

Modification Number

Motor Mod Express®

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Baldor
Mod Express

ABB
Mod Express

ABB ATEX
Mod Express

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Baldor
Sales Offices

Motor Mod Express®

Ordering Information

Note: Motors made for sale in the U.S. must comply with the Small Motor Rule and the Integral Horsepower Rule (10 CFR 431) including those modified from stock. After any modification, the motor must comply with the minimum efficiency levels if the motor is sold for use in the United States.

Motors sold for use in Canada must comply with the applicable regulations such as Natural Resources Canada if used in that country. Motors sold through distribution into Mexico must be registered and comply with NOM ANCE standards. Motors modified and sold for use in Europe must comply with CE for efficiency and other markings. Other countries have their own specific requirements and certifications for those specific countries.

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 and Kings Mountain Warehouses. 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.

Modifications for the 449T frame 2300 Volt and above as well as the 5008-5810 frame motors have been specifically created for the General Purpose Motor (GPM) product family of Large AC TEFC motors. Factory modifications are not available for the 450 and 500 IEC frame sizes in the GPM product. Some of the modifications may be used on the Severe Duty or Ammonia Compressor ODP products, however please check with the factory prior to order entry to ensure availability of required modification.

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.

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed. Please contact your Baldor representative.

Note

NEW modifications are indicated with RED Titles.

All lead times indicated are subject to availability of stock motors and parts in the Fort Smith and Kings Mountain 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

Balance

M1A

Dynamic Balance of Rotor

Re-balance stock motor to special balance NEMA 42 through 5810 frame.

TWO DAYS

Squirrel Cage Type

NEMA Frame	Standard Balance	Special Balance	List Price Per Motor
42 - 145	0.15"/s	0.08"/s	256
182 - 215	0.15"/s	0.08"/s	621
254 - 286	0.15"/s	0.08"/s	894
324 - 364	0.15"/s	0.08"/s	1734
404 - 445	0.15"/s	0.10"/s	2100
447 - 449	0.15"/s	0.10"/s	2192
5008 - 5810	0.15"/s	0.10"/s	2342

NOTE: Balance units are for velocity in inches per second.
Special balance is the standard level for IEEE-841 (2009).

Bearings

M2A

Sealed

This modification provides the option of replacing standard bearings in AC motors with sealed bearings.

TWO DAYS

NEMA Frame	List Price Per Motor (2 Bearings)
48, 56	181
143 - 145	185
182 - 184	233
213 - 215	233
254 - 256	435
284 - 286	435
324 - 326	562
364 - 365	562

NOTE: Grease fittings will be replaced with slotted head pipe plugs. 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. Only the stock 449T frames 2300V and above, as well as the TEFC 5000 and 5800 frame GPM TEFC motors with "L" shafts have high strength steel shafts. Also see the main catalog section for motors that Baldor stocks with roller bearings already installed. These stock motors are identified with a "LR" suffix after the catalog number - Example: EM58606LR-2340.

THREE DAYS

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

NEMA Frame	List Price Per Motor
449T*	1948
5008L - 5810L	1948

NOTE: *449T - Applicable to 449T, 2300 volt and above.
Users must ensure to not exceed load carrying capability of installed roller bearing. Maximum load capability of a rating can be provided. If unsure of your load data, a belt load datasheet can be provided to assist.

**Modification
Number**

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

**Working Days
Required**

Bearings continued...

M2C

Add Thermocouple to Bearing Housing

THREE
DAYS

Iron constantan thermocouples unless specified otherwise. 449T Frame and up, leads for temperature detectors are brought into separate terminal housing condulets located at each bearing housing.

NEMA Frame	List Price Per Bearing
449T*	1477
5008 - 5810	1477

NOTE: *449T - Applicable to 449T, 2300 volt and above. 5008 frame and up, option is available to terminate detector leads in the stator RTD box rather than condulets. Please advise if required.

M2D

Add Bearing Temperature Detector

THREE
DAYS

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

NEMA Frame	List Price Per Bearing
449T	1477
5008 - 5810	1477

NOTE: *449T - Applicable to 449T, 2300 volt and above. 5008 frame and up, option is available to terminate detector leads in the stator RTD box rather than condulets. Please advise if required.

M2E

Add Sealed Bearings

TWO
DAYS

See M2A for Sealed Bearings.

M2F

Add Isolated Bearings NEMA 56 Through 5810 (SKF Insocoat or equivalent)

TWO
DAYS

If insulating both bearings, Baldor recommends addition of M39A.

NEMA Frame	List Price (x2 per set)
56 - 145T	539
182T - 184T	560
213T - 215T	762
254T - 256T	1168
284T - 286T	1466
324T - 326T	1634
364T - 365T	1693
404T - 405T	1772
444T - 445T	1852
447T - 449T	3174
5008 - 5810	1305 (1 Bearing)

NOTE: Totally Enclosed (TEFC) 449T frames at 2300/4000V and 5008-5810 motors come standard with an insulated opposite drive bearing. For pricing on 2300/4000V 449T frame, please use 5008-5810 frame adder

M2G

Roller to Ball Bearing 1800 RPM or Below

THREE
DAYS

This modification is to convert all LR catalog 5000 frame motors and above from roller bearings to standard ball bearing design.

NEMA Frame	List Price Per Bearing
5008-5810	1613

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****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).

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.

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

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.

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

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

M3C**Add Larger or Smaller Brake (All Types)**

Contact Baldor for application assistance.

List Price: \$308 per brake (plus difference in brake cost).

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
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Brake Motors continued...

M3D

Change Stearn's Brake

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.)

List Price: \$282 per brake (plus any difference in coil cost).

CONTACT YOUR BALDOR DISTRICT OFFICE

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.

CONTACT YOUR BALDOR DISTRICT OFFICE

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.

CONTACT YOUR BALDOR DISTRICT OFFICE

Brake Rating	List Price Per Motor
All	184

M3G

Change Dodge Brake

Brake will be changed to specified hertz, voltage, and brake rating. (Allow 2 weeks for brake delivery)

List Price: \$282 per brake (plus any difference in brake cost).

CONTACT YOUR BALDOR DISTRICT OFFICE

Baldor Mod Express

ABB Mod Express

ABB ATEX Mod Express

Product Index

Baldor Sales Offices

Modification Number

Motor Mod Express® Description and List Price

Working Days Required

Conduit Box

M4A

Tap or Provide Additional Lead Hole

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.

TWO
DAYS

NEMA Frame	Stock Motor		Optional Threaded Hole For Conduit Size	List Price Per Motor
	Hole Diameter *	For Conduit Size		
48 - 145T	7/8"	1/2"	3/4"	126
182 - 215T	1-1/16"	3/4"	1"	126
254 - 256T	1-3/8"	1"	1-1/4"	206
284 - 326T	2"	1-1/2"	2"	206
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

Specify lead opening location facing conduit box

List Price Per Motor: \$147

TWO
DAYS

M4C

Add Oversized Cast Iron Conduit Box

NEMA Frame	List Price Per Motor
182-184T	298
213-215T	298
254-256T	298
284-286T	427
324-326T	433
364-365T	459
404-405T	491
447-449T	515

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

TWO
DAYS

M4F

Replace Die Cast Aluminum Conduit Box

Install cast iron conduit box with drilled and tapped entrance hole.

NEMA Frame	List Price Per Motor
42 - 56	162
143 - 215T	187
254 - 286T	230
324 - 365T	368

TWO
DAYS

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
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Conduit Box continued...

M4G Add Conduit Box for Thermostat or Heater Leads

Not for Explosion Proof motors

CONTACT YOUR BALDOR DISTRICT OFFICE

NEMA Frame	List Price Per Motor
56 - 145T	441
182 - 215T	515
254 - 365T	778
404 - 449T	984

Cord

M5A Install Line Cord in Conduit Box or Terminal Panel

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.**

TWO DAYS

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed. Please contact your Baldor representative.

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

With ground plug for 115VAC, single phase only.

Does Not Apply to Explosion-Proof Motors.

TWO DAYS

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed. Please contact your Baldor representative.

Hp	List Price Per Motor
1 Hp and smaller	142

NOTE: Advise rotation facing drive end of motor

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

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed. Please contact your Baldor representative.

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

NOTE: Advise voltage and rotation facing drive end of motor

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

2 Hp and smaller (Includes price of switch). Remove mechanical switch from inside motor and install electronic switch in motor conduit box. Contact Baldor for assistance.

Does Not Apply to Explosion-Proof Motors

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed. Please contact your Baldor representative.

Hp	List Price per Motor
2 Hp and smaller	313

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 plastic T-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
215 and Smaller	223
254 - 449	303

NOTE: Indicate position of drain holes in each endplate.

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

M7B	<p>Install "T" Drain. Install one stainless steel "T" drain in each end bracket in existing hole. Does Not Apply to Explosion-Proof Motors</p>	TWO DAYS
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NEMA Frame	List Price Per Motor
254T - 449T	579
5008 - 5810	427

M7C	<p>Close Standard Condensation Drain Holes. Close existing drain holes with plugs. Does Not Apply to Explosion-Proof Motors</p>	TWO DAYS
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NEMA Frame	List Price Per Motor
215 and Smaller	185
254 - 449	223

M7D	<p>Add Breather Drains to Cast Iron Explosion-Proof Motor.</p>	TWO DAYS
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Drain Type	List Price Per Motor
UL Listed Explosion Proof Drain - ANSI 316 S.S.	389
UL Listed Explosion Proof Drain - Crouse-Hinds ECD	437

Dripcovers

M8A	<p>Install Dripcover on TEFC or ODP</p>	TWO DAYS
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NEMA Frame	List Price Per Motor ODP or TEFC
48 - 145	147
182 - 184	158
213 - 215	176
254 - 256	202
284 - 286	244
324 - 326	270
364 - 365	488
404-405 (NEMA Frame)	488
444 - 449 (NEMA Frame)	692

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****Slurry Coat & Encapsulation****M9B****Encapsulation**

Not available as ModX.

Encapsulation is available on Washdown Duty motors as a custom motor option.

Leads**M10A****Install Terminal Lugs**

Ring-type non insulated terminals made of copper alloy and seamless compression type lugs. Prices are standard 3-lead single voltage three-phase motors. Multiply mod list adder for actual number of leads per motor.

TWO
DAYS

NEMA Frame	List Additions for 3 Terminal Lugs
215 and Smaller	180
254-365	223
404-445	265
447-449	265

NOTE: 5008 and up, come standard with lead lugs. Option is for conversion to single or double Burndy style lugs.
5008 and above contact your Baldor Representative 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 - 145	162
182 - 184	251
213 - 215	333
254 - 256	375
284 - 286	494
324 - 326	624

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

M10C**Reconnect Motor to High or Low Voltage in
Conduit Box**TWO
DAYS

Please specify voltage.

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

**Modification
Number**

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

**Working Days
Required**

Leads continued...

M10D

Longer Leads, Additional Leads added:

TWO
DAYS

Does Not Apply to Explosion-Proof Motors.

Some modifications cannot be performed on UL, CSA, or UL / CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed.

Please contact your Baldor representative.

NEMA Frame	Number of Leads	List Price		
		18 Inches	24 Inches	36 Inches
42-286	3 - 12 Leads	215	218	224
324-449	3 Leads	324	335	346
	6 Leads	358	380	403
	9 Leads	392	425	459
	12 Leads	425	470	515

NOTE: If lead requirements are longer than 8 feet contact Baldor Sales Team.

Lubrication

M11A

Install Low Temperature Lubricant in Bearings

TWO
DAYS

(Single Shield or Open Bearing)

Standard grease is Exxon POLYREX® EM, with bearing operating temperature range of -15° to +250°F. For low temperature operation, please specify either Aeroshell #7 or Mobil Temp SHC-32 low temperature grease which allows an operating temperature range for bearings of -55° to +200°F. New bearings are installed when grease is changed.

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: Low temperature operation below -25C (-13F)

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****Lubrication continued...****M11B****Add High Temperature Grease**

Standard grease is Exxon POLYREX® EM, with bearing operating temperature range of -15° to +250°F. For High temperature operation, please specify Mobilith SHC 220 high temperature grease which allows an operating temperature range for bearings of -40° to +302°F. New bearings are installed when grease is changed.

TWO
DAYS**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.

Seals**M12A****Install Oil Seals**

Nitrile is the standard oil seal material.

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

NEMA Frame	List Price Each
48, 56	342
143T - 145T	342
182T - 184T	378
213T - 215T	417
254T - 256T	574
284T - 286T	673
324T - 326T	760
364T - 365T	956
404T - 405T	956
444T - 449T*	1008

NOTE: Does Not Apply to Explosion-Proof Motors

*For 449T frames 2300 Volt and above, consult M27B Mod.

**Modification
Number**

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

**Working Days
Required**

Seals continued...

M12B

Install Inpro/Seal® Drive End Only

FOUR
DAYS

Contact Baldor for Other Frame Sizes. Inpro/Seal® VBX is the standard material used.

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
5008 - 5810	1101

Mountings

M13A

Add Rigid Base

TWO
DAYS

Weld stamped steel base to steel band explosion proof motor unless motor meets VEM or VEL. Not available if conversion results in motors that fall under EISA/NRCAN 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.

Modification Number

Motor Mod Express® Description and List Price

Working Days Required

Mountings continued...

M13C-1 Install NEMA C-Face - Cast Iron Construction

Install Cast Iron Endplate where aluminum die cast parts are supplied as standard.

TWO DAYS

Does Not Apply to Explosion-Proof Motors, See M13G

NEMA Frame	NEMA C-Face Price
48 & 56	234
143 - 145T (1)	234
182 - 184T (1)	282
213 - 215T (1)	324
254 - 256T	717
284 - 286T	988
324 - 326T	1069
364 - 365T	1153
404 - 405T	1438
444 - 449T	1725

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

Westville open motors cannot be modified to C-Face.
Contact Baldor.

M13C-2 Install NEMA C-Face - IEEE 841 Motors

TWO DAYS

NEMA Frame	NEMA C-Face Price
284 - 365TC	1022
324 - 326TC	1590
364 - 326TC	1611
404 - 405TC	1793
447 - 449TC	1902

M13D Add D-Flange

Some motors may be converted to D-Flange mounting and meet NEMA BA dimensions.

All other frame sizes needing D-Flange mounting please order as custom motor.

CONTACT YOUR BALDOR DISTRICT OFFICE

Does not Apply to Explosion Proof Motors

Steel Band

NEMA Frame	List Price Per Motor
140	221
320	986

Cast Iron

NEMA Frame	List Price Per Motor
180	321 * †
250	1069 * †
280	1192 *
320	1357 *

NOTE: * TEFC motors only
† Must start with motor that already has C-Face on it.

**Modification
Number**

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

**Working Days
Required**

Mountings continued...

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.

M13F-1

Convert Mounting Configuration for Steel Band Motor

TEN
DAYS

Available on all Steel Band AC motors through 449T Frame. For conversion to F2 designs, check available inventory before using Mod. Consists of repositioning endplate vents, condensation drains, and where applicable, the conduit to positions shown in the Mountings chart at the end of Mountings mods. Converting a steel band motor requires a new steel band frame.

Does Not Apply to Stainless Steel Band Motors
Does Not Apply to Explosion-Proof Motors

NEMA Frame Enclosure	Specify Mounting configuration using Drawings on Pg. 392		List Price Per Motor
	ODP	TEFC	
UP TO 184T	Yes	Yes	564
213 - 215T	Yes	Yes	564
254 - 326T	Yes	254-6	733
364 - 449T	Yes	Yes	959

M13F-2

Convert Mounting Configuration for Cast Iron Motor

THREE
DAYS

Available on all Cast Iron AC motors through 449T Frame. For conversion to F2 designs, check available inventory before using Mod. Consists of repositioning endplate vents, condensation drains, and where applicable, the conduit to positions shown in the Mountings chart at the end of Mountings mods.

Does Not Apply to Explosion-Proof Motors

NEMA Frame Enclosure	Specify Mounting configuration using Drawings on Pg. 392		List Price Per Motor
	ODP	TEFC	
UP TO 184T	Yes	Yes	213
213 - 215T	Yes	Yes	213
254 - 326T	Yes	Yes	213
365 - 449T	Yes	Yes	213
5008-5810	No	Yes	414

NOTE: For 5008-5810 Open motors (WPI, WPIL), please contact factory to determine if F2 is achievable.

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****Mountings continued...****M13G****Add C-Face to Explosion Proof Motors**

Only available on NEMA frames shown below.

THREE
DAYS

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

NOTE: Any other frame size must be built as a custom motor.**M13H****Mount Dust Control Unit on Grinders**

Labor only to mount dust control unit.

Price does not include the dust control unit or any accessories.

See Accessories to order Dust Control Unit.

TWO
DAYS

Wheel Size	List Price Per Grinder
All	213

M13I**Mount Grinder or Buffer onto Pedestal**

Price does not include the grinder or buffer, pedestal or any accessories.

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.

**Modification
Number**

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

**Working Days
Required**



Mountings continued...

M13K

Add Two Piece Transition Base

QUOTE

A custom designed adapter base allows stock 5008-5810 frame motors to mount in existing applications, where standard footprint and shaft height are not sufficient. Mounting dimension and shaft height of existing machine is required prior to order. Please note terminal boxes, accessory boxes, and overall length may be different. Please reference drawing of stock motor to ensure proper overall fit in your application.

List price – Consult factory for quote.

M13L

Add Steel Fan Cover

TWO
DAYS

Add Steel Fan Cover on TEFC motors.

NEMA Frame	List Price
5008-5012	650
5810	821

NOTE: Some ratings may come with steel fan cover as standard. Contact Baldor for lead time and freight charges back to plant of manufacturing

M13M

Add Low Noise Fan and/or Fan Cover

QUOTE

Add low noise steel fan cover to TEFC motors. Please contact Baldor for expected sound levels when using low noise fan covers.

NEMA Frame	List Price
5008-5810	Quote

M13N

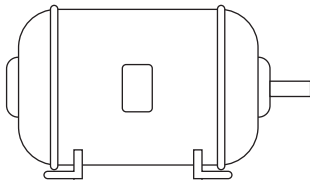
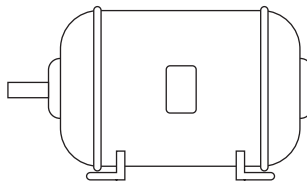
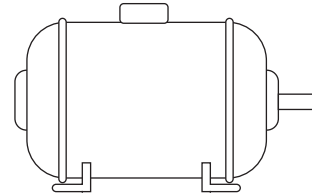
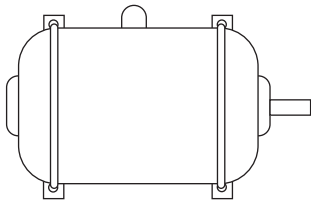
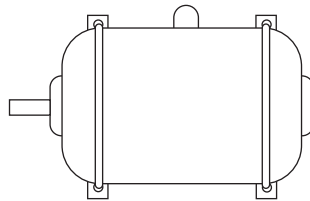
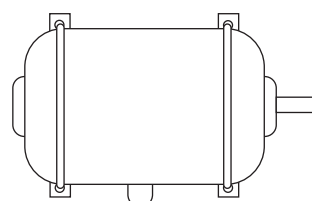
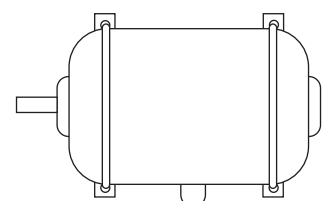
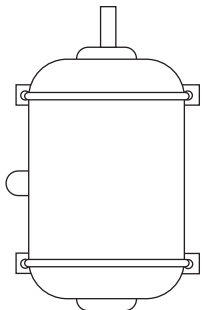
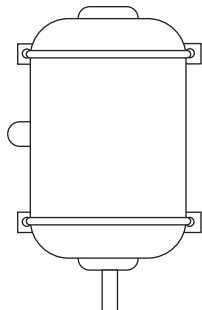
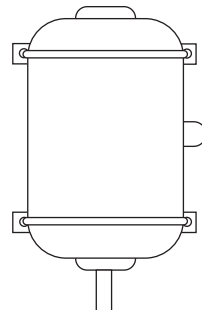
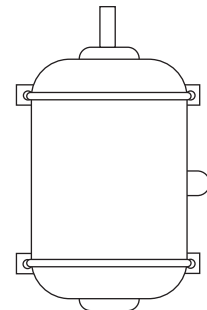
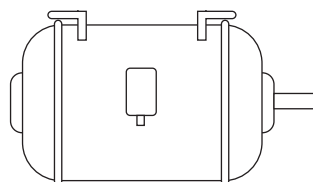
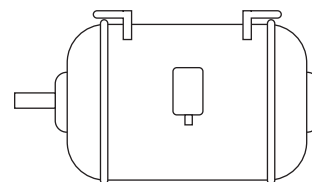
Add Cast Iron Fan Cover

TWO
DAYS

Converting a General Purpose, Super-E Cast Iron motor with a Steel Fan Cover to a Cast Iron Fan Cover.

NEMA Frame	List Price
143-145T	271
182-184T	284
213-215T	321
254-256T	349
404-405T	384
447-449T	437

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****Floor Mountings****Assembly F-1****Assembly F-2****Assembly F-3****Wall Mountings****Assembly W-1****Assembly W-2****Assembly W-3****Assembly W-4****Assembly W-5****Assembly W-6****Assembly W-7****Assembly W-8****Ceiling Mountings****Assembly C-1****Assembly C-2****NOTE:** For all NEMA mounting configurations, refer to NEMA MG 1-2009.For more information visit baldor.com

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

M14A	Open Crate Packaging	EIGHT DAYS
-------------	-----------------------------	------------

Replace standard motor packaging with Open Crate. For NEMA 360 thru 449 frames the open crate has Euro base as standard. Requests for Euro pallet on NEMA 320 frame and smaller must be made in shipping instructions.

NEMA Frame	Open Crate List Price
56-215	420
254-326	547
364-445	772
447-449	873
5008-5012	1634
5810	1743

M14B	Totally Enclosed Crate Packaging	EIGHT DAYS
-------------	---	------------

Replace standard motor packaging with Enclosed Crate. For NEMA 360 thru 449 frames the enclosed crate has Euro base as standard. Requests for Euro pallet on NEMA 320 frame and smaller must be made in shipping instructions.

NEMA Frame	Enclosed Crate List Price
56-215	526
254-326	740
364-445	921
447-449	1070
5008-5012	7323
5810	7979

M14C	Motor and Nameplate Photograph
-------------	---------------------------------------

Take photo of motor and nameplate for FAA Security Endorsement Documents. Photos will be attached to sales order.

List Price per Motor: \$85

Baldor Mod Express

ABB Mod Express

ABB ATEX Mod Express

Product Index

Baldor Sales Offices

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

Nameplate

M15A	Provide Original Nameplate for Remote Mounting	TWO DAYS
-------------	---	----------

Extra nameplate is packed with motor, not mounted.
All CSA and UL_R markings are removed on duplicate nameplates.
Shipped loose.

List Per Motor: \$123 5000 Frame and Above: \$369 List

M15B	Replace Nameplate	TWO DAYS
-------------	--------------------------	----------

Replace motor nameplate which may include customer part numbers, voltage, hertz, etc.

List Per Motor: \$147 5000 Frame and Above: \$400 List

M15C	Laser Engrave Nameplate into Stainless Steel Motor	TWO DAYS
-------------	---	----------

Motor nameplate is laser etched on stainless steel band surface up to 210 frame motor

List Per Motor \$147

M15E	Mail Nameplates to Customer (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 net. Add \$3.00 net for each additional nameplate.

5000 Frame and Above: \$369

NOTE: No charge orders only accepted if with RA or warranty claim.
Nameplates for Explosion-proof motors will not be mailed out, no exceptions.

M15F	Mark Nameplate with CE	TWO DAYS
-------------	-------------------------------	----------

The motor has to meet IE2 efficiency standards and be ATEX / IECEx approved in order to be CE marked. Does not apply to Div. 1 or Div. 2 classified motors.

List Per Motor \$147

Blowers

M16A	Add Constant Velocity Blower Unit	TWO DAYS
-------------	--	----------

For Baldor legacy products, contact Baldor for details.

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

NEMA Frame	List Price Per Motor
All	228

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

M17A

Paint Motor to Baldor Stock Paint Color

Baldor Stock colors are: Metallic Gray, Reliance Blue/Green, Gold Super-E, Black, White, Silver, Lite Tan. Stock colors for 5008 and up are: White, Black, Yellow, Gray and Signal Red. Please specify color on order.

All orders that call for Epoxy Paint require an additional day to allow for complete drying of paint.

NEMA Frame	List Price Per Motor
42 - 215T	147
254 - 449T	579
5008 - 5812	1359

TWO
DAYS

M17B

Paint Motor or Parts to Customer Specified Color

Painted parts include, but are not limited to, fan covers, conduit boxes, drip covers, etc.

Please provide color chip or RAL number on order.

All orders that call for Epoxy Paint require an additional day to allow for complete drying of paint.

List price: Contact Baldor for quote.

TWO
DAYS

Lifting Lugs

M18A

Add Lifting Lugs Up to a 326T Frame Size

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

TWO
DAYS

Screens

M19A

Add Rodent Screens to Open Drip-Proof Motors

NEMA Frame	List Price Per Motor
56	293
143-215T	380
254-365T	461
404-449T	535

TWO
DAYS

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****Hardware****M20A****Exchange Plated Hardware with Stainless Steel**

Replaces all mounting hardware for fan cover, conduit box, bearing retainers, thru-bolts, and frame bolts with 304 stainless steel hardware.

TWO
DAYS

NEMA Frame	List Price Per Motor
56-184	337
213-215	373
254-256	431
284-286	488
324-326	561
364-405	647
444-445	792
447-449	876
5008-5810	3410

NOTE: 5008 frame and up, pricing includes grease and relief tubes.

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

NOTE: Strip type space heaters are standard.

Does Not Apply to Explosion-Proof Motors

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

**Modification
Number**

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

**Working Days
Required**

Thermal Protectors

M23A

Thermostats

TWO
DAYS

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.

All ECP motors require hermetically sealed thermostats to maintain Division 2 marking.

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

TWO
DAYS

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

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

CONTACT
YOUR
BALDOR
DISTRICT
OFFICE

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

NEMA Frame	List Price Per Motor
440T	4096

NOTE: Installing RTD on winding endturns are not as effective as embedded RTD in winding. For embedded RTD, build as custom motor.

Does Not Apply to Explosion-Proof Motors

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

NOTE: Thermocouples are installed on end turns.**Does Not Apply to Explosion-Proof Motors****Winding Thermistors****Does Not Apply to Explosion-Proof Motors****M25A****Thermistors**Thermistors are normally applied in sets of three (3) per motor,
One (1) per phase.**List Price per Motor: \$669**TWO
DAYS**Tropicalization****M26A****Protection of Windings and Mechanical Parts**

Protection from tropical environments.

TWO
DAYS

NEMA Frame	List Price Per Motor
	AC
Through 215T	244
254 - 365T	350
404 - 449T	598
5008 - 5810	1609

NOTE: For 5008-5810 this includes epoxy coating of rotor and stator and additional fungus protection**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
42 - 215T	238
254 - 365T	1112
404 - 449T	1306

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

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

M27B	Upgrade to IP55 Protection Includes all necessary mechanical modifications for TEFC motors to meet IP55.	TWO DAYS
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NEMA Frame	List Price
449T	815
5008 - 5810	815

NOTE: Available for 449T frames 2300V and above

Shaft Modifications

Includes modifications to existing shafts only. Not applicable if new shaft is required. Price each modification per table. One or both bearings will be replaced after shaft modification is complete.	FIVE DAYS
---	--------------

NEMA Frame	List Price Per Modification	NEMA Frame	List Price Per Modification
42 - 145T	219	254T - 256T	291
182 - 184T	230	284 - 286T	291
ASM62 (5)	270	324-326T	337
213 - 215T	319	364-365T	359
ASM75 (5)	319	404-405T	401

NOTE: (5) Arbor Saw Motors.

M29A	Drill and Tap One Hole in End of Shaft or Mill Flat on Shaft Extension. Provide details on order. Price this modification per table above.	THREE DAYS
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M29B	Convert from TEFC to TEAO Cut off shaft extension for external fan. Price this modification per table above. Does Not Apply to Explosion-Proof Motors	THREE DAYS
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M29C	Threading Specify right hand or left hand thread, also type and length of thread. Price this modification per table above.	FIVE DAYS
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**Modification
Number**

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

**Working Days
Required**

Shaft Modifications continued...

M29D

Convert “T” Frame to “U” Frame Shaft Dimension or Smaller (TS)

FIVE
DAYS

Provide details on order. For “U” frame conversion on 280, 320, 360, and 440 frames, please enter custom order. Not available through Mod Express.

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

M29F

Shorten Shafts Without Reducing the Overall Diameter

THREE
DAYS

Shortening the shaft may cause the motor to fall out of NEMA standards. If motor falls out of NEMA standards, the nameplate will be designated with a “TZ” to signify short shaft.

NEMA Shaft	List Price Per Motor
48 - 145T	232
182 - 215T	247
254 - 256T	253
324 - 326T	267
364 - 365	281
404 - 405	281
447 - 449	294

M29I

Machine Explosion Proof Motor Shafts from T to U Frame

Contact Baldor for price and availability.

M29J

Convert “L” Frame to Shorter Shaft for Coupled Duty

This modification includes taking 1800 RPM and slower, 5008-5810L frame and shortening the shaft for Coupled Duty.

NEMA Frame	List Price
5008-5810	5500

NOTE: For 5008 frames and above please use reference chart below to understand allowable length reductions. Shortening the shaft length on motors with roller bearings is not recommended. If required please contact factory for review.

Table M29J

Frame	Speed (RPM)	Maximum shaft extension length reduction (in.)	Resulting “V” dimension (in.)	Minimum “XBA” (in.)	Standard “XBA” (in.)
5000	1800	4.88	5.12	14.62	19.50
	1200				
	900				
5800	1800	4.26	8.75	19.42	23.68
	1200				
	900				

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

M30A	<p>Add Grounding Screw On Endplate Requirement for UL 1081, swimming pool pump motors only (includes slinger.) List Price: \$135</p>	TWO DAYS
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Tach and Encoder Mounting Kits

M31A	<p>Add Tach Mounting Kits Only These kits are complete and will allow mounting of a BTG1000 or XPY tach generator (tach generator not included). For more information on tachometer kits, see tach mountings kits in the DC motor section.</p>	THREE DAYS
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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	<p>Tach Kit with BTG1000 Tach Order tach kit per M31A and order tach separately.</p>	FOUR DAYS
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M31C	<p>Tach Kit with XPY Tach Order tach kit per M31A and order tach separately.</p>	FOUR DAYS
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M31D	<p>Add Encoder Kit to Inverter Duty V*S Master or RPMAC Motor Order encoders separately. Encoders can be found in the inverter/vector motors & controls section.</p>	TWO DAYS
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NEMA Frame	RPMAC Frame	List Price Per Motor
56 - 215T	FL/RL180-210	191
254T - 404T	FL/RL 250-400	397
444T - 449T	FL/RL440	619
5008 - 5810	N/A	2614

NOTE: For 5008-5810 frames motors come with HS35R dynapar encoders.

**Modification
Number**

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

**Working Days
Required**

Tach and Encoder Mounting Kits continued...

M31E

**Additional Mounted Encoder Options for
IDRPM Motors**

TWO
DAYS

List price includes encoder and mounting to motor.

Type	Frame Size	Mfg.	PPR	Mag or Optical	Conn Type	Input Voltage VDC	List Price
HS35	All	BEI	1024	O	MS-TL	5-28	1834
HS35	All	BEI	2048	O	MS-TL	5-28	1834
LP35	All	BEI	1024	M	Term. Block	5-15	1834
LP35	All	BEI	1024	M	MS-TL	5-15	1834
LP35	All	BEI	1024	M	MS-ST	5-15	1834
HS20	All	Dynapar	1024	O	MS-TL	5-26	1834
ST85	All	Northstar	1024	O	EPIC Latch	5-15	3226
HS35M	All	Avtron	1024	M	MS-ST	5-24	1995
HS35M	All	Avtron	1024	M	EPIC Latch	5-24	1995

Testing

Contact your Baldor District Office for original factory test reports.

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.

Bearings are replaced after testing.

NEMA Frame	List Price Per Motor
42 - 215	2400
254 - 320	3901
360 - 449	4694
5008 - 5810	5250

NOTE: For 449T frames 2300V and above use 5000 frame price – motors will be tested at factory.

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.

Bearings are replaced after testing.

NEMA Frame	List Price Per Motor
42 - 215	7709
254 - 320	8613
360 - 449	8837
5008 - 5810	9450

NOTE: For 449T frames 2300V and above use 5000 frame price - motors will be tested at factory.

NOTE: * Lead time is dependent on Test Lab availability. Contact your Baldor District Office.

For more information visit baldor.com

**Modification
Number**

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

**Working Days
Required**

Testing continued...

M33A

Short Motor 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
- Full Load Current
- Breakdown Torque
- Locked Rotor (Starting) Current
- Locked Rotor Torque
- Hi-Potential Test

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

NOTE: Not available for 449T Frame 2300 Volt and up.

M33B

Routine Motor Test

SEVEN *
DAYS

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
- Locked Rotor Current
- High-Potential
- Winding resistance

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

M33C

Complete Performance Test

SEVEN *
DAYS

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
- Full Load Current
- Locked Rotor Current
- High-Potential
- Winding Resistance
- Full Load Heat Run
- Temperature Rise
- Full Load Slip
- Measure breakdown and starting torques
- Measure efficiency at 100%, 75%, 50% of full load
- Measure power factor at 100%, 75%, 50% of full load

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

NOTE: For 449T frame 2300 Volt and up please see M32A.

NOTE: * Lead time is dependent on Test Lab availability. Contact your Baldor District Office.

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****Testing continued...****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.

CONTACT *
BALDOR
DISTRICT
OFFICE

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

NOTE: Not available for 449T frame 2300 Volt and above.

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.

SEVEN *
DAYS

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

Worm Gear Modifications**M34A****Install Bases on Worm Gear Speed Reducers.**

List price include bases.

TWO
DAYS

900 Series			
Size	Horiz. Base List Price	Vertical Low Base List Price	Vertical High Base List Price
913	200	242	244
915	211	244	247
918	211	244	247
921	215	249	252
924	230	268	274
926	244	309	313
932	274	337	344
938	299	379	391

NOTE: * Lead time is dependent on Test Lab availability. Contact your Baldor District Office.

For more information visit baldor.com

Modification Number	Motor Mod Express® Description and List Price	Working Days Required
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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, or Remove Left or Right shaft output on 900 or Universal Series Reducers** TWO DAYS

List Price: \$168 (Price does not include reducer)

M34D **Install Motor on 900 F-Series or Universal STF Series Reducers** TWO DAYS

List Price: \$168 (Price does not include motor or reducer)

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

NOTE: Not available for 449T frames 2300V and above

**Modification
Number****Motor Mod Express®
Description and List Price****Working Days
Required****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 dependent on delivery of the starter.

Price of the starter is included.

M36A**Starter – Single Phase**

Full voltage control.

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed.

Please contact your Baldor representative.

TWO
DAYS

Grinder Wheel Size	Buffer Hp	Manual	Magnetic	
		115/230 Volts	115 Volts	230 Volts
		List Price	List Price	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. **Price of the starter is included.**

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed.

Please contact your Baldor representative.

TWO
DAYS

Grinder Wheel Size	Buffer Hp	Manual	Magnetic	
		208-230/460 Volts	208-230 Volts	460 Volts
		List Price	List Price	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.

**Modification
Number**

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

**Working Days
Required**

Starters continued...

M36C

Magnetic Starter – Three Phase

With Low Voltage Control.

Price of the starter is included.

TWO
DAYS

Grinder Wheel Size	Buffer Hp	Magnetic With 110 Volt Control Circuit Transformer	
		208-230 Volts	460 Volts
		List Price	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.

M36D

Overload Protection for Dust Control Unit

Price of the starter is included.

TWO
DAYS

NEMA Frame	List Price
All	619

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

Voltage

M37A

**Change a Grinder Dust Control Unit from
230/460 Volts to 575 Volts**

Some modifications cannot be performed on UL, CSA, or UL/CSA Certified Grinders, Buffers, or Belt Sanders without voiding the Certification. In such instances, the Certification Mark(s) would need to be removed.

Please contact your Baldor representative.

TWO
DAYS

NEMA Frame	List Price
All	184

M37B

**Reconnect grinder for 230V and change to 230V relay
List Price \$184**

TWO
DAYS

**Modification
Number**

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

**Working Days
Required**

Shaft Grounding

A shaft ground may be specified by many HVAC, pump and conveyor manufacturers to mitigate the effects of Adjustable Speed Drive circulating currents and prolong bearing life. Shaft grounding is available as an option on Baldor•Reliance custom motors or can be installed on a stock motor in Baldor's Mod Express. On applications where washdown or debris may be present, mounting the ground internally on the motor (as custom) may be required.

NOTE: A shaft ground is a sparking device not suited for explosion-proof Division 1 or 2 applications, even when mounted internally.

Baldor offers three main types of shaft grounding devices:

- **M39A - Shaft Grounding Systems**
- **M39B - Shaft Grounding Rings**
- **M39C - Shaft Grounding Brush**

M39A

Shaft Grounding Systems

The SGS™ (Shaft Grounding Systems) design is a robust, enclosed unit designed for harsh environments. Mounts to the opposite drive end of the motor on TEFC, TENV, TEBC & ODP motors.



THREE
DAYS

NEMA Frame	List Price
56 - 449T	1231

Does Not Apply to Explosion-Proof or Division 2 Motors

M39B-1

AEGIS® Bearing Protection Ring

NEMA Frame	Shaft Diameter	External List Price	Internal List Price
56	0.625	221	663
140T, 180	0.875	232	696
180T, 210	1.125	244	732
210T, 250U	1.375	258	774
250T, 280U	1.625	322	966
280T, 320U, 320TS, 360TS	1.875	343 (1)	1,029
320T, 360U, 400TS	2.125	379 (1)	1,137
360T, 400U, 440TS	2.375	456 (1)	1,368
400T, 440U	2.875	643 (1)	1,929
440T	3.375	766 (1)	2,298

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

NOTE: For this modification, the AEGIS Bearing Protection Ring mounts to the drive end of the motor.

Shaft Grounding continued...

M39B-2 Inpro/Seal® Current Diverter Ring™

NEMA Frame	Shaft Diameter	List Price
56	0.625	226
140T, 180	0.875	226
180T, 210	1.125	272
210T, 250U	1.375	320
250T, 280U	1.625	383
280T, 320U, 320TS, 360TS	1.875	458 (1)
320T, 360U, 400TS	2.125	515 (1)
360T, 400U, 440TS	2.375	547 (1)
400T, 440U	2.875	653 (1)
440T	3.375	738 (1)

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

NOTE: For this modification, the Inpro/Seal Current Diverter Ring mounts to the drive end of the motor.

M39B-3 Inpro/Seal® Motor Grounding Seal™

The Inpro/Seal Motor Grounding Seal *includes* their labyrinth seal.

NEMA Frame	Shaft Diameter	List Price
56	0.625	1184
140T, 180	0.875	1184
180T, 210	1.125	1213
210T, 250U	1.375	1242
250T, 280U	1.625	1541
280T, 320U, 320TS, 360TS	1.875	1686 (1)
320T, 360U, 400TS	2.125	1767 (1)
360T, 400U, 440TS	2.375	2083 (1)
400T, 440U	2.875	2225 (1)
440T	3.375	2711 (1)

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

NOTE: For this modification, the Inpro/Seal Motor Grounding Seal (MGS) will be installed on the drive end of the motor (unless otherwise specified), and replaces any existing seal currently installed on the motor. Use of a MGS on both ends of the motor is not recommended as it may introduce the potential for circulating currents.

**Modification
Number**

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

**Working Days
Required**

Shaft Grounding continued...

M39C

Baldor Shaft Grounding Brush Assembly

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

TWO
DAYS

NEMA Frame	List Price Per Motor
48, 56	221
140	232
180	244
210	258
250	272
280	291 (1)
320	318 (1)
360	350 (1)
400	386 (1)
440	431
5008 - 5810	1306 (1)



Does Not Apply to Explosion-Proof Motors

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

M39D

Add AEGIS® Colloidal Silver Shaft Coating to Shaft

Add a coating of AEGIS colloidal silver to shaft of motor to enhance the conductivity of the surface

List Price: \$350

Check Total Indicated Runout (TIR)

M40A

Check Total Indicated Runout (TIR)

Check C-face and shaft run out. If applicable check foot flatness.

List Price: \$123

Vibration Detectors

M41A

Provisions for Vibration Detection

This will include (1) vibration block on DE and (1) on ODE of the motor, with a 1/4 - 28 standard drill and tap. Please specify plane (horizontal, vertical, axial) at time of order.

TWO
DAYS

NEMA Frame	List Price
5008 - 5810	3076

**Modification
Number**

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

**Working Days
Required**

Vibration Detectors continued...

M41B

Add Vibration Switch

Includes adding a vibration switch to each end of the motor, (1) on DE and (1) on ODE

NEMA Frame	List Price
5008 - 5810	12300

NOTE: Requires M41A.
Providing the vibration switches only. Instrumentation leads are not provided.

M41C

Add Velocity Transducer

Pricing is per set of transducers.
Up to (3) sets can be supplied per motor to measure Horizontal, Vertical, and Axial positions.
Direction of measurement to be specified at order entry.

NEMA Frame	List Price
5008 - 5810	5490

NOTE: Requires M41A.
Providing the velocity transducers only. Instrumentation leads are not provided.

M41D

Add Accelerometer

Pricing is per set of accelerometers.
Up to (3) sets can be supplied per motor to measure Horizontal, Vertical, and Axial positions.
Direction of measurement to be specified at order entry.

NEMA Frame	List Price
5008 - 5810	5350

NOTE: Requires M41A.
Providing the accelerometers only. Instrumentation leads are not provided.

Cast Iron Endplate

M42A

Install Cast Iron Endplate

NEMA Frame	Cast Iron Endplate Price
48 & 56	151
143 - 145T	159
182 - 184T	168
213 - 215T	185

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