

AMPRO ELECTRIC LTD.

ECRA / ESA LICENCE #7015465



Stainless Steel IP69K

1/3 - 5HP, FOOD SAFE, Three Phase, TEFC/TENV

STAINLESS STEEL IP69K MOTORS

1/3 - 5HP, FOOD SAFE, THREE PHASE, TEFC/TENV



PRODUCT OVERVIEW

Techtop's Three Phase Stainless Steel severe washdown duty motors are designed to withstand the extreme and stringent sanitation requirements of today's food processing, pharmaceutical, packaging and beverage industries. Tested to meet the demanding IP69K specification using high pressure steam and water, Techttop's food safe stainless motors provide durable protection against the most extreme caustic washdown environments while maintaining a hygienic level to ensure uncompromised food safety.

Wherever your Techttop Stainless Steel motor finds itself, it will be protected from the environment and ready for a long and productive life.

BASIC SPECIFICATIONS

- Power Ratings from 1/3 to 5HP
- Three Phase, 2 and 4 pole, 50/60Hz
- 230/460V 60Hz (Usable @ 208V 1.0 SF), 190/380V 50Hz
- 575V 60Hz
- Totally Enclosed Fan Cooled (TEFC)
- Totally Enclosed Non-Ventilated (TENV)



STANDARD FEATURES

- IP69K third party tested
- BISCC certified
- 1.25 Service Factor with 60Hz operation
- 36 Month warranty
- Fully encapsulated winding with epoxy resin
- Potted connection box
- 3-stage drive end sealing system
- Stainless steel shaft slinger
- Food-grade hi-temp silicone o-rings on conduit box, thru-bolts and end bells
- Double lip Viton® oil seals, drive-end seal installed internally
- Double shielded ball bearings packed with food grade Mobilgrease™ FM 222
- 304 Stainless Steel Construction
- Bead blast finish for clean, consistent, streak-free appearance
- 304 Stainless Steel shaft
- Fully Stainless Steel hardware
- Laser etched nameplate
- Flat, catch free 1/8" gauge welded base
- Waterproof pressure equalization and release vent in order to extend seal life and prevent internal condensation



OPERATING PARAMETERS

- Continuous (S1) duty
- Ambient temperatures up to 40°C
- Installation up to 1000 MASL (3300 ft.)

CONNECTION

- 9-Lead 230V parallel-wye / 460V series-wye connection
- 3-Lead 575V wye connection

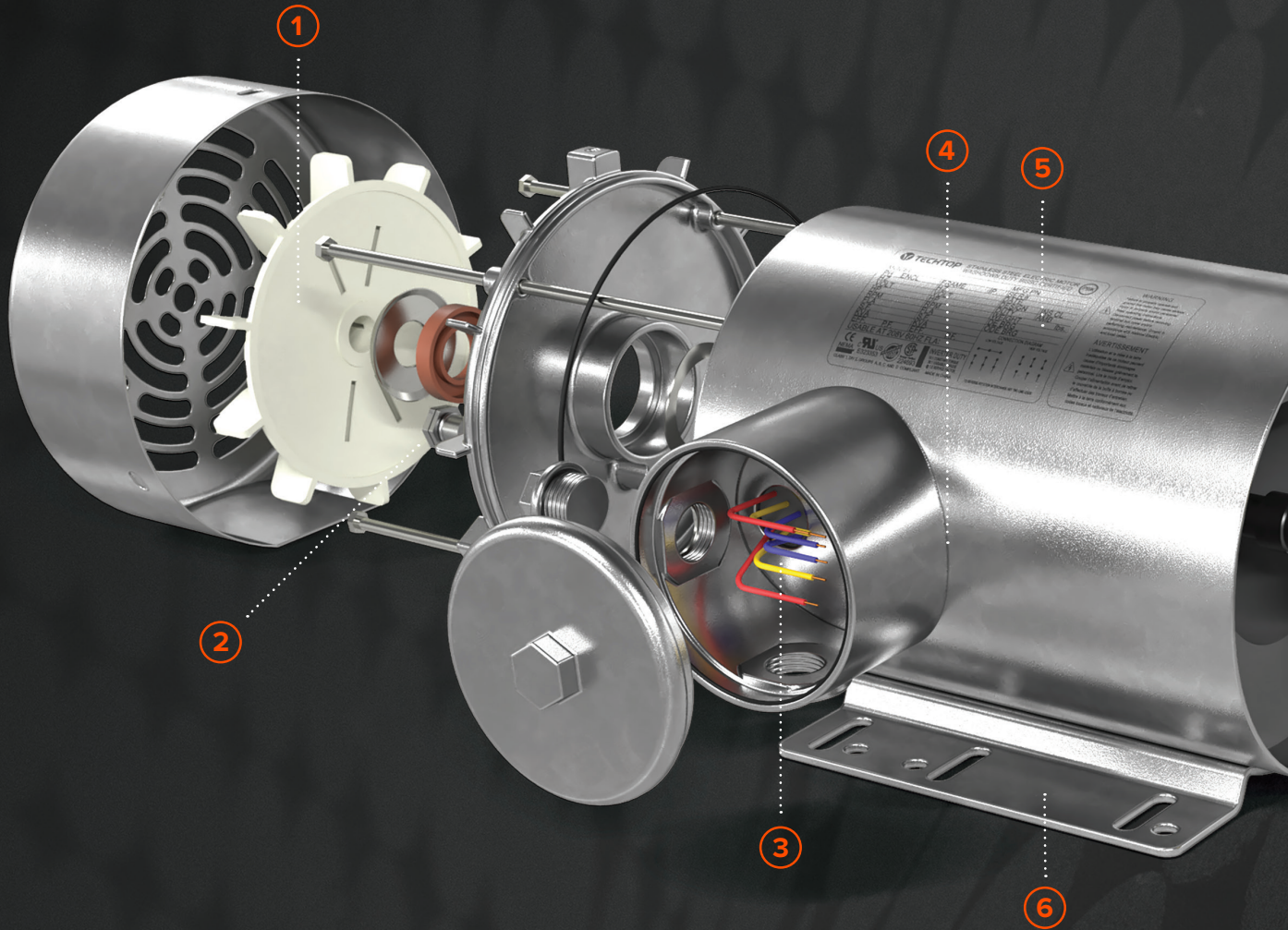
INSULATION AND INVERTER RATING

- Class F Insulation (Impregnation resin, magnet wire and insulation materials are Class H)
- Designed to Class B temperature rise
- Vacuum Impregnated and fully encapsulated winding
- Inverter Rated 15:1 Constant Torque, 30:1 Variable Torque (1.0 S.F. on VFD Power)
- Exceeds NEMA MG 1 Part 31.4.4.2



STAINLESS STEEL IP69K MOTORS

1/3 - 5HP, FOOD SAFE, THREE PHASE, TEFC/TENV



FEATURES



① TEFC & TENV Designs

Both enclosures available from stock (TEFC motor design shown).

② Patented Breather Vent

Eliminates need for drain plugs, prevents internal condensation and protects from water, chemicals or oil entering the motor.

③ Potted Connection Box & Leads

With colour coded lead wires & markers.

④ Fully Welded, Water Tight Connection Box

With two entry points and IP69K threaded conduit entry plug.

⑤ Full-Fact Nameplate

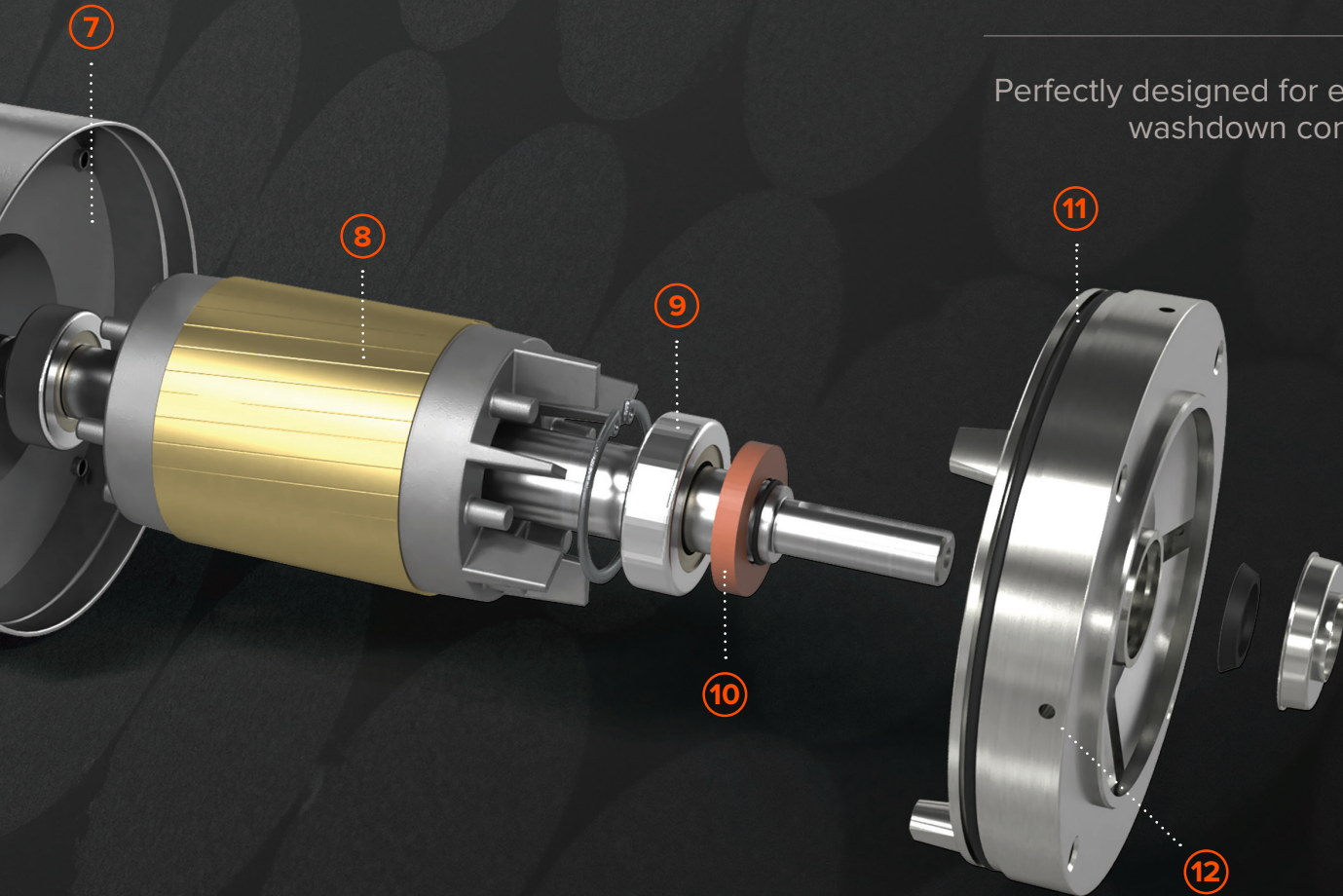
Permanently laser etched into the motor frame.

⑥ Flat Welded Base

1/8" gauge stainless steel with a catch free design.

300 Series Stainless Steel Construction

Perfectly designed for extreme
washdown conditions



7 Fully Encapsulated Winding

Hardened epoxy resin completely encapsulates our VPI, inverter duty winding for an additional layer of protection against water and humidity.

8 Treated Rotor for Corrosion Protection

Rotor laminations treated with anti-corrosion coating.

9 Food Safe Bearing Grease

Double shielded ball bearings packed with food grade Mobilgrease™ FM 222.

10 Three-Stage Shaft Seal

Includes a drive end internal chemical resistant Viton® double lip oil seal, exterior wear seal and stainless steel shaft slinger.

11 Multiple O-Ring Inserts

Food safe silicone o-rings fitted to the conduit box lid, through bolts and end bells.

12 C-Face Centre Cavity Drains

Including drip grooves that direct moisture away from shaft seals.

PURCHASING DATA

56C - 140TC Frame Foot-Mount

NEMA Premium Efficiency

HP	Model	MFG Number	Sync. Rpm	NEMA Frame	Encl.	Full Load Current I _n (A)				Fl Eff. (%)	Shipping Weight (Lbs.)	"C" Dim. (In.)	List Price
						208V	230V	460V	575V				
1/3	SSBN.334[]-C	TSSN 56C1/3U4B	1800	56C	TENV	1.34	1.21	0.61	0.49	79.5	36.3	10.4	\$1,096
1/2	SSB.504[]-C	TSSF 56C1/2U4B	1800	56C	TEFC	2.03	1.84	0.92	0.66	78.5	36.8	12.0	\$1,133
	SSBN.504[]-C	TSSN 56C1/2U4B	1800	56C	TENV	1.81	1.64	0.82	0.73	84.0	40.8	11.0	\$1,140
3/4	SSB.752[]-C	TSSF 56C3/4U2B	3600	56C	TEFC	2.46	2.22	1.11	0.97	77.0	37.2	12.0	\$1,159
	SSB.754[]-C	TSSF 56C3/4U4B	1800	56C	TEFC	2.89	2.61	1.31	0.89	81.5	41.7	12.6	\$1,184
	SSBN.754[]-C	TSSN 56C3/4U4B	1800	56C	TENV	2.67	2.42	1.21	1.04	85.5	45.4	11.6	\$1,190
1	SSB0002[]-C	TSSF 56HC1U2B	3600	56HC	TEFC	3.28	2.96	1.48	1.19	80.0	41.6	13.2	\$1,202
	SSB0004[]-C	TSSF 56HC1U4B	1800	56HC	TEFC	3.41	3.08	1.54	1.23	85.5	46.7	13.2	\$1,270
	SSBN0004[]-C	TSSN 56HC1U4B	1800	56HC	TENV	3.52	3.18	1.59	1.27	86.5	50.7	12.2	\$1,232
1.5	SSB0012[]-C	TSSF 56HC1.5U2B	3600	56HC	TEFC	4.57	4.13	2.06	1.65	84.0	45.7	13.2	\$1,238
	SSB0014[]-C	TSSF 56HC1.5U4B	1800	56HC	TEFC	4.92	4.45	2.22	1.78	86.5	50.9	13.8	\$1,322
	SSG0014[]-TC	TSSF 140TC1.5U4B	1800	145TC	TEFC	4.92	4.45	2.22	1.78	86.5	50.9	13.9	\$1,362
2	SSB0022[]-C	TSSF 56HC2U2B	3600	56HC	TEFC	5.84	5.28	2.64	2.11	85.5	53.9	13.8	\$1,302
	SSB0024[]-C	TSSF 56HC2U4B	1800	56HC	TEFC	6.38	5.77	2.89	2.31	86.5	57.1	14.6	\$1,432
	SSG0024[]-TC	TSSF 140TC2U4B	1800	145TC	TEFC	6.38	5.77	2.89	2.31	86.5	57.1	14.7	\$1,475
3	SSB0032[]-C	TSSF 56HC3U2B	3600	56HC	TEFC	8.35	7.55	3.78	3.02	86.5	62.2	14.6	\$1,377
	SSB0034[]-C	TSSF 56HC3U4B	1800	56HC	TEFC	9.25	8.37	4.18	3.35	89.5	71.7	16.2	\$1,677
	SSG0034[]S-TC	TSSF 140TC3U4B	1800	145TC	TEFC	9.25	8.37	4.18	3.35	89.5	71.7	16.3	\$1,727
5	SSB0052[]-C	TSSF 56HC5U2B	3600	56HC	TEFC	13.1	11.9	5.94	4.75	88.5	70.1	16.6	\$1,568

Voltage: Replace [] with D for 208-230/460V, or F for 575V

56C Frame Round Body

NEMA Premium Efficiency

HP	Model	MFG Number	Sync. RPM	NEMA Frame	Encl.	Full Load Current I _n (A)				FL Eff. (%)	Shipping Weight (lbs.)	"C" Dim. (in.)	List Price
						208V	230V	460V	575V				
1/3	SSBN.334[]-C-RND	TSSN 56C1/3U4B	1800	56C	TENV	1.34	1.21	0.61	0.49	79.5	35.1	10.4	\$1,075
1/2	SSB.504[]-C-RND	TSSF 56C1/2U4B	1800	56C	TEFC	2.03	1.84	0.92	0.66	78.5	35.9	12.0	\$1,111
	SSBN.504[]-C-RND	TSSN 56C1/2U4B	1800	56C	TENV	1.81	1.64	0.82	0.73	84.0	39.9	11.0	\$1,118
3/4	SSB.754[]-C-RND	TSSF 56C3/4U4B	1800	56C	TEFC	2.89	2.61	1.31	0.89	81.5	40.5	12.6	\$1,161
	SSBN.754[]-C-RND	TSSN 56C3/4U4B	1800	56C	TENV	2.67	2.42	1.21	1.04	85.5	44.3	11.6	\$1,167
1	SSB0004[]-C-RND	TSSF 56HC1U4B	1800	56HC	TEFC	3.41	3.08	1.54	1.23	85.5	45.0	13.2	\$1,245
	SSBN0004[]-C-RND	TSSN 56HC1U4B	1800	56HC	TENV	3.52	3.18	1.59	1.27	86.5	48.9	12.2	\$1,207
1.5	SSB0014[]-C-RND	TSSF 56HC1.5U4B	1800	56HC	TEFC	4.92	4.45	2.22	1.78	86.5	49.4	13.8	\$1,296

Voltage: Replace [] with D for 208-230/460V, or F for 575V

DIMENSIONAL DRAWINGS

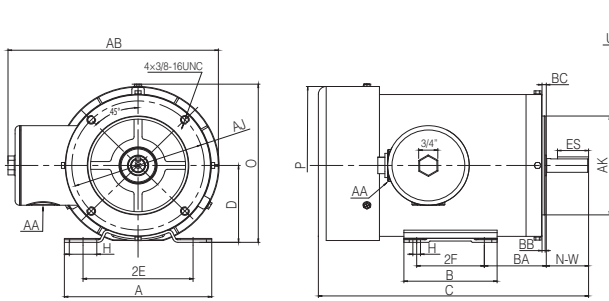


Figure 1 - Foot Mount, 56C

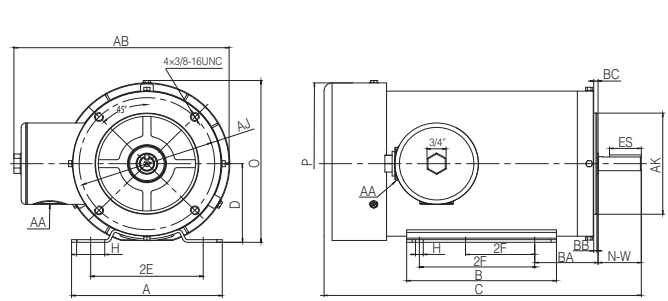


Figure 2 - Foot Mount, 56HC, 145TC

Dimensions are in inches

NEMA Frame	Foot Mounting					Shaft					General					NEMA C-Flange						
	E	2E	2F	A	BA*	H	N-W	U	S	R	ES	AA	C**	D	O	B	P	AB	AJ	AK	BB	BC
56C TEFC/TENV	2.44	4.88	3.0	6.54	2.75	0.34 *1.22	1.875	0.625	0.1875	0.517	1.378	2-NPT 1/2"	See Below	3.5	7.2	4.13	7.4/ 6.46	9.33	5.875	4.5	0.16	0.19
56HC TEFC/TENV	2.44	4.88	3.0/5.0	6.54	2.75	0.34 *1.22	1.875	0.625	0.1875	0.517	1.378	2-NPT 1/2"	See Below	3.5	7.2	6.5	7.4/ 6.46	9.33	5.875	4.5	0.16	0.19
145TC	2.75	5.5	4.0/5.0	6.54	2.25	0.34 *1.22	2.25	0.875	0.1875	0.771	1.378	2-NPT 3/4"	See Below	3.5	7.2	5.91	7.4	9.33	5.875	4.5	0.16	0.19

*Non-standard NEMA BA dimension for c-flanged models

**Refer to Performance Data chart for model c-dimensions

PREMIUM EFFICIENCY 60HZ PERFORMANCE DATA

HP	Sync. Speed	NEMA Frame	Encl.	Full Load Data			Full Load Current I_n (A)				KVA Code	Net Weight (lbs.)	Bearings		"C" Dim. (in.)
				RPM (r/min)	Eff. (%)	PF (Cos θ)	208V	230V	460V	575V			DE	NDE	
1/3	1800	56C	TENV	1760	79.5	0.64	1.34	1.21	0.61	0.49	N	34.1	6205ZZ	6204ZZ	10.4
	1800	56C	TEFC	1750	78.5	0.65	2.03	1.84	0.92	0.66	M	34.6	6205ZZ	6204ZZ	12.0
1/2	1800	56C	TENV	1760	84.0	0.68	1.81	1.64	0.82	0.73	N	38.6	6205ZZ	6204ZZ	11.0
	3600	56C	TEFC	3510	77.0	0.82	2.46	2.22	1.11	0.97	L	35.0	6205ZZ	6204ZZ	12.0
3/4	1800	56C	TEFC	1750	81.5	0.66	2.89	2.61	1.31	0.89	M	39.5	6205ZZ	6204ZZ	12.6
	1800	56C	TENV	1760	85.5	0.68	2.67	2.42	1.21	1.04	N	43.2	6205ZZ	6204ZZ	11.6
1	3600	56HC	TEFC	3510	80.0	0.79	3.28	2.96	1.48	1.19	L	39.4	6205ZZ	6204ZZ	13.2
	1800	56HC	TEFC	1750	85.5	0.71	3.41	3.08	1.54	1.23	L	44.5	6205ZZ	6204ZZ	13.2
	1800	56HC	TENV	1760	86.5	0.68	3.52	3.18	1.59	1.27	N	48.5	6205ZZ	6204ZZ	12.2
1.5	3600	56HC	TEFC	3510	84.0	0.81	4.57	4.13	2.06	1.65	L	43.5	6205ZZ	6204ZZ	13.2
	1800	56HC	TEFC	1750	86.5	0.73	4.92	4.45	2.22	1.78	K	48.7	6205ZZ	6204ZZ	13.8
	1800	145TC	TEFC	1750	86.5	0.73	4.92	4.45	2.22	1.78	K	48.7	6205ZZ	6204ZZ	13.9
2	3600	56HC	TEFC	3510	85.5	0.83	5.84	5.28	2.64	2.11	L	51.7	6205ZZ	6204ZZ	13.8
	1800	56HC	TEFC	1750	86.5	0.75	6.38	5.77	2.89	2.31	K	54.9	6205ZZ	6204ZZ	14.6
	1800	145TC	TEFC	1750	86.5	0.75	6.38	5.77	2.89	2.31	K	54.9	6205ZZ	6204ZZ	14.7
3	3600	56HC	TEFC	3510	86.5	0.86	8.35	7.55	3.78	3.02	K	60.0	6205ZZ	6204ZZ	14.6
	1800	56HC	TEFC	1750	89.5	0.75	9.25	8.37	4.18	3.35	L	69.5	6205ZZ	6204ZZ	16.2
	1800	145TC	TEFC	1750	89.5	0.75	9.25	8.37	4.18	3.35	L	69.5	6205ZZ	6204ZZ	16.3
5	3600	56HC	TEFC	3480	88.5	0.89	13.1	11.9	5.94	4.75	L	67.9	6205ZZ	6204ZZ	16.6

You can't top a Techtop.

We're Here To Help.

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