

NEMA Stainless Steel Motors

NEMA PREMIUM EFFICIENCY OR HIGH EFFICIENCY

Enclosures: 1/4 – 1HP TENV, 1/4 – 10HP TEFC

Class F insulation with Class B rise @ 1.15 SF

HP Ratings: 1/4 – 10HP

Frame: 56 – 256T and 56C – 256TC

Mounting: Footed, Footed with C-Face and C-Face Footless



NEMA PREMIUM EFFICIENCY OR HIGH EFFICIENCY

Applications:

Food processing, packaging, outdoor and highly corrosive environments.

TYPICAL NAMEPLATE INFORMATION

**NEMA PREMIUM
3 PHASE INDUCTION MOTOR**

MODEL NUMBER: AH0024FFA	FRAME 145TC	 Energy Verified
HP/KW 2.0/1.49	INS. CLASS F DUTY CONT.	
VOLTS 208-230/460	NEMA CODE G ENCL. TEFC	 NEMA Premium
AMPS 5.98-5.41/2.71	NEMA DESIGN B IP 55	
RPM 1720 Hz 60	DATE CODE	
P.F. 0.80 S.F. 1.15	OPP.END BRG. 6205-2RZ	
NOM.F.L.EFF. 86.5 %	DRIVE END BRG. 6205-2RZ	
MOTOR WT. LBS. kg.	SERIAL NO.	
MAX.AMB. 40 °C USABLE@ V	HP AMPS,1.0S.F.	
MEETS NEMA MG1 PART 31		

TATUNG

Features:

- All external surfaces: 304 series stainless steel, including motor frame, endplates, conduit box, shaft and base.
- Four condensation drains in each endplate.
- Conduit box gasketed, Lip seals. Especially effective in highly corrosive environments where paint or other finishes do not hold up.
- Sealed Bearing, IP55
- Inverter Rated, Meets NEMA MG1 Part 31.

PERFORMANCE DATA

NEMA PREMIUM STAINLESS STEEL MOTORS

Totally Enclosed Fan Cooled, Squirrel Cage,
NEMA Design B 3-phase 60Hz 208-230/460V
1.15 S.F., Class F Insulation, 40 Deg. C Ambient

HP	Full load r/min	Frame	Conn.	Current at 460V		Current at 575V		Torque			Efficiency			Power Factor		
				Full load (A)	Locked Rotor (A)	Full load (A)	Locked Rotor (A)	Full load (LB-FT)	Locked Rotor %	Break down %	Full load %	3/4 load %	1/2 load %	Full load %	3/4 load %	1/2 load %
1	3440	56HC	2Y/Y	1.45	15	1.16	12	1.53	185	250	77.0	81.1	79.7	84	85.0	75.5
1	3440	143TC	2Y/Y	1.45	15	1.16	12	1.53	185	250	77.0	81.1	79.7	84	85.0	75.5
1	1725	56HC	2Y/Y	1.46	15	1.17	12	3.05	275	300	85.5	84.8	83.2	75	71.9	59.2
1	1725	143TC	2Y/Y	1.46	15	1.17	12	3.05	275	300	85.5	84.8	83.2	75	71.9	59.2
1	1135	56HC	2Y/Y	1.67	15	1.34	12	4.63	170	265	82.5	82.5	81.3	68	60.1	47.1
1	1135	145TC	2Y/Y	1.67	15	1.34	12	4.63	170	265	82.5	82.5	81.3	68	60.1	47.1
1.5	3440	56HC	2Y/Y	1.99	20	1.59	16	2.29	175	250	84.0	85.1	84.7	84	86.2	77.8
1.5	3440	143TC	2Y/Y	1.99	20	1.59	16	2.29	175	250	84.0	85.1	84.7	84	86.2	77.8
1.5	1720	56HC	2Y/Y	2.06	20	1.64	16	4.59	250	280	86.5	86.4	85.1	79	75.5	63.5
1.5	1720	145TC	2Y/Y	2.06	20	1.64	16	4.59	250	280	86.5	86.4	85.1	79	75.5	63.5
1.5	1175	182TC	2Y/Y	2.29	20	1.83	16	6.71	165	250	87.5	87.3	88.4	70	67.3	54.4
2	3430	56HC	2Y/Y	2.55	25	2.04	20	3.07	170	240	85.5	86.2	86.1	86	89.2	82.7
2	3430	145TC	2Y/Y	2.55	25	2.04	20	3.07	170	240	85.5	86.2	86.1	86	89.2	82.7
2	1720	56HC	2Y/Y	2.71	25	2.16	20	6.11	235	270	86.5	86.8	86.3	80	76.8	65.2
2	1720	145TC	2Y/Y	2.71	25	2.16	20	6.11	235	270	86.5	86.8	86.3	80	76.8	65.2
2	1170	184TC	2Y/Y	2.90	25	2.32	20	8.99	160	240	88.5	88.3	86.5	73	69.2	56.4
3	3455	145TC	2Y/Y	3.78	32	3.02	26	4.57	160	230	86.5	86.9	85.9	86	89.7	83.3
3	3510	182TC	2Y/Y	3.73	32	2.99	26	4.49	160	230	86.5	87.3	86.4	87	88.7	81.8
3	1725	145TC	2Y/Y	3.92	32	3.14	26	9.14	215	250	89.5	88.9	88.2	80	77.1	65.6
3	1765	182TC	2Y/Y	3.92	32	3.14	26	8.94	215	250	89.5	89.4	88.2	80	75.3	63.2
3	1170	184TC	2Y/Y	4.30	32	3.44	26	13.48	155	230	89.5	89.1	87.6	73	65.4	52.2
3	1175	213TC	2Y/Y	4.30	32	3.44	26	13.42	155	230	89.5	89.7	88.4	73	68.5	56.0
5	3500	184TC	2Y/Y	6.01	46	4.81	37	7.51	150	215	88.5	88.9	88.6	88	89.6	83.4
5	1760	184TC	2Y/Y	6.54	46	5.23	37	14.94	185	225	89.5	89.3	88.6	80	79.8	69.4
5	1170	215TC	2Y/Y	6.97	46	5.58	37	22.47	150	215	89.5	90.1	89.5	75	71.4	59.4
7.5	3520	213TC	2Δ/Δ	8.82	63.5	7.05	51	11.20	140	200	89.5	89.8	89.5	89	90.0	84.6
7.5	1760	213TC	2Δ/Δ	9.12	63.5	7.29	51	22.41	175	215	91.7	91.6	91.1	84	81.9	73.1
7.5	1170	254TC	2Δ/Δ	10.29	63.5	8.23	51	33.70	180	220	91.0	91.2	90.5	75	69.5	57.5
10	3520	215TC	2Δ/Δ	11.53	81	9.23	65	14.94	135	200	90.2	90.8	90.3	90	91.7	87.8
10	1760	215TC	2Δ/Δ	12.16	81	9.72	65	29.87	165	200	91.7	91.9	91.4	84	83.6	75.8
10	1170	256TC	2Δ/Δ	13.54	81	10.83	65	44.94	170	220	91.0	91.4	90.6	76	70.9	58.7

Note:

1. The above are typical values based on test, per IEEE 112-method B.
2. For current of 230V, multiple the current of 460V by 2.

ALL DATA SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

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PERFORMANCE DATA

NEMA STAINLESS STEEL MOTORS

Totally Enclosed Fan Cooled, Squirrel Cage,
NEMA Design B 3-phase 60Hz 208-230/460V
1.15 S.F., Class F Insulation, 40 Deg. C Ambient

HP	Full load r/min	Frame	Conn.	Current at 460V		Current at 575V		Torque			Efficiency			Power Factor		
				Full load (A)	Locked Rotor (A)	Full load (A)	Locked Rotor (A)	Full load (LB-FT)	Locked Rotor %	Break down %	Full load %	3/4 load %	1/2 load %	Full load %	3/4 load %	1/2 load %
1/4	3405	56C	2Y/Y	0.42	10	0.33	8	0.39	230	275	70.0	71.4	69.6	80	80.4	69.6
1/4	1740	56C	2Y/Y	0.46	10	0.37	8	0.76	300	300	74.0	74.7	72.0	69	64.9	51.7
1/4	1140	56C	2Y/Y	0.56	10	0.44	8	1.15	175	265	68.0	69.7	66.1	62	54.7	42.5
1/3	3405	56C	2Y/Y	0.54	10	0.43	8	0.51	230	275	71.0	73.6	71.4	81	78.2	66.5
1/3	1735	56C	2Y/Y	0.58	10	0.46	8	1.00	300	300	76.0	76.5	73.0	70	65.2	51.8
1/3	1140	56C	2Y/Y	0.70	10	0.55	8	1.52	175	265	70.0	72.7	69.7	64	56.2	43.8
1/2	3425	56C	2Y/Y	0.77	10	0.62	8	0.77	230	275	74.0	77.0	74.9	82	80.1	69.1
1/2	1730	56C	2Y/Y	0.82	10	0.66	8	1.52	250	300	77.0	77.8	75.9	74	69.6	56.5
1/2	1135	56C	2Y/Y	0.96	10	0.77	8	2.32	175	265	74.0	75.9	73.5	66	59.0	46.3
3/4	3410	56C	2Y/Y	1.12	12.5	0.90	10	1.16	200	275	75.5	78.1	76.9	83	81.8	71.3
3/4	3410	143TC	2Y/Y	1.12	12.5	0.90	10	1.16	200	275	75.5	78.1	76.9	83	81.8	71.3
3/4	1725	56C	2Y/Y	1.22	12.5	0.97	10	2.29	275	300	78.0	79.4	78.0	74	71.1	58.4
3/4	1725	143TC	2Y/Y	1.22	12.5	0.97	10	2.29	275	300	78.0	79.4	71.1	74	78.0	58.4
3/4	1135	56HC	2Y/Y	1.36	12.5	1.09	10	3.47	175	275	77.0	79.7	77.6	67	60.1	47.2
3/4	1135	143TC	2Y/Y	1.36	12.5	1.09	10	3.47	175	275	77.0	79.7	77.6	67	60.1	47.2

Note:

For current of 230V, multiple the current of 460V by 2.

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PERFORMANCE DATA

NEMA STAINLESS STEEL MOTORS

Totally Enclosed Non-Ventilated, Squirrel Cage,
NEMA Design B 3-phase 60Hz 208-230/460V
1.15 S.F., Class F Insulation, 40 Deg. C Ambient

HP	Full load r/min	Frame	Conn.	Current at 460V		Current at 575V		Torque			Efficiency			Power Factor		
				Full load (A)	Locked Rotor (A)	Full load (A)	Locked Rotor (A)	Full load (LB-FT)	Locked Rotor %	Break down %	Full load %	3/4 load %	1/2 load %	Full load %	3/4 load %	1/2 load %
1/4	3405	56C	2Y/Y	0.42	10	0.33	8	0.39	230	275	70.0	71.4	69.6	80	80.4	69.6
1/4	1740	56C	2Y/Y	0.46	10	0.37	8	0.76	300	300	74.0	74.7	72.0	69	64.9	51.7
1/4	1140	56C	2Y/Y	0.56	10	0.44	8	1.15	175	265	68.0	69.7	66.1	62	54.7	42.5
1/3	3405	56C	2Y/Y	0.54	10	0.43	8	0.51	230	275	71.0	73.6	71.4	81	78.2	66.5
1/3	1735	56C	2Y/Y	0.58	10	0.46	8	1.00	300	300	76.0	76.5	73.0	70	65.2	51.8
1/3	1140	56C	2Y/Y	0.70	10	0.55	8	1.52	175	265	70.0	72.7	69.7	64	56.2	43.8
1/2	3425	56C	2Y/Y	0.77	10	0.62	8	0.77	230	275	74.0	77.0	74.9	82	80.1	69.1
1/2	1730	56C	2Y/Y	0.82	10	0.66	8	1.52	250	300	77.0	77.8	75.9	74	69.6	56.5
1/2	1135	56C	2Y/Y	0.96	10	0.77	8	2.32	175	265	74.0	75.9	73.5	66	59.0	46.3
3/4	3410	56C	2Y/Y	1.12	12.5	0.90	10	1.16	200	275	75.5	78.1	76.9	83	81.8	71.3
3/4	3410	143TC	2Y/Y	1.12	12.5	0.90	10	1.16	200	275	75.5	78.1	76.9	83	81.8	71.3
3/4	1725	56C	2Y/Y	1.22	12.5	0.97	10	2.29	275	300	78.0	79.4	78.0	74	71.1	58.4
3/4	1725	143TC	2Y/Y	1.22	12.5	0.97	10	2.29	275	300	78.0	79.4	71.1	74	78.0	58.4
3/4	1135	56HC	2Y/Y	1.36	12.5	1.09	10	3.47	175	275	77.0	79.7	77.6	67	60.1	47.2
3/4	1135	143TC	2Y/Y	1.36	12.5	1.09	10	3.47	175	275	77.0	79.7	77.6	67	60.1	47.2
1	3440	56HC	2Y/Y	1.45	15	1.16	12	1.53	185	250	77.0	81.1	79.7	84	85.0	75.5
1	3440	143TC	2Y/Y	1.45	15	1.16	12	1.53	185	250	77.0	81.1	79.7	84	85.0	75.5
1	1725	56HC	2Y/Y	1.46	15	1.17	12	3.05	275	300	85.5	84.8	83.2	75	71.9	59.2
1	1725	143TC	2Y/Y	1.46	15	1.17	12	3.05	275	300	85.5	84.8	83.2	75	71.9	59.2
1	1135	56HC	2Y/Y	1.67	15	1.34	12	4.63	170	265	82.5	82.5	81.3	68	60.1	47.1
1	1135	145TC	2Y/Y	1.67	15	1.34	12	4.63	170	265	82.5	82.5	81.3	68	60.1	47.1
1.5	1720	56HC	2Y/Y	2.06	20	1.64	16	4.59	250	280	86.5	86.4	85.1	79	75.5	63.5
1.5	1720	145TC	2Y/Y	2.06	20	1.64	16	4.59	250	280	86.5	86.4	85.1	79	75.5	63.5
2	1720	56HC	2Y/Y	2.71	25	2.16	20	6.11	235	270	86.5	86.8	86.3	80	76.8	65.2
2	1720	145TC	2Y/Y	2.71	25	2.16	20	6.11	235	270	86.5	86.8	86.3	80	76.8	65.2

Note:

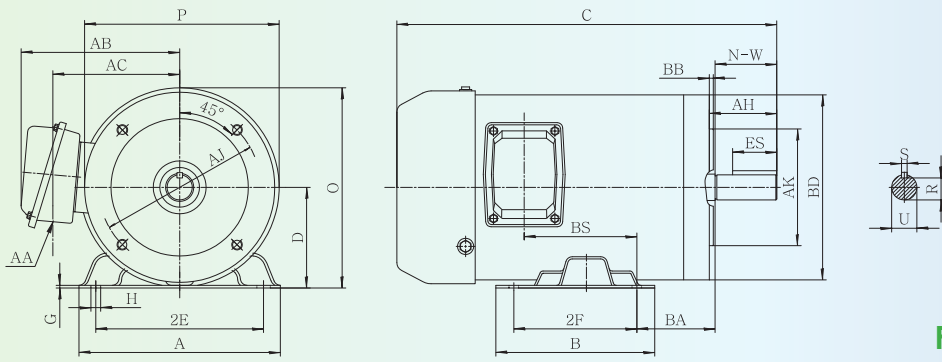
For current of 230V, multiple the current of 460V by 2.

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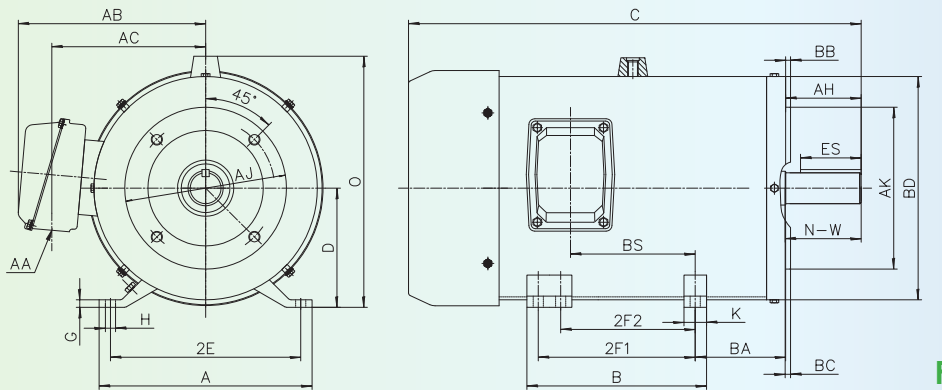
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DIMENSION

TEFC

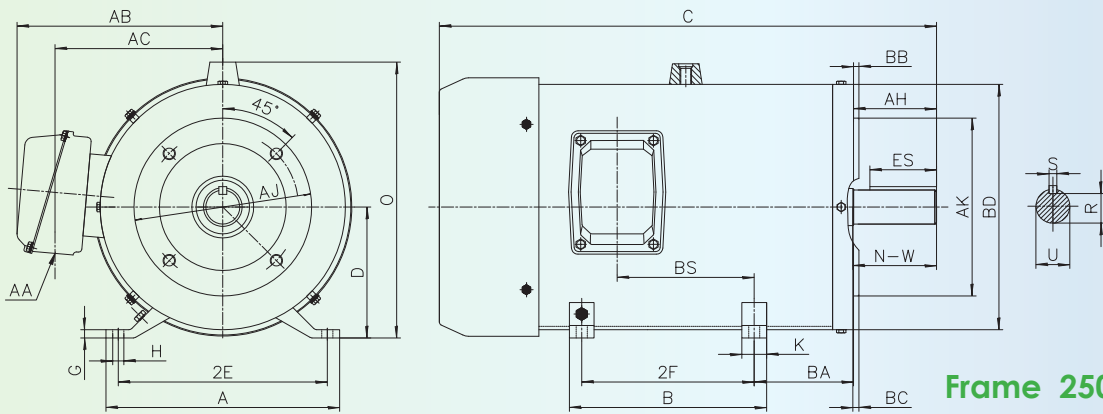


Frame 56-140T



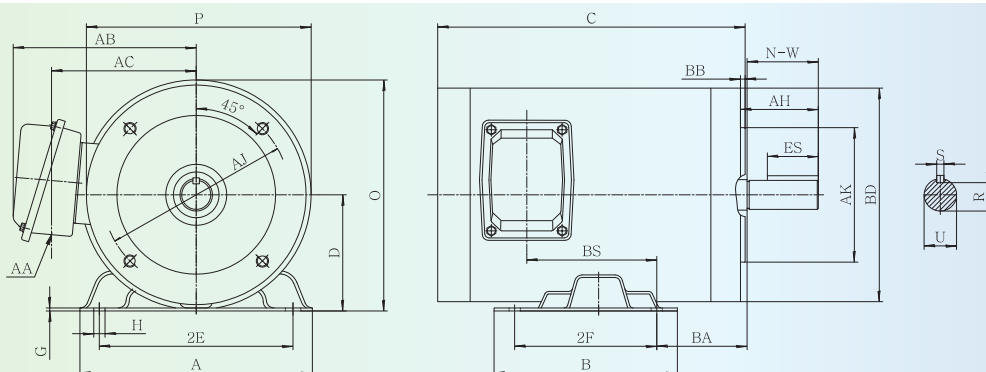
Frame 180-210T

Note : 2F1 is the 2F dimension for 184T&215T; 2F2 is the 2F dimension for 182T&213T



Frame 250T

TENV



NEMA PREMIUM EFFICIENCY OR HIGH EFFICIENCY

FRAME	MOUNTING			A	B	C		D	G	H	O	P	R	S	BS	SHAFT EXTENSION			Approx. WT. (lb)
	2E	2F	BA			TEFC	TENV									N-W	U	V	
56C	4.88	3.0	2.75	6.5	5.0	12.5	10.5	3.5	0.118	0.34	6.8	7.0	0.517	0.188	3.3	1.88	0.625	2.0	34
56HC	4.88	5.0	2.75	6.5	6.5	14.0	12.0	3.5	0.118	0.34	6.8	7.0	0.517	0.188	3.3	1.88	0.625	2.0	48
56HC4						16.0	14.0												
143TC	5.5	4.0	2.75	6.5	5.0	13.4	11.4	3.5	0.118	0.34	6.8	7.0	0.771	0.188	3.3	2.25	0.875	2.0	41
145TC	5.5	5.0	2.75	6.5	6.5	14.2	12.2	3.5	0.118	0.34	6.8	7.0	0.771	0.188	4.05	2.25	0.875	2.0	46
145TC2-2						16.2	14.2								49				
145TC3-4						6.02	59												
182TC-2	7.5	4.5	3.5	8.6	6.7	17.3	-	4.5	0.394	0.41	9.2	8.9	0.986	0.25	5.16	2.75	1.125	2.5	84
184TC-2	7.5	5.5	3.5	8.6	6.7	17.9	-	4.5	0.394	0.41	9.2	8.9	0.986	0.25	6.54	2.75	1.125	2.5	92
184TC2-6																			83
182TC-4/6	7.5	4.5	3.5	8.6	6.7	16.5	-	4.5	0.394	0.41	9.3	8.9	0.986	0.25	4.96	2.75	1.125	2.5	86
184TC-4/6	7.5	5.5	3.5	8.6	6.7	17.1	-	4.5	0.394	0.41	9.3	8.9	0.986	0.25	5.75	2.75	1.125	2.5	93
213TC	8.5	5.5	4.25	9.6	8.2	20.5	-	5.25	0.394	0.41	11.0	10.2	1.201	0.312	4.17	3.38	1.375	3.12	148
215TC	8.5	7.0	4.25	9.6	8.2	22	-	5.25	0.394	0.41	11.0	10.2	1.201	0.312	5.67	3.38	1.375	3.12	180
254TC	10.0	8.25	4.75	11.2	9.45	23.8	-	6.25	0.394	0.53	13.2	12.3	1.416	0.375	6.97	4.0	1.625	3.75	256
256TC	10.0	10.0	4.75	11.2	12.2	25.4	-	6.25	0.394	0.53	13.2	12.3	1.416	0.375	8.54	4.0	1.625	3.75	300

FRAME	AJ	AK	BA	MIN BB	BC	MAX BD	NUMBER OF HOLE	SCREW	DEPTH OF HOLE	U	AH	AB	AC	AA	Key seat			BEARINGS	
															R	ES	S	D.E.	O.D.E.
56C. 56HC	5.875	4.5	2.75	0.16	-0.19	6.5	4	3/8-16	-	0.625	2.06	6.5	4.92	0.59	0.517	1.41	0.188	6205	6205
143TC. 145TC	5.875	4.5	2.75	0.16	+0.12	6.5	4	3/8-16	0.56	0.875	2.12	6.5	4.92	0.59	0.771	1.41	0.188	6205	6205
182TC.184TC	7.25	8.5	3.50	0.25	+0.12	9.0	4	1/2-13	0.75	1.125	2.62	7.1	5.75	0.78	0.986	1.78	0.250	6306	6306
213TC.215TC	7.25	8.5	4.25	0.25	+0.25	9.0	4	1/2-13	0.75	1.375	3.12	8.27	6.69	0.78	1.201	2.41	0.312	6208	6208
254TC.256TC	7.25	8.5	4.75	0.25	+0.25	10.0	4	1/2-13	0.75	1.625	3.75	9.85	8.27	0.98	1.416	2.91	0.375	6309	6309

Note:

1. Dimensions are in inches.

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Tatung headquarters was established in 1918 in Taiwan, which has produced motors since 1949. Tatung (Shanghai) Co., LTD. was established in Shanghai in 1998 and mainly manufactures energy-saving products like motors, generators and solar power energy systems that services the local and overseas markets.