



YOUR MOTOR, YOUR WAY...NOW!

The LEESON Canada MOD-SQUAD™ is ready to tailor a LEESON stock motor to meet your modified motor needs in a few days or less. From one modified motor to many - there is no faster, more versatile source for mechanically or electrically “customerized” motors.

Starting with an off-the-shelf LEESON motor selected from the nearly 3,000 LEESON stock motors, the modifications listed here are completed in the time frame requested, or noted by our attendant sales personnel.

... and our **CustomPDQ** program can design and build a special motor from the ground up, on a quick turnaround basis giving you the ability to say “yes” to you or your customer’s special motor needs.

Custom & Modified

INDEX TO MOTOR MODIFICATIONS

Description	MOD-SQUAD™	
	Number	Page
Anti-Condensation/Space Heaters	MS1	98
Balancing - Special	MS2	98
Base Removal	MS3	98
Bearing Modifications	MS4	98
C and D Flange Installation	MS5	99
Drip Cover - Open, Drip-Proof Motors	MS6	99
Fungus Proofing and Tropicalization	MS7	99
IEEE 841 Requirements	MS8	99
Kiln Duty Requirements	MS9	100
Motor Protection	MS10	100
Seals - Shaft	MS11	101
Shaft Modification	MS12	101
Washguard™ Requirement	MS13	101

ORDERING INFORMATION

To order please specify the catalogue number of the LEESON stock motor to be modified and the MOD-SQUAD™ modification catalogue number or numbers desired.

Delivery is requested or quoted at the time of order placement.

Modification list prices are subject to the same discounts as apply to the motor. (Some motors, such as explosion-proof, are not modifiable.)

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 and subject to Leeson Canada’s current freight policy.

See Page 51 for CustomPDQ



MS1 Anti-Condensation / Space Heaters

Add anti-condensation heaters to totally enclosed or open motors.

Standard space heaters voltage is 115V. May be installed in single phase or three phase motors (except explosion proof motors).

NEMA Frame	List Price Adder.
56-145T	\$108
182-256T	108
284-326T	211
360-400T	211
444-445T	250

MS2 Balancing - Special

Specifications:

NEMA MG1 Section 7 "Precision", ISO 1940 G2.5-G6.3, API. Price includes assembly/disassembly and replacement bearings

NEMA Frame	List Price Adder.
182-256T	\$325
284-365T	450
404-445T	700

MS3 Base Removal

Create a round body motor - generally for flange mounting.

Rolled Steel Motors

NEMA Frame	List Price Adder.
56-145T	No charge
182-184T	\$76
213-215T	76

Cast Iron

NEMA Frame	List Price Adder.
182-215T	\$109
256-286T	109
324-365T	109
404-445T	109

MS4 Bearing Modification

Change standard drive end bearings to roller bearings.

NEMA Frame	List Price Adder.
254-256T	\$353
284-286T	365
324-326T	472
364-365T	490
404-405T	684
444-445T	792
447/449T	910

MS5 C & D Flange Installation

Install flanges on TEFC or ODP motors.

All frame sizes	No Charge
-----------------	-----------

MS6 Drip Covers

Install a drip cover on Steel frame motors. Price includes drip cover.

NEMA Frame	List Price Adder.
48-S56	\$91
56-145T	116
182-184T	165
213-215T	165

Install a drip cover on Cast Iron motors. Price includes drip cover.

NEMA Frame	List Price Adder.
182-184T	\$150
213-215T	157
254-256T	174

MS7 Fungus Proofing / Tropicalization

Special treatment of motor's windings and mechanical parts to resist tropical environments or high moisture areas.

NEMA Frame	List Price Adder.
56-215T	\$150
254-286T	170
324-445T	210

MS8 IEEE841 Requirement

- Custom wound, double-coated varnishes
- Class F insulating enamel, on all interior surfaces
- Cast Iron construction
- Grounding lug on frame.
- All fasteners are high strength, plated hex bolts.
- All exterior surfaces coated with two-part epoxy.
- INPRO seals on both the drive & non-drive end shaft openings. Chicago Rawhide oil seals are available upon request.
- Fully tested - including resistance, amps, no load watts, locked rotor amps, & vibration.
- Stainless steel nameplate with stainless steel U drive screws.
- Regreaseable bearings on 254T frame & larger. 180T & 210T frame motors are equipped with double rubber sealed bearings on both ends.

NEMA Frame	List Price Adder.
182-184T	\$895
213-215T	975
254-256T	1140
284-286T	1305
324-326T	1575
364-365T	1765
404-405T	2705
444-445T	3095



MS9 Kiln Duty Requirements

Motors are designed to meet the rigors of high humidity and temperature dryer applications.

NEMA Frame	List Price Adder.
182T-449	Contact Factory

Typical features include:

- Class H Insulation
- Extended and sealed leads
- Totally enclosed - air-over frame design
- Grease fittings
- High Temperature grease

All applications are unique and specific requirements must be considered.

Custom & Modified

MS10 Motor Protection

Thermostats

Install one or more thermostats in the motor winding of a NEMA frame AC motor. These are pilot or signal devices only, to be used in series with the motor controller or starter to remove power to the motor. Red motor leads are brought into the conduit box. Specify normally closed or normally open contacts. Normally closed contacts connected in series. Thermostats cannot be installed on explosion proof motors.

Type	NEMA Frame	List Price Adder.	No. of Devices
Single phase	All	\$76	1
Three Phase	56-145T	152	2
	184-215T	152	2
	254-286T	152	2
	324-365T	152	2
	404-445T	152	2

Thermistors

Install one or more thermistors on Nema frame AC motor. Thermistor provides the same protection as thermostats plus locked rotor, starting overload and single phasing. Must be connected to thermistor protection relay - sold separately. See page 137.

Type	NEMA Frame	List Price Adder.	No. of Devices
Single phase	All	\$76	1
Three Phase	56-145T	113	3
	184-215T	205	3
	254-286T	205	3
	324-365T	205	3
	404-445T	205	3

MS11 Seals

Install oil seal on shaft end only, may be installed on single, three phase or direct current motors, not applicable to explosion proof motors

NEMA Frame	List Price Adder.
42-145T	\$180
182-215T	225

Contact factory for pricing on larger frame size.

MS12 Shaft Modification

Includes modification to existing shaft only, drill and tap one hole on either end of shaft or mill a flat on the drive end shaft.

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. Provide details on order. Not applicable to explosion proof motors.

NEMA Frame	List Price Adder.
56	\$180
145T	200
182-184T	220
213-215T	313
254-256T	545
284-286T	527
324-326T	618
364-365T	**
404-405T	**
444-445T	**

**Call factory for pricing

MS13 Washguard™ Requirement

Interior and exterior coatings are used to protect motor against moisture and corrosion.

NEMA Frame	List Price Adder.
56	\$400
145T	415
182-184T	600
213-215T	620
254-256T	640
284-286T	700
324-326T	750
364-365T	878
404-405T	900
444-445T	950