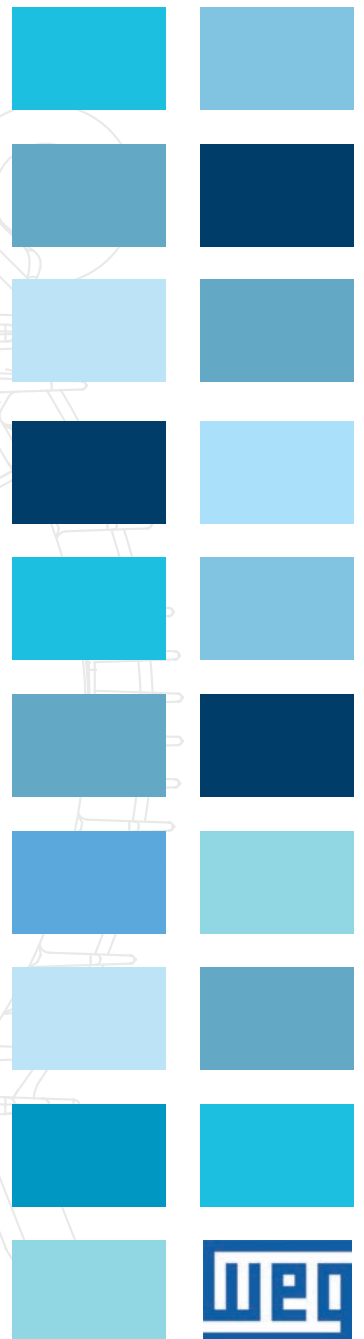


WEG Standard Product Catalog

VFDs, Parts and Modifications

2020



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NEMA FRAME		48 / 56 / 140T / 180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580T	
IEC FRAME		63 / 71 / 80 / 90 / 100L/112	132S/M	160M/L	180M/L	200M/L	225S/M	250S/M	280S/M	315S/M	355M/L	
REPLATE	ADD CUSTOMER PART NUMBER AND / OR OTHER CHANGES SUCH AS VOLTAGE, HZ, ETC.											
MOD. NUMBER	NAMEPLATE											
N-10	Main Nameplate Change - Stainless Steel	NET	25	25	25	25	25	25	25	25	25	25
N-20	Additional Nameplate - Stainless Steel	NET	25	25	25	25	25	25	25	25	25	25
N-25	Additional Rating/Service - Adhesive Mylar only	NET	25	25	25	25	25	25	25	25	25	25

ELECTRICAL ADD-ON'S		INSTALLATION OF SPACE HEATERS, THERMISTORS, THERMOSTATS & EXTENDING MOTOR LEADS											
NEMA FRAME		48 / 56 / 140T / 180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580T		
IEC FRAME		63 / 71 / 80 / 90 / 100L/112	132S/M	160M/L	180M/L	200M/L	225S/M	250S/M	280S/M	315S/M	355M/L		
E-25	120V Space heater - XP motors	LIST	1010.00	1012.00	1103.00	1104.00	1104.00	1107.00	1197.00	1202.00	1202.00	1206.00	
E-26	240V Space heater - XP motors	LIST	1010.00	1012.00	1103.00	1104.00	1104.00	1107.00	1197.00	1202.00	1202.00	1206.00	
E-30	120V Space Heater	LIST	204.09	206.55	297.34	299.45	299.45	302.26	393.04	398.64	398.64	403.92	
E-40	240V Space Heater (Operating on 240V)	LIST	204.09	206.55	297.34	299.45	299.45	302.26	393.04	398.64	398.64	403.92	
E-50	240V Space Heater (Operating on 120V)	LIST	217.32	221.23	312.01	315.36	315.36	319.83	410.61	419.55	419.55	427.93	
E-55	Bearing RTDS (DE and NDE)	LIST	N/A	N/A	N/A	N/A	1446.01	1446.01	1446.01	1446.01	1446.01	1446.01	
E-60	Winding RTD's 100 Ohm Platinum (One Per phase - 3 lead PT100's)	LIST	792.77	792.77	792.77	792.77	792.77	883.55	883.55	883.55	883.55	974.33	
E-70	Thermistors (One per phase @155°C)	LIST	301.54	301.54	301.54	301.54	301.54	392.32	392.32	392.32	392.32	483.10	
E-80	Thermostats (One per phase @155°C)	LIST	167.25	167.25	287.99	287.99	287.99	378.77	378.77	378.77	378.77	445.04	
E-95	Provision for vibration detector (drilled and tapped)	LIST	N/A	N/A	363.13	363.13	363.13	363.13	363.13	363.13	363.13	363.13	
E-99	Installation of Stubshaft Only - (Only valid for NEMA Premium® 280T & above) 5/8" stub shaft	LIST	N/A	N/A	N/A	345.00	345.00	345.00	475.00	475.00	475.00	475.00	
E-100	Installation of Encoder - (Only valid for NEMA Premium® 280T & above) Dynapar HSD38 1024PPR & 5/8" stub shaft	LIST	N/A	N/A	N/A	1201.12	1201.12	1201.12	1291.90	1291.90	1291.90	1291.90	
E-105	Installation of Encoder on VECTOR DUTY MOTORS (FRAMES 140- 250 - Dynapar HSD38 1024PPR with 5/8" bore)	LIST	949.02	949.02	949.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
E-110	MODIFY BRAKE RECTIFIER TO ACCEPT 460V	LIST	164.16	164.16	164.16	164.16	N/A	N/A	N/A	N/A	N/A	N/A	

C-FLANGE KIT		INSTALLATION OF C-FLANGE KITS											
C-80	Installation of C-FLANGE (IEC)	LIST	343.13	343.13	343.13	558.83	558.83	558.83	1530.39	1530.39	1530.39	1530.39	
C-90	Installation of C-FLANGE (TEFC - GEN PRP)	LIST	302.63	302.63	302.63	558.83	558.83	558.83	1530.39	1530.39	1530.39	1530.39	
C-105	Installation of C-FLANGE (IEEE-841)	LIST	471.20	471.20	471.20	602.01	602.01	602.01	1530.39	1530.39	1530.39	1530.39	
C-110	Installation of C-FLANGE (XP)	LIST	432.42	478.07	542.25	756.28	954.95	1005.92	1042.99	1128.38	N/A	N/A	
C-120	Installation of C-FLANGE (ODP)	LIST	388.27	388.27	388.27	642.37	642.37	642.37	1222.32	1222.32	N/A	N/A	

NEMA FRAME	48 / 56 / 140T / 180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580T
IEC FRAME	63 / 71 / 80 / 90 / 100L/112	132S/M	160M/L	180M/L	200M/L	225S/M	250S/M	280S/M	315S/M	355M/L

D-FLANGE KIT		INSTALLATION OF D-FLANGE KITS											
D-120	Installation of D-FLANGE (IEC)	LIST	410.64	410.64	434.25	737.01	737.01	737.01	737.01	1105.00	1105.00	1105.00	1105.00
D-130	Installation of D-FLANGE (TEFC - GEN PRP)	LIST	416.79	416.79	416.79	743.52	743.52	743.52	743.52	1448.27	1448.27	1448.27	1448.27
D-135	Installation of D-FLANGE (IEEE-841)	LIST	N/A	429.05	429.05	743.52	743.52	743.52	743.52	1448.27	1448.27	1448.27	1448.27
D-140	Installation of D-FLANGE (XP)	LIST	484.25	484.25	484.25	905.08	905.08	905.08	905.08	1286.01	1286.01	N/A	N/A
D-150	Installation of D-FLANGE (ODP)	LIST	N/A	N/A	444.30	527.96	723.74	815.89	919.75	1160.84	N/A	N/A	N/A

DRIP COVERS		INSTALLATION OF DRIP COVER (RAIN CAP)										
DC-160	Drip Cover (TEFC / XP)	LIST	254.58	277.07	320.25	363.44	406.59	484.19	681.01	825.45	1058.13	1290.78
DC-170	Drip Cover (ODP)	LIST	276.50	280.53	305.03	328.70	406.01	479.48	570.26	657.97	N/A	N/A

COOLING		ALUMINUM FAN MATERIAL CHANGE OUT AND INSTALLATION OF BLOWER KIT (FORCED VENTILATION)										
F-180	Fan Material (ALUMINUM) Note #4	LIST	1250.55	1287.15	1287.15	1315.82	1422.28	1627.06	1717.84	1867.77	2147.10	3174.81
F-190	Forced Ventilation: Blower Cooling (w/o Encoder) (Not valid for 48 & 56 frames)	LIST	1258.63	1371.79	1439.89	1485.12	1593.32	1797.63	1797.63	2186.87	2452.77	2478.41
F-195	Forced Ventilation: Blower Cooling (w/ Encoder) (Not valid for 48 & 56 frames)	LIST	4337.60	4624.41	4782.99	4896.15	4950.84	5495.06	5955.95	6552.15	6817.40	7417.96
F-200	Cast Iron Fan Cover	List	159.50	144.80	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard

continued on next page

NEMA FRAME		48 / 56 / 140T / 180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580T	
IEC FRAME		63 / 71 / 80 / 90 / 100L/112	132S/M	160M/L	180M/L	200M/L	225S/M	250S/M	280S/M	315S/M	355M/L	
BEARINGS	BEARING CHANGE OUTS & SHAFT GROUNDING MODIFICATION											
B-200	Ball to Roller Bearing Conversion Note #3 & #5	LIST	N/A	N/A	527.09	616.23	645.92	1024.27	1337.85	1812.35	1890.17	1890.17
B-210	Roller to Ball conversion Note #3 & #6	LIST	N/A	N/A	N/A	N/A	N/A	N/A	1270.28	1636.34	1636.34	1636.34
B-220	Convert to Insulated Bearing - NDE ONLY	LIST	564.72	568.44	673.10	852.65	852.65	1347.85	1347.85	1721.28	1888.88	1888.88
B-225	Convert to 2RS (sealed bearings)	LIST	210.73	221.40	277.54	312.21	346.87	835.42	1077.96	N/A	N/A	N/A
B-230*	External AEGIS shaft Grounding Ring - DE ONLY	LIST	258.44	258.44	258.44	262.57	262.57	273.74	273.74	402.23	530.73	871.87
B-231*	Internal AEGIS Ring for W22 w/o a Flange	LIST	N/A	N/A	582.00	590.00	610.00	782.00	893.00	1143.00	N/A	N/A
B-232*	Internal AEGIS Ring for W22 with any Flange	LIST	336.00	366.00	582.00	590.00	610.00	782.00	893.00	1143.00	N/A	N/A
B-233*	Internal AEGIS Ring for W22 JP/JM	LIST	N/A	N/A	582.00	590.00	610.00	782.00	893.00	1143.00	N/A	N/A
B-234*	Internal AEGIS Ring for W22-IEEE 841 (All Mtg)	LIST	355.00	366.00	582.00	590.00	610.00	782.00	893.00	1143.00	N/A	N/A
B-235*	Internal AEGIS Ring for ODP w/o Flange	LIST	N/A	N/A	N/A	N/A	N/A	782.00	893.00	1143.00	N/A	N/A
B-236*	Internal AEGIS Ring for ODP with C-Flange	LIST	N/A	N/A	501.00	N/A	N/A	782.00	893.00	1143.00	N/A	N/A
B-237*	Internal AEGIS Ring for ODP JP/JM	LIST	N/A	N/A	501.00	N/A	N/A	782.00	893.00	1143.00	N/A	N/A
B-240*	Spring Loaded Grounding Brush - DE Only	LIST	205.45	205.45	205.45	214.53	214.53	214.53	234.64	321.79	321.79	321.79
B-250*	Installation of Helwig Grounding Brush (Includes Brush and Brush Holder - DE only)	LIST	N/A	N/A	N/A	N/A	N/A	316.56	316.56	341.12	341.12	341.12
B-255	High Frequency Terminal Box Grounding Strap (For use with VFD driven motors)	LIST	486.00	486.00	486.00	486.00	486.00	486.00	608.00	608.00	608.00	608.00
B-260	Insulated ODE End Bell conversion (TEFC 360 frames and above - W22 only)	LIST	N/A	N/A	N/A	N/A	N/A	883.87	1177.85	1474.36	1581.09	1834.53
B-270	Low Temp Bearing Grease change out (Aeroshell 22 Low Temp Grease / -50°C to 50°C) - Requires bearings change out	LIST	N/A	N/A	370.34	474.47	509.78	946.26	1036.82	1777.46	1777.46	1830.08
B-280	High Temp Bearing Grease change out (Dow Corning 44 High Temp Grease / -20°C to 90°C) - Requires Bearing Change out	LIST	N/A	N/A	370.34	474.47	509.78	946.26	1036.82	1777.46	1777.46	1830.08

*DIV2 removed from nameplate

NEMA FRAME	48 / 56 / 140T	180 / 210T	250T	280T	320T	360T	400T	440T	L440/500	580T
IEC FRAME	63 / 71 / 80 / 90 / 100L	112 / 132S/M	160M/L	180M/L	200M/L	225S/M	250S/M	280S/M	315S/M	355M/L

MOUNTING	TERMINAL BOX											
M-280	F1 to F2 Mounting Conversion (Cast Iron 3 phase motors only)	LIST	136.17	136.17	181.56	181.56	181.56	181.56	272.35	272.35	272.35	272.35
M-290	Convert Footed Motor to Round Body (Cast Iron Only)	LIST	544.69	544.69	544.69	544.69	544.69	635.47	635.47	635.47	817.04	817.04
M-300	Auxiliary terminal box (Not valid for 48 & 56 frames)	LIST	188.33	188.33	204.70	204.70	204.70	214.18	214.18	214.18	214.18	214.18
M-310	Dual Auxiliary Terminal Box Configuration (Separating Temp. Sensors and Space heaters if specified)	LIST	N/A	N/A	N/A	N/A	N/A	352.21	352.21	352.21	352.21	352.21
M-320	Install terminal block in terminal box (Cast Iron 3 Phase only - leads not connected)	LIST	244.58	258.29	285.07	285.07	337.67	532.11	532.11	643.62	736.42	736.42

ENVIRONMENTAL	ENVIRONMENTAL CONDITIONS											
EV-300	Stainless Steel Breather Drains	LIST	328.21	328.21	418.99	418.99	418.99	509.78	509.78	509.78	600.56	600.56
EV-310	Stainless Steel Hardware (Only external bolts - End bell, Terminal box cover & Fan cover)	LIST	551.68	551.68	551.68	551.68	621.51	621.51	621.51	621.51	782.12	782.12
EV-320	Grounding Provisions on Frame (TEFC cast iron only)	LIST	251.40	251.40	251.40	251.40	382.68	382.68	382.68	Standard	Standard	Standard
EV-330	Tropicalization/Anti-Fungal Protection	LIST	178.07	223.46	223.46	265.36	356.15	356.15	488.83	488.83	488.83	488.83
EV-335	IP56 Modification (GEN PRP TEFC / IEC)	LIST	1031.01	1031.01	1031.01	1031.01	1031.01	1121.79	1121.79	1121.79	1121.79	1121.79
EV-340	IP56 Modification (IEEE 841)	LIST	81.00	93.00	128.00	186.00	244.00	314.00	372.00	430.00	430.00	430.00
EV-342	IP65 Modification (IEEE 841)	LIST	98.00	112.00	154.00	223.00	293.00	377.00	447.00	517.00	517.00	517.00
EV-345	IP56 Modification (XP)	LIST	98.00	112.00	154.00	223.00	293.00	377.00	447.00	517.00	517.00	517.00
EV-350	Sealant on Joints	LIST	198.32	198.32	198.32	198.32	305.87	305.87	305.87	413.41	413.41	413.41
EV-360	External Epoxy Paint (per below color chart only)	LIST	620.11	620.11	620.11	801.68	801.68	801.68	1240.22	1240.22	1240.22	1240.22
EV-380	Top Coat Paint Color Change (per below color chart only)	LIST	396.65	396.65	396.65	520.95	520.95	520.95	645.25	645.25	645.25	645.25
EV-390	FIN-FAN Modification (IEEE 841 motors only)	LIST	572.00	608.00	723.00	812.00	812.00	1110.00	N/A	N/A	N/A	N/A
EV-400	Addition of Rodent Screens (Cast iron ODP motors only)	LIST	N/A	N/A	740.00	971.00	971.00	971.00	971.00	971.00	971.00	971.00

Notes:

1. CONSIDER TENV VECTOR DUTY MOTOR (If rating is available) = **%
2. NOT AVAILABLE AS MODIFICATION = N/A
3. CONTACT FOR QUOTE WITH LOAD DATA FOR EVALUATION
4. MACHINING REQUIRED
5. ROLLER BEARINGS SIZES NOT AVAILABLE FOR 210T FRAMES AND SMALLER
6. STOCK PRODUCT NOT AVAILABLE WITH ROLLER BEARINGS BELOW NEMA 400T
7. PRICING IS SUBJECT TO FUTURE UPDATES THAT MAY ALTER WHAT IS REFLECTED IN PRINTED MATERIALS.

AVAIL TOP COAT COLORS

RAL 5009 - BLUE
MUNSELL N1 - BLACK
RAL 6002 - GREEN
RAL 7022 - DARK GRAY
RAL 9010 - WHITE
RAL 3002 - RED

BEARINGS

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580
IEC Frame Series	-	-	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
Ball to Roller (IV, VI, VIII P) D.E.:	n/a	n/a	n/a	n/a	n/a	566	645	772	863	974	n/a	n/a	n/a	n/a
ZZ Bearings (Double shielded): Added when manufacturing	std	std	std	std	std	std	96	321	632	n/a	n/a	n/a	n/a	n/a
2 RS Bearing (D.E. and N.D.E.) Added when manufacturing	38	38	38	38	61	67	207	293	973	1364	n/a	n/a	n/a	n/a
Insulated (Hybrid) NDE Bearing	n/a	n/a	n/a	417	671	700	2163	2318	2755	n/a	n/a	n/a	n/a	n/a
Insulated Bearing Housing NDE Endshield	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1064	1239	1539	1539	2265

COOLING

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580
IEC FRAME SERIES			63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
Fan Material : - Aluminum Added when manufacturing	n/a	n/a	n/a	64	110	118	132	151	175	218	255	298	348	n/a
Fan Material : - Cast Iron Added when manufacturing	n/a		n/a	34	50	61	79	107	112	185	185	216	300	527
Fan Material : - Bronze Added when manufacturing	n/a	n/a	n/a	238	532	865	1068	1,493	1,508	2,627	2,627	2,627	2,627	2,971
Forced Ventilation (TEBC) :	n/a	n/a	n/a	1,406	1,513	1,575	1,965	2,286	2,448	2,921	3,139	4,275	5,773	7,383
TEAO Added when manufacturing	54	54	54	54	81	94	97	176	176	370	370	380	439	520
Drip Cover Added when manufacturing	21	21	55	55	58	82	98	141	166	191	191	234	234	330
Textile Fan Cover Added when manufacturing	n/a	n/a	n/a	61	63	90	108	156	183	220	220	n/a	n/a	n/a

DEGREE OF PROTECTION

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580
IEC FRAME SERIES	-	-	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
TEFC IP55 with Lip Seal	33	33	33	33	58	76	95	113	132	151	175	213	249	502
TEFC IP55 with Oil Seal	n/a	n/a	55	55	85	104	112	133	143	171	200	231	268	-
TEFC IP55 with Labyrinth seal or Nilos Ring	n/a	n/a	196	196	220	220	299	315	354	463	511	511	579	1380
TEFC IP56 w/ Oil Seals	n/a	n/a	n/a	75	118	176	267	383	498	441	655	1724	2041	-
TEFC IP56 w/ W3Seals (labyrinth)	n/a	n/a	n/a	230	277	401	501	643	861	825	1023	2143	2674	3815
TEFC IP65 w/ Oil Seals	n/a	n/a	n/a	75	118	176	267	383	498	441	655	1724	2041	-
TEFC IP65 w/ Taconite (labyrinth) Seals	n/a	n/a	n/a	167	205	303	398	528	709	659	857	1954	2394	3366
TEFC IP65 w/ W3seals (labyrinth)	n/a	n/a	n/a	230	277	401	501	643	861	825	1023	2143	2674	3815
TEFC IP66 w/ W3seals (labyrinth)	n/a	n/a	n/a	273	344	496	662	853	1112	1185	1515	3310	4009	5687

ELECTRICAL SPECIAL FEATURES - Added when manufacturing

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580
IEC FRAME SERIES	-	-	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
Thermistors (1/phase) PTC:	n/a	n/a	142	142	142	142	142	142	142	142	142	142	142	142
Thermostats (1/phase) NC:	n/a	n/a	142	142	142	142	142	142	142	142	142	142	142	142
Bearing RTD's PT100 (1/bearing)	n/a	n/a	n/a	n/a	n/a	n/a	1215	1215	1215	1215	1215	1215	1215	1215
Winding RTD's PT100 (1/phase):	n/a	n/a	1052	1052	1052	1052	1052	1052	1052	1052	1052	1052	1052	1052
Space Heater	n/a	n/a	37	37	37	37	54	54	54	109	109	109	109	217
Class of Insulation : -"F"	Add 5% to motor list price									Add 3% to motor list price				
Class of Insulation : -"H"	Add 10% to motor price													
Epoxy varnish impregnation Enclosed motors only	Add 5% to motor price													
Above 600 V (1000 Max.)	Add 10% to motor price													

FLANGES

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580	
IEC FRAMES SERIES	-	-	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355	
FLANGE TYPE	Enclosure		List Price												
"C" Flange	TEFC	28	28	28	28	38	51	68	99	121	442	491	606	716	1,623
	ODP	28	28	-	34	38	51	68	85	100	394	446	560	-	-
	Explosion Proof	-	-	61	61	70	76	103	147	182	665	736	1,384	1,384	-
"D" Flange	TEFC	-	-	50	59	70	79	117	136	192	637	762	915	1,051	1,863
	ODP	-	-	-	-	-	-	107	126	170	537	685	855	-	-
	Explosion Proof	-	-	-	89	89	103	130	189	246	736	1,067	1,311	1,577	2,364

PAINTING PLANS Factory Build Adder

NEMA FRAME SERIES	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/500	580
IEC FRAMES SERIES	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
Painting Plan	List Price											
202	45	58	94	120	196	228	246	308	335	402	447	745
203	58	85	138	188	290	344	384	509	553	696	808	1,269
211	106	114	133	228	467	547	597	775	828	1,003	1,075	1,113
212	122	133	171	277	585	692	779	1,026	1,121	1,410	1,577	1,661
Internal Epoxy Painting	45	58	94	120	196	228	246	308	335	402	447	745

Painting Plan Description

Painting Plan	Recommended Uses	Surface Preparation Grade	PRIMER		INTERMEDIATE		FINISH COAT		ADHERENCE GRADE ASTM
			Paint	Film Thickness (µm)	Paint	Film Thickness (µm)	Paint	Film Thickness (µm)	D-3359
201A	Non aggressive environments; Not recommended for direct exposure to solvents, alkalis and acid vapors	Sa 2 ½	Synthetic alkyd	20 – 55	-	-	Synthetic alkyd enamel	40 – 60	3B to 5B
202E	Aggressive sheltered industrial environments; Chemical, pulps and paper industries, resistant to acid steams, alkalis and solvents vapors	Sa 2 ½	Synthetic alkyd	20 - 55	Epoxy Isocyanate	20 - 30	Epoxy polyamide enamel	100 – 140	3A to 5A
202P	Aggressive sheltered or non-sheltered industrial environments; Chemical, mining, pulp and paper industries, resistant to acid steams, alkalis and solvents vapors; Indicated to food processing motors – USA and Europe	Sa 2 ½	Synthetic alkyd	20 - 55	Epoxy Isocyanate	20 - 30	1 coats Aliphatic polyurethane enamel	60 - 100	3A to 5A
203A	Environments low aggressiveness; Not recommended for direct exposure to solvents, alkalis and acid vapors	Sa 2 ½	Synthetic alkyd	20 – 55	Synthetic powdered alkyd	30 a 45	Synthetic alkyd enamel	30 – 45	3B to 5B
211E	Painting of equipment, structures in general subject to moderate and high aggressive level such as: pulp and paper plants, steel and iron and chemical industries	Sa 2 ½	Polyamide Epoxy	90 - 130	-	-	Polyamide Epoxy	90 - 130	3A to 5A
211P	Painting of equipment, structures in general subject to moderate and high aggressive level such as: pulp and paper plants, steel and iron and chemical industries	Sa 2 ½	Polyamide Epoxy	90 - 130	-	-	Aliphatic polyurethane enamel	65 – 90	3A to 5A
212E	Non sheltered marine environment; Resistant to acid, alkalis and solvent spills	Sa 2 ½	Zinc ethyl silicate	70 - 90	Epoxy polyamide	90 – 130	Polyamide Epoxy	90 – 130	3A to 5A
212P	Non sheltered marine environment; Resistant to acid, alkalis and solvent spills	Sa 2 ½	Zinc ethyl silicate	70 - 90	Epoxy polyamide	90 – 130	Aliphatic polyurethane enamel	65 – 90	3A to 5A

Special Shaft

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	500	580
IEC FRAMES SERIES	-	-	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
Second Shaft End (standard dimension)	n/a	n/a	60	72	87	101	104	189	189	392	396	407	752	879
Threaded center hole in the shaft end	n/a	n/a	33	33	41	51	85	136	155	std	std	std	-	-
420 Stainless steel shaft end	Add 10% to motor list price													
315 Stainless steel shaft end	Add 15% to motor list price													
Special Shaft														
Special Shaft Diameter (Type "A" mod)	n/a	n/a	58	58	87	130	151	189	209	392	396	407	752	879
Special Shaft Length (Type "B" mod)	n/a	n/a	63	63	96	113	120	208	216	446	450	473	821	987
Special Shaft Diameter & Length (Type "C" mod)	n/a	n/a	72	72	125	141	158	249	262	574	579	628	965	1117
Special Shaft Diameter, Length & Tapered (Type "D" mod)	n/a	n/a	79	79	130	156	174	271	288	646	654	716	1023	1254
Balance - Reduced	n/a	n/a	n/a	33	79	91	100	125	134	156	167	188	507	616
Balance - Special	n/a	n/a	n/a	58	87	133	159	180	217	250	283	317	846	1044

Terminal Box*

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/ 500	580
IEC FRAMES SERIES	-	-	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
Cable Gland - Plastic	n/a	n/a	10	10	14	14	22	22	22	-	-	-	-	-
Cable Gland - Brass	n/a	n/a	33	33	50	50	182	182	182	567	567	567	567	714
Threaded Plug	n/a	n/a	6	6	9	9	18	18	18	22	22	22	22	44
Terminal Block (6 pin):	n/a	n/a	9	9	14	23	23	41	41	197	197	380	380	753
Additional terminal box	n/a	n/a	n/a	30	30	41	41	41	41	59	59	59	70	118
Without Terminal Box	n/a	n/a	18	18	22	22	33	33	33	45	45	47	58	70

* Not valid for Hazardous Location Motors

Testing:

NEMA FRAME SERIES	48	56	-	140T	180T	210T	250T	280T	320T	360T	400T	440T	L440/ 500	380
IEC FRAMES SERIES	-	-	63 UP 80	90	100/112	132	160	180	200	225	250	280	315	355
Routine Test - Unwitnessed	-	-	381	381	381	513	513	513	513	622	622	718	877	877
Routine Test - Witnessed	-	-	1215	1215	1215	1427	1427	1427	1427	1683	1683	1903	2368	2368
Type Test - Unwitnessed	-	-	586	586	586	769	769	769	769	952	952	1208	1768	1768
Type Test - Witnessed	-	-	1419	1419	1419	1632	1632	1632	1632	1939	1939	2195	2318	2318
Vibration Test	-	-	183	183	183	205	205	205	205	285	285	403	559	559
Noise Level Test	-	-	213	213	213	242	242	242	242	322	322	462	638	638

Test Description:

Routine Test

- Winding resistance check (at cold)
- Locked Rotor test (torque, current and absorbed power)
- No-load test (current and absorbed power)
- Hi-pot
- Insulation resistance
- Accessories check for continuity (if applicable)

Type Test

- Winding resistance check (at cold)
- Locked Rotor test (torque, current and absorbed power)
- Load test, including temperature rise with constant output power at full load)
- Breakdown Torque test
- No-load test (current and absorbed power)
- Vibration test on motors 364/5T and above
- Hi-pot
- Insulation resistance
- Accessories check for continuity (if applicable)

Vibration Test

- Vibration measure on as many as 6 points, depending on the mechanical envelope of the motor allowing access to all the reading points
- Test performed with half key on the shaft
- Performed with motor on an elastic mounting base (rigid base when requested)

Noise Test

- Performed at no load on an acoustic chamber
- Measurements at 1m (~ 3.3ft) distance from the motor
- Readings:
 - Total sound pressure level of the motor at 4 points, in dB(A)
 - Bearings sound pressure level in dB(A)
 - Frequency spectrum of the global noise for the point with the most intense reading, at 50% and 100% of rated voltage
 - Frequency spectrum of the bearings noise for the point with the most intense global reading, at 50% and 100% of rated voltage

- Models in blue text are NEMA Premium Efficiency

- Models in green text are NEMA Super Premium Efficiency

Catalog Notes

1	1.0 Service Factor	31	Rating is suitable for 1.0SF @ 50Hz. Also suitable for next lower HP @ 1.15SF 50Hz
2	Aluminum Frame with Removable Feet	32	Suitable for 1.15SF @ 50°C ambient
3	Automatic Reset Thermal Overload Protector	33	Suitable for 380V 60Hz when wired as YY (double WYE)
4	Manual Reset Thermal Overload Protector	34	AEGIS® Inside
5	CCW Rotation Viewed from Shaft End - Non Reversible	35	AEGIS® ring installation reduces the available "N-W" length
6	Compressor Duty	36	Super Premium
7	F2 Mount	37	Design A
8	F3 Mount	38	TEAO - Totally Enclosed Air Over
9	Rolled Steel Frame - Cannot be modified with T Box on opposite side	39	Cannot be modified with T Box on opposite side
10	Not Thermally Protected	40	NDE shaft with 3/8" drive socket
11	Metal fan - Not suitable for division 2	41	Also rated 230/460V 50Hz 1.0 SF
12	Reduced Frame	42	Rated 50°C ambient
13	Resilient Base	43	With insulated non drive end housing
14	Roller Bearing	44	With air deflector. Flange MOD not available
15	Round Body - Drip Cover Included	45	Also rated 380V 50Hz
16	Split-Phase Motor	46	56J shaft end with dual opposed threads (7/16-20 UNF-2A R.H and 3/8-16 UNF-2A L.H)
17	TENV - Totally Enclosed Non Ventilated	47	Motor designed with copper bar rotor
18	Z-Frame; Bigger Shaft Diameter and Bearings	48	Motor suitable for safe area only
19	105K Tempature Rise; VFD service requires HP derate		
20	Round Body - Drip Cover NOT Included		
21	Stainless Steel Body		
22	Two Speed - Double Windings		
23	Two Speed - Single Winding		
24	Modified item. Usually ships in two weeks		
25	Brake rectifier suitable for 230VAC		
26	Brake rectifier suitable for 460VAC		
27	For Export Only (not to be used in the USA) due to Certification and/or Efficiency requirements.		
28	ODP Fan Cooled		
29	Standard Efficiency		
30	High Efficiency (EPACT)		