Mod-Squad Stock Motor Modification Program

Your motor, your way...now

The Mod-Squad stands on alert ready to tailor a LEESON or Lincoln stock motor to meet your modified motor needs in a few days or less. From one modified motor up to a few—there is no faster, more versatile source for mechanically or electrically "customerized" motors.

Starting with an off-the-shelf LEESON or Lincoln motor selected from the nearly 6,000 LEESON or Lincoln stock motors, the modifications listed here can be completed in the time frame noted for each item.

Ordering Information

To order please specify the catalog number of the LEESON or Lincoln stock motor to be modified and the Mod-Squad modification catalog number or numbers desired.

An inventory of popular motors is maintained by the Modification Center for fast delivery. However, delivery of the modified motor is governed by availability of the stock motor. If a stock motor is shipped from a District Warehouse to the Modification Center in Indianapolis, IN, the cost of the inbound freight is added to the price of the modified motor and delivery of the modified motor will be extended by the inbound transit time.

Modification list prices are subject to the same discounts as apply to the motor. (Some motors, such as explosion-proof, may not be modified.) Days noted are working days excluding holidays and weekends—larger quantities may require additional leadtime.

MOD-SQUAD Cancellation Policy

Modified motors may not be returned for credit or re-stocking. If a modification order is cancelled before shipment, a cancellation charge of double the modification charge will be invoiced to the customer. Any Mod-Squad order cancelled before modification is completed is subject to cancellation charges of 10% of total charges for that item.

Terms are net 30 days, FOB Indianapolis, IN, with freight prepaid on single shipments of 1,500 pounds or 3,000 dollars or more to the first destination within the continental United States, excluding Alaska.

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L1 Balancing Two Days*

The LEESON balancing modification has been discontinued due to high costs of re-balancing by an outside firm. Contact your sales office for a quote on special or precision balanced production motors, requiring a minimum order of 10 pieces or contact a LEESON Authorized Service Center for a quote on a Special balance modification.

L2 Bearing Modifications

#L2a Changing shielded bearings to sealed bearings on stock motors. 48, 56 and 143T-145T, Agricultural motors as well as all Washguard duty and Wash-Thru motors have sealed bearings as standard. Note: Adding sealed bearings to motors having grease fittings may not make the bearings regreasable. Grease fittings will be removed and plugged.

NEMA Frame	Catalog Number	List Price
42	L2A42	192
48	L2A48	192
56	L2A56	192
143T-145T	L2A140	197
182T-184T	L2A180	215
213T-215T	L2A210	228
254T-256T	L2A250	401
284T-286T	L2A280	510
324T-326T	L2A320	671
364T-365T	L2A360	1,189
404T-405T	L2A400	1,231
444T-449T	L2A440	1,640

#L2c Change bearing grease on cast iron motors with open-type regreaseable bearings. Endbells and bearings are purged and repacked with low-temperature grease (Beacon #325 or equivalent) with a temperature range of -75°F to +250°F or high-temperature grease (Dow Corning DC44M or equivalent) with a temperature range of -40°F to +400°F. Specify grease to be used. Check with LEESON to verify the motor can operate in the temperature range required! LEESON Only.

NEMA Frame	IEC Frame	Catalog Number	List Price
254T-256T	_	L2C250	368
284T-286T	160	L2C280	411
324T-326T	180	L2C320	574
364T-365T	200	L2C360	614
404T-405T	225	L2C400	983
444T-449T	250	L2C440	1,351

#L2b Stock motors with shielded or sealed bearings – replace standard bearings with ones having low-temperature lubricant (Beacon #325 or equivalent) with a temperature range of –75°E

Mod-Squad Stock Motor Modification Program

Two Days

equivalent), with a temperature range of -75°F to +250°F. Standard lubricant has a temperature range of -20°F to +300°F and is considered a high temp lubricant for these motors. Explosion proof motors can only be rated to a -13°F temperature.

NEMA Frame	Catalog Number	List Price
42	L2B42	192
48	L2B48	192
56	L2B56	192
143T-145T	L2B140	197
182T-184T*	L2B180	215
213T-215T*	L2B210	228

^{*}Rolled steel, cast iron or aluminum motors

#L2d Install insulated bearings to protect inverterdriven motors from inverter-sourced shaft voltages. May not be installed on Division 1 or Division 2 hazardous locations. Contact factory for lead time on installing insulated bearings.

NEMA Frame	Catalog Number	List Price
143T-145T	L2D140	476
182T-184T	L2D180	570
213T-215T	L2D215	1,676
254T-256T	L2D250	1,784
284T-286T	L2D280	1,784
324T-326T	L2D320	1,938
364T-365T	L2D360	1,981
404T-405T	L2D400	2,004
444T-449T	L2D440	2,221



Gearmotors

Mods / Factory Options

L3 Brakemotor Modifications

"Motors and BrakeKits sold separately"

- **#L3a** Convert brakemotors (TENV only) with standard enclosure brakes to weatherproof brakes by changing the disc brake. Weatherproof brakes have additional sealing and protection. Price includes cost of weatherproof brake.
- **#L3b** Change the standard brake to one with a different torque rating. Specify torque rating. Standard enclosure brakes only—not weatherproof. Some torque limitations apply, specify torque rating. Catalog Number L3B. List price \$164

Catalog Number	List Price
L3A3	840
L3A6	840
L3A10	857
L3A15	883
L3A25	972

Three Days

- **#L3c** Change Brake Coil Voltage. Change from standard coil voltage to 115 volts (for Stearns brand brakes only). Catalog Number L3C.List Price \$164
- #L3d Install a LEESON BrakeKit. See page 276 for BrakeKits available and motors that can be converted. Specify the catalog number of both the stock motor and the BrakeKit. List Price \$326



BrakeKit Installation

- **#L3e** Remove brake from stock brakemotor for customers supplying their own brake. Specify Catalog Number L3E. List Price \$335
- **#L3f** Assemble double C-face coupler brake on C-face motor. MOD charge is for assembly only. Brake and motor are purchased separately. Specify the catalog number of the stock motor and coupler brake.

Catalog Number L3F56140 - 56C, 143TC, or 145TC motors. List Price \$326 Catalog Number L3F180210 - 182TC, 184TC, 213TC, or 215TC motors. List Price \$480

Wire

Gauge

16

14

#L3g Change Brake Coil Voltage. Change from standard coil voltage to 200 volts (for Stearns brand brakes only).

Catalog Number L3G1.5-3 – 1.5 & 3 lb-ft brakes. List Price \$397 Catalog Number L3G6-10 – 6 & 10 lb-ft brakes. List Price \$397

L5 Cords, Plugs and Grounding Provisions

Three Days

Catalog

Number Each

Add'l. Foot

L5A16ADD

L5A14ADD

L5A12ADD

List Price

Each Add'l

Foot to 10

ft. Max.

3

4

#L5a For single phase motors, install grounded line cord of type S.O., three-conductor oil resistant cord, connected in the conduit box or terminal panel, with strain relief. No plug. Specify cord length, voltage and shaft rotation (clockwise or counterclockwise) viewed from the drive shaft end of the motor.

12	

List Price Catalog **List Price** Catalog Each Add'l Number 6 6 ft. or **Number Each** Foot to 10 ft. or Less HP Add'l. Foot ft. Max. Less L5B 159 L5BADD 3 1 and smaller

List Price

6 ft. or

Less

160

168

176

#L5b Install 6-foot grounded type S.O. cord with plug, 115VAC single phase only. Specify cord length, shaft rotation (clockwise or counterclockwise) viewed from the drive shaft end of the motor.



Max Amp

Rating

Single

Phase

13

18

25

Catalog

Number 6

ft. or Less

L5A16

L5A14

L5A12

#L5c Add an additional grounding screw to the endbell of drip-proof or totally enclosed non-ventilated NEMA 48 or 56 frame motors. Meets UL 1081 swimming pool motor grounding provisions (includes slinger). Catalog Number L5C. List Price \$140

Grounded Cord w/Plug



Three Days

Gearmotors

L6 Switches – Power or Electronic Starting

#L6a On-off switch for 2 HP and smaller single phase motors only. Install double-pole, single-throw switch in the conduit box, with switch guard and a 6-foot type S.O. cord with grounded plug, 115 VAC or 230 VAC—please specify. Also specify shaft rotation (clockwise or counterclockwise) viewed from the drive shaft end of the motor.

Rating	Catalog Number	List Price
16-20A/115V or 230V	L6A	339



On-Off Switch w/Guard

#L6b Replace mechanical centrifugal switch on single phase motors 2HP and smaller with solid-state, encapsulated, electronic starting switch. Capacitorstart, induction-run motors only. Subject to engineering approval. Catalog Number L6B. List Price \$355

L7 Severe Duty - Cast Iron Fan Covers - LEESON Only

#L7a Remove steel fan guard and

install a cast iron fan guard on LEESON 150, G150 and 170 series NEMA and 193 series IEC TEFC cast iron motors to meet severe duty, mill and chemical duty specifications. Note: These motors have cast iron endbells, frame, and conduit box as standard. Lincoln Motors has a line of Severe Duty motors that include a cast iron fan guard. See page 100.

NEMA Frame	IEC Frame	Catalog Number	List Price
182T-184T	_	L7A180	356
213T-215T	_	L7A210	400
254T-256T	_	L7A250	489
284T-286T	160	L7A280	762
324T-326T	180	L7A320	790
364T-365T	200	L7A360	1,113
404T-405T	225	L7A400	1,206
444T-445T	250	L7A445	1,214
447T-449T	280	L7A449	1,238



Cast Iron Fan Cover

Two Days

L8 Condensate Drains - Totally Enclosed Motors

#L8a 215T and smaller steel frame motors. Drill one or two condensation drain holes on the periphery or in the face of each endbell of steel frame 215T frame and smaller totally enclosed motors. Specify location in both the shaft end and opposite endbell using a drawing or clockface analogy. When specified, a drain can be added to the face of one endbell for shaft up or down mounting.

	NEMA Frame	Catalog Number	List Price
	215T and smaller	L8A40210	250
ľ	254T-365T	L8A250360	347
	404T-449T	L8A400440	416

#L8b 182T and larger cast iron frame motors. Provides an additional one-way, cross-drilled stainless steel condensation drain on the periphery or in the face of each endbell. Provide a drawing or clockface analogy for position in each endbell.

NEMA Frame	Catalog Number	List Price
215T and smaller	L8B40210	250
254T-365T	L8B250360	347
404T-449T	L8B400440	416

Condensate Drain



Mods / Factory Options

L9 Drip Cover – Open, Drip-Proof Motors

Two Days

#L9a Install a drip cover on steel frame motors. Price includes drip cover. LEESON Only

	NEMA Frame	Catalog Number	List Price
	48-145T	L9A40140	164
i	182T-184T	L9A180	178
Ċ	213T-215T	L9A210	197



Drip Cover

#L9b Install a drip cover on cast iron motors. Price includes drip cover. **LEESON Only**

NEMA Frame	Catalog Number	List Price
182T-184T	L9B180	178
213T-215T	L9B210	197
254T-256T	L9B250	236

#L9c Install a drip cover on SPD, SRD and SSD Model Numbers. Not suitable for use on motors having NN in Notes column. Lincoln Only

NEMA Frame	Catalog Number	List Price
48-56*	L9C4856	164
56-145T	L9C56145	164
182T-184T	L9C182184	178
213T-215T	L9C213215	197

^{*} Motors having a 2.18 inch bolt circle for the mounting holes

L10 Leads - Reconnect, Remark or Extend

Two Days

#L10a Re-Connect leads in the conduit box to a single voltage and/or for wye or delta connection.

Most motors 444T frame and above are single voltage. Specify voltage and connection.

NEMA Frame	Catalog Number	List Price
48-145T	L10A40140	181
182T-184T	L10A180	287
213T-215T	L10A210	381
254T-256T	L10A250	427
284T-286T	L10A280	565
324T-326T	L10A320	638
364T-365T	L10A360	638
404T-405T	L10A400	715
444T-449T	L10A440	797

#L10c Extend leads up to 42 inches longer than standard by splicing. **Specify additional length required.**

NEMA Frame	Catalog Number	List Price
48-145T	L10C40140	181
182T-184T	L10C180	287
213T-215T	L10C210	381
254T-256T	L10C250	427
284T-286T	L10C280	565
324T-326T	L10C320	638
364T-365T	L10C360	638
404T-405T	L10C400	715
444T-449T	L10C440	715

#L10b Remark leads using metal markers. Any size motor. **Specify markings, letters or numbers. Specify Catalog Number L10B**. List Price \$192

#L10d Add crimp-type terminal lugs – steel frame motors. Lugs standard on LEESON cast iron motors. **Specify Catalog Number L10D.** List Price \$149

L11 Shaft Seals

Three Days

#L11a Install an oil seal on the shaft end of 215T and smaller steel frame LEESON motors. May be installed on single, three phase or direct current motors, but not explosion-proof motors.

Catalog	List
Number	Price
L11A	477



L12 Mountings Two Days

#L12a Add a stamped steel rigid base to steel frame motors. For 182-4T frame motors, minimum 8.50" (TEFC, rigid, C face) or 8" (ODP, rigid, C face) frame length is required. LEESON Only

NEMA Frame	Catalog Number	List Price
42-48	L12A4248	192
56	L12A56	195
143T-145T	L12A140	195
182T-184T	L12A180	235
213T-215T	L12A210	287

Note: It is not possible to add a base to some three phase motors as the resulting rigid base motor will be subject to EISA mandated efficiency values. Contact the factory.

This Mod. cannot be done on an explosion proof motor for an F2 conduit box location.

#L12b Remove stamped steel rigid base from steel frame motors.

NEMA Frame	Catalog Number	List Price
42-56	L12B4256	295
143T-145T	L12B140	295

#L12c Install a NEMA C face on steel frame motors 215T and smaller. **Specify if the rigid base is to be removed. If so, add for modification #L12b listed above.** List Price includes C face Kit. **LEESON Only**

NEMA Frame	Catalog Number	List Price
42-56*	L12C4256	249
143T-145T	L12C140	249
182T-184T	L12C180	269
182T-184T**	L12C180U	269
213T-215T	L12C210	333

*Adding a 48 C-Face results in a non-NEMA BA dimension.

** Convert a 182T-184T frame motor to have a C-face dimensions of a 143T-145T or 182U-184U frame motor (AJ = 5 7/8 ", AK = 4 1/2"). The shaft dimensions and base location will not change.

#L12d Install a NEMA C face to 150, 170 or 199 series cast iron motors. **The rigid base cannot be removed from these cast iron frame motors.** List Price includes C Face Kit. **LEESON Only**

NEMA Frame	Catalog Number	List Price
182T-184T	L12D180	447
213T-215T	L12D210	487
254T-256T	L12D250	616
284T-286T	L12D280	745
324T-326T	L12D320	966
364T-365T	L12D360	1,050
404T-405T	L12D400	1,147
444T-445T	L12D440	1,410
447T-449T	L12D4479	1,490

#L12e Install a NEMA D flange to open or totally enclosed motors of steel frame construction in 182-4T frame and cast iron 150 and 170 series motors in 213T frames through 445T frame. Steel rigid base can be removed from steel frame 182-4T frame motors. Specify and add for modification L12b.

Rigid base cannot be removed from cast iron frame motors. List Price includes D Flange. LEESON Only

NEMA Frame	Catalog Number	List Price
182T-184T	L12E180	447
213T-215T	L12E210	487
254T-256T	L12E250	616
284T-286T	L12E280	745
324T-326T	L12E320	966
364T-365T	L12E360	1,050
404T-405T	L12E400	1,407
444T-445T	L12E440	1,831

#L12f Convert standard F1 motors to F2, sidewall or ceiling mounting. Consists of repositioning the endbell vents and condensation drains where applicable and the conduit box lead hole. Note: If brakemotor, brake knob will be located at 6 o'clock. Note: Only the 56/140 frame motors can have the motor bases removed where needed. **LEESON** or Lincoln Branded motors where applicable.

NEMA Frame	Catalog Number	List Price
56-184T	L12F56180	381
 213T-215T	L12F210	413
 254T-326T	L12F250320	493
 364T-449T	L12F360449	638

^{*} Three phase only; single phase motors cannot be converted. Please contact factory for Explosion proof motor approval for this modification. Washdown motors cannot be converted to F2.

#L12g Rotate standard conduit box position by 90° increments. Specify by clock face, i.e. 9 o'clock, 12 o'clock, etc. for position (viewed from shaft end). Consists of repositioning the endbell vents and condensation drains where applicable and the conduit box lead hole. Note: If brakemotor, brake knob will be rotated 90° from conduit box. This mod. can no longer be offered on the 180 and 210 frame motors for the bases of these motors can no longer be removed without damaging the motor. List Price includes D Flange.

NEMA	Catalog	List
Frame	Number	Price
56-145T	L12G56140	381

^{*} Three phase rolled steel only; single phase motors cannot be converted.



Mods / Factory Options

L12 Mountings Two Days

#L12h Install a metric (IEC) B5 flange to 190 series cast aluminum or cast iron AC motors and DC steel frame motors. List Price includes B-5 Kit. LEESON

IEC Frame	Catalog Number	List Price
63	L12H63	242
71	L12H71	250
71(DC)	L12HD71	250
80	L12H80	000
80 (DC)	L12HD80	260
90	L12H90	264
90 (DC)	L12HD90	264
100	L12H100	290
112	L12H112	300
100/112/(DC)	L12HD100112	300
132	L12H132	339
160	L12H160	487
180	L12H180	554
200	L12H200	687
225	L12H225	878

#L12i Install C Face kit to an IEEE-841 motor. Modification includes C Face kit and new Inpro shaft seal. Bases cannot be removed from these motors.

NEMA Frame	Catalog Number	List Price
143T-145T	L12I140	314
182T-184T	L12l180	447
213T-215T	L12l210	487
254T-256T	L12l250	616
284T/TS-286T/TS	L12l280	745
324T/TS-326T/TS	L12l320	966
364T-365T	L12l360	1,605
404T-405T	L12I400	1,646

#L12j Install a metric (IEC) B14 face to 190 series cast aluminum or cast iron AC motors and DC steel

IEC Frame	Catalog Number	List Price
63	L12J63	234
71	L12J71	242
71 (DC)	L12JD71	242
80	L12J80	249
80 (DC)	L12JD80	249
90	L12J90	259
90 (DC)	L12JD90	259
100	L12J100	282
112	L12J112	290
100/112 (DC)	L12JD100112	290
132	L12J132	332
160	L12J160	477

#L12k Reposition feet and nameplate (to relocate conduit box) on AC aluminum-frame IEC motors (63 thru 90L frame). LEESON Only

	IEC Frame	Catalog Number	List Price
	63	L12K63	170
	71	L12K71	180
-	80	L12K80	192
	90	L12K90	240

#L12I Install C Face. For motors having AF/AAF in the model number. List Price includes C Face Kit. Lincoln Only

NEMA Frame	Catalog Number	List Price
182T-184T	L12L182184	269
213T-215T	L12L213215	333
254T-256T	L12L254256	376
284T-286T	L12L284286	422

#L12m Install C Face. For motors having SRF in the model number. List Price includes C Face Kit. Lincoln Only

NEMA Frame	Catalog Number	List Price
56 (203 brg)	L12M56203	249
56 (205 brg)	L12M56205	249

#L12n Install C Face. For motors having SSF in the model number. List Price includes C Face Kit. Lincoln Only

NEMA Frame	Catalog Number	List Price
143-145T	L12N143145	249
182-184T	L12N182184	269
213-215T	L12N213215	333

frame motors. List Price includes B-14 Kit. LEESON #L12o Install C Face. For motors having SF in the model number, having a cast iron endbell. List Price includes C Face Kit. Lincoln Only

NEMA Frame	Catalog Number	List Price
324T/TS-326T/TS	L12O324326	966
364T/TX-365T/TS	L12O364365	1,050
404T/TS-405T/TS	L12O404405	1,147
444T/TS-445T/TS	L12O444445	1,410
447T/TS-449T/TS	L12O447449	1,490

#L12p Install C Face. For motors having CCN in the model number. List Price includes C Face Kit. Lincoln Only

NEMA	Catalog	List
Frame	Number	Price
143-145T	L12P143145	



#L12q Install C Face. For motors having CCF in the model number. List Price includes C Face Kit. Lincoln Only

#L12r Install C Face. For motors having CCS in the model number. List Price includes C Face Kit. Lincoln Only

Mods / Factory Options

NEMA Frame	Catalog Number	List Price
143T-145T	L12Q143145	249
182T-184T	L12Q182184	447
213T-215T	L12Q213215	487
254T-256T	L12Q254256	616
284T-286T	L12Q284286	745
342T-326T	L12Q324326	966

Catalog Number	List Price
L12R143145	249
L12R182184	447
L12R213215	487
L12R254256	616
L12R284286	745
L12R324326	966
L12R364365	1,050
L12R404405	1,147
L12R444445	1,410
	Number L12R143145 L12R182184 L12R213215 L12R254256 L12R284286 L12R324326 L12R364365 L12R404405

L13 Nameplates

Three Days

- #L13a Provide an extra motor nameplate-unmounted. (Nameplate only) Add customer part number or change to other voltage or frequency service. Unmounted nameplates are not available for explosion-proof motors.

 Note: Markings for UL and CSA cannot be included on unmounted nameplates that are shipped loose and not installed on a motor. Add \$1 (net) for each additional Aluminum or Mylar nameplate. Add \$2 (net) for each additional stainless steel nameplate. Catalog Number L13A. List Price per motor \$138 60Hz single phase motors cannot be re-rated to 50Hz Must Provide Date Code Information
- **#L13b** Replace, existing nameplate on provided motor. Add customer part number or change to other voltage or frequency service and mount to motor. List Price per motor \$160

 Note: Not available for motors that are all stainless steel construction.
- **#L13c** Replace standard aluminum nameplate with stainless steel nameplate. LEESON cast iron, WASHGUARD and severe duty motors have stainless steel nameplates as standard. Add \$2 (net) for each additional stainless steel nameplate. List Price per motor \$164
 - ① Must specify catalog number and date code of motor's existing nameplate. Nameplates changed to a single voltage connection does not mean motors would be re-connected to this connection unless the L10 Mod is also requested. ② Additional nameplates must be identical.

L14 Paint Two Days'

#L14a Repaint motor to another LEESON or Lincoln stock paint color. A sample of choices include LEESON blue, white epoxy, farm duty red, light gray epoxy, black, or black epoxy. Powder coat paint is not available as a modification. For Lincoln motors, your choices include: Lincoln gray, severe duty blue, black or gloss white. Not available on Lincoln Wash-thru motors. **Specify color.**

*Note: Epoxy paint requires extra curing time. Please allow one additional day.

	Frame	Catalog Number	List Price
NEMA	42-215T	L14A40210	164
NEMA	254T-365T	L14A250360	332
NEMA	404T-449T	L14A400440	531
IEC	63-90	L14A6390	164
IEC	100-225	L14A100225	333

L15 Rodent Screens - LEESON Only

Two Days

#L15a Add rodent screens to open drip-proof motors, cast iron and steel frame, 326T and smaller.

L16 Space Heaters, Anti-Condensation

Five Days

#L16a Add anti-condensation space heaters to totally enclosed or open motors. Standard space heater voltage is 115 VAC. Heaters for 230 or 460 VAC are available. Specify circuit voltage. May be installed in single, three phase or direct current motors. Explosion proof motors are not included. Washdown duty motors are not included.

NEMA Frame	Catalog Number	List Price
145T and smaller	L16A40140	363
182T-215T	L16A180210	458
254T-365T	L16A250360	684
404T-449T	L16A400440	898



Mods / Factory Options

L17 Lint-Proof Textile Service Motors - LEESON Only

#L17a Convert a standard totally enclosed-fan cooled motor to textile service by modifying the fan cover to reduce "snagging" of lint and reduction in cooling air for the motor. Price includes kit cost.

NEMA Frame	Catalog Number	List Price
56-145T	L17A40140	332
182T-184T	L17A180	433



Two Days

Two Days

Lint-Proof Kit

L18 Motor Protection

#L18a Thermostats on the winding. Install one or more thermostats in the windings of NEMA frame AC motors on the brush plate of DC motors or on the inside of frame on Sub-FHP DC motors. These are pilot or signal devices only, to be used in series with a motor controller or starter to remove power from the motor. Red color leads are brought into the conduit box.

Specify normally open or closed contacts. Normally closed thermostats connected in series. Thermostats connected in series.

	NEMA	Catalog	No. of	List
Туре	Frame	Number	Devices	Price
Single Phase	All	L18AS40210	1	207
Three Phase	42-215T	L18AT40210	2	235
Three Phase	254T-365T	L18AT250360	2	638
Three Phase	404T-449T	L18AT400440	2	797
Direct Current	42-56	L18AD4056	1	235
·				

closed thermostats connected in series. Thermostats cannot be installed in explosion-proof or Washdown duty motors.
#L18b For a motor equipped with a thermal overload, exchange a manual

or automatic reset thermal overload to the opposite style. Delivery is dependent upon availability of the thermal overload. LEESON Only Not for Explosion Proof motors

Note: Automatic thermal overloads return power to the motor automatically after cooling-off. Automatic thermal overloads should not be used in installations where a sudden restart could cause injury.

NEMA Frame	Catalog Number	List Price
48-56	L18B4056	261
143T-145T	L18B140	266
182T-184T	L18B180	304
213T-215T	L18B210	426

#L18c Thermistors on the winding. As standard, three (3) thermistors are furnished, one per phase. As the critical temperature of the motor's winding is reached, the resistance of the thermistor changes radically, causing operation of a control relay. Not available on washdown duty motors, explosion proof motors or medium voltage motors.

Туре	NEMA Frame	Catalog Number	No. of Devices	List Price
Three Phase	42-215T	L18CT40210	3	265
Three Phase	254T-365T	L18CT250360	3	668
Three Phase	404T-449T	L18CT400440	3	827

Note: Thermostat and Thermistor Descriptions:

Thermostats are made of two or three different metal strips that each expand at different rates when heated. They are sandwiched together to make a laminated strip, with a set of electrical contacts at one end securely mounted to a platform. When the strip is heated it warps and the contacts open as a threshold temperature is exceeded. Thermostats are reliable, noise immune and easily configured into control schemes. Typically, inverter-duty motors have thermostats as standard equipment.

Thermistors are conductive ceramic materials, whose resistance remains relatively constant over a broad temperature range, then changes abruptly at a design threshold point, creating essentially a solid-state thermal switch. Attached control modules register this abrupt resistance change and produce an amplified output signal, usually a contact closure or fault trip annunciation. Thermistors are more accurate and faster responding than thermostats.

L19 Fungus Proofing and Tropicalization

#L19a Special treatment of the motors windings and mechanical parts to resist tropical environments. Not available on brakemotors, washguard duty motors and explosion proof motors.

** AC or DC Motors

NEMA Frame	Catalog Number	List Price
42-215T**	L19A40210	274
254T-365T	L19A250360	398
404T-449T	I 19A400440	636

L20 Weatherproofing – Three Phase, Totally Enclosed Motors*

#L20a Treatment of mechanical and electrical components of LEESON steel frame totally enclosed motors to resist weather in application outside or in high-moisture conditions. NOTE: LEESON 150 and 170 series cast iron motors are weatherproofed as standard. LEESON WASHGUARD motors are also well-suited for outside and high-moisture applications. Not available on brakemotors or explosion proof motors. ** AC or DC Motors

Five Days

Two Davs

NIENAA	Catalan	12.4
NEMA Frame	Catalog Number	List Price
rrame	Number	Frice
42-215T**	L20A40210	268

^{*} For single phase weatherproofed motors, see Washguard motors on pages 141 and 171.



Five Days

Five Davs

Five Days

865

L21 Marine Service (IEEE 45) Motors – Three Phase, Totally Enclosed - LEESON Only

#L21a In order for a motor to be approved for the L21 MOD, the motor must meet:

- IP 54 minimum protection
- Motor frame, conduit box and endbells must be cast iron construction - cast iron fan cover must be added
- Motor's temperature rise must meet 70 degrees C or less and must be rated at 1.15 or higher Service Factor (S.F.)
 Contact your local sales office for more information

NEMA Frame	Catalog Number	List Price
56-215T**	L21A40210	274
254T-365T	L21A250360	461
404T-405T	L21A400	684

L22 Shaft Modifications

#L22a Drill and tap one hole in either end of motors shaft or mill a flat on the drive end shaft extension. **Provide details of hole, thread size or flat with the order.** List price is per modification. For example, a motor modified by adding a tapped hole and flat would be priced by adding the list price twice.

3 inches maximum depth hole. Does not include keyway modification.

INEIVIA	Catalog	LIST
Frame	Number	Price
42-145T	L22A40140	248
182T-184T	L22A180	261
213T-215T	L22A210	408
250T-280T	L22A250280	456
•		

L21A440

444T-449T

#L22b TEFC to air-over service. Convert a motor from totally enclosed, fan cooled construction to totally enclosed, air-over service by removing fan cover and fan and cutting off the fan end shaft. The modified motor must be mounted in the air stream of the driven fan for cooling purposes.

NEMA Frame	Catalog Number	List Price
42-145T	L22B40140	248
182T-184T	L22B180	261
213T-215T	L22B210	363

L23 Tachometer Mounting Provisions – DC Motors - LEESON Only

#L23a Add a tachometer mounting kit to NEMA frame size Direct Current motors. See page 282 for availability of tachometer mounting kits. Does not include tachometer.

NEMA Frame	Catalog Number	List Price
S56	L23AS56	477
SS56	L23ASS56	592
56/145T	L23A56140	613



Tach Kit Adaptor

L24 CE Marking*

#L24 Modify provided motor to comply with the nameplate designation, lead markings and connection diagrams required by the IEC34 motor specification. Modification includes a nameplate with the CE logo or a separate CE decal and a CE Declaration of Conformity document. Not available on DC motors below 75 V.D.C. LEESON Only

Catalog	List
Number	Price
L24	229

#L24b CE Marking Kit - Includes new nameplate only with data in IEC34 format, lead markers for IEC lead designations, a connection diagram, and a CE Declaration of Conformity document. The nameplate will have the CE logo, or a CE decal will be provided. LEESON Only UL will not be stamped on nameplate - Must provide motors date code.



Five Days

Catalog	List
Number	Price
L24B	138

* Explosion proof motors cannot be built or modified to meet CE.



X-Ref / Index

Mods / Factory Options

L25 Micro Series Inverter - Remote Keypad Option - LEESON Only

Two Days

#L25 A remote keypad for Micro Series inverters is available only as a factory installed option. The keypad is mounted in a gasketed steel faceplate that must be mounted in an enclosure for protection. An inverter modified for remote operation can only be operated from the remote keypad. Price includes remote keypad, faceplate, cable and factory modification charges. Not available on Washguard Duty Inverters. See page 208 for Remote Keypad kits for the Sub-Micro Series Inverters.



Description	Catalog Number	List Price
Keypad with 2.5 foot cable	L25A25	557
Keypad with 5 foot cable	L25A50	608
Keypad with 10 foot cable	L25A100	711

L27 Terminal Blocks - NEMA Motors - LEESON Only

Five Days

#L27a Add a terminal block in the conduit box of rolled steel motor from 56 to 215T-frame. Install ring terminals on the motor leads.

- Conduit box on 56-frame motors will be changed to a longer version to accommodate the terminal board
- Use with single-phase or three-phase motors with no protector
- Specify connection voltage and direction of rotation for single-phase
- Not intended for 56, 143T & 145T-frame TENV or ODP motors that have a built-in conduit box. Contact LEESON for the suitability of adding a terminal board to one of these motors
- Cannot be added to WASHGUARD Duty motors

NEMA Frame	Catalog Number	List Price
56/143T/145T	L27A56140	268
182T/184T/S213T	L27A180	300
213T-215T	L27A210	330

#L27b Install a terminal block kit in the conduit box of a cast iron NEMA frame motor. Price includes kit. (IEC motors have a terminal block installed as standard.)

NEMA Frame	Catalog Number	List Price
180/210T	L27B180210	330
250/280T	L27B250280	390
320/360T	L27B320360	447
400/440T	L27B400440	587

L28 Dynamic Braking Board – Micro Series

Drives - LEESON Only

Two Days

#L28 Install Dynamic Braking board in Micro Series drive. Note: Does not include Dynamic Braking resistor, which is ordered as a separate line item. See Micro Series accessory section of catalog for resistor selection. See page 363 for Dynamic Brake kits for the Sub-Micro Series inverters.

HP Rating	Voltage	Catalog Number	List Price
			11100
1/2 - 3HP	All	L28A174184	1,075
5HP	200-230V	L28A174185	1,127
5HP	460-480V	L28A174185	1,127
5HP	550-575V	L28A174184	1,075
7 1/2HP	200-230V	L28A174192	1,059
7 1/2HP	460-480V	L28A174193	1,059
7 1/2HP	550-575V	L28A174193	1,059
10-60HP	All	L28A174192	1,059



Two Days

L29 Encoder Kits – WATTSAVER® & SPEEDMASTER® Motors

#L29a Assemble a stock Encoder Kit on a WATTSAVER® motor. Price is for assembly only. Motor and kit are purchased separately. **Specify motor and kit numbers. Note:** The assembly of an encoder kit on a WATTSAVER® motor requires the removal of the external fan. The use of a Blower Fan Kit is strongly encouraged for proper cooling!

NEMA Frame	Catalog Number	List Price
56-215T	L29A56215	288
254T-324T	L29A250320	465
360T-405T	L29A360400	525

#L29b Assemble a stock Encoder Kit on a SPEEDMASTER® motor. Includes assembly of conduit box kit ECB175926 on 215T-449T frame motors. Price is for assembly only. Motor and kits are purchased separately. Specify motor and kit numbers. LEESON Only

NEMA Frame	Catalog Number	List Price
143T-215T	L29B140210	204
254T-365T	L29B250360	433
404T-449T	L29B400440	663

#L29c Available on Inverter Duty CTAC Motors that have Model Number ending with Q10. Price is for assembly only. Encoder kit, Mounting kit and Motor sold separately. Lincoln Only

NEMA Frame	Catalog Number	List Price
56-215T	L29C56210	204
254T-365T	L29C250360	433
404T-445T	L29C400440	663

L30 Blower Fan Kits – WATTSAVER® Motors

Two Days

#L30b Install a blower fan kit on a WATTSAVER® motor.
Price is for assembly only. Motor and kit are purchased separately. **Specify motor and kit numbers.**LEESON Only

NEMA Frame	Catalog Number	List Price
56-215T	L30B56210	204
254T-326T	L30B250320	353
360T-440T	L30B360440	522

L31 Conduit Box Kits - Larger Size - Lincoln Only

#L31a Install larger size conduit box. AF, MD, SD and SF Model Numbers, S and H Efficiency Codes

NEMA Frame	Catalog Number	List Price
213T-215T	L31A213215	176
254T-256T	L31A254256	197
284T-286T	L31A284286	213
324T-326T	L31A324326	242
364T-365T	L31A364365	283
404T-405T	L31A404405	370

#L31b Install larger size conduit box. AF, AAF, CF, CS, CP, SD and SF Model Numbers, P and B Efficiency Codes

NEMA Frame	Catalog Number	List Price
143T-184T	L31B143184	161
213T-215T	L31B213215	176
254T-256T	L31B254256	197
284T-286T	L31B284286	213
324T-326T	L31B324326	242
364T-365T	L31B364365	283
404T-405T	L31B404405	370
444T-445T	L31B444449	533



Factory Options

CUSTOMIZED AND MODIFIED PRODUCTS

CUSTOM MOTORS, GEARBOXES & GEARMOTORS

LEESON is a leading designer and manufacturer of application-specific AC and DC motors and gearmotors in sub-fractional, fractional and integral horsepower sizes. We offer a database of over 30,000 custom designs, experienced application and design engineering teams, to ensure the best, most cost-effective custom motor solution.

CUSTOM MULTI-SPEED & LOW-SPEED MOTORS

LEESON's PDQ Modular Production Program utilizes specially designed and standard components to make almost any imaginable NEMA frame multi-speed or low-speed motor available when you need it. We pride ourselves on fast turnaround times on highly customized motors.

Custom motors include two, three and four-speed motors and speed ranges of 900, 720, 600, 450 and 300 RPMs. We also specialize in non-standard shaft designs.

For quotations, availability and application assistance, phone toll-free to our Canadian manufacturing facility at 1-800-463-1797.





Below is a listing of a few of our Factory "Build-up" options. Please contact our local Sales office for more information.

ADDITIONAL LEAD LENGTH	GROUND PROVISIONS
HIGH ALTITUDE	HARDWARE
AMBIENT	HIGH INERTIA LOAD
CONDUIT BOXES	INSULATION
BALANCE	LEADS
BEARINGS	LUBRICATION
ROLLER BEARINGS	MARINE DUTY
INSULATED BEARINGS	NAMEPLATES
BLOWER TYPES	PAINT
BRAKES	SCREENS
CONNECTIONS / CORDS	SEALS & SLINGERS
WYE DELTA	SEVERE DUTY
PART WIND START	SERVICE FACTOR
DOCUMENTATION - SUBMITTAL DATA	SHAFTS
DOWELING	SPACE HEATERS
DRAINS	TACHOMETERS - SEE ENCODERS
ENCODERS	TACONITE DUTY - SEE INPRO SEALS
END TURN BRACING	TERMINAL BLOCKS / STRIPS
END BRACKETS - FACES & FLANGES	TESTS
FREQUENCY - Other than 60HZ	THERMAL PROTECTION
GREASE FITTINGS	VERTICAL MODIFICATION
GREASE: LOW TEMP	VIBRATION DETECTOR
GREASE: HIGH TEMP	VOLTAGE - SPECIAL



Cross Reference Exception Codes

CIO	ss Reference Exception Codes		
LEES	SON Product Base Exceptions	C30	LEESON does not have tapped-hole (as standard) for pulse generator
B01	Install base kit 175032 (Extra cost)	C31	LEESON gearbox mounting face includes 3-point mounting
B02	Install base kit 175033 (Extra cost)	C32	LEESON motor is dual voltage rated - 115/230
B03	Install base kit 175034 (Extra cost)	C33	LEESON armature voltage is 90V DC
B04	Install base kit 175035 (Extra cost)	C34	LEESON motor is 230V only
B05	Install base kit 175036 (Extra cost)	C35	LEESON motor is non-reversible
B06	Install base kit 175037 (Extra cost)	C36	LEESON motor is reversible
B07	Install base kit 175038 (Extra cost)	C37	LEESON motor shaft endshield is totally enclosed
B08	Install base kit 175039 (Extra cost)	C38	Install explosion proof conduit box 175026 (Extra cost)
B09	Install base kit 175040 (Extra cost)	C39	LEESON motor has 1.15 service factor
B10	Install base kit 175041 (Extra cost)	C40	LEESON motor has 1.25 service factor
B11	Install base kit 175042 (Extra cost)	C41	LEESON motor has 1.35 service factor
B12	Install base kit 175043 (Extra cost)	C42	LEESON motor has a 145T "C" face and shaft with welded on base
B13	Install base kit 175044 (Extra cost)	C43	LEESON motor may not be used on 190-208/380-416V 50HZ at full rated HP
B14	Install base kit 175045 (Extra cost)	C44	IEEE 841 modification required - reference mod squad motor
B15 B16	Install base kit 175046 (Extra cost)	011	modifications L26
B17	Install base kit 175047 (Extra cost) Install base kit 175048 (Extra cost)	C45	LEESON motor has cast iron C face
B17	Install base kit 175049 (Extra cost)	C46	LEESON motor is 60HZ Only
B19	Install base kit 175088 (Extra cost)	C47	LEESON motor is 208-230/460V
B20	Install base kit 175089 (Extra cost)	C48	LEESON motor is class F insulated
B21	Install base kit 175090 (Extra cost)	C49	LEESON motor is EPAct efficiency
B22	Install base kit 175091 (Extra cost)	C50	LEESON motor is design B
B23	Install base kit 175092 (Extra cost)	C51	LEESON motor is all stainless steel
B24	Install base kit 175093 (Extra cost)	C52	LEESON motor has 12 leads
B25	Install base kit 175094 (Extra cost)	C53	LEESON motor has standard paint
B26	Install base kit 175095 (Extra cost)	C54	LEESON motor is 460 Volt only
B27	Install base kit 175097 (Extra cost)		LEESON motor has a solid-state switch
B28	Install base kit 175098 (Extra cost)		LEESON motor does not rodent screens
B29	Install base kit 175127 (Extra cost)	E01	SON Product Enclosure Exceptions
B30	LEESON motor has a 56 frame base		LEESON motor is totally enclosed non-ventilated LEESON motor is totally enclosed fan-cooled
B31	LEESON motor has rigid base		LEESON motor is totally enclosed fair-cooled
B32	LEESON motor has resilient base		SON Product Frame Size Exceptions
B33	LEESON motor has no base	F01	LEESON frame size is 48
B34	LEESON's motor base is not removable	F02	LEESON frame size is S56
B35	LEESON motor has base with mounting holes for 56 & 143-5T	F03	LEESON frame size is 56
B36 B37	LEESON base mounting holes not 'Drop-in' replacement	F04	LEESON frame size is 56C
B38	Install base kit M1760006 (Extra cost) LEESON motor has 184JM base and shaft	F05	LEESON frame size is 56H
	SON Product Construction Exceptions	F06	LEESON frame size is 145T
C01	LEESON motor has steel frame	F07	LEESON frame size is 145TC
	LEESON motor has cast iron frame	F08	LEESON frame size is 182T
C03	LEESON motor has mechanical switch	F09	LEESON frame size is 184T
C04	Reassemble LEESON motor to F2 mounting	F10	LEESON frame size is 184TC
C05	LEESON motor has base with mounting holes for 56, 143-5T	F11	LEESON frame size is 184JM
	and 5/8" Nema 56 shaft	F12	LEESON frame size is 215T
C06	LEESON motor is not BISSC certified	F13	LEESON frame size is 286T
C07	LEESON motor is capacitor start/capacitor run design	F14 F15	LEESON frame size is 326T LEESON frame size is 364T
C08	LEESON motor is normal efficiency	F16	LEESON frame size is 365T
C09	LEESON motor has double shielded ball bearings	F17	LEESON frame size is 405T
C10	LEESON motor is capacitor start/induction run design	F18	LEESON frame size is 444T
C11	LEESON motor has 1.0 service factor LEESON motor is ball bearing design	F19	LEESON frame size is 445T
C12	LEESON motor is 208-230 volts	F20	LEESON frame size is 447T
C14	LEESON motor has steel fan-guard	F21	LEESON frame size is D63D
C15	LEESON motor is premium efficiency design	F22	LEESON frame size is 143T
C16	LEESON motor has ball bearing instead of roller bearing drive end	F23	LEESON frame size is 404T
C17	LEESON motor does not have extended thru-bolts	F24	LEESON frame size is 213TC
C18	LEESON motor has 145TC face with 182T base	F25	LEESON frame size is 449T
C19	LEESON motor requires C face adapter	F26	LEESON frame size is 256JM
C20	LEESON motor is 1650 RPM	F27	LEESON frame size is 284JM
C21	LEESON motor has no cord or plug	F28	LEESON frame size is 286JM
C22	LEESON motor is IP54	F29	LEESON frame size is 56HC
C23	LEESON motor is 1625 RPM	F30	LEESON frame size is SS56
C24	LEESON motor is 1075 RPM	F31	LEESON frame size is S213T
C25	LEESON motor is class B insulated	F32	LEESON frame size is 326TS
C26	LEESON motor is Class I Group D, Class II Groups F & G	F33	LEESON frame size is 324TS
C27	LEESON motor is 60/50HZ	F34 F35	LEESON frame size is 284TC
C28	LEESON motor has external capacitor	1-00	LEESON frame size is 324TC



LEESON motor is PSC design

LEESON Product Horsepower Exceptions

LEESON motor is rated 1/2 HP LEESON motor is rated 1 HP H02 H03 LEESON motor is rated 1/3 HP H04 LEESON motor is rated 1/4 HP H05 LEESON motor is rated 4.0 KW/5.5 HP H06 LEESON motor is rated 1/6 HP

LEESON motor is rated 3/4 HP

H07

K56

K57

K58

K60

LEESON Product Kit Exceptions Install AC metric (63 frame) B5 flange kit 175850 (Extra cost) K02 Install AC metric (71 frame) B5 flange kit 175852 (Extra cost) K03 Install AC metric (80 frame) B5 flange kit 175854 (Extra cost) Install AC metric (90 frame) B5 flange kit 175856 (Extra cost) K04 K05 Install AC metric (100 frame) B5 flange kit 175984 (Extra cost) K06 Install AC metric (112 frame) B5 flange kit 175986 (Extra cost) K07 Install AC metric (132 frame) B5 flange kit 175988 (Extra cost) K08 Install AC metric (160 frame) B5 flange kit 175890 (Extra cost) K09 Install AC metric (180 frame) B5 flange kit 175890 (Extra cost) K10 Install AC metric (63 frame) B14 flange kit 175851 (Extra cost) K11 Install AC metric (71 frame) B14 flange kit 175863 (Extra cost) Install AC metric (80 frame) B14 flange kit 175855 (Extra cost) K12 Install AC metric (90 frame) B14 flange kit 175857 (Extra cost) K13 K14 Install AC metric (100 frame) B14 flange kit 175985 (Extra cost) K15 Install AC metric (112 frame) B14 flange kit 175987 (Extra cost) K16 Install AC metric (132 frame) B14 flange kit 175989 (Extra cost) K17 Install AC metric (160 frame) B14 flange kit 175991 (Extra cost) Install DC metric (71 frame) B5 flange kit 175106 (Extra cost) K18 K19 Install DC metric (80 frame) B5 flange kit 175108 (Extra cost) Install DC metric (90 frame) B5 flange kit 175108 (Extra cost) K20 K21 Install DC metric (100 frame) B5 flange kit 175137 (Extra cost) Install DC metric (71 frame) B14 flange kit 175107 (Extra cost) K23 Install DC metric (80 frame) B14 flange kit 175109 (Extra cost) K24 Install DC metric (90 frame) B14 flange kit 175129 (Extra cost) Install DC metric (100 frame) B14 flange kit 175130 (Extra cost) K25 K26 Install NEMA steel frame C Face kit 175661 (Extra cost) K27 Install NEMA steel frame C Face kit 175294 (Extra cost) Install NEMA steel frame C Face kit 175297 (Extra cost) K28 K29 Install NEMA steel frame C Face kit 175075 (Extra cost) Install NEMA steel frame C Face kit 175076 (Extra cost) K31 Install NEMA steel frame C Face kit 175078 (Extra cost) K32 Install NEMA steel frame C Face kit 175181 (Extra cost) Install NEMA steel frame C Face kit 175077 (Extra cost) K33 K34 Install NEMA steel frame C Face kit 175969 (Extra cost) K35 Install NEMA steel frame C Face kit 175691 (Extra cost) Install NEMA steel frame C Face kit 175303 (Extra cost) K36 K37 Install NEMA steel frame C Face kit 175007 (Extra cost) K38 Install NEMA steel frame C Face kit 175693 (Extra cost) Install NEMA steel frame C Face kit 175008 (Extra cost) K39 Install NEMA steel frame C Face kit 175845 (Extra cost) K40 Install NEMA steel frame C Face kit 175844 (Extra cost) K41 K42 Install NEMA steel frame C Face kit 175304 (Extra cost) K43 Install NEMA cast iron C Face kit 175655 (Extra cost) Install NEMA cast iron C Face kit 175066 (Extra cost) K44 Install NEMA cast iron C Face kit 175068 (Extra cost) K45 K46 Install NEMA cast iron C Face kit 175067 (Extra cost) Install NEMA cast iron C Face kit 175069 (Extra cost) K47 K48 Install NEMA cast iron C Face kit 175191 (Extra cost) K49 Install NEMA cast iron C Face kit 175058 (Extra cost) K50 Install NEMA cast iron C Face kit 175061 (Extra cost) K51 Install NEMA cast iron C Face kit 175059 (Extra cost) K52 Install NEMA cast iron C Face kit 175062 (Extra cost) Install NEMA cast iron C Face kit 175060 (Extra cost) K53 K54 Install NEMA cast iron C Face kit 175063 (Extra cost) Install NEMA cast iron C Face kit 175199 (Extra cost)

Install NEMA cast iron C Face kit 175664 (Extra cost)

Install Chemical Service/Severe Duty (182/184T) kit 175663 (Extra cost)

Install Chemical Service/Severe Duty (213/215T) kit 175050 (Extra cost)

Install Chemical Service/Severe Duty (254/256T) kit 175051 (Extra cost)

Install Chemical Service/Severe Duty (284/286T) kit 175052 (Extra cost)

Cross Reference Exception Codes

Install Chemical Service/Severe Duty (324/326T) kit 175053 (Extra cost) Install Chemical Service/Severe Duty (364/365T) kit 175054 (Extra cost) K63 Install Chemical Service/Severe Duty (404/405T) kit 175055 (Extra cost) K64 Install Chemical Service/Severe Duty (444/445T) kit 175056 (Extra cost) K65 Install NEMA D Flange (182/184T) kit 175694 (Extra cost) K66 Install NEMA D Flange (182/184T) kit 175658 (Extra cost) K67 Install NEMA D Flange (213/215T) kit 175114 (Extra cost) K68 Install NEMA D Flange (213/215T) kit 175115 (Extra cost) K69 Install NEMA D Flange (254/256T) kit 175116 (Extra cost) K70 Install NEMA D Flange (364/365T) kit 175995 (Extra cost) Install NEMA D Flange (254/256T) kit 175192 (Extra cost) K71 K72 Install NEMA D Flange (284/286T) kit 175118 (Extra cost) K73 Install NEMA D Flange (284/286T) kit 175119 (Extra cost) K74 Install NEMA D Flange (324/326T) kit 175120 (Extra cost) K75 Install NEMA D Flange (324/326T) kit 175121 (Extra cost) K76 Install NEMA D Flange (364/365T) kit 175657 (Extra cost) K77 Install Textile "Lint-Proof" kit 175024 (Extra cost) K78 Install Textile "Lint-Proof" kit 175025 (Extra cost) K79 Install Textile "Lint-Proof" kit 175695 (Extra cost) K80 Install Drip-Cover (213/215JP) kit 175305 (Extra cost) K82 Install Drip-Cover (56) kit 175004 (Extra cost) Install Drip-Cover (143/145T) kit 175004 (Extra cost) K83 Install Drip-Cover (182/184T) kit 175614 (Extra cost) K85 Install Drip-Cover (213/215T) kit 175849 (Extra cost) K86 Install conduit box kit M1760007 (Extra cost) K87 Install conduit box kit M1760021 (Extra cost) Install NEMA Wattsaver cast iron C face kit 175869 (Extra cost) K88 K89 Install Drip-Cover (56) kit 175298 (Extra cost) K90 Install NEMA Wattsaver cast iron C face kit 175842 (Extra cost) K91 Install Brake kit 175178 (Extra cost) Install AC Metric (200 frame) B5 flange 175994 (Extra cost) Install AC Metric (200 frame) B5 flange 175995 (Extra cost) Install NEMA Cast Iron C-Face kit 175842 (Extra cost) Install NEMA Cast Iron C-Face kit 175958 (Extra cost) Install NEMA Cast Iron C-Face kit 175454 (Extra cost) Install NEMA Cast Iron C-Face kit 175394 (Extra cost) Install NEMA D Flange (324/326T) kit 175455 (Extra cost)

K93 K94 K95 K96 K97 K98 Install NEMA D Flange (404/405T) kit 175956 (Extra cost) K99

Install NEMA D Flange (404/405T) kit 175957 (Extra cost) Install NEMA D Flange (213/215T) Wattsaver kit 175959 (Extra cost) K102 Install NEMA D Flange (182/184T) Wattsaver kit 175396 (Extra cost) K103 Install Drip-Cover (182/184T) Cast Iron kit 175961 (Extra cost)

K104 Install Drip-Cover (213/215TT) Cast Iron kit 175962 (Extra cost) Install Drip-Cover (254/256T) Cast Iron kit 175963 (Extra cost) Install Chemical Service/Severe Duty (447/449T) kit 175891 (Extra cost)

LEESON Product Protector Exceptions

LEESON motor has automatic reset protector LEESON motor has manual reset protector LEESON motor has no thermal overload protector **LEESON Product Shaft Exceptions**

LEESON motor has a 182-4T shaft extension

LEESON motor has a 213-5T shaft extension S02 S03 LEESON motor has a 254-6T shaft extension S04 LEESON motor shaft is 1 inch longer S05 LEESON motor has shaft that is a TS not T LEESON motor has phosphatized shaft S07 LEESON has .625 inch diameter shaft SOS LEESON has single output shaft S09 LEESON shaft center-line height from base is 1.48 inches LEESON shaft on left side facing the gearbox S11 LEESON shaft center-line height from the base is 1.67 inches

S10

S12 LEFSON motor has 1 1/8" shaft S13 LEESON motor has 416 stainless shaft

LEESON Product Thermostat Exceptions

LEESON shaft dimensions not "drop in"

LEESON motor has no thermostats T01 T02 LEESON motor has normally closed thermostats



S14

replacement