 254T through NEMA 449T (SKF Insocoat or equivalent)

TWO
DAYS

NEMA Frame	List Price Per Bearing (x2 per set)
254T - 256T	1168
284T - 286T	1466
324T - 326T	1634
364T - 365T	1693
404T - 405T	1772
444T - 445T	1852
447T - 449T	3174

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**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****M3 Brake Motors****M3A Convert Standard to Weatherproof**

Standard base mounted, TEFC brake motors will be converted to W/P brake motors. Includes replacement of standard brake with W/P brake of the same rating and weatherproofing of motor (See M27).

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Brake Rating lb-ft	List Price Per Motor	Brake Rating lb-ft	List Price Per Motor
3	648	50	1330
6	659	75	1373
10	668	105	1672
15	751	125	2591
25	758	175	3323
35	791	230	3572

NOTE: TENV, C-Face brake motors can be converted also. **TEFC C-Face brake motors cannot be converted.**

M3B Convert to Vertical Mounting

Standard brake motors will be modified so that brakes will be operable in a brake-below motor or a brake-above motor vertical mounting position.

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BALDOR
DISTRICT
OFFICE

Brake Rating lb-ft	List Price Per Motor	Explosion-Proof List Per Motor-Additional
10 - 15	STD	159
25 - 35	368	223
50 - 75	416	251
105	551	332
125 - 175	918	552
230	1161	

NOTE: Specify if brake is to be above or below motor

M3C Add Larger or Smaller Brake (All Types)

Contact Baldor for application assistance.
\$308 list per brake (plus difference in brake cost)

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BALDOR
DISTRICT
OFFICE

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M3 Brake Motors continued...

M3D

Electrical Modifications

Brake coils will be changed to allow operation from different voltage supplies for both 50 and 60 hertz AC or from DC supplies. External brake coil lead connections will be brought from the brake or from the motor conduit box when necessary in the application. Specify brake lead location, voltage of brake coil, frequency of supply source. (Allow 2 weeks for brake coil delivery.) \$282 List per brake (plus any difference in coil cost).

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M3E

Add a Double C-Face Coupler Brake

Double C-Face coupler brakes. Mounts on motors with C-Face. Provides NEMA C-Face mounting on brake. Spring set, electrically released.

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Brake Rating lb-ft	Brake Mounting	List Price Per Motor
3	56C	832
6	56C	1105
6	145TC	1105
10	145TC	1249
15	145TC	2387

NOTE: Rating up to a 105 ft. lb. is available. Contact Baldor Representative for approval and delivery time.

M3F

Remove Brake From a Brake Motor

Brake is removed for customers who will be supplying a brake at their location.

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Brake Rating	List Price Per Motor
All	184

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Description and List Price**

**Working Days
Required**

M4 Conduit Box

M4A Tap or Provide Additional Lead Hole

TWO
DAYS

Lead outlet hole in conduit box with dimensions as shown below will be tapped to accept threaded conduit as shown in "Optional threaded hole..." column below. An additional clearance hole or threaded hole may be supplied if specified. Use same list adder for threaded hole.

NEMA Frame	Stock Motor		Optional Threaded Hole For Conduit Size	List Price Per Motor	Oversize Box	List Price Per Motor
	Hole Diameter *	For Conduit Size				
48 - 145T	7/8"	1/2"	3/4"	126	48-56	140
182 - 215T	1-1/16"	3/4"	1"	126	143-145T	157
254 - 256T	1-3/8"	1"	1-1/4"	206	182-184T	173
284 - 326T	2"	1-1/2"	2"	206	213-215T	191
364 - 365T	2-1/2"	2"	2-1/2"	276		
404 - 405T	3"	2 1/2"	3"	300		
444 - 447T	3"	2-1/2"	3"	300		

NOTE: * Stock motor lead holes are not threaded except on Dirty Duty and Chemical Process motors. Extra lead holes do not apply to Explosion Proof motors. If additional hole is needed, specify hole diameter and exact location. Contact your Baldor representative for application assistance.

M4B Rotate Conduit Box Lead Opening

TWO
DAYS

Specify lead opening location facing conduit box
List Per Motor: \$147

M4C Add Oversized Cast Iron Conduit Box

TWO
DAYS

2100 Cubic Inches

NEMA Frame	List Price Per Motor
449T	296

NOTE: Consider use of IEEE 841 motors that have oversized conduit boxes standard.

M4E Add 3.5" Round Accessory Box

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12 Cubic Inches - for Thermostat, Heater or accessory leads.

NEMA Frame	List Price Per Motor
G5008 - G5012	1442

NOTE: Contact Baldor for lead time and freight charges back to plant of manufacturing.

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M4 Conduit Box continued...

M4F **Replace Die Cast Aluminum Conduit Box** TWO DAYS
Install cast iron conduit box with drilled and tapped entrance hole.

NEMA Frame	List Price Per Motor
42 - 56	126
143 - 215T	151
254 - 286T	230
324 - 365T	277

M5 Cord

M5A **Install Line Cord in Conduit Box or Terminal Panel** TWO DAYS
Heavy duty, industrial type SO oil resistant cord with ground will be installed in conduit box or terminal panel. Strain relief included. Plug not included. **Does Not Apply to Explosion-Proof Motors**

Wire Gauge	Amp Rating		Six Feet or Less List Price	Each Additional Foot to Ten Max. - List Price
	Single Phase	Three Phase		
18	10	7	133	10
16	13	10	133	11
14	18	15	154	14
12	25	20	162	15

NOTE: Specify voltage and rotation facing drive end of motor.

M5B **Install 6 Foot, 3 Conductor, Type SO Cord With Plug** TWO DAYS
With ground plug for 115VAC, single phase only. Not for explosion proof motors.

Hp	List Price Per Motor
1 and smaller	142

NOTE: Advise rotation facing drive end of motor

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**Working Days
Required**

M6 Switch

**M6A Install Switch, Cord and Plug
(Single Phase Only)**

TWO
DAYS

Includes installation of cord with ground prong and two pole single throw switch. **Does Not Apply to Explosion-Proof Motors**

Hp	Rating	List Price per Motor
Thru 2	16-20A/115V or 230V	299

NOTE: Advise voltage and rotation facing drive end of motor

**M6C Change from Mechanical to Electronic
(Single Phase Only)**

TWO
DAYS

UP to 2 HP (Includes price of switch). Remove mechanical switch from inside motor and install electronic switch in motor conduit box. Contact Baldor for assistance. List Each: \$313

Does Not Apply to Explosion-Proof Motors

M7 Drains

M7A Add Condensation Drain Holes

TWO
DAYS

A maximum of two additional drilled holes will be made in both endplates of 215T frame and smaller TEFC motors.

A maximum of one additional cross-drilled drain fitting will be installed in both endplates of 254T frame and larger TEFC motors.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Per Motor
215T and Smaller	223
254T - 449T	303
G5008 - G5012	741

NOTE: Indicate position of drain holes in each endplate.
449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M7B Install "T" Drain

TWO
DAYS

Install one stainless steel "T" drain in each end bracket in existing hole.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Per Motor
254T - G5012	579

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
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M7 Drains continued...

M7C	<p>Close Standard Condensation Drain Holes. Close existing drain holes with plugs. Does Not Apply to Explosion-Proof Motors</p>	TWO DAYS
------------	-------------------------------------------------------------------------------------------------------------------------------------------------------	-------------

NEMA Frame	List Price Per Motor
215T and Smaller	185
254T - G5012	223

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M7D	<p>Add Breather Drains to Cast Iron Explosion-Proof Motor.</p>	TWO DAYS
------------	-----------------------------------------------------------------------	-------------

NEMA Frame	List Price Per Motor
48 - 215T	391
254 - 449T	451

M8 Dripcovers

M8A	<p>Install Dripcover on TEFC or ODP</p>	TWO DAYS
------------	------------------------------------------------	-------------

NEMA Frame	List Price Per Motor ODP or TEFC
48 - 145T	147
182 - 184T	158
213 - 215T	176
254 - 256T	202
284 - 286T	244
324 - 326T	270
364 - 365T	488
404-405T (NEMA Frame)	488

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M9 Slurry Coat & Encapsulation

M9A Slurry Coat Winding Endturns for Additional Environmental Protection.

TWO
DAYS

Endturns are coated with Dolphon® CB-1128, flexible motor varnish component.

NEMA Frame	List Price Per Motor
48 - 145T	319
182 - 184T	360
213 - 215T	467
254 - 256T	592
284 - 286T	640
324 - 326T	717
364 - 365T	879
404 - 405T	1005
444 - 449T	1159
G449 - G5012	(Medium Voltage and all G5000 motors have VPI epoxy varnish - ENCAP NOT NEEDED)

M9B Encapsulation

Encapsulation is available on SSE Washdown Duty motors and as a custom motor option. Not available as ModX.

M10 Leads

M10A Install Terminal Lugs

TWO
DAYS

Specify type of lug. Subject to availability

NEMA Frame	List Price Per Motor
215T and Smaller	147
254 - 326T	213
364 - 447T	267
449T - G5012	332

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M10B Reconnect Motor from Nine Leads to Three, Specify Voltage When Ordering

TWO
DAYS

NEMA Frame	List Price Per Motor
42 - 145T	162
182 - 184T	251
213 - 215T	333
254 - 256T	375
284 - 286T	494
324 - 326T	624

NOTE: On explosion proof, leads are connected in conduit box.

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M10 Leads continued...

M10C	Re-Mark Leads Using Cloth Markers - Specify Markings, Letters or Numbers Any Size - List Per Motor: \$162	TWO DAYS
-------------	------------------------------------------------------------------------------------------------------------------------	-------------

M10D Longer Leads, Total Length Up To:

NEMA Frame	List Price		
	18 Inches	24 Inches	36 Inches
42-145T	326	404	450
182-184T	342	422	462
213-215T	360	441	485

Does Not Apply to Explosion-Proof Motors

M11 Lubrication

M11A	Install Low Temperature Lubricant in Bearings Bearing grease may be changed to allow an operating temperature range for bearings of -55° to +200°F. Standard grease is Exxon POLYREX®EM, with bearing operating temperature range of -15° to +250°F.	TWO DAYS
-------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------

NEMA Frame	List Price Per Motor
48	126
56 - 145T	135
182 - 184T	145
213 - 215T	150
254 - 256T	192
284 - 286T	213
324 - 326T	299
364 - 365T	319
404 - 405T	507
444 - 449T	700

NOTE: Single shield or open bearing only.
Low temperature operation below -25C(-13F)
Does Not Apply to Explosion-Proof Motors

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M11 Lubrication continued...

M11B Add High Temperature or Customer Supplied Grease

TWO
DAYS

Bearing grease may be changed to allow an operating temperature range above the standard grease, which is Exxon POLYREX®EM, with bearing operating temperature range of -15° to +250°F. Motors must be studied by Fort Smith application engineering for acceptable temperature rise above 40°C ambient.

Customer-supplied grease must be suitable for the motor application and approved by Fort Smith application engineering. Grease must be accompanied with MSDS data sheets.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Per Motor
48	126
56 - 145T	135
182 - 184T	145
213 - 215T	150
254 - 256T	192
284 - 286T	213
324 - 326T	299
364 - 365T	319
404 - 405T	507
444 - 449T	700

NOTE: Contact your Baldor representative to discuss application prior to ordering.

M12 Seals

M12A Install Oil Seals

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

NEMA Frame	List Price Each
56	342
143T - 145T	342
182T - 184T	378
213T - 215T	417
254T - 256T	574
284T - 286T	673
324T - 326T	760
364T - 365T	956

NOTE: Contact your Baldor representative for larger frame sizes.

Does Not Apply to Explosion-Proof Motors

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M12 Seals continued...

M12B Install Inpro/Seal® Drive End Only

FOUR
DAYS

Contact Baldor for Other Frame Sizes.

NOTE: Contact Baldor for opposite drive end installation or order IEEE 841 motor from stock..

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price Each
143T-215T.	1070
254-256T	1340
284-286T	1428
324-326T	1516
364-365T	1739
404-405T	1825
444-449T	2224
G5008 - G5012	2620

NOTE: Contact Baldor for lead time and freight charges back to plant of manufacturing.

M13 Mountings

M13A Add Rigid Base

TWO
DAYS

Weld stamped steel base to steel band motors.

Not available if conversion results in motors that fall under E Pact requirements.

NEMA Frame	List Price Per Motor
42 - 48	168
56	172
143 - 145T	172
182 - 184T	209
213 - 215T	251

NOTE: Not available for cast iron motors.

M13B Install NEMA C-Face Steel Band Motor Construction

TWO
DAYS

Add to rigid base mounted motor. Not for explosion proof motors.

NEMA Frame	List Price Per Motor
42, 48 & 56	221
143 - 145T (1)	221
182 - 184T (1)	242
213 - 215T (1)	293
254 - 256T (2)	557
284 - 286T (2)	756
324 - 326T (2)	988

284T &
LARGER
SUBJECT TO
CASTING
AVAILABILITY

NOTE: (1) These motors will have a non-NEMA BA dimension when C-Face is added.
(2) Applies to ODP only.

Open motors having type numbers beginning with "34" cannot be modified to C-Face. Contact your Baldor representative for details.

Gearmotors and
Gear Products

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**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M13 Mountings continued...

M13C Install NEMA C-Face - Cast Iron Construction

TWO
DAYS

Or Install Cast Iron Endplate where aluminum die cast parts are supplied as standard. **Does Not Apply to Explosion-Proof Motors**

NEMA Frame	List Addition Each End	
	NEMA C-Face Price	Endplate Price
48 & 56	234	151
143 - 145T (1)	234	159
182 - 184T (1)	282	168
213 - 215T (1)	324	185
254 - 256T	717	(2)
284 - 286T	988	(2)
324 - 326T	1069	(2)
364 - 365T	1153	(2)
404 - 405T	1438	(2)
444 - 449T	1725	(2)

NOTE: (1) These motors will have a non-NEMA BA dimension when C-Face is added. Specify C-face or Standard horizontal endplate.

(2) Motors have Cast Iron endplates as standard.

Westville open motors cannot be modified to C-Face.

IEEE 841 motors cannot be modified to C-Face.

Contact Baldor.

M13D Add NEMA D-Flange

Some motors may be converted to D-Flange mounting. Contact your Baldor representative for availability and pricing.

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

NOTE: Some metric flanges are available. Contact your Baldor representative.

Does Not Apply to Explosion-Proof Motors

Baldor Type	NEMA Frame	Open	TEFC	List Price Per Motor
35	56-145T	35EP1604A01	35EP1506A01	399
36	182-4T	36EP1405A09	36EP1304A01 +++	414
306	182-4T	None	36EP1304A01 +++	414
309	254-5U, T	None	09EP1500A04 **	1069
310	284-6U, T	None	10EP1502A01	1192
42	324-6U, T	42EP1601A01	None	986
312	324-6U, T	None	12EP1501A03	1357
36G	364-5U, T	—	—	1562
40G	404-5U, T	—	—	2013
40G	444-5U, T	—	—	2957

NOTE: ** Must start with motor that already has C-Face on it

+++ These require a special machined D-flange, available only through Mod Express

M13E Remove Rigid Base From Foot Mounted Steel Band Motors.

TWO
DAYS

NEMA Frame	List Price Per Motor	NEMA Frame	List Price Per Motor
42 - 48	224	213 - 215T	372
56	230	254 - 256T	529
143 - 145T	230	284 - 286T	600
182 - 184T	279	324 - 326T	736

NOTE: Bases cannot be removed from explosion proof motors.

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M13 Mountings continued...

M13F Convert to F-2, Sidewall, or Ceiling Mount

THREE
DAYS

AC motors and DC motors through 10 Hp

Consists of repositioning endplate vents, condensation drains, and where applicable, the conduit box to positions shown in chart on page 411.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	F2		C1 W1		C2 W2		W4	W5	W3	W8	List Price Per Motor
	ODP	TEFC	ODP	TEFC	ODP	TEFC	W7	TEFC	W6	TEFC	
UP TO 184T	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	333
213 - 215T	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	365
254 - 326T	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	434
365T - 449T	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	558
G5008 - G5012		Yes		Yes		Yes		Yes		Yes	1026

NOTE: Specify mounting style from the drawings on page 411. Open slotted band motors are not convertible to "C" or "W" mountings. 09 or larger with CB @ 12 o'clock location requires 3 days lead time. DC motors would be converted at the manufacturing plant. Contact scheduling to check availability of production motors or to ship motor from Fort Smith for conversion. Contact your Baldor representative.

M13G Add C-Face to Explosion Proof Motors

THREE
DAYS

Only available on NEMA frames shown below.

NEMA Frame	List Price Per Motor
56	268
143 - 145T	268
284 - 286T	1932
324 - 326T	2643
364 - 365T	2957
404 - 405T	3489

NOTE: Any other frame size must be built as a custom item.

M13H Mount Dust Control Unit on Grinders

TWO
DAYS

Does Not Include Dust Control Unit

Wheel Size	List Price Per Grinder
All	213

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**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M13 Mountings continued...

M13I Mount Grinder or Buffer onto a Pedestal and Package for Shipment

TWO
DAYS

Wheel Size	List Price Per Grinder or Buffer
All	213

M13J ADD ADJUSTABLE MOTOR BASES

Adjustable motor bases bolted to fixed base on stock motor before shipping. NEMA 215T and smaller bases feature one adjusting screw. Bases on NEMA 254T frame and larger feature two adjusting screws.

TWO
DAYS

NEMA Frame	List Price Per Motor
48 - 56	184
143T - 145T	210
182T - 184T	219
213T - 215T	238
254T - 256T	379
284T - 286T	414
324T - 326T	566
364T - 365T	716
404T - 405T	978
444T - 445T	1156
447T - 449T	1331

NOTE: Bases not suitable for vertical mounting.

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Gear Products

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Accessories

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Baldor
Mod Express

ABB
Mod Express

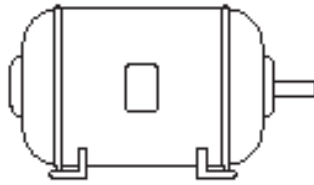
Product
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**Modification
Number**

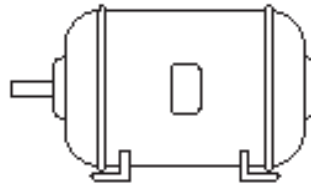
**Motor Mod Express®
Description and List Price**

**Working Days
Required**

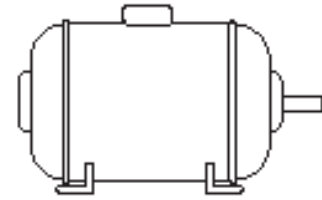
Floor Mountings



Assembly F-1

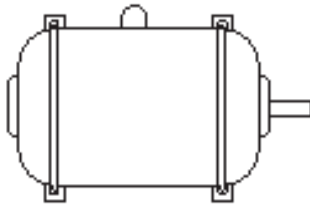


Assembly F-2

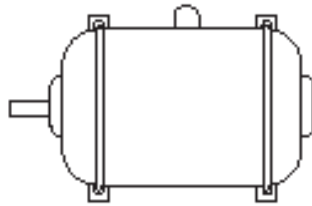


Assembly F-3

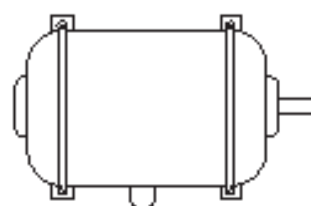
Wall Mountings



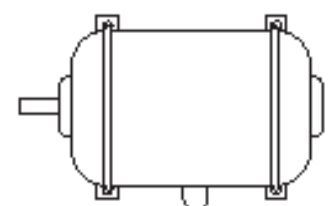
Assembly W-1



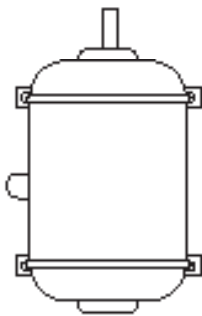
Assembly W-2



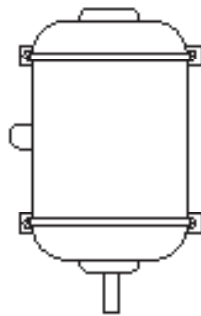
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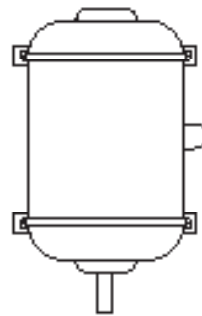
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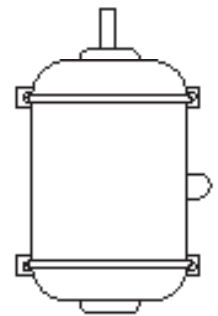
Assembly W-5



Assembly W-6

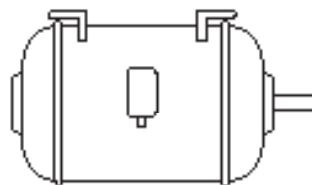


Assembly W-7

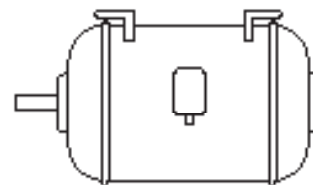


Assembly W-8

Ceiling Mountings



Assembly C-1



Assembly C-2

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****M14 Export Packaging****M14A****Box, Package and Crate**

For under-deck exporting

FOUR
DAYS

NEMA Frame	List Price Each
254 - 286T	806
324 - 365T	1201
405 - 449T	1601
G5008 - G5012	3838

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.**M15 Nameplate****M15A****Provide Auxiliary Data Plate for Remote Mounting**Extra nameplate is packed with motor, not mounted.
List Per Motor: \$123TWO
DAYS**M15B****Replace/Add Customer Nameplate**Add Customer Part Number and/or other changes such as voltage,
hertz, etc.
List Per Motor: \$147TWO
DAYS**M15C****Replace with Stainless Steel Nameplate**

List Per Motor \$147

TWO
DAYS**M15D****Add Bearing Data Nameplate**

List Per Motor \$147

NOTE: Does Not Apply to Explosion-Proof MotorsTWO
DAYS**M15E****Mail Out Nameplates to District Offices
(All CSA and UL_R markings are removed on nameplates
ordered as a mail out order)****No Explosion Proof Nameplates (No Exceptions!)**

Order minimum charge of \$31 Add \$3.00 for each additional nameplate.

NOTE: No charge orders only accepted if we are correcting our error.

Nameplates for Explosion-proof motors will not be mailed out, no exceptions.

M15F**Mark Nameplate with CE**

List Per Motor \$147

TWO
DAYS

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
---------------------	--------------------------------------------------	-----------------------

M16 Blowers

M16A	Add Constant Velocity Blower Unit Contact Baldor for details.	TWO DAYS
-------------	-------------------------------------------------------------------------	-------------

M16B	Convert from a 3 Phase to a Single Phase Blower	TWO DAYS
-------------	--------------------------------------------------------	-------------

NEMA Frame	List Price Per Motor
All	228

M17 Paint

M17A	Paint Motor to Baldor Stock Paint Color Baldor stock colors are: Dark Machinery Gray, Reliance Blue/Green, Fire Engine Red, Vista Green, Medium Royal Blue, Silver/Grey Hamertone and Copper/Bronze. All are lacquer base. All orders that call for Epoxy Paint require an additional day to allow for complete drying of paint.	TWO DAYS
-------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------

NEMA Frame	List Price Per Motor
42 - 215T	147
254 - 449T	579
G5008 - G5012	1153

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M17B	Paint Motor to Customer Color Contact your Baldor representative for color match, availability and price.	THREE DAYS (From Date Paint is Available in Fort Smith)
-------------	---------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------

NOTE: Specifying epoxy paint will add one additional day to allow for complete drying of paint.

Gearmotors and Gear Products

Motor Accessories

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**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****M18 Lifting Lugs****M18A Add Lifting Lugs Up to a 326T Frame Size**TWO
DAYS

NEMA Frame	List Price Per Motor
48 - 145T	219
182 - 215T	272
254 - 286T	353
324 - 326T	431

M19 Screens**M19A Add Rodent Screens to Open Drip-Proof Motors**TWO
DAYS

NEMA Frame	List Price Per Motor
48 - 326T	293
364T - 405T	380

M20 Hardware**M20A Exchange Plated Hardware with Stainless Steel**TWO
DAYS

NEMA Frame	List Price Per Motor
145T - 215T	537
254T - 326T	895
364T - 405T	1250
444T - G5012	1605

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M21 Space Heaters

M21A Add Space Heaters to TEFC or Open Motors

Standard space heater voltage is 110VAC. Heaters for 230 or 460 volts are available. Specify circuit voltage.

TWO
DAYS

NEMA Frame	List Price Per Motor
145T and Smaller	319
182 - 215T	402
254 - 365T	598
404 - 449T	680
G5008 - G5012	1232

NOTE: Strip type space heaters are standard. 5000 frame perform at plant of manufacturing. Contact Baldor for time. 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

Does Not Apply to Explosion-Proof Motors

M21B Add Conduit Box for Thermostat or Heater Leads

(See M4E) Not for explosion proof motors.

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

NEMA Frame	List Price
56 - 145T	441
182 - 215T	515
254 - 365T	778
404 - 449T	984
G5008 - G5012	1442

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M22 Textile Service

M22A Lint Proof Fan Cover for Textile Applications

Remove standard fan cover and replace with textile fan shroud and cover.

TWO
DAYS

NEMA Frame	List Price Per Motor
48 - 145T	292
182 - 184T	380
213 - 215T	429
254 - 256T	613
284 - 286T	719
324 - 326T	795
364 - 365T	944
404 - 405T	1026
444 - 449T	1108

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**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M23 Thermal Protectors

M23A

Thermostats

One or More Thermostats Laced to Winding

For over temperature protection. These are pilot circuit devices only with leads into conduit box tagged "JJ". Specify normally open or closed contacts. IEEE 841 motors require hermetically sealed thermostats to maintain Division 2 marking.

TWO
DAYS

NEMA Frame	Number of Devices	Standard List Price Per Motor	Hermetically Sealed for Division 2
Single Phase	1	185	N/A
Three Phase 42 - 215T	3 (3)	209	304
Three Phase 254 - 449T	3 (3)	557	653
Direct Current 48 - 215T	1	209	N/A

NOTE: (3) In Series with two leads into conduit box. Normally open are in parallel.

Does Not Apply to Explosion-Proof Motors

M23B

Exchange Thermal Overload

Exchange from manual thermal overload to automatic thermal overload or exchange from automatic thermal overload to manual thermal overload.

TWO
DAYS

NEMA Frame	List Price Per Motor
	M.T.O to A.T.O. OR A.T.O. to M.T.O.
48 and 56	230
143 and 145T	235
182 - 184T	270
213 - 215T	372

Does Not Apply to Explosion-Proof Motors

M23C

Install Resistance Temperature Detectors

Install on low voltage winding endturns (Six 100 OHM RTD's).

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

NEMA Frame	List Price Per Motor
449T - G5012	4096

NOTE: 449T - up contact Baldor for lead time and freight charges back to plant of manufacturing.

Does Not Apply to Explosion-Proof Motors

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
---------------------	--------------------------------------------------	-----------------------

M24 Winding Thermocouples
(3 per motor, 6 foot standard length)

M24A Iron Constantan (3 per motor)
Specify location.

TWO
DAYS

NEMA Frame	List Price Per Thermocouple
42 - 215T	202
254 - 449T	417
G5008 - G5012	2460

NOTE: 449T - up contact Baldor for lead time and freight charges back to plant of manufacturing.
Does Not Apply to Explosion-Proof Motors

M25 Winding Thermistors

NOTE: 449T - up contact Baldor for lead time and freight charges back to plant of manufacturing.
Does Not Apply to Explosion-Proof Motors

M25A One or Two
List Price: \$340

TWO
DAYS

M25B Three Per Motor
List Price: \$708

TWO
DAYS

Gearmotors and Gear Products

Motor Accessories

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**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****M26 Tropicalization****M26A Protection of Windings and Mechanical Parts**

Protection from tropical environments.

TWO
DAYS

NEMA Frame	List Price Per Motor	
	AC	DC
Through 215T	244	355
254 - 365T	350	557
404 - 449T	598	N/A

M27 Weatherproofing**M27A Treatment of Windings and Mechanical Parts**

Protection from the elements or high moisture areas.

TWO
DAYS

NEMA Frame	List Price Per Motor	
	AC	DC
Through 215T	238	350
254 - 365T	1112	557
404 - 449T	1306	N/A

NOTE: Baldor "Dirty Duty", "CP" and "ECP" motors are weatherproofed as standard.**Does Not Apply to Explosion-Proof Motors****M28 Marine Motors****M28A IEEE 45**

A combination of M4A and M27 for frames 215T and smaller plus nameplate stamped IEEE 45. NEMA frames 254T and larger require tapping of conduit box and nameplate stamped IEEE 45. For full IEEE 45 compliance, VPI must be added.

TWO
DAYS

NEMA Frame	List Price Per Motor	
	AC	DC
42, 48, 56	244	350
143 - 215T	350	557
254 - 365T	405	N/A
404 - 449T	598	N/A

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
---------------------	--------------------------------------------------	-----------------------

M29 Shaft Modifications

FIVE DAYS

Includes modifications to existing shafts only. Not applicable if new shaft is required. Price each modification per table M29 or M29D.

NEMA Frame	List Price Per Modification	NEMA Frame	List Price Per Modification
42 - 145T	219	254T - 256T	394
182 - 184T	230	284 - 286T	394
ASM62 (5)	270	324-326T	566
213 - 215T	319	364-365T	628
ASM75 (5)	319	404-405T	708

NOTE: (5) Arbor Saw Motors.

M29A Drill and Tap One Hole in End of Shaft or Mill Flat on Shaft Extension.

THREE DAYS

Provide details on order. Price this modification per table M29.

M29B Convert from TEFC to TEAO

THREE DAYS

Cut off shaft extension for external fan. Price this modification per table M29.

Does Not Apply to Explosion-Proof Motors

M29C Threading

FIVE DAYS

Specify right hand or left hand thread, also type and length of thread. Price this modification per table M29.

M29D Convert "T" Frame to "U" Frame Shaft Dimension or Smaller (TS)

FIVE DAYS

Provide details on order.

NEMA Shaft	Conversion of T Frame to TS or U Frame
	List Price Per Motor
143 thru 145T	219
182 thru 215T	402
254 thru 286T	916
324 thru 365T	1364
404 thru 449T	2248

Gearmotors and Gear Products

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**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****M29 Shaft Modifications continued...****M29F Shorten Shafts Without Reducing the Overall
Diameter**THREE
DAYS

NEMA Shaft	List Price Per Motor
48 - 145T	353
182 - 215T	485
254 - 256T	671
324 - 326T	688

M29G Special Shafts

Contact Baldor for price and availability.

M29H Convert to a Longer Shaft Up to a 215T Frame

Contact Baldor for price and availability.

**M29I Machine Explosion Proof Motor Shafts from
T to U Frame**

Contact Baldor for price and availability.

M30 Grounding Screw**M30A Add Grounding Screw On Endplate**

Requirement for UL 1081, swimming pool pump motors (includes slinger.)

List Price: \$135

TWO
DAYS

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M31 Tach Mounting Kits

M31A Add Tach Mounting Kits Only

THREE
DAYS

Tach mounting kits are listed on page 253-255. These kits are complete and will allow mounting of a BTG1000 or XPY tach generator (tach generator not included).

Baldor Motor Type	List Price Per Motor
3300P	417
3400D/P	515
3500D/P	536
3600D/P	619
180 - 500 Frame DC	1333

NOTE: Price includes tach kit.

M31B Tach Kit with BTG1000 Tach

FOUR
DAYS

Order tach kit per M31A and order tach separately.

M31C Tach Kit with XPY Tach

FOUR
DAYS

Order tach kit per M31A and order tach separately.

M31D Add Encoder Kit to Inverter Duty Motor

TWO
DAYS

Order encoders separately. Encoders are listed on page 196.

NEMA Frame	List Price Per Motor
56-215T	191
254T-404T	397
444T - G5000	619

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M31E Additional Mounted Encoder Options for IDRPM Motors

TWO
DAYS

List price includes encoder and mounting to motor.

Motor Enclosure	Type	Frame Size	Mfg.	Mag or Optical	Conn Type	Input Voltage VDC	List Price
All	H20	FL180 - L400	Dynapar	0	MS-ST	5-15	2044
All except TEFC	RL67	FL180 - L400	Dynapar	M	Latch	5-15	2520
All except TEFC	SL85	F280 - L400	Dynapar	M	Latch	5-15	2653

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**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M32 Testing

M32A CSA C390 Method 1 Equivalent to IEEE 112 Method B Performance Testing

SEVEN
DAYS

Three phase stock motors will be tested under lab conditions according to CSA C390 (equivalent to IEEE 112b). Complete test data will be supplied.

NEMA Frame	List Price Per Motor
42 - 215T	2400
254T - 449T	3597
G5000	8787

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M32B Witnessed CSA C390 Method 1 Equivalent to IEEE 112 Method B Performance Testing

SEVEN
DAYS

Test schedule must be coordinated with Baldor corporate office.

NEMA Frame	List Price Per Motor
42 - 215T	8390
254T - 449T	9588
G5000	13581

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

M33 Short Test

M33A Motor Performance - Short Test

SEVEN
DAYS

Three phase or single phase motors will have any or all of the following motor characteristics measured. Test data will be supplied. All data will be taken on cold motor.

- | | |
|-------------------|---------------------------------|
| No Load Current | Locked Rotor (Starting) Current |
| Full Load Current | Locked Rotor Torque |
| Breakdown Torque | Hi-Potential Test |

NEMA Frame	List Price Per Motor
42 - 215T	400
254 - 449T	731

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

M33 Short Test continued...

M33B Routine Test

This is a test reported per IEEE Std. 112 - 2004 Annex B. All data will be taken on a cold motor. Test includes:

- No Load Current
- High-Potential
- Locked Rotor Current
- Winding resistance

Tests may also be performed as a witnessed test. Test schedule must be coordinated with the Baldor corporate office.

NEMA Frame	List Price Per Motor
42 - 215T	270
254 - 449T	496

M33C Complete Performance Test

A Complete test uses a dynamometer to verify nameplate description and electrical design characteristics. The motor is allowed to achieve its full load temperature rise before making performance measurements. Testing conducted per IEEE Std 112-2004 Annex C. Test report includes:

- No Load Current
- Temperature Rise
- Full Load Current
- Full Load Slip
- Locked Rotor Current
- Measure breakdown and starting torques
- High-Potential
- Measure efficiency at 100%, 75%, 50% & 25% of full load
- Winding Resistance
- Full Load Heat Run
- Measure power factor at 100%, 75%, 50% & 25% of full load

Tests may also be performed as a witnessed test. Test schedule must be coordinated with the Baldor corporate office.

NEMA Frame	List Price Per Motor
42 - 215T	2400
254 - 320T	3597
360T - 449T	8787

M33D Calibration Test

This test consists of 0 to 125% rated load test measurement of speed, torque, current, power factor and efficiency at rated voltage. The data is provided as a curve plotted on Baldor•Reliance standard format. Tests may also be performed as a witnessed test. Test schedule must be coordinated with the Baldor corporate office.

NEMA Frame	Calibration Test
42 - 215T	2160
254T - 320T	2878
360T - 449T	7913

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M33 Short Test continued...

M33E Sound Measurement Test

Two tests are available to measure the sound produced by the motor at idle and operated from a line power supply.

The basic test is an overall sound measurement (one band). The Noise test that verifies sound levels per procedures defined in IEEE-85 under a No Load Condition showing an octave band analysis is also available. Double these prices for witnessed tests.

Note: Sound tests must be performed in Fort Smith or the Motor R&D Lab in Greenville. Allow for extra shipping time and freight charges from plant.

NEMA Frame	List Price Per Motor
42 - 215T	985
254 - 445T	1472
447 - 449T	3595

M34 Worm Gear Modifications

M34A Install Bases on Worm Gear Speed Reducers.

List price include bases.

TWO
DAYS

900 Series				Universal Series	
Size	Horiz. Base List Price	Vertical Low Base List Price	Vertical High Base List Price	Size	Vertical Base List Price (Converts STF to SVF)
913	200	242	244	133	202
915	211	244	247	175	202
918	211	244	247	200	222
921	215	249	252	225	222
924	230	268	274	258	243
926	244	309	313	300	243
932	274	337	344	350	257
938	299	379	391	400	291

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
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M34 Worm Gear Modifications continued...

M34B Convert from Single to Double End Output Shaft on Worm Gear Speed Reducers. TWO DAYS

List price includes shaft.

900 Series		Universal Series	
Size	List Price	Size	List Price
913	221	133	217
915	224	175	224
918	224	200	224
921	224	225	235
924	230	258	244
926	244	300	249
932	249	350	270
938	270	400	296

M34C Convert Output Shaft from Left Hand to Right Hand or vice versa on 900 or Universal Series Reducers TWO DAYS
\$168 List (Price does not include reducer)

M34D Install Motor on 900 F-Series or Universal STF Series Reducers TWO DAYS
\$168 List (Price does not include motor or reducer)

M35 Terminal Blocks

M35A Install IEC Terminal Blocks in Conduit Box and Connect Leads TWO DAYS

IEC Frame, stocked with terminal blocks.
Advise how motors leads are to be connected.

Does Not Apply to Explosion-Proof Motors

NEMA Frame	List Price
34 FRAME - 56-143T	228
35 FRAME - 56-145T	245
182-184	272
213-215	298
254-256	342
284-286	353
324-326	1031
364-365	1031
404-405	1031
444-449	1031

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Required**

M36 Starters

Add Magnetic or Manual Starter to Grinder or Buffer

Mounted and wired on Baldor industrial grinders and buffers. Starters are in NEMA 1 enclosure and have the push button in cover. Available only as factory installed options. Lead time is dependant on delivery of the starter.

M36A Starter – Single Phase

Full voltage control.

TWO
DAYS

Grinder Wheel Size	Buffer Hp	Manual	Magnetic	
		115/230 Volts List Price	115 Volts List Price	230 Volts List Price
6"	1/3	503	825	922
7"	N/A	503	825	922
8"	3/4	503	946	922
10"	1	503	946	922
N/A	1-1/2	503	946	810
12"	2	Standard Equipment	803*	810*

NOTE: Specify voltage when ordering.
*Price includes allowance for omission of standard starter.

M36B Starter – Three Phase

Full voltage control.

TWO
DAYS

Grinder Wheel Size	Buffer Hp	Manual	Magnetic	
		208-230/460 Volts List Price	208-230 Volts List Price	460 Volts List Price
7"	N/A	581	922	850
8"	N/A	581	922	850
10"	3/4	581	922	850
12"	1	Standard Equipment	650*	597*
12"	2	Standard Equipment	650*	597*

NOTE: Specify voltage when ordering.
*Price includes allowance for omission of standard starter.

M36C Magnetic Starter – Three Phase

With Low Voltage Control.

TWO
DAYS

Grinder Wheel Size	Buffer Hp	Magnetic With 110 Volt Control Circuit Transformer	
		208-230 Volts List Price	460 Volts List Price
7"	N/A	2071	2291
8"	N/A	2071	2291
10"	3/4	2071	2291
12"	1	2032*	2074*
12"	2	2032*	2074*
14"	5	2032*	2074*
14"	7-1/2	2032*	2074*

NOTE: Specify voltage when ordering.
*Price includes allowance for omission of standard starter.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
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M36 Starters continued...

M36D Overload Protection for Dust Control Unit TWO DAYS

NEMA Frame	List Price
All	619

NOTE: Must be used with magnetic control. Contact Baldor for details.

M37 Voltage

M37A Change a Grinder Dust Control Unit from 230/460 Volts to 575 Volts TWO DAYS

NEMA Frame	List Price
All	184

M38 Fan Change with Inverter Nameplate Markings

Refer to Inverter/Vector Motors & Controls section Page 176 for details on fixed speed motor capabilities when used in variable speed applications. Where available, this modification changes the fan used on TEFC motors and changes the motor nameplate to reflect the new speed range capabilities.

TWO DAYS

NEMA Frame	List Price Per Motor
180-280	293
320-449	361

M39 Shaft Grounding

M39A Shaft Grounding Systems

Add Shaft Grounding System unit to opposite shaft end of motor on TEFC, TENV, TEBC and ODP motors. Available for all frame sizes. Shaft grounding brush provides a current path from the rotor to the frame to lessen the chance of bearing fluting. Insolated bearings isolate the shaft, but rotor currents can be passed through a conductive coupling to the driven load and damage bearings there.



THREE DAYS

NEMA Frame	Baldor Type	List Addition
56 - 449T	35/305 - 44G	1231
G5000 - G5800	318 - 322	1833

NOTE: 449T-up contact Baldor for lead time and freight charges back to plant of manufacturing.

Does Not Apply to Explosion-Proof or Division 2 Motors

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M39 Shaft Grounding continued...

M39B Aegis SGR™ Inpro/Seal CDR™ and Inpro/Seal MGS™ with Labrinth Seal

Shaft grounding rings are specified by many HVAC, pump and conveyor manufacturers to mitigate ASD circulating currents and prolong bearing life. These grounding rings are available as an option on Baldor•Reliance custom motors or they can be installed on a stock motor in Baldor's Mod Express and shipped within a few days. Shaft grounding rings are not suited for Division 1 or 2 areas. On applications where washdown or debris may be present, internal mounting solutions may be required.

These are sparking devices not suited for explosion-proof Division 1 or 2 applications, even when mounted internally.

The Aegis SGR™ and Inpro/Seal CDR™ rings usually mount to the drive end of the motor. The Inpro/Seal MGS™ includes their labyrinth seal and will be mounted on the ODE of the motor, usually under the fan and cover.

NEMA Frame	Shaft Diameter	Shaft Ground Only		Shaft Ground and Labyrinth Seal
		Aegis SGR™ List Price	Inpro/Seal CDR™ List Price	Inpro/Seal MGS™ List Price
56	0.625	203	226	1184
140T, 180	0.875	203	226	1184
180T, 210	1.125	215	272	1213
210T, 250U	1.375	235	320	1242
250T, 280U	1.625	275	383	1541
280T, 320U, 320TS, 360TS	1.1875	333	458	1686
320T, 360U, 400TS	2.125	332	515	1767
360T, 400U, 440TS	2.375	564*	547	2083
400T, 440U	2.875	718*	653	2225
440T	3.375	766*	738	2711

Shaft Grounding Prices

* Motors over 100 Hp / 75 kW require an additional modification to add an insulated bearing on the opposite drive end. Reference Mod M2F on page 397 to add for one insulated bearing on the ODE of the motor.

Both Aegis and Inpro/Seal shaft grounding rings are covered by that manufacturer's warranty available from their website.

M39C Shaft Grounding Brush Assembly

Add external shaft grounding brush to motor endplate.
Brush contacts motor shaft diameter.

TWO
DAYS

NEMA Shaft	List Addition
48 - 145T	202
182 - 215T	303
254 - 256T	456
324 - 326T	684

Does Not Apply to Explosion-Proof Motors

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Ordering Information

Note: Motors made for sale in the U.S. by ABB must comply with the Energy Independence and Security Act of 2007 (EISA) including those modified from stock. After any modification, the motor must comply with the Energy Independence and Security Act of 2007 (EISA) or the applicable regulations such as Natural Resources Canada if used in that country.

For example, it is not permissible to take a footless VM3615T and add a base to it. Such a base-mounted motor needs to comply with NEMA MG 1, table 12-12 for a premium motor which means a VEM Super-E® motor should have been used instead. Note that 50 Hz efficiency levels may not be the same level when operated at 60 Hz.

To order, specify the catalog number of the stock product and the MOD variant code number. Use the motor discount for the motor. All modifications should be priced using the modification list price, applying the appropriate multiplier symbol for the motor. **Lead times indicated are subject to availability of stock motors in the Fort Smith Warehouse.** Customer will absorb all freight costs when motor is shipped to Fort Smith for modification from field warehouses.

NOTE: Some modifications do not apply to explosion-proof or hazardous duty motors. Contact Baldor for Approval

MOD Express Cancellation Policy

Should it be necessary to cancel an order for a motor after it is modified, but before it ships – a cancellation charge of double the modification charge will be invoiced to the customer. Any MOD order cancelled before modification is completed is subject to 25% cancellation charge.

Once shipped, modified motors returned at purchaser's expense will be invoiced at double the MOD fee plus 10% restock fee.

Note

All lead times indicated are subject to availability of stock motors and parts in the Fort Smith warehouse. Please check stock availability before quoting lead time.

Some conversions may not be allowed if they result in a change of operating parameters that affect efficiency or change the EISA or NRCAN classification of compliant motors.

Modification prices do not include the cost of the motor, speed reducer, etc.

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
---------------------	--------------------------------------------------	-----------------------

VC002 Replace/Add Customer Motor Nameplate

Restamp voltage, frequency and output, continuous duty. Rating data according to quotation and engineering approval. Rerate must be compliant with EISA or NRCan if motor used here.
List Per Motor: \$147

TWO DAYS

VC135 Additional Stainless Motor Nameplate

Add customer part number and/or other changes such as voltage, hertz, etc. Rerate must be compliant with EISA or NRCan if motor used here.
List Per Motor: \$147

TWO DAYS

VC161 Additional Loose Motor Nameplate

Add customer part number and/or other changes such as voltage, hertz, etc. Rerate must be compliant with EISA or NRCan if motor used here.
List Per Motor: \$123

TWO DAYS

VC163 Add Adjustable Speed Motor Nameplate

Add adjustable speed nameplate. Rating data according to quotation and engineering approval. Rating must be compliant with EISA or NRCan if motor used here.
List Per Motor: \$147

TWO DAYS

VC450 Add 100-120V Space Heater

Standard space heater is 120V.
Not for ATEX or hazardous duty motors.

TWO DAYS

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	346	N/A
71 – 80	346	294
90 – 100	350	294
112 – 132	357	334
160	405	429
180	447	501
200	499	559
225	571	639
250	687	769
280	N/A	779

Modification Number

Motor Mod Express® Description and List Price

Working Days Required

VC451 Add 200-240V Space Heater

TWO DAYS

Standard space heater is 240V.
Not for ATEX or hazardous duty motors.

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	346	N/A
71 – 80	346	294
90 – 100	350	294
112 – 132	357	334
160	405	429
180	447	501
200	499	559
225	571	639
250	687	769
280	N/A	779

VC008 Add IEC B14 C-Face

TWO DAYS

Add IEC B14 C-face to B3 base mounted motor
(Convert to B34).
Not for ATEX or hazardous duty motors.

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	198	N/A
71 – 80	198	121
90 – 100	260	174
112 – 132	305	174
160	420	N/A
180	N/A	N/A
200	N/A	N/A
225	N/A	N/A
250	N/A	N/A
280	N/A	N/A

**Modification
Number**
**Motor Mod Express®
Description and List Price**
**Working Days
Required**
VC009 Add IEC B5 D-Flange

TWO DAYS

Add IEC B5 D-flange to B3 base mounted motor
(Convert to B35).
Not for ATEX or hazardous duty motors.

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	186	N/A
71 – 80	186	121
90 – 100	194	121
112 – 132	194	174
160	262	382
180	366	410
200	497	556
225	551	617
250	603	675
280	N/A	714

VC066 Convert motor for other than horizontal mounting

TWO DAYS

Adjust placement of weep holes if motor is used as
other than horizontally mounted in normal plane
Not for ATEX or hazardous duty motors.

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	N/A	N/A
71-80	198	121
90 – 100	212	161
112 – 132	237	191
160 - 250	284	382
280	N/A	486

VC005 Add drip cover

TWO DAYS

Add metal drip cover to motor for vertical mounting.
Requires VC066.
Not for ATEX or hazardous duty motors.

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	165	N/A
71 - 80	165	134
90 – 100	176	134
112 – 132	176	147
160	183	205
180	210	236
200	223	249
225	299	335
250	373	418
280	N/A	512

Modification Number

Motor Mod Express® Description and List Price

Working Days Required

VC145 Test report

TWO DAYS

Supply copies of test report for typical catalog motor of requested rating at 400V 50 Hz. Not a test for specific motor shipped – see VC148 if test for specific motor shipped is requested.
List Per Motor: \$125

VC148 Routine test report

SEVEN DAYS

Supply copies of test report for specific motor on order. Three phase motors will have the following motor characteristics measured. Test data will be supplied. All data will be taken on cold motor.

1. Visual inspection.
2. Terminal markings and direction of rotation.
3. Resistance measurement at ambient temperature.
4. No load test (speed and current).
5. Locked rotor test (torque and current).
6. Withstand voltage test (hipot).
7. Insulation resistance measurement (meg ohm).

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	203	N/A
71 - 80	203	267
90 - 100	217	267
112 - 132	264	294
160 - 180	289	324
200 - 250	314	352
280	N/A	425

VC480 Nameplate as Ex nA II Temp Class T3

TWO DAYS

Renameplate motor as Ex nA II, Temp Class T3 (Similar to Division 2). Engineering must approve rerate of motor.
List Per Motor: \$352

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

VC186 Fulfilling Marine Duty LR, without certificate

TWO DAYS

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	84	N/A
71 - 80	84	N/A
90 - 100	88	N/A
112 - 132	95	N/A
160 - 180	119	N/A
200 - 250	171	N/A

VC096 Fulfilling Marine Duty LR, without certificate

TWO DAYS

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	84	N/A
71 - 80	84	81
90 - 100	88	81
112 - 132	102	95
160 - 180	131	147
200 - 250	183	205
280	N/A	486

VC403 IP56 Protection

TWO DAYS

Convert process performance motor from IP55 to IP56

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	227	N/A
71 - 80	227	319
90 - 100	271	319
112 - 132	359	440
160 - 180	511	573
200 - 250	511	573
280	N/A	607

Modification Number

Motor Mod Express® Description and List Price

Working Days Required

VC701 Insulated bearing at N-end

TWO DAYS

Add an insulated bearing on the opposite drive end of the motor for use with inverter driven motors per ABB practices. Lead time subject to availability of bearing.

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	N/A	N/A
71 - 132	N/A	N/A
160 - 180	1407	Request
200	1832	1906
225 - 250	2172	1906
280	N/A	2043

VC067 External Earthing Bolt

TWO DAYS

External grounding bolt added to motor frame

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	108	N/A
71 - 80	108	134
90 - 100	118	134
112 - 132	118	147
160 - 180	134	Standard
200 - 250	134	Standard
280	N/A	Standard

VC122 Bimetal Detectors 150° C

TWO DAYS

Install normally-closed winding thermostats (3 in series)

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	N/A	N/A
71 - 80	186	194
90 - 100	212	194
112 - 132	222	213
160 - 180	257	288
200 - 250	314	352
280	N/A	376

**Modification
Number**

**Motor Mod Express®
Description and List Price**

**Working Days
Required**

VC178 Stainless Steel Bolts

TWO DAYS

Install stainless steel frame bolts and hardware. Acid free.

IEC Frame Size	Aluminum List Price	Cast Iron List Price
63	141	N/A
71 - 80	141	126
90	147	126
100	158	126
112 - 132	158	126
160	168	225
180	279	377
200	423	568
225 - 250	524	703
280	N/A	765