

## MOTOR ACCESSORIES BLOWER FAN KITS • ENCODER KITS

## **BLOWER FAN KITS**



These kits are used for converting 150, 160 and 170 Series Cast Iron TEFC motors to Totally Enclosed Blower Cooled motors. Cooling per MG1.6 (IC46) The kits are designed for inverter and vector drive applications where continuous cooling is required regardless of motor shaft speed. The kit is mounted on the back of the motor after removing the fan guard and fan. Modifying the shaft is not required. Contact factory for installation and specify blue or green paint colour. Other voltages are also available.

#### For use with 150, 160 & 170 Series Cast Iron TEFC Motors only.

Blowe Voltage	r Motor Phase	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	CFM	App. Wgt. (lbs.)
115	1	182-4T	175674	\$670	А	260	23
115	1	213-5T	175675	720	Α	260	26
115	1	254-6T	175676	780	Α	260	28
115	1	284-6T	175677	940	Α	500	39
115	1	324-6T	175678	1070	Α	500	42
115	1	364-5T	175879	1912	А	500	75
115	1	404-5T	175880	1989	А	500	85
115	1	444-5T	175558	2225	Α	500	95

#### For use with Steel Frame TEFC Motors only.

Blowe Voltage	r Motor Phase	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	CFM	App. Wgt. (lbs.)
115	1	56/140T	AF56/145	\$604	А	250	19
115	1	182-4T	AF180	670	А	260	23

## **ENCODER KITS**

These kits include the parts and encoder for field assembly of slim-line, through-shaft encoder designed to slip over the motor's fan end shaft. Blower kit sold separately. Output is 1024 pulses per

vDC line driver output. Short-

circuit protection is standard. Inputs are over voltage and reverse voltage protected. Electrical noise immunity exceeds international standards. Encoders are isolated from shaft currents using hard anodized sleeves and non metallic anti-rotation hardware. Designed for long-life in industrial environments using an all-metal, shock resistant code disk. The encoder is protected by the motor's fan cover after mounting. Using a blower fan kit is suggested for proper motor cooling.

## FOR CAST IRON 150, 160 & 170 SERIES TEFC MOTORS

For NEMA Frame	Encoder Kit Catalogue Number	List Price	Disc. Sym.
182-4T	175684	\$1487	А
213-5T	175685	1487	А
254-6T	175686	2039	А
284-6T	175687	2039	A

## FOR ROLLED STEEL MOTORS

For NEMA Frame	Encoder Kit Catalogue Number	List Price	Disc. Sym.
56/145T	175960	\$750	А
182-4T	175897	1064	А
213-5T	175898	1080	А

Catalogue numbers in blue are NEW items.



AC Motors

## WASHGUARD<sup>™</sup> MOTORS NOW AVAILABLE IN THREE STYLES



## Stainless Steel Tough for demanding washdown applications

- All exterior components of 300 series stainless steel, including motor frame, endshield and conduit box castings
- Moisture resistant sealant between frame and endbells
- Full-fact nameplate is laser-etched on the motor frame
- Built to withstand the demanding washdown environments found in the food processing, chemical processing and beverage industries
- No paint or coatings of any type are used on the exterior of the motor
- · Four locations for T-drains provided on each endshield
- IRIS<sup>™</sup> insulation system
- Meets IP 55 Enclosure Protection
- Three Phase motors are suitable for use on VFDs, 10:1 ratio for constant or variable torque at 1.0 SF
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WASHGUARD<sup>™</sup> ALL-STAINLESS



STAINLESS STEELDUCK

## Maximum service in critically clean or corrosive environments

- All exterior components of stainless steel
- Endshields o-ring sealed to frame
- · IEEE 841 severe-duty features standard
- Meets demanding pharmaceutical requirements, also excellent for chemical-processing applications
- Incorporates all WASHGUARD<sup>™</sup> mechanical and electrical features, plus IRIS<sup>™</sup> insulation system
- IRIS<sup>™</sup> insulation system
- BISSC certified for baking industry
- Meets IP 55 Enclosure Protection
- Three Phase motors are suitable for use on VFDs, 10:1 ratio for constant or variable torque at 1.0 SF

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WASHGUARD™ WHITE EPOXY





#### Enhanced performance in wet, humid areas

- · Our original moisture-shedding "duck" motor
- Durable RUST-OLEUM<sup>®</sup> white epoxy coating
- · Stainless steel shaft, conduit box cover, nameplate, fan guard

ROTECTED

WITH RUST-OLEUM\*

COATINGS

- Special gaskets, slingers and seals
- Four endshield drains
- · Moisture-resistant interior components
- IRIS<sup>™</sup> insulation system
- · Single-phase, three-phase and DC SCR models
- Three Phase motors are suitable for use on VFDs, 10:1 ratio for constant or variable torque at 1.0 SF

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WASHDOWN SERVICE



# WASHGUARD<sup>™</sup> MOTORS ARE BUILT TO HANDLE HIGH-PRESSURE WASHDOWNS!\*

USDA-approved, white epoxy finish for superior

protection and resistance to

caustic cleaning solutions.

LEESON

**Stainless-steel fan guard** (48-145T frames) or heavy-duty epoxy-coated fan guard (182T-215T frames).

**Composite fan** is chemically-inert and static-free. Fan is positively positioned on shaft. On TEFC designs only.

Stainless-steel, "full-fact" nameplate includes information on motor efficiency and connections. Readable even after repeated washdowns. Encapsulated starting switch (single-phase WASHGUARD<sup>™</sup> motors) uses a patented, field-proven design that is immune to moisture, shock and vibration. No moving parts or exposed contacts to become corroded or inoperable.

> Moisture-resistant shaft system includes 303 stainless-steel shaft and lubricated, spring-loaded contact seals in each endshield. Patented V-ring Forsheda seal on shaft end to deflect water (see inset). Double-sealed, oversized bearings lubricated with Exxon POLYREX® EM high temperature, moistureresistant lubricant. Bearing cavities packed to further retard entrance of moisture.

WASHGUARD™ White Epoxy Model Shown

Cast, oversized conduit box with tough, high-temperature nitrile gaskets and stainless-steel cover and hardware. Oversized design with threaded entrance. All machined fits are sealed and nylon gaskets are used under bolt heads.



#### Interior coatings protect against moisture and corrosion. Frame, base, endshields, rotor, and interior components are protected by enamel and polyester compounds of outstanding adhesion and resistance to moisture, acids, alkalies, and oils. Efficiencies meet EPACT mandates for *covered* motors when tested without shaft seals. High temperature, moisture resistant IRIS insulation system assures long life on inverter service. Windings are immersed and cured windy and compound.





Four condensate drains in each endshield (at three, six, nine, and twelve o'clock) purge condensate and water which may enter the motor.

\* ALSO EXCELLENT FOR APPLICATIONS REQUIRING A MOTOR THAT IS "TROPICALIZED!"



## WASHGUARD<sup>™</sup> WASHDOWN MOTORS **\***

LEESON WASHGUARD<sup>™</sup> motors are designed for enhanced performance in applications requiring regular washdown as in food processing and for application in wet, high humidity environments.

WASHGUARD<sup>™</sup> motors retard the entrance of water during cleaning operations and release any water that does enter the motor. Extra protection for the motor's interior reduces rust and corrosion build-up. Drains release trapped moisture.



Mechanical Protection Features: Corrosion resistant 303 stainless steel shaft with seals and "V" ring seal deflect water, protect bearings and the motor's interior. Double sealed, bearings with high temperature, moisture resistant lubricant are used.

Cast conduit box with threaded entrance, drain holes and tough, high temperature nitrile gaskets. Conduit box cover is stainless steel.

Four drains in each endshield purge water regardless of the motor's mounting. Machined fits are sealed, and nylon gaskets are used to seal bolt heads. Stainless steel data plate.

Fan cooled designs utilize a chemically inert static free fan. Heavy gauge type 304 stainless steel fan cover in frames 56 through 145T. Fan cover is epoxy coated for frames 182T and larger.

**Electrical Features:** High efficiency copper windings. Service Factors are 1.15 or greater, with Class F insulation system. High torques exceed NEMA performance standards.

Single phase motors use a field proven electronic solid state encapsulated starting switch.

For further information on LEESON WASHGUARD™ motors, request Bulletin 1500.

## SINGLE PHASE • TEFC • RIGID BASE

## **Featuring Electronic Solid State Encapsulated Switch**

HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	Over- load Prot.	F.L. Amps 230V	"C" Dim. (in.)
1/2	1725	56	112431	\$686	А	25	115/208-230	None	4.4	10.81
3/4	1725	56	112432	737	А	29	115/208-230	None	5.4	11.31
1	1725 1740	56 143T	112626 120589	765 805	A A	33 36	115/208-230 115/208-230	None None	6.4 6.4	11.81 12.25
1½	1740	145T	120590	829	А	44	115/208-230	None	9.5	13.75
2	1740	182T	131571	1088	А	74	115/208-230	None	12.6	13.47

## SINGLE PHASE • TEFC • C FACE WITH BASE

HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	Over- load Prot.	F.L. Amps 230V	"C" Dim. (in.)
1/4	1725	56C	112525	\$658	А	26	115/208-230	None	2.4	10.69
1/3	3450	56C	113580	669	А	26	115/208-230	None	2.6	10.69
	1725	56C	112526	669	А	28	115/208-230	None	3.2	10.69
1/2	3450	56C	113581	681	А	25	115/208-230	None	3.6	10.69
	1725	56C	112527	681	А	27	115/208-230	None	4.4	11.19
3/4	3450	56C	113582	725	А	31	115/208-230	None	5.0	11.69
	1725	56C	112528	725	А	30	115/208-230	None	5.4	11.69
1	3450	56C	113583	744	А	30	115/208-230	None	6.0	12.19
	1725	56C	112529	761	А	34	115/208-230	None	6.4	12.19
<b>1</b> ½	3450	56C	113584	763	А	36	115/208-230	None	8.5	12.69
	1725	56HC	113300	817	A	44	115/208-230	None	9.5	13.69
2	3450	56HC	114637	810	A	45	115/208-230	None	10.0	13.69



## DC • SCR RATED 90 & 180 VOLTS **TENV • C FACE WITH REMOVABLE BASE**

HP	Full Load RPM	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (Ibs.)	Arm. Volts DC	Volts AC	F.L. Amps DC	"C" Dim. (in.)
1/4	1750	S56C	108423	\$794	A	23	90	115	2.7	10.69
	1750	S56C	098375	429	A	23	180	230	1.4	10.22
1/3	1750	S56C	108424	809	A	26	90	115	3.5	11.69
	1750	S56C	098376	430	A	21	180	230	1.7	10.22
1/2	1750	S56C	108226	980	A	38	90	115	4.9	13.69
	1750	S56C	108227	980	A	39	180	230	2.4	13.69
3/4	1750	S56C	108228	1072	A	50	90	115	7.0	15.69
	1750	S56C	108229	1072	A	50	180	230	3.5	15.69
1	1750	S56C	108230**	1093	A	42	90	115	10.0	15.81
	1750	S56C	108231**	1093	A	42	180	230	5.0	14.81
<b>1</b> ½	1750	S56C	108232**	1210	А	50	180	230	7.6	16.81



If base is removed, do not reinstall bolts without using washers to compensate for the thickness of base.



PROTECTED

## **Catalogue numbers in** blue are NEW items.

All three phase motors, 1HP and above, are inverter rated, refer to page 182 for speed ranges.

#### NEW ALL-STAINLESS WASHGUARD™ ON PAGE 28.

## WASHGUARD<sup>™</sup> MOTORS

WHITE EPOXY • THREE PHASE



AC Motors





RPM 60 HP         NEMA Hz         Catalogue Frame         List Number         List Price         App. Disc. Sym.         FL. Wgt. (lbs.)         FL. Voltage           1/4         1725         56C         112523         \$467         A         21         208-230/460         1.1           1/3         1725         56C         112547         481         A         23         208-230/460         1.7	% F.L. Eff. 67.0 68.0	"C" Dim. (in.) 10.69
1/4         1725         56C         112523         \$467         A         21         208-230/460         1.1           1/2         1725         56C         112547         481         A         23         208-230/460         1.7	67.0 68.0	10.69 10.69
1/2 1725 56C 1125/7 /81 A 23 208-230//60 1.7	68.0	10.69
173 1723 300 112347 401 A 23 200-230/400 1.7	70.0	
<b>1/2</b> 3450 56C <b>113588</b> 514 A 26 208-230/460 1.5	76.0	10.56
1725         56C <b>113586</b> 514         A         27         208-230/460         1.8           1725         56C <b>112429</b> †         514         A         29         208-230/460         2.0	78.5 74.0	10.06 11.19
<b>3/4</b> 3450 56C <b>113589●</b> 595 A 24 208-230/460 2.4	75.5	10.06
1725         56C <b>113587</b> 595         A         30         208-230/460         2.5           1725         56C <b>112430</b> 595         A         28         208-230/460         2.8	80.0 77.0	10.56 11.19
<b>1</b> 3450 56C <b>113590</b> 619 A 37 208-230/460 2.6	78.0	11.56
1725         56C <b>112524</b> 619         A         31         208-230/460         3.6           1740         143TC <b>G120587</b> 730         A         32         208-230/460         3.1	77.0 82.5	11.69 13.25
<b>1</b> <sup>1</sup> / <sub>2</sub> 3450 56C <b>113591●</b> 646 A 44 208-230/460 3.8	80.0	12.56
1725         56C <b>112643</b> 646         A         36         208-230/460         5.0           1740         145TC <b>G121540</b> 767         A         32         208-230/460         4.4	78.5 84.0	12.19 13.25
2 3450 56HC 113592 ● 678 A 48 208-230/460 5.0	78.0	13.06
1725         56C <b>112644</b> 678         A         38         208-230/460         6.2           1740         145TC <b>G120588</b> 793         A         39         208-230/460         6.0	81.5 84.0	12.69 14.25
<b>3</b> 3450 145TC <b>G120911</b> 828 A 45 208-230/460 8.0	85.5	13.25
1740 182TC <b>G130664</b> 1237 A 66 208-230/460 8.2	87.5	13.96
5 1740 184TC G131171 1257 A 76 208-230/460 13.0	87.5	14.96



## WATTSAVER® • WASHGUARD™ • 575 VOLTS • THREE PHASE • TEFC • C FACE WITH BASE

HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps 575V.	% F.L. Eff.	"C" Dim. (in.)
1	1740	143TC	121073	\$730	А	30	575	1.3	84.0	12.25
<b>1</b> <sup>1</sup> / <sub>2</sub>	1740	143TC	121074	767	Α	32	575	1.7	84.0	12.25
2	1740	145TC	121075	793	А	42	575	2.4	84.0	13.75
3	1740	184TC	131260	1237	А	65	575	3.3	87.6	14.38
5	1740	184TC	G131261	1257	А	84	575	5.4	88.0	16.38

• These motors are totally enclosed, non ventilated – Others are fan cooled.

W Premium efficiency WATTSAVER® Motors.

All three phase motors, 1HP and above, are inverter rated, refer to page 182 for speed ranges.

## THREE PHASE • 575 VOLTS • TEFC C FACE WITH BASE

HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps 575V	% F.L. Eff.	"C" Dim. (in.)
1/4	1725	56C	112520	\$467	А	23	575	0.44	68.0	10.69
1/3	1725	56C	112521	481	А	22	575	0.68	68.0	10.69
1/2	1725	56C	112483	514	А	28	575	0.8	75.0	11.19
3/4	1725	56C	112484	595	А	24	575	1.12	77.0	11.19
1	1725	56C	112522	619	A	30	575	1.5	77.0	11.69







## SEE PAGE 25 FOR DESIGN FEATURES. ADDITIONAL WASHDOWN MOTORS ON NEXT PAGE.



## WASHGUARD<sup>™</sup> MOTORS SST<sup>™</sup> ALL-STAINLESS

THREE PHASE • 208-230/460 & 575 VOLTS

**LEESON's FHP WASHGUARD**<sup>™</sup> **SST<sup>™</sup> Stainless Steel** motors are designed for long life in severe duty or washdown applications. Washguard<sup>™</sup> SST<sup>™</sup> motors are **Stainless Steel Tough** to withstand the demanding environments found in the food processing, chemical processing and beverage industries.

- 1/3 thru 3 HP
- 1750 & 3450 RPM ratings available in TEFC and TENV enclosures
- · 56C, 143TC & 145TC frame sizes available
- Rigid/C-Face and C-Face less base mountings available
- LEESON's IRIS (Inverter Rated Insulation System) included on all ratings
- Fully-gasketed conduit box and rubber-covered oil seals to exclude water
- All-stainless steel construction prevents corrosion in harsh washdown environments
- No paint or coatings of any type are used on the exterior of the motor
- Nameplate is laser-etched into the motor frame to eliminate nameplate rivet holes and bearing locking screws located inside the motor to reduce entry points for water
- · Rugged industrial-duty construction

WASHGUARD<sup>™</sup>SST<sup>™</sup>

Anti-corrosion coating applied to rotor and heavy polyester varnish on stator and to prevent corrosion.

• See Chemical Resistance Rating Chart on page 30

**300-Series stainless steel** exterior components – frame, base, endshields, shaft extension, fan guard, hardware, conduit box and cover – for maximum corrosion resistance.

**Laser-etched** full-fact nameplate on motor frame.



**Double-sealed bearings** with moisture-resistant high-temperature grease.

**Rubber-covered seals** 

on both shaft extensions of TEFC motors.

**Split conduit box design** with flanged cover and rubber gasket for better sealing.

Heavy-duty 12 ga. stamped base used on all ratings.

Moisture resistant sealant between frame and endshields excludes water.



Four condensate drains in each endshield (at three, six, nine and twelve o'clock) provide locations to purge condensate and water, which may enter the motor.
T-drains provided for effective drainage without allowing water to splash inside the motor. T-drain for opposite shaft end is installed at six o'clock position (and can be relocated easily). T-drain for shaft end is shipped loose for customer installation at low point of motor.

## WASHGUARD<sup>™</sup> SST<sup>™</sup> ALL STAINLESS

THREE PHASE • 208-230/460 & 575 VOLTS







20	8-23	0/460	V • TEP	AV/TE	=FC	• C	FACE WI	ГНВ	ASE		575V	• TENV/	TEFO	;•C	FAC	E WITH	BAS	Ξ.	
HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (Ibs.)	Voltage	F.L. Amps 230V	% F.L. Eff.	"C" Dim. (Inches)	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (Ibs.)	Voltage	F.L. Amps 230V	% F.L. Eff.	"C" Dim. (Inches)
1/3	3450	56C	191200	\$433	А	29	208-230/460	1.0	74.0	9.78	56C	191227	\$433	А	29	575	0.45	74.0	9.78
	1750	56C	191201 •	452	А	30	208-230/460	1.3	78.5	9.78	56C	191228	452	А	30	575	0.52	78.5	9.78
1/2	3450	56C	191203	440	А	32	208-230/460	1.5	77.0	9.78	56C	191230	440	А	32	575	0.65	77.0	9.78
	1750	56C	191204	466	Α	33	208-230/460	1.6	81.5	9.78	56C	191231	466	Α	33	575	0.65	81.5	9.78
3/4	3450	56C	191206	498	А	33	208-230/460	2.0	78.5	9.78	56C	191233	498	А	33	575	0.8	78.5	9.78
	1750	56C	191207 •	539	Α	38	208-230/460	2.3	82.5	9.78	56C	191234	539	Α	38	575	0.95	82.5	9.78
1	3450	56C	191209	541	А	41	208-230/460	2.6	80.0	13.77	56C	191236	541	А	41	575	1.2	80.0	13.77
	3450	143TC	G191210	541	В	42	208-230/460	2.6	80.0	13.62	143TC	191237	541	Α	42	575	1.2	80.0	13.62
	1750	56C	191291	562	А	49	208-230/460	3.0	81.0	11.00	56C	191295	562	Α	47	575	1.2	82.5	11.00
	1750	56C	191211	562	Α	47	208-230/460	3.0	82.5	13.77	56C	191238	562	Α	47	575	1.2	82.5	13.77
	1750	143TC	G191212	604	В	48	208-230/460	3.0	82.5	13.62	143TC	191239	604	Α	48	575	1.2	82.5	13.62
11/2	3450	56C	191215	587	Α	48	208-230/460	3.8	82.5	13.77	56C	191242	587	Α	48	575	1.7	82.5	13.77
	3450	143TC	G191216	587	В	49	208-230/460	3.8	82.5	13.62	143TC	191243	587	Α	49	575	1.7	82.5	13.62
	1750	56C	191217	586	Α	48	208-230/460	4.8	84.0	13.77	56C	191244	586	Α	48	575	1.9	84.0	13.77
	1750	145TC	G191218	628	В	49	208-230/460	4.8	84.0	13.62	145TC	191245	628	Α	49	575	1.9	84.0	13.62
2	3450	56C	191221	650	А	49	208-230/460	5.0	84.0	13.77	56C	191248	650	Α	49	575	2.2	84.0	13.77
	3450	145TC	G191222	650	В	50	208-230/460	5.0	84.0	13.62	143TC	191249	650	А	50	575	2.2	84.0	13.62
	1750	56C	191223	667	Α	52	208-230/460	5.8	84.0	13.77	56C	191250	667	Α	52	575	2.3	84.0	13.77
	1750	145TC	G191224	703	В	53	208-230/460	5.8	84.0	13.62	145TC	191251	703	A	53	575	2.3	84.0	13.62
3	3450	145TC	G191293	795	В	62	208-230/460	7.4	85.5	14.12	145TC	191297	795	A	62	575	3.0	85.0	14.12



## 208-230/460V • TENV/TEFC • C FACE LESS BASE



• These motors are totally enclosed, non-ventilated Others are fan cooled.





## **Standards and Approvals**

UL component recognized, file number E57948, guide number PRGY2. Energy efficiency ratings are verified by an independent testing laboratory. CSA Energy Efficiency Verification Program, report number EEV 78720-1. Construction is CSA Certified for safety report number LR33543.

All three phase motors, 1HP and above, are inverter rated, refer to page 182 for speed ranges.

AC Motors



# PREMIUM



CHEMICAL RESISTANCE RATING CHART



## General Specifications:

Motors have been tested to and passed the IEC IP-56 test requirements. Designed specifically to meet the demanding sanitation requirements of the pharmaceutical, food processing and beverage industries. These motors are also ideal in clean room and severe chemical-processing applications involving frequent washdown with nitric acid and caustic lye. In fact, WASHGUARD™ All-Stainless Motors include IEEE 841 severe-duty features right out of the box!

## **Mechanical Protection Features:**

- · All exterior components are 300-series stainless steel.
- Nothing on the motor's exterior is painted or coated in any way.
  All sealing components are Viton<sup>®</sup> for superior chemical resistance.
- Full fact nameplate is laser etched on the motor frame no separately
- attached nameplate to trap dirt or contaminants.
- · Endshields are O-ring sealed to the frame.

· Double lip shaft seals on both ends of TEFC motors (shaft end only on TENV motors).

· Removable hydrophobic breathers in opposite shaft endbell and conduit box equalize pressure without allowing moisture to enter.

· Exterior fastener use minimized reducing the number of entry points for moisture. There are no holes in the frame for attaching a nameplate. Bearing lock screws are located inside the motor and the conduit box mounted screws have been eliminated.

Double-sealed bearings are pre-lubricated with moisture-resistant high-temperature grease for long life.

- Interior coatings applied to rotor and stator protect against corrosion.
- New conduit box mounting system provides optimum sealing.
  Ease to clean construction is BISSC Certified for bakery applications...

#### **Electrical Performance and Protection Features**

• WASHGUARD™ efficiencies meet EPACT mandates for non-exempt motors when tested without shaft seals.

· Windings are immersed and cured in polyester insulating varnish for extra moisture-resistance.

- LEESON's exclusive IRIS" Inverter-Rated Insulation System provides extra protection and long life, especially in inverter-driven applications.
- Single-phase motors use Solid State Sinpac® switch no mechanical switch contacts to corrode and fail.

#### Standards and Approvals

- Single and three phase motors are UL component recognized file number E57948, guide number PRGY2.
- CSA Energy Efficiency Verification Program, report number EEV 78720-1.
- Construction is CSA Certified for safety report number LR33543 and listed under BISSC authorization number 769.

300-Series stainless steel exterior components - frame, base, endshields, shaft extension, fan guard, hardware, conduit box and cover - for maximum corrosion resistance.

Laser-etched full-fact nameplate on motor frame. Interior coatings applied to rotor and stator protect against moisture and corrosion. Double-sealed bearings with moistureresistant high-temperature grease. Hydrophobic breathers in opposite endshield and conduit box allow passage of air for pressure equalization without allowing moisture to enter the motor. Fillet welded base is double-welded for greatest strength. Extra strong cast stainless steel base on motors over 1HP.

> **Revolutionary conduit box** mounting uses pressure clip to assure maximum sealing and allows easy repositioning for multiple conduit entry locations.

Viton® O-rings seal the fit between the frame and endshields to exclude moisture and resist harsh chemicals

Viton<sup>®</sup> double-lip shaft seals on both ends of TEFC motors.

CHEMICAL	CONCENTRATION	COMPONENTS	
WATER:			
De-Ionized Boiling	100%	Excellent	
Salt (Immersed)	30%	Excellent	
Salt (Spray)	5%	Excellent	
Tap - 250°F/120°C @ 10,000 PSI	100%	Excellent	EP
ACIDS:			CFFIGIER
Hydrochloric	35%	Poor	
Sulfuric	25%	Poor	
Nitric	35%	Excellent	NG IN
Picric	Saturated Solution	Excellent	1 Sint
BASE:			CET
Caustic	100%	Excellent	
Caustic	12.5 pH	Excellent	210
Caustic - 125°F/50°C	9.5 pH	Excellent	
SOLVENTS:	-	Excellent	

ALL STAINLESS

## WASHGUARD<sup>™</sup> ALL-STAINLESS MOTORS

SINGLE & THREE PHASE





115/208-230 None

115/208-230 None

8.8

10.0

14.81

14.81

# ALL-STAINLESS ALL-STAINLESS SINGLE PHASE • TENV/TEFC • C FACE LESS BASE SINGLE PHASE • TENV/TEFC • C FACE WITH BASE

HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	Over- load Prot.	F.L. Amps 230V	"C" Dim. (Inches)	HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (Ibs.)	Voltage	Over- load Prot.	F.L. Amps 230V	"C" Dim. (Inches)
1/3	1750	56C	116349●	\$836	А	25	115/208-230	None	2.7	11.70	1/3	1750	56C	116343	\$883	А	28	115/208-230	None	2.7	12.20
1/2	1750	56C	116350	852	А	29	115/208-230	None	3.3	12.70	1/2	3450	56C	116344	760	А	25	115/208-230	None	3.8	12.20
3/4	1750	56C	116351	935	Α	31	115/208-230	None	3.8	12.70	•	1750	56C	116345	897	А	28	115/208-230	None	3.3	12.70
1	1750	56C	116352	950	Α	34	115/208-230	None	4.5	13.70	3/4	1750	56C	116346	980	Α	30	115/208-230	None	3.8	12.70
<b>1</b> ½	1750	145TC	121624	1274	А	43	115/208-230	None	7.4	14.87	1	3450	56C	116347	798	А	31	115/208-230	None	6.0	13.70
2	1750	145TC	121633	1466	А	60	115/208-230	None	10.0	14.87		1750	56C	116348	996	Α	33	115/208-230	None	4.5	13.70
•	<ul> <li>These motors are totally enclosed, non-ventilated — Others are fan cooled.</li> </ul>						1½	3450	56C	116482□	1319	А	36	115/208-230	None	6.8	13.81				
								1750	145TC	121622	1374	Α	45	115/208-230	None	7.4	14.81				

2

3450 145TC

1750

121623

145TC **121632** 

These motors are totally enclosed, non-ventilated — Others are fan cooled.
 Combination 56H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.

A 60

1480 A 43

1541

## 208-230/460V ALL STAINLESS • TENV/TEFC • C FACE WITH BASE

HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	Over- load Prot.	F.L. Amps 230V	"C" Dim. (Inches)
3	1750	182TC	G131900	\$1459	А	70	208-230/460	8.2	87.5	14.77
5	3450	184TC	G131901	1517	А	80	208-230/460	12.0	87.5	14.77
	1750	184TC	G131902	1456	А	80	208-230/460	13.0	87.5	15.27
<b>7</b> ½	3450	213TC	G140698	2410	А	150	208-230/460	18.4	88.5	18.69
	1750	213TC	G140675	2321	А	153	208-230/460	20.4	89.5	18.69
10	3450	215TC	G140699	2632	А	165	208-230/460	24.0	89.5	18.69
	1750	215TC	G140676	2545	А	170	208-230/460	26.0	89.5	18.69

## 575V

## ALL STAINLESS • TENV/TEFC • C FACE WITH BASE

HP	RPM 60 Hz	NEMA Frame	Catalogue Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	Over- load Prot.	F.L. Amps 230V	"C" Dim. (Inches)
3	1750	182TC	G132012	\$1459	А	70	575	3.3	87.5	14.77
5	3450	184TC	G132013	1517	Α	80	575	4.8	87.5	14.77
	1750	184TC	G132014	1456	А	80	575	5.2	87.5	15.27
<b>7</b> ½	3450	213TC	G140748	2410	А	150	575	7.4	88.5	18.69
	1750	213TC	G140749	2321	А	153	575	8.2	89.5	18.69
10	3450	215TC	G140750	2632	А	165	575	9.6	89.5	18.69
	1750	215TC	G140751	2545	А	170	575	10.4	89.5	18.69