ROTATING RIGHT

TECO-WESTINGHOUSE MOTORS & DRIVES

TECO Westinghouse

ANAB ACCREDITED

SGS

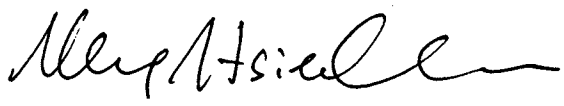
TECO Westinghouse

QUALITY STATEMENT

TECO-Westinghouse Motor Company is committed to serving the needs of our customers BETTER THAN ANYONE ELSE by providing products and services which meet requirements, are delivered on time, and are priced to provide superior value. This is achieved through excellence in everything we do. Each task is performed in exact conformance to requirements, and precise processes and systems assure error-free performance in every activity of the business. Our focus is to exceed customer expectations. QUALITY IS THE CORE VALUE OF OUR BUSINESS.

POLITICA DE CALIDAD

TECO-Westinghouse Motor Company esta comprometido a servir las necesidades de nuestros clientes MEJOR QUE NADIE proporcionando productos y servicios que cumplen lo requerimientos, como tiempo de entrega y son evaluados a un valor superior. Esto se cumple atraves de la excelencia en todo lo que hacemos. Cada objectivo es desarollado con exacto cumplimiento de requerimientos y un proceso preciso de systemas que aseguran un funcionamiento libre de error en cada actividad de la compañia. Nuestro objectivo es exceder las demandas de nuestros clientes. CALIDAD ES LA ESCENCIA DE NUESTRO NEGOCIO.



Dr. H. C. Meng
President
TECO-Westinghouse Motor Company

3/23/06

All data presented in this book is for reference only and subject to change without notice. For specific applications, certified dimensions, or additional performance data, etc., please contact your TECO-Westinghouse representative or call: 1-800-USE-TECO

ONLINE SUBMITTAL DATA INSTRUCTIONS

ONLINE INSTRUCTIONS

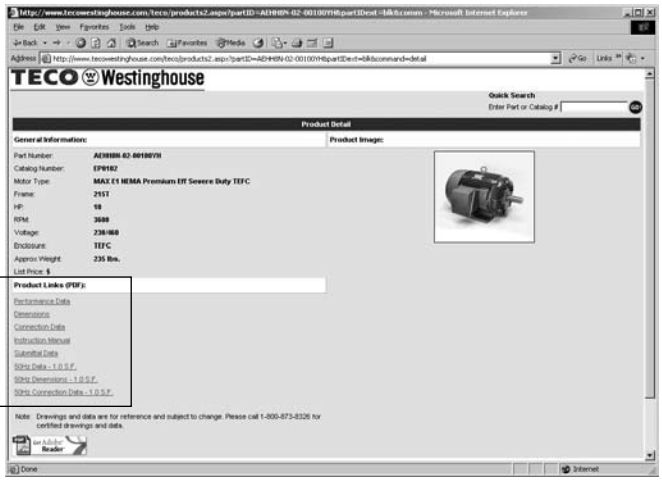
SUBMITTAL DATA

Submittal data consists of basic performance data, dimensional drawings, connection diagrams, and instruction manuals. Mechanical and electrical submittal data is available on many stock catalog motors through our website **www.tecowestinghouse.com** by following the three easy steps below. If additional submittal data is required, please contact your TECO-Westinghouse representative.

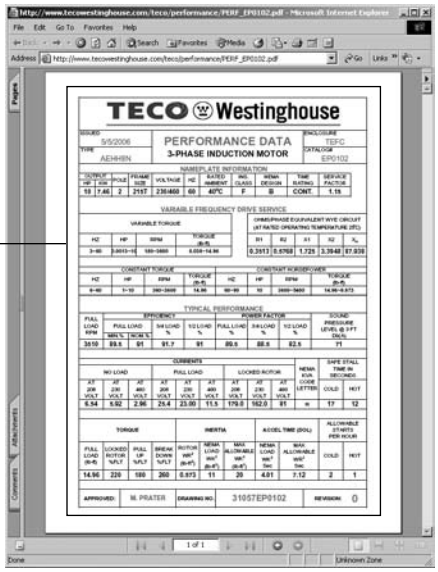
1. **From our website homepage, www.tecowestinghouse.com, click on the link for the Online Product Catalog. The main catalog page will appear (as shown to the right).**

   Enter the TECO-Westinghouse part number or catalog number in the "Quick Search" box located in the upper right corner of the page. Click on "Go!"

   (Note: If you have a TECO-Westinghouse motor and are looking for the performance data, please use the catalog number off the nameplate for your search. Ex: EP0102.)



2. A product listing page will appear about the motor. You will be able to print the available performance data, dimensional drawings, connection diagrams, and instruction manuals in PDF format for the motor you have selected. Links to the available information are listed at the bottom of the screen. **Click on the appropriate product link for the information that you need.**



3. Your results will look similar to the example shown to the right for the TECO-Westinghouse MAX-E1™ NEMA Premium Efficiency Severe Duty TEFC motor, catalog # EP0102.

   It's that easy!

CATALOG NUMBER REFERENCE GUIDE

EXAMPLE:

DHP 0754R

FIRST 1-3 SPACES (LETTERS) DESIGNATE THE MOTOR LINE

LOW VOLTAGE

S=	TEFC	-	SINGLE PHASE (1/3 HP - 10 HP)
DS=	ODP	-	ROLLED STEEL - 56 FRAME (1/3 HP - 3 HP)
DT=	ODP	-	ROLLED STEEL (1 HP - 40 HP)
DJM=	ODP	-	ROLLED STEEL - JM FRAME (1HP - 40 HP)
DJP=	ODP	-	ROLLED STEEL - JP FRAME (1HP - 40 HP)
DHP=	ODP	-	NEMA PREMIUM EFFICIENCY (1 HP - 400 HP)
Q=	ODP	-	OIL WELL PUMP (5 HP - 125 HP)
G=	TEFC	-	3 PHASE FRACTIONAL HP (1/3 HP - 2 HP)
GV=	TEFC	-	3 PHASE FRACTIONAL HP ROUND BODY (1/3 HP - 2 HP)
N=	TEFC	-	MAX-SE™ EPACT EFFICIENCY (1 HP - 200 HP)
NV=	TEFC	-	MAX-SE™ EPACT EFFICIENCY - ROUND BODY WITH C-FACE (1 HP - 100 HP)
CD=	TEFC	-	MAX-HT™ CRUSHER DUTY (200 HP - 600 HP)
E=	TEFC	-	MAX-E1™ HIGH EFFICIENCY - ALL 900 RPM AND 600 HP AND LARGER
EP=	TEFC	-	MAX-E1™ NEMA PREMIUM EFFICIENCY (1 HP - 800 HP)
EPV=	TEFC	-	MAX-E1™ NEMA PREMIUM EFFICIENCY ROUND C-FACE (1 HP - 100 HP)
HH=	TEFC	-	MAX-E2™ NEMA PREMIUM EFFICIENCY IEEE 841 READY (1 HP - 300 HP)
HB=	TEFC	-	MAX-E2/841™ NEMA PREMIUM EFFICIENCY - IEEE 841 (1 HP - 500 HP)
HBV=	TEFC	-	MAX-E2/841™ NEMA PREMIUM EFFICIENCY ROUND BODY C-FACE (1 HP - 100 HP)
W/WF/WV=	TEFC	-	HIGH EFFICIENCY WASHDOWN DUTY (1/2 HP - 10 HP)
JMN=	TEFC	-	CLOSED COUPLED PUMP JM FRAME (3/4 HP - 50 HP)
JPN=	TEFC	-	CLOSED COUPLED PUMP JP FRAME (3/4 HP - 50 HP)
X=	TEFC	-	TEXP HE HIGH EFFICIENCY EXPLOSION PROOF (1 HP - 150 HP)
XV=	TEFC	-	TEXP HE HIGH EFFICIENCY EXPLOSION PROOF - ROUND BODY WITH C-FACE (1 HP - 30 HP)
M=	TEFC	-	METRIC HIGH EFFICIENCY (1 HP - 100 HP)
CP=	TEFC	-	TWO SPEED ONE WINDING MOTOR (100 HP - 300 HP)

MEDIUM VOLTAGE

P=	ODP/ WPI	-	STANDARD EFFICIENCY (100 HP - 900 HP)
K=	TEFC	-	STANDARD EFFICIENCY (100 HP - 250 HP)
KG=	TEFC	-	NEMA PREMIUM EFFICIENCY (150 HP - 900 HP)
JH=	TEFC	-	PREMIUM EFFICIENCY (800 HP - 2000 HP)

NEXT 3-4 SPACES (NUMBERS) DESIGNATE THE HORSEPOWER

"JH" and "P" MOTOR LINES ARE THE ONLY LINES THAT WILL HAVE 4 SPACES
IF "JH" HP <1000, USE A "0" IN THE 1ST SPACE - "0800" = 800 HP
IF HP IS <100, USE A "0" IN THE 1ST SPACE - "075" = 75 HP
IF HP <1, USE A "0" IN THE 1ST SPACE, FOLLOWED BY A "/", THEN THE BOTTOM NUMBER OF THE FRACTION - "0/3" = 1/3 HP
IF HP HAS A DECIMAL > 1, USE THE WHOLE NUMBER 1ST FOLLOWED BY A "/", THEN THE NUMBER AFTER THE DECIMAL - "7/5" = 7.5 HP

NEXT SPACE (NUMBER) DESIGNATES THE SPEED

2 = 2 POLE = 3600 OR 3000 RPM
4 = 4 POLE = 1800 OR 1500 RPM
6 = 6 POLE = 1200 OR 1000 RPM
8 = 8 POLE = 900 OR 750 RPM

NEXT SPACE IF OCCUPIED:

S = 4 POLE MOTOR WITH SHORT SHAFT (TS)
5 = MOTOR STOCKED STANDARD AS 575 VOLT
2 = MOTOR STOCKED STANDARD AS 200 VOLT
R = MOTOR STOCKED STANDARD WITH A DRIVE-END ROLLER BEARING
C = MOTOR STOCKED STANDARD WITH A C-FACE

TECO-WESTINGHOUSE STOCK MOTOR WARRANTY

Effective 12-01-08
Supercedes 03-01-08

STANDARD WARRANTY FOR TECO-WESTINGHOUSE MOTORS

All TECO-Westinghouse brand stock motors sold by TECO-Westinghouse Motor Company are warranted to be free from defects in material and workmanship for a period of 36 months from the date of manufacture.

This warranty is conditioned upon the installation, operation, and maintenance of the motors in accordance with TECO-Westinghouse Motor Company's recommendations or standard industry practice, and the motors have at all times been operated or used under normal operating conditions for which they were designed.

TECO-Westinghouse Motor Company shall, at its sole option and expense, either repair or replace, FOB warehouse, any such motor or part which is defective within the warranty period.

In the event of warranty claims, TECO-Westinghouse Motor Company must be notified promptly following any motor failure. The motor shall be sent to a TECO-Westinghouse Motor Company authorized service center for diagnosis on the cause of failure. If the failure is due to defective material and/or workmanship, TECO-Westinghouse Motor Company will replace or repair the defective motor or part.

The repair or replacement of defective material and workmanship shall constitute complete fulfillment of TECO-Westinghouse Motor Company's warranty liability whether the warranty claims are based on contract, tort (including negligence and strict liability), or otherwise. **THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM COURSE OF DEALING AND USAGE OF TRADE. UNDER NO CIRCUMSTANCES SHALL TECO-WESTINGHOUSE MOTOR COMPANY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING FREIGHT.**

STOCK MOTOR RETURN PROCEDURE

RESTOCKING POLICY — All returned goods are subject to prior approval and must be accompanied by a Return Material Authorization (RMA) number. These goods must be returned within 90 days, freight prepaid, in resalable condition and in original packaging. A 15% restocking charge will be applied. If upon receipt of RMA, goods are deemed not to be in resalable condition or in original packaging then additional fees will be applied. Returns on modified motors will not be allowed.

POLICY FOR WARRANTY CLAIMS ON STOCK MOTORS

Effective 12-01-08
Supercedes 03-01-08

WARRANTY CLAIMS

In the event of warranty claims, TECO-Westinghouse Motor Company must be notified promptly prior to any repairs or replacement of failed motors and/or motor components. Original purchase information will be requested. The failed motor shall be sent to a TECO-Westinghouse authorized service center for diagnosis on the cause of the failure. If the failure is due to defective material and/or workmanship, TECO-Westinghouse shall, at its sole option, either repair on a straight time basis, issue credit, or replace, FOB warehouse, any such motor or component that is defective within the warranty period. Failure to notify TECO-Westinghouse prior to performing repairs or providing replacements will result in denial of warranty claims. Contact the TECO-Westinghouse Warranty Department at (**512) 218-7272**.

AUTHORIZED SERVICE

Authorized service centers shall contact the TECO-Westinghouse Warranty Department for serial number verification to determine warranty status of the motor. If the motor is within the original warranty period, the service center shall dismantle and inspect the motor, and prepare a standard EASA Warranty Repair Report. Fax the report to the TECO-Westinghouse Warranty Department at (512) 218-7378 for review of the failure and determination if the failure will be covered under terms of the TECO-Westinghouse standard warranty.

WARRANTY DETERMINATION

If the motor failure is determined to be a warranty failure, a Return Material Authorization (RMA) number will be assigned to the claim. The RMA number represents the credit memo number for any motor not repaired, as well as the purchase order number for inspection, and/or repair charges for motors to be replaced or repaired. Charges for inspections and/or repairs to motors outside the warranty period or for failures not resulting from material or workmanship issues are the sole responsibility of the end user.

For Warranty Repairs: The original EASA Warranty Repair Report, along with pictures documenting the failure, shall be submitted to the TECO-Westinghouse Warranty Department, along with an invoice for all repair charges. All reports and invoices submitted require an RMA number for processing. Claims submitted without RMA numbers will be denied.

For Warranty Credit: The original EASA Warranty Repair Report, pictures, and the original nameplate off the motor must be returned to the TECO-Westinghouse Warranty Department prior to issuance of credit. All claims and invoices submitted require an RMA number for processing. Claims submitted without RMA numbers will be denied. An invoice must be received for payment of inspection charges. Invoice only for inspection charges. Credit will be issued to the buyers account for any motor determined not to be repairable.

Request for warranty replacements: In special circumstances, the TECO-Westinghouse Warranty Department can process replacement orders, if an exact replacement motor/component is in stock. All such orders will be shipped FOB warehouse, and the customer will receive an invoice for the replacement. On receipt of the nameplate off the original failed motor, credit will be issued for the failed motor. Freight is not covered under warranty.

NOTE: If the cause of the failure is determined to not be a result of a manufacturer's defect, all expenses associated with inspection, repair, etc., will be the responsibility of others.

SINGLE PHASE

TYPE BEGCFD, BECCFD, BECSFD

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- Farm Equipment
- Machine Tools

FEATURES:

- 1/3 - 10 HP
- 1800 RPM
- Totally Enclosed Fan Cooled (IP44)
- High Torque Design
- 36 Month Warranty from Date of Manufacture
- 1 Phase – 60 Hz – 115/230V (3 HP and Larger are 230V Only)
- Capacitor Start, Induction Run – 1/3 to 1.5 HP
- Capacitor Start, Permanent Split Capacitor Run – 2 to 10 HP
- 1.15 Service Factor – Continuous
- Class B Insulation from 1/3 to 3 HP
- Class F Insulation from 5 to 10 HP
- Manual Reset Overload with Outside Rubber Boot
- Class B Temperature Rise
- Bi-Directional Rotation
- Rolled Steel Frame for 1/3 – 1 HP
- Cast Iron Frame for 1.5 – 10 HP
- Rolled Steel Terminal Box
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Green – Munsell 5G 4/ 4
- Double Shielded Bearings Pre-Packed with MULTEMP SRL Grease
- Rubber Flinger on Drive-End
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate on Frames 143T and Larger
- Motors are UL Recognized and CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

SINGLE PHASE

TYPE BEGCFD, BECCFD, BECSFD

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	TYPE	HP	RPM	FRAME	FL EFF	FL PF	FR. MAT.*	APPROX. Shipping WT. (lbs.)	LIST PRICE
S0/34(1)	BEGCFD	1/3	1800	56	51.0	47.0	RS	29	353
S0/54(1)	BEGCFD	1/2	1800	56	58.0	58.0	RS	33	375
S0/74(1)	BEGCFD	3/4	1800	56	65.0	63.0	RS	38	398
S0014(1)	BEGCFD	1	1800	56	69.0	68.0	RS	38	427
S1/54(1)	BECCFD	1.5	1800	145T	70.0	63.0	CI	73	516
S0024(2)	BECSFD	2	1800	182T	73.0	63.5	CI	120	718
S0034(2)(3)	BECSFD	3	1800	182T	74.0	63.0	CI	120	816
S0054(2)(3)	BECSFD	5	1800	184T	78.5	69.0	CI	135	931
S7/54(2)(3)	BECSFD	7.5	1800	213T	80.0	84.5	CI	200	1,583
S0104(2)(3)	BECSFD	10	1800	215T	78.5	87.0	CI	210	1,885

Notes:

(1) BEGCFD and BECCFD are capacitor start, induction run.
(2) BECSFD is capacitor start and permanent split capacitor run.
(3) Ratings 3 HP and larger are 230V only.

* Frame Material:
RS = Rolled Steel
CI = Cast Iron

ROLLED STEEL ODP EPACT FAMILY

TYPE ASGA (56 FRAME), ASGANE (140~280 FRAME), ASGAJP/JM

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- HVAC Equipment
- Compressors

FEATURES:

- 1/3 - 40 HP
- 3600, 1800, 1200 RPM
- Open Drip Proof Enclosure
- Available in Horizontal Foot Mounted or JM/ JP Frame Configurations
- Meets or Exceeds EPACT Efficiency Levels
- Department of Energy Efficiency Certification #CC002A
- 36 Month Warranty from Date of Manufacture
- 60 Hz - 230/ 460V (Usable on 200V and 208V)
- 1.15 Service Factor – Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – F1 Mounted. F2 Available for Frames 180T-280T – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation
- Rolled Steel Frame and Conduit Box
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Light Gray – Munsell N5.0
- Double Shielded Bearings on Frames Pre-Packed with MULTEMP SRL Grease
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- VFD Rated per NEMA MG1, Part 31, 4.4.2 - Note (3)(4)
- Speed Ranges: 20:1 VT, 10:1 CT
- 9 Leads
- Motors are UL Recognized, CSA Approved, and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Maximum lead length is 150 feet with a carrier frequency of 3 kHz. Addition of output reactor or filter may allow for increased carrier frequency. Please contact TWMC if lead length and carrier frequency surpass these values.

ROLLED STEEL ODP EPACT

TYPE ASGA (56 FRAME), ASGANE (140~280 FRAME)

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
DS0/32	1/3	3600	A56	68.0	73.8	1.24	21	243
DS0/34	1/3	1800	A56	75.5	73.0	1.13	22	259
DS0/36	1/3	1200	A56	75.5	67.2	1.23	22	348
DS0/52	1/2	3600	A56	72.0	73.8	1.76	22	259
DS0/54	1/2	1800	A56	77.0	68.8	1.77	22	285
DS0/56	1/2	1200	A56	75.5	65.5	1.89	23	378
DS0/72	3/4	3600	A56	75.5	74.2	2.50	35	291
DS0/74	3/4	1800	A56	75.5	70.0	2.70	23	316
DS0/76	3/4	1200	A56	75.5	63.2	2.90	26	384
DS0012	1	3600	A56	74.0	74.0	3.40	25	338
DS0014	1	1800	A56	77.0	75.8	3.20	25	338
DT0014	1	1800	143T	82.5	78.5	2.90	35	348
DS0016	1	1200	A56	77.0	70.8	3.40	32	400
DT0016	1	1200	145T	80.0	72.5	3.20	37	432
DS1/52	1.5	3600	A56	77.0	79.2	4.60	26	362
DT1/52	1.5	3600	143T	82.5	82.8	4.10	29	378
DS1/54	1.5	1800	A56	80.0	80.0	4.40	30	362
DT1/54	1.5	1800	145T	84.0	84.0	4.00	40	378
DT1/56	1.5	1200	182T	84.0	55.0	6.08	82	446
DS0022	2	3600	A56	80.0	80.5	5.80	28	384
DT0022	2	3600	145T	84.0	83.5	5.30	36	384
DS0024	2	1800	B56	81.5	82.0	5.60	35	384
DT0024	2	1800	145T	84.0	81.0	5.50	58	384
DT0026	2	1200	184T	85.5	62.0	7.10	82	497
DS0032	3	3600	B56	82.5	85.0	8.00	36	464
DT0032	3	3600	145T	84.0	87.0	7.70	36	487
DS0034	3	1800	C56HZ	85.5	82.5	8.00	53	415
DT0034	3	1800	182T	86.5	78.0	8.30	93	432
DT0036	3	1200	213T	86.5	71.0	9.20	150	692
DT0052	5	3600	182T	85.5	90.0	12.2	86	607
DT0054	5	1800	184T	87.5	81.5	13.1	93	511
DT0056	5	1200	215T	87.5	72.0	14.9	150	960
DT7/52	7.5	3600	184T	87.5	91.0	17.6	90	725
DT7/54	7.5	1800	213T	88.5	85.0	18.7	160	737
DT7/56	7.5	1200	254T	88.5	81.0	19.6	255	1,188
DT0102	10	3600	213T	88.5	88.0	24.0	155	928
DT0104	10	1800	215T	89.5	86.5	24.2	160	818
DT0106	10	1200	256T	90.2	81.0	25.6	255	1,384
DT0152	15	3600	215T	89.5	87.5	35.9	160	1,226
DT0154	15	1800	254T	91.0	88.0	35.1	250	1,213
DT0156	15	1200	284T	90.2	83.0	37.5	289	1,769
DT0202	20	3600	254T	90.2	91.0	45.6	220	1,447
DT0204	20	1800	256T	91.0	88.0	46.8	290	1,510
DT0206	20	1200	286T	91.0	84.0	49.0	370	2,265
DT0252	25	3600	256T	91.0	91.0	56.5	255	1,763
DT0254	25	1800	284T	91.7	86.0	59.4	300	1,778
DT0302	30	3600	284TS	91.0	89.0	59.4	289	1,997
DT0304	30	1800	286T	92.4	86.5	70.3	370	2,084
DT0402	40	3600	286TS	91.7	88.0	92.8	344	2,729

ROLLED STEEL ODP JP/JM EPACT

TYPE ASGAJP/JM

Effective 12-01-08
Supercedes 03-01-08

JP CATALOG NO.	JM CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (230V)	APPROX. JP SHIPPING WT. (lbs.)	APPROX. JM SHIPPING WT. (lbs.)	LIST PRICE
DJP0014	DJM0014	1	1800	143JP/JM	82.5	78.5	2.89	40	40	387
DJP0016	DJM0016	1	1200	145JP/JM	80.0	72.5	3.20	45	45	485
DJP1/52	DJM1/52	1.5	3600	143JP/JM	82.5	82.8	4.10	40	40	422
DJP1/54	DJM1/54	1.5	1800	145JP/JM	84.0	84.0	4.00	47	47	422
DJP1/56	DJM1/56	1.5	1200	182JP/JM	84.0	55.0	6.08	90	83	501
DJP0022	DJM0022	2	3600	145JP/JM	84.0	83.5	5.30	45	45	431
DJP0024	DJM0024	2	1800	145JP/JM	84.0	81.0	5.50	50	49	431
DJP0026	DJM0026	2	1200	184JP/JM	85.5	62.0	7.10	93	89	555
DJP0032	DJM0032	3	3600	145JP/JM	84.0	87.0	7.70	50	50	546
DJP0034	DJM0034	3	1800	182JP/JM	86.5	78.0	8.30	113	95	485
DJP0036	DJM0036	3	1200	213JP/JM	86.5	71.0	9.20	155	146	776
DJP0052	DJM0052	5	3600	182JP/JM	85.5	90.0	12.2	95	78	679
DJP0054	DJM0054	5	1800	184JP/JM	87.5	81.5	13.1	113	108	573
DJP0056	DJM0056	5	1200	215JP/JM	87.5	72.0	14.9	155	146	1,075
DJP7/52	DJM7/52	7.5	3600	184JP/JM	87.5	91.0	17.6	100	78	810
DJP7/54	DJM7/54	7.5	1800	213JP/JM	88.5	85.0	18.7	155	140	824
DJP7/56	DJM7/56	7.5	1200	254JP/JM	88.5	81.0	19.6	265	265	1,330
DJP0102	DJM0102	10	3600	213JP/JM	88.5	88.0	24.0	167	165	1,041
DJP0104	DJM0104	10	1800	215JP/JM	89.5	86.5	24.2	180	150	916
DJP0106	DJM0106	10	1200	256JP/JM	90.2	81.0	25.6	290	275	1,551
DJP0152	DJM0152	15	3600	215JP/JM	89.5	87.5	35.9	167	165	1,374
DJP0154	DJM0154	15	1800	254JP/JM	91.0	88.0	35.1	265	257	1,356
DJP0156	DJM0156	15	1200	284JP/JM	90.2	83.0	37.5	375	365	1,981
DJP0202	DJM0202	20	3600	254JP/JM	90.2	91.0	45.6	265	250	1,620
DJP0204	DJM0204	20	1800	256JP/JM	91.0	88.0	46.8	275	265	1,689
DJP0206	DJM0206	20	1200	284JP/JM	91.0	84.0	49.0	410	405	2,537
DJP0252	DJM0252	25	3600	256JP/JM	91.0	91.0	56.5	300	275	1,974
DJP0254	DJM0254	25	1800	284JP/JM	91.7	86.0	59.4	375	365	1,991
DJP0302	DJM0302	30	3600	284JP/JM	91.0	89.0	69.4	370	350	2,240
DJP0304	DJM0304	30	1800	286JP/JM	92.4	86.5	70.3	395	370	2,334
DJP0402	DJM0402	40	3600	286JP/JM	91.7	88.0	92.8	395	370	3,057

NEMA PREMIUM EFFICIENT ODP

TYPE ASHH

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors

FEATURES:

- 1 - 400 HP
- 3600, 1800, 1200 RPM
- Open Drip Proof Enclosure (IP22 Rating)
- NEMA Premium Efficiency
- Department of Energy Efficiency Certification #CC002A
- 36 Month Warranty from Date of Manufacture
- 60 Hz - 230/ 460V (Usable on 208V). 150 HP and Larger is 460V Only
- Available in 575V - Note (1)
- 1.15 Service Factor – Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – F1 Mounted. F2 Available – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature - Note (2)
- Designed for 3300 ft. Elevation - Note (3)
- Bi-Directional Rotation
- Cast Iron Frame and End Bells
- Rolled Steel Conduit Box for 360T Frame and Smaller. Cast Iron Conduit Box for Frames 400T-449T/ TS
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue Gray – Munsell N5
- Vacuum De-Gassed Regreasable Ball (or Roller) Bearings on Frames 280TS-449T/ TS Using Polyrex EM Grease
- Double Shielded Bearings on Frames 140T-280T Pre-Packed with MULTEMP SRL Grease
- Labyrinth Type Metal Flinger on Both Ends for Frames 280TS to 449T/ TS
- Cast Iron Inner and Outer Bearing Caps for Frames 280TS to 449T/ TS
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- HPE Stator Wire Rated per NEMA MG1, Part 31, 4.4.2 - Note (4)
- Speed Ranges: 20:1 VT, 10:1 CT
- 9 Leads -5 HP and Below, 12 Leads - 7.5 HP to 125 HP, 6 Leads - 150 HP and Larger
- Motors are UL Recognized, CSA Approved, and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) TWMC carries minimal 575V stock. Please check availability to ensure required motors are in stock. Ratings may be available from our Canadian warehouses at a higher price, or from our factory with longer lead time.
(2) Please consult factory for suitability in higher ambients.
(3) Please consult factory for suitability in higher elevations.
(4) Motor service factor is 1.0 when operated on a VFD.

NEMA PREMIUM EFFICIENT ODP

TYPE ASHH

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
DHP0014	1	1800	143T	85.5	78.0	1.4	59	375
DHP0016	1	1200	145T	82.5	65.5	1.7	75	484
DHP1/52	1.5	3600	143T	85.5	80.0	2.1	50	400
DHP1/54	1.5	1800	145T	86.5	80.5	2.0	80	415
DHP1/56	1.5	1200	182T	87.5	63.0	2.5	123	513
DHP0022	2	3600	145T	85.5	84.5	2.6	57	452
DHP0024	2	1800	145T	86.5	79.5	2.7	67	440
DHP0026	2	1200	184T	87.5	71.0	3.0	130	561
DHP0032	3	3600	145T	87.5	87.0	3.7	66	504
DHP0034	3	1800	182T	89.5	81.0	3.9	110	484
DHP0036	3	1200	213T	88.5	77.0	4.1	183	783
DHP0052	5	3600	182T	87.5	91.0	5.9	120	572
DHP0054	5	1800	184T	89.5	84.5	6.2	145	606
DHP0056	5	1200	215T	89.5	79.0	6.6	195	945
DHP7/52	7.5	3600	184T	88.5	91.5	8.7	145	753
DHP7/54	7.5	1800	213T	91.0	86.0	9.0	185	869
DHP7/56	7.5	1200	254T	90.2	79.0	9.9	260	1,410
DHP0102	10	3600	213T	90.2	88.0	11.8	190	945
DHP0104	10	1800	215T	91.7	87.0	11.7	235	1030
DHP0106	10	1200	256T	91.7	81.0	12.6	329	1,612
DHP0152	15	3600	215T	90.2	87.5	17.8	220	1,265
DHP0154	15	1800	254T	93.0	84.5	17.9	310	1,420
DHP0156	15	1200	284T	91.7	83.0	18.5	367	2,155
DHP0202	20	3600	254T	91.0	90.5	22.8	310	1,647
DHP0204	20	1800	256T	93.0	86.5	23.3	350	1,755
DHP0206	20	1200	286T	92.4	83.5	24.3	392	2,612
DHP0252	25	3600	256T	91.7	92.0	27.7	340	1,955
DHP0254	25	1800	284T	93.6	87.0	28.7	410	2,168
DHP0256	25	1200	324T	93.0	83.0	30.3	559	3,240
DHP0302	30	3600	284TS	92.4	90.5	33.6	405	2,417
DHP0304	30	1800	286T	94.1	87.0	34.3	550	2,548
DHP0306	30	1200	326T	93.6	83.5	35.9	675	3,641

Notes:

- To order 575V , please add "5" to the end of Catalog Number as shown, for example: "DHP00545" for 5 HP, 1800 RPM, 575V.

NEMA PREMIUM EFFICIENT ODP

TYPE ASHH

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
DHP0402	40	3600	286TS	92.4	91.5	44.3	452	3,094
DHP0404	40	1800	324T	94.1	86.0	46.3	625	3,159
DHP0406	40	1200	364T	94.1	87.0	45.7	835	4,543
DHP0502	50	3600	324TS	93.0	86.0	58.5	650	3,810
DHP0504	50	1800	326T	94.5	85.0	58.3	690	3,541
DHP0506	50	1200	365T	94.1	86.0	57.8	906	5,383
DHP0602	60	3600	326TS	93.6	87.0	69.0	670	4,479
DHP0604	60	1800	364T	95.0	85.0	69.6	795	4,492
DHP0606	60	1200	404T	94.5	85.5	69.5	1100	6,468
DHP0752	75	3600	364TS	94.1	90.5	82.5	785	5,950
DHP0754	75	1800	365T	95.0	86.0	86.0	900	5,322
DHP0754R(2)	75	1800	365T	95.0	86.0	86.0	900	5,322
DHP0756	75	1200	405T	94.5	86.5	86.0	1210	7,752
DHP0756R (2)	75	1200	405T	94.5	86.5	86.0	1210	7,752
DHP1002	100	3600	365TS	94.1	90.5	109.9	825	7,892
DHP1004	100	1800	404T	95.4	85.5	114.8	1125	6,827
DHP1004R (2)	100	1800	404T	95.4	85.5	114.8	1125	6,827
DHP1006	100	1200	444T	95.0	82.0	120.0	1454	11,276
DHP1006R (2)	100	1200	444T	95.0	82.0	120.0	1454	11,276
DHP1252	125	3600	404TS	94.1	90.5	137.5	907	9,996
DHP1254	125	1800	405T	95.4	84.5	145.2	1235	8,554
DHP1254R (2)	125	1800	405T	95.4	84.5	145.2	1235	8,554
DHP1256	125	1200	445T	95.0	82.0	150.0	1605	13,195
DHP1256R (2)	125	1200	445T	95.0	82.0	150.0	1605	13,195
DHP1502(1)	150	3600	405TS	94.5	90.5	164.0	1156	12,107
DHP1504(1)	150	1800	444T	95.8	86.0	170.0	1510	11,448
DHP1504R(1) (2)	150	1800	444T	95.8	86.0	170.0	1510	11,448
DHP1506(1)	150	1200	445T	95.4	82.5	178.0	1705	15,616
DHP1506R(1) (2)	150	1200	445T	95.4	82.5	178.0	1705	15,616
DHP2002(1)	200	3600	444TS	95.0	88.5	223.0	1320	15,681
DHP2004(1)	200	1800	445T	95.8	86.5	226.0	1635	14,014
DHP2006(1)	200	1200	447T	95.4	83.0	236.0	2010	20,785
DHP2006R(1) (2)	200	1200	447T	95.4	83.0	236.0	2010	19,795
DHP2502(1)	250	3600	445TS	95.0	88.5	278.0	1470	18,161
DHP2504(1)	250	1800	447T	95.8	87.0	281.0	1806	18,894
DHP2506R(1) (2)	250	1200	449T	95.4	86.0	285.0	2532	24,746
DHP3002(1)	300	3600	445TS	95.4	89.0	331.0	1535	23,255
DHP3004(1)	300	1800	449T	95.8	87.5	335.0	2205	23,115
DHP3502(1)	350	3600	447TS	95.4	90.0	382.0	1840	26,125
DHP4002(1)	400	3600	449TS	95.8	90.0	434.0	2050	29,817

Notes:

- To order 575V , please add "5" to the end of Catalog Number as shown, for example: "DHP00545" for 5 HP, 1800 RPM, 575V.

(1) Ratings 150 HP and larger are 460V only.
(2) "R" = Motor stocked standard with a drive-end roller bearing.

OIL WELL PUMP

TYPE ASFAFP

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Oil Well Pumps
- Any Applications Requiring NEMA Design D Torques

FEATURES:

- 5 - 125 HP
- 1200 RPM
- Open Drip Proof Enclosure (IP22 Rating) with Rodent Screens
- Standard Efficient Design
- 36 Month Warranty from Date of Manufacture
- 60 HZ – 230/ 460/ 796V
- 1.15 Service Factor – Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish – 2 Dips and Bakes
- Class B Temperature Rise
- Standard with Klixon 9700K Temperature Limiting Switch, 1 per Phase
- NEMA Design D Torques
- 5% Minimum Slip
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrance - F2 Mounted. F1 Available – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation
- Cast Iron Frame, End Bells, and Conduit Box
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: White
- Vacuum De-Gassed Regreasable Bearings for Frames 324T and Larger Using Polyrex EM Grease
- Double Shielded Bearings on Frames 215T-286T Pre-Packed with MULTEMP SRL Grease
- Labyrinth Type Metal Flinger on Both Ends for Frames 324T and Larger
- Cast Iron Inner and Outer Bearing Caps for Frames 324T and Larger
- Grounding Terminal Inside Main Box and on Frame
- Stainless Steel Nameplate
- 12 Leads

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.

OIL WELL PUMP

TYPE ASFAFP

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
Q0056	5	1200	215T	81.5	77.0	7.5	205	1,154
Q7/56	7.5	1200	254T	85.5	82.0	10.0	270	1,470
Q0106	10	1200	256T	85.5	85.0	12.9	335	1,797
Q0156	15	1200	284T	87.5	86.0	18.7	410	2,574
Q0206	20	1200	286T	85.5	89.0	24.6	453	3,175
Q0256	25	1200	324T	86.5	89.0	30.4	620	3,807
Q0306	30	1200	326T	86.5	90.0	36.1	700	4,121
Q0406	40	1200	365T	89.5	90.0	46.5	795	5,723
Q0506	50	1200	404T	88.5	89.5	59.1	1,075	7,053
Q0606	60	1200	404T	89.5	90.0	70.0	1,165	8,096
Q0756	75	1200	405T	88.5	91.0	87.5	1,245	9,606
Q1006R[(1)]	100	1200	444T	86.5	82.0	132.0	1,585	12,636
Q1256R[(1)]	125	1200	445T	87.0	82.0	164.0	1,725	13,693

Notes:
(1) "R" = Motor stocked standard with a drive-end roller bearing.

3 PHASE FRACTIONAL HP

TYPE AEGA, AETACF

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- HVAC Equipment
- Compressors

FEATURES:

- 1/3 - 2 HP
- 3600, 1800, 1200 RPM
- Totally Enclosed Fan Cooled Enclosure (IP44)
- 36 Month Warranty from Date of Manufacture
- Round Body C-Face Available for 1800 RPM and 3/4 HP at 1200 RPM (Type AETACF)
- 60 Hz - 230/ 460V (Usable on 200V and 208V)
- 1.15 Service Factor – Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – F1 Mounted
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation
- Rolled Steel Frame and Conduit Box
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Gray – Munsell 10B 4/ 1.5
- Double Shielded Bearings on Frames Pre-Packed with MULTEMP SRL Grease
- Grounding Terminal Inside Main Box
- Mylar Nameplate
- Rubber Flinger on Drive-End
- 9 Leads

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.

3 PHASE FRACTIONAL HP

TYPE AEGA, AETACF

Effective 12-01-08
Supercedes 03-01-08

HP	RPM	FL EFF	FL PF	FL AMPS (230V)	RIGID BASE MOUNT				ROUND BODY C-FACE			
					FRAME	CAT. NUMBER	APPROX. SHIPPING WT(lbs.)	LIST PRICE	FRAME	CAT. NUMBER	APPROX. SHIPPING WT.(lbs.)	LIST PRICE
1/3	3600	66.0	78.0	1.2	56	G0/32	24	259	-	-	-	-
1/3	1800	71.0	70.0	1.3	56	G0/34	26	305	56C	GV0/34C	27	349
1/3	1200	68.0	63.0	1.5	56	G0/36	26	415	-	-	-	-
1/2	3600	70.0	80.0	1.7	56	G0/52	26	292	-	-	-	-
1/2	1800	72.0	69.0	1.9	56	G0/54	26	349	56C	GV0/54C	32	396
1/2	1200	70.0	60.0	2.2	56	G0/56	30	452	-	-	-	-
3/4	3600	76.0	84.0	2.2	56	G0/72	26	317	-	-	-	-
3/4	1800	73.0	66.0	2.9	56	G0/74	30	376	56C	GV0/74C	32	416
3/4	1200	73.0	66.0	2.9	56	G0/76	32	471	56C	GV0/76C	37	416
1	3600	76.0	84.0	2.9	56	G0012	26	371	-	-	-	-
1	1800	77.0	71.0	3.4	56	G0014	33	394	56C	GV0014C	35	437
1	1200	75.0	70.0	3.8	56	G0016	35	500	-	-	-	-
1.5	3600	78.0	83.0	4.3	56	G1/52	30	399	-	-	-	-
1.5	1800	78.0	77.0	4.7	56	G1/54	39	431	56C	GV1/54C	40	467
1.5	1200	75.0	71.0	5.3	56	G1/56	39	566	-	-	-	-
2	3600	81.0	86.0	5.4	56	G0022	39	487	-	-	-	-
2	1800	78.5	76.0	6.3	56	G0024	39	453	56C	GV0024C	44	504

Notes:

- Cast iron C-Face kits are available for rigid base mount motors.

MAX-SE™ FAMILY

CE ee CCOO2A SP UL CSA EPACT

TYPE AEEANE, AEEANECF, AEVANE

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressors
- Mixers
- Conveyors

FEATURES:

- 1 - 200 HP - Horizontal Mount
- 1 - 100 HP - Foot Mounted with C-Flange or Round Body C-Flange
- 3600, 1800, 1200 RPM
- Totally Enclosed Fan Cooled (IP54 Rating)
- Meets or Exceeds EPACT Efficiency Levels
- Department of Energy Efficiency Certification #CC002A
- 36 Month Warranty from Date of Manufacture
- 60 Hz - 230/460V (Usable on 208V). 150 HP and Larger is 460V Only
- 1.15 Service Factor – Continuous
- 50 Hz Data on Nameplate – 190/ 380V at 1.0 S.F. - 150 HP and Larger is 380V Only at 1.0 S.F.
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design C Torques 20 HP and Above, 4 and 6 Pole Speed – NEMA Design B for All Other Ratings
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrance - F1 Mounted. F2 Available – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Factory Self-Certified for Class I, Divison II, Groups B, C, D, Temp Code T3C, 400T and Below - Note (3)
- Bi-Directional Rotation
- Cast Iron Frame, End Bells, and Main Conduit Box
- Dual Drilled Feet – Longer Frames (i.e. 145T Drilled Also for 143T)
- Rolled Steel Fan Cover, 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue Gray – Munsell 7.5 BG 4/ 2
- Vacuum De-Gassed Regreasable Ball Bearings on Frames 280TS-449T/ TS Using Polyrex EM Grease
- Double Shielded Bearings on Frames 140T-280T Pre-Packed with MULTEMP SRL Grease
- Automatic Grease Discharge Fitting on Re-Greasable Motors
- Labyrinth Type Metal Flinger on Both Ends for Frames 280TS to 449T/ TS
- Rubber Flinger on Drive-End for Frames 140T to 280T
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- VFD Rated per NEMA MG1, Part 30 - Note (4) and (5)
- Speed Ranges: 10:1 VT, 5:1 CT
- 9 Leads -5 HP and Below, 12 Leads - 7.5 HP to 125 HP, 6 Leads - 150 HP and Larger
- Marks are UL Recognized, CSA Approved, and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.
(3) Factory self-certification for 440T/ TS frames requires fan change. Please see modifications section. There is an additional charge for Division II nameplates.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Maximum lead length is 150 feet with a carrier frequency of 3 kHz. Addition of output reactor or filter may allow for increased carrier frequency. Please contact TWMC if lead length and carrier frequency surpass these values.

MAX-SE™ HORIZONTAL MOUNT

CE ee CCOO2A EPACT

TYPE AEEANE

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
N0012	1	3600	143T	77.0	84.5	1.44	83	333
N0014(C)	1	1800	143T	82.5	77.0	1.48	78	349
N0016(C)	1	1200	145T	80.0	63.5	1.85	90	446
N1/52	1.5	3600	143T	82.5	85.0	2.01	85	375
N1/54(C)	1.5	1800	145T	84.0	80.5	2.08	78	390
N1/56	1.5	1200	182T	85.5	66.5	2.47	120	457
N0022	2	3600	145T	84.0	88.5	2.52	62	415
N0024	2	1800	145T	84.0	82.5	2.70	90	419
N0026	2	1200	184T	86.5	67.0	3.23	132	530
N0032	3	3600	182T	85.5	90.0	3.65	130	484
N0034	3	1800	182T	87.5	82.5	3.89	135	481
N0036	3	1200	213T	87.5	76.5	4.20	164	694
N0052	5	3600	184T	87.5	91.5	5.85	135	604
N0054	5	1800	184T	87.5	86.5	6.20	133	591
N0056	5	1200	215T	87.5	76.5	7.00	210	978
N7/52	7.5	3600	213T	88.5	87.0	9.10	180	833
N7/54	7.5	1800	213T	89.5	88.0	8.90	200	817
N7/56(C)	7.5	1200	254T	89.5	81.0	9.70	315	1,382
N0102	10	3600	215T	89.5	90.0	11.6	220	962
N0104	10	1800	215T	89.5	89.5	11.7	219	983
N0106(C)	10	1200	256T	89.5	82.5	12.7	340	1,718
N0152	15	3600	254T	90.2	91.5	17.0	325	1,374
N0154	15	1800	254T	91.0	88.0	17.6	316	1,362
N0156(C)	15	1200	284T	90.2	83.0	18.8	530	2,243
N0202	20	3600	256T	90.2	92.0	22.6	380	1,685
N0204(C)	20	1800	256T	91.0	88.0	23.4	395	1,626
N0206(C)	20	1200	286T	90.2	83.5	24.9	520	2,826
N0252	25	3600	284TS	91.0	90.5	28.4	460	2,119
N0254(C)	25	1800	284T	92.4	89.0	28.5	510	1,973
N0254S(C)	25	1800	284TS	92.4	89.0	28.5	510	1,973
N0256(C)	25	1200	324T	91.7	81.5	31.3	745	3,438
N0302	30	3600	286TS	91.0	91.0	33.9	508	2,520
N0304(C)	30	1800	286T	92.4	88.0	34.6	545	2,396
N0304S(C)	30	1800	286TS	92.4	88.0	34.6	545	2,396
N0306(C)	30	1200	326T	91.7	80.5	38.1	775	3,863
N0402	40	3600	324TS	91.7	89.5	45.7	650	3,217
N0404(C)	40	1800	324T	93.0	89.0	45.3	710	3,115
N0404S(C)	40	1800	324TS	93.0	89.0	45.3	710	3,115
N0406(C)	40	1200	364T	93.0	86.5	46.6	945	5,057
N0502	50	3600	326TS	92.4	90.5	56.0	775	4,284
N0504(C)	50	1800	326T	93.0	89.5	56.0	795	4,023
N0504S(C)	50	1800	326TS	93.0	89.5	56.0	795	4,023
N0506(C)	50	1200	365T	93.0	85.5	59.0	1040	6,239

Notes:
(C) Meets NEMA Design C torque

MAX-SE™ HORIZONTAL MOUNT

CE ee CCOO2A EPACT

TYPE AEEANE

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
N0602	60	3600	364TS	93.0	93.0	65.0	890	5,639
N0604(C)	60	1800	364T	93.6	86.5	69.5	870	5,081
N0604S(C)	60	1800	364TS	93.6	86.5	69.5	870	5,081
N0606(C)	60	1200	404T	93.6	88.0	68.0	1295	7,342
N0752	75	3600	365TS	93.0	93.5	81.0	970	7,268
N0754(C)	75	1800	365T	94.1	87.5	85.5	1075	6,497
N0754S(C)	75	1800	365TS	94.1	87.5	85.5	1075	6,497
N0754R(C)	75	1800	365T	94.1	87.5	85.5	1075	6,497
N0756(C)	75	1200	405T	93.6	88.5	85.0	1317	8,824
N0756R(C)	75	1200	405T	93.6	88.5	85.0	1317	8,824
N1002	100	3600	405TS	93.6	91.5	109.5	1286	10,175
N1004(C)	100	1800	405T	94.5	89.0	111.5	1360	9,118
N1004S(C)	100	1800	405TS	94.5	89.0	111.5	1360	9,118
N1004R(C)	100	1800	405T	94.5	89.0	111.5	1360	9,118
N1006(C)	100	1200	444T	94.1	83.5	119.0	1665	11,328
N1006R(C)	100	1200	444T	94.1	83.5	119.0	1665	11,328
N1252	125	3600	444TS	94.5	89.5	138.0	1530	12,225
N1254(C)	125	1800	444T	94.5	87.5	142.0	1705	11,634
N1254S(C)	125	1800	444TS	94.5	87.5	142.0	1705	11,634
N1254R(C)	125	1800	444T	94.5	87.5	142.0	1705	11,634
N1256(C)	125	1200	445T	94.1	83.0	150.0	1860	15,081
N1256R(C)	125	1200	445T	94.1	83.0	150.0	1860	15,081
N1502(1)	150	3600	445TS	94.5	90.2	165.0	1710	14,789
N1504(1, C)	150	1800	445T	95.0	88.0	168.0	1865	13,122
N1504S(1, C)	150	1800	445TS	95.0	88.0	168.0	1865	13,122
N1504R(1, C)	150	1800	445T	95.0	88.0	168.0	1865	13,122
N1506(1, C)	150	1200	447T	95.0	86.5	171.0	2230	16,838
N1506R(1, C)	150	1200	447TZ	95.0	86.5	171.0	2230	16,838
N2002(1)	200	3600	447TS	95.0	90.0	219.0	2015	21,080
N2004(1, C)	200	1800	447T	95.0	88.5	223.0	2465	17,523
N2004S(1, C)	200	1800	447TS	95.0	88.5	223.0	2465	17,523
N2004R(1, C)	200	1800	447TZ	95.0	88.5	223.0	2465	17,523
N2006(1, C)	200	1200	449T	95.0	86.5	228.0	2625	25,413
N2006R(1, C)	200	1200	449TZ	95.0	86.5	228.0	2625	25,413

Notes:

- Ratings 150 HP and Larger are 460V Only

(S) at end of catalog number denotes "TS" Short Shaft
"R" = Motor stocked standard with a drive-end roller bearing.
(C) Meets NEMA Design C torque

MAX-SE™ FOOTED C-FACE

CE ee CCOO2A SP UL CSA **EPACT**

TYPE AEEANECF

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
N0012C	1	3600	143TC	77.0	84.5	1.44	85	360
N0014C(C)	1	1800	143TC	82.5	77.0	1.48	50	398
N0016C(C)	1	1200	145TC	80.0	63.5	1.85	92	515
N1/52C	1.5	3600	143TC	82.5	85.0	2.01	50	424
N1/54C(C)	1.5	1800	145TC	84.0	80.5	2.08	54	446
N1/56C	1.5	1200	182TC	85.5	66.5	2.47	121	521
N0022C	2	3600	145TC	84.0	88.5	2.52	53	481
N0024C	2	1800	145TC	84.0	82.5	2.70	80	487
N0026C	2	1200	184TC	86.5	67.0	3.23	134	612
N0032C	3	3600	182TC	85.5	90.0	3.65	135	573
N0034C	3	1800	182TC	87.5	82.5	3.89	122	559
N0036C	3	1200	213TC	87.5	76.5	4.20	166	886
N0052C	5	3600	184TC	87.5	91.5	5.85	145	686
N0054C	5	1800	184TC	87.5	86.5	6.20	150	653
N0056C	5	1200	215TC	87.5	76.5	7.00	200	1,111
N7/52C	7.5	3600	213TC	88.5	87.0	9.10	190	964
N7/54C	7.5	1800	213TC	89.5	88.0	8.90	198	947
N7/56C(C)	7.5	1200	254TC	89.5	81.0	9.70	272	1,551
N0102C	10	3600	215TC	89.5	90.0	11.6	218	1,113
N0104C	10	1800	215TC	89.5	89.5	11.7	221	1,150
N0106C(C)	10	1200	256TC	89.5	82.5	12.7	318	1,971
N0152C	15	3600	254TC	90.2	91.5	17.0	350	1,598
N0154C	15	1800	254TC	91.0	88.0	17.6	365	1,568
N0156C(C)	15	1200	284TC	90.2	83.0	18.8	485	2,609
N0202C	20	3600	256TC	90.2	92.0	22.6	375	1,971
N0204C(C)	20	1800	256TCC	91.0	88.0	23.4	410	1,885
N0206C(C)	20	1200	286TC	90.2	83.5	24.9	498	3,317
N0252C	25	3600	284TSC	91.0	90.5	28.4	444	2,473
N0254C(C)	25	1800	284TC	92.4	89.0	28.5	515	2,310
N0256C(C)	25	1200	324TC	91.7	81.5	31.3	645	4,009
N0302C	30	3600	286TSC	91.0	91.0	33.9	555	2,956
N0304C(C)	30	1800	286TC	92.4	88.0	34.6	503	2,812
N0306C(C)	30	1200	326TC	91.7	80.5	38.1	656	4,553
N0402C	40	3600	324TSC	91.7	89.5	45.7	625	3,614
N0404C(C)	40	1800	324TC	93.0	89.0	45.3	740	3,533
N0406C(C)	40	1200	364TC	93.0	86.5	46.6	706	5,749
N0502C	50	3600	326TS	92.4	90.5	56.0	706	4,757
N0504C(C)	50	1800	326TC	93.0	89.5	56.0	835	4,524
N0506C(C)	50	1200	365TCC	93.0	85.5	59.0	838	6,958
N0602C	60	3600	364TSC	93.0	93.0	65.0	910	6,251
N0604C(C)	60	1800	364TC	93.6	86.5	69.5	915	5,776
N0606C(C)	60	1200	404TC	93.6	88.0	68.0	1091	8,291
N0752C	75	3600	365TSC	93.0	93.5	81.0	970	8,058
N0754C(C)	75	1800	365TC	94.1	87.5	85.5	1035	7,202
N0756C(C)	75	1200	405TC	93.6	88.5	85.0	1289	9,785
N1002C	100	3600	405TSC	93.6	91.5	109.5	1203	11,279
N1004C(C)	100	1800	405TC	94.5	89.0	111.5	1365	10,192

Notes:
(C) Meets NEMA Design C torque

MAX-SE™ ROUND BODY C-FACE

CE ee CCOO2A EPACT

TYPE AEVANE

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
NV0012C	1	3600	143TC	77.0	84.5	1.44	85	360
NV0014C(C)	1	1800	143TC	82.5	77.0	1.48	50	398
NV1/52C	1.5	3600	143TC	82.5	85.0	2.01	50	424
NV1/54C(C)	1.5	1800	145TC	84.0	80.5	2.08	54	446
NV0022C	2	3600	145TC	84.0	88.5	2.52	53	481
NV0024C	2	1800	145TC	84.0	82.5	2.70	80	487
NV0032C	3	3600	182TC	85.5	90.0	3.65	135	573
NV0034C	3	1800	182TC	87.5	82.5	3.89	122	559
NV0052C	5	3600	184TC	87.5	91.5	5.85	145	686
NV0054C	5	1800	184TC	87.5	86.5	6.20	150	653
NV7/52C	7.5	3600	213TC	88.5	87.0	9.10	190	964
NV7/54C	7.5	1800	213TC	89.5	88.0	8.90	198	947
NV0102C	10	3600	215TC	89.5	90.0	11.6	218	1,113
NV0104C	10	1800	215TC	89.5	89.5	11.7	221	1,150
NV0152C	15	3600	254TC	90.2	91.5	17.0	350	1,598
NV0154C	15	1800	254TC	91.0	88.0	17.6	365	1,568
NV0202C	20	3600	256TC	90.2	92.0	22.6	375	1,971
NV0204C(C)	20	1800	256TC	91.0	88.0	23.4	410	1,885
NV0252C	25	3600	284TSC	91.0	90.5	28.4	444	2,473
NV0254C(C)	25	1800	284TC	92.4	89.0	28.5	515	2,310
NV0302C	30	3600	286TSC	91.0	91.0	33.9	555	2,956
NV0304C(C)	30	1800	286TC	92.4	88.0	34.6	503	2,812
NV0402C	40	3600	324TSC	91.7	89.5	45.7	625	3,614
NV0404C(C)	40	1800	324TC	93.0	89.0	45.3	740	3,533
NV0502C	50	3600	326TSC	92.4	90.5	56.0	706	4,757
NV0504C(C)	50	1800	326TC	93.0	89.5	56.0	835	4,524
NV0602C	60	3600	364TSC	93.0	93.0	65.0	910	6,251
NV0604C(C)	60	1800	364TC	93.6	86.5	69.5	915	5,776
NV0752C	75	3600	365TSC	93.0	93.5	81.0	970	8,058
NV0754C(C)	75	1800	365TC	94.1	87.5	85.5	1035	7,202
NV1002C	100	3600	405TSC	93.6	91.5	109.5	1203	11,279
NV1004C(C)	100	1800	405TC	94.5	89.0	111.5	1365	10,192

Notes:

- See Page 61 for Drip Cover Adders.
- See Page 63 for Drip Cover Factory Modifications.

(C) Meets NEMA Design C torque

MAX-HT™

TYPE AEEAGD

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Crushers
- Impactors
- Chippers / Shredders
- Ball Mills/ Rolling Mills
- Any High Torque Application

FEATURES:

- 200 - 600 HP
- 1800, 1200, 900 RPM
- Totally Enclosed Fan Cooled (IP55 Rating)
- Standard Efficient Design
- 36 Month Warranty from Date of Manufacture
- 60 Hz – 460V Only
- Standard With Thermistors (PTC 140˚C), 1 per Phase, Wired to a Separate Auxiliary Box
- 1.15 Service Factor – Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish – 2 Dips and Bakes
- Class B Temperature Rise
- NEMA Design C Torques - ≥ 200% Starting Torque, ≥ 250% Breakdown Torque
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with 2 – 3" NPT Threaded Entrances - F1 Mounted.
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation
- Cast Iron Frame, End Bells, and Conduit Box
- Rolled Steel Fan Cover
- High Strength 4140 AISI Steel Shaft
- Locknut and Washer on NDE for Vertical Shaft Down Applications
- Drain Holes/ Plugs on Both End Brackets for Vertical Applications
- Threaded One Way Breather Drains for Horizontal Applications
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue Gray – Munsell 7.5GB 4/ 2
- Vacuum De-Gassed Regreasable Bearings Using Polyrex EM Grease
- Roller Bearing On Drive-End – NU320 or Larger
- Labyrinth Type Metal Grease Flinger on Both Ends
- Rubber Dust Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- 6 Leads
- Motors are CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) please consult factory for suitability in higher elevations.

MAX-HT™

TYPE AEEAGD

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
CD2006RZ	200	1200	505UZ	94.1	85.0	234	3,500	25,386
CD2008R(1)	200	900	5007C	93.6	80.0	250	3,728	38,080
CD2008RZ	200	900	586/7UZ	93.6	80.0	250	5,093	39,576
CD2504TR(1)	250	1800	449TZ	94.1	88.5	281	2,708	22,780
CD2504R(1)	250	1800	5007C	94.1	88.5	281	3,570	25,386
CD2506TR(1)	250	1200	449TZ	94.1	85.0	293	2,900	26,917
CD2506R(1)	250	1200	5007C	94.1	85.0	293	3,500	27,978
CD2506RZ	250	1200	586/7UZ	94.1	85.0	293	4,750	36,278
CD2508R(1)	250	900	5009C	94.1	80.0	311	4,200	42,402
CD2508RZ	250	900	586/7UZ	94.1	81.0	307	5,610	44,847
CD3004TR(1)	300	1800	449TZ	94.1	89.0	335	3,585	26,683
CD3004R(1)	300	1800	5007C	94.1	89.5	334	3,585	28,336
CD3004RZ	300	1800	586/7UZ	94.1	89.0	335	4,748	36,278
CD3006TR(1)	300	1200	449TZ	94.1	85.0	351	4,175	32,582
CD3006R(1)	300	1200	5009C	94.1	85.0	351	4,175	35,337
CD3006RZ	300	1200	586/7UZ	94.5	85.0	350	5,100	41,711
CD3008R(1)	300	900	5806C	94.1	81.0	368	5,093	52,832
CD3008RZ	300	900	586/7UZ	94.1	81.0	368	5,828	52,832
CD3504TR(1)	350	1800	449TZ	94.1	89.5	391	3,945	29,548
CD3504R(1)	350	1800	5009C	94.1	89.5	389	3,945	31,563
CD3504RZ	350	1800	586/7UZ	94.5	89.5	387	5,093	39,012
CD3506R(1)	350	1200	5806C	94.5	85.0	407	4,750	42,540
CD3506RZ	350	1200	586/7UZ	94.5	85.0	407	5,565	44,637
CD3508R(1)	350	900	5808C	94.5	81.0	428	5,610	55,371
CD3508RZ	350	900	586/7UZ	94.5	81.0	428	5,925	55,371
CD4004R(1)	400	1800	5806C	94.5	89.5	443	4,748	40,207
CD4004RZ	400	1800	586/7UZ	94.5	89.5	443	5,445	43,050
CD4006R(1)	400	1200	5808C	94.5	85.5	464	5,100	47,753
CD4006RZ	400	1200	586/7UZ	94.5	85.5	464	6,020	47,753
CD4008R(1)	400	900	5808C	94.5	81.5	486	5,828	67,089
CD4504R(1)	450	1800	5808C	94.5	90.0	495	5,093	44,765
CD4504RZ	450	1800	586/7UZ	94.5	90.0	495	6,510	44,765
CD4506R(1)	450	1200	5808C	94.5	85.5	521	5,565	51,871
CD5004R(1)	500	1800	5808C	94.5	90.0	550	5,445	46,164
CD5006R(1)	500	1200	5808C	94.5	85.5	579	6,020	55,165
CD6004R(1)	600	1800	5808C	95.1	90.0	656	6,510	65,799
CD6006R(1)	600	1200	5810C	95.1	85.5	691	6,898	79,125

Notes:
(1) "R" = Motor stocked standard with a drive-end roller bearing.

MAX-E1™ FAMILY NEMA PREMIUM EFFICIENCY

TYPE AEHE, AEHH8N, AEHH8NCF, AEUH8NDC

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressor
- Mixers
- Conveyors
- Any Severe Duty/ Petro-Chem/ Pulp & Paper Application

FEATURES:

- 3/4 - 800 HP - 3600, 1800, 1200, 900 RPM
- Totally Enclosed Fan Cooled (IP54 Rating), (IP55 Ratings for Frames Sizes 5000 and Larger)
- NEMA Premium Efficient Ratings From 1 - 500 HP, Denoted Catalog Number Prefix of "EP" - Note (1)
- Department of Energy Efficiency Certification # CC002A
- 36 Month Warranty from Date of Manufacture
- 3 Phase, 60 Hz , 230/ 460V (Usable on 208V) – 150 HP and Larger are 460V Only - Note (2)
- 575V Ratings Available, Denoted by a Catalog Number Suffix of "5" - Note (2)
- 1.15 Service Factor – Continuous
- NEMA Design B Torques as a Minimum
- Class B Temperature Rise, Class F Insulation with Phenolic Alkyd Resin Varnish – 2 Dips and Bakes
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrance – F1 Mounted. F2 Available – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature and Designed for 3300 ft. Elevation - Note (3)
- CSA Certified for Class I, Division II, Groups B, C, D, Temp Code T3C, Non Sparking, Non Static Fan - Note (4)
- Bi-Directional Rotation Except 2 Pole Motors 5000 Frame and Larger which are Unidirectional CCW Facing the Drive-End. See EXTRAS/ OPTIONS Below if CW Rotation is Required.
- Cast Iron Frame, End Bells, Fan Cover, and Main Conduit Box
- Dual Drilled Feet – Longer Frames. (i.e. 145T Drilled Also for 143T) Through 449T Frames Only
- 1045 Carbon Steel Shaft. Stainless Steel Nameplate
- Aluminum Die Cast Squirrel Cage Rotor Construction for Frames 449 and Smaller. Copper/ Copper Alloy Rotor for Frames 5000-6800.
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat/ Paint Color: Light Grey – Munsell N5.0
- Vacuum De-Gassed Regreasable Ball Bearings (or Roller) on 280TS Frames and Larger Using Polyrex EM Grease
- Double Shielded Bearings on Frames 140T-280T Pre-Packed with MULTEMP SRL Grease
- Automatic Grease Discharge Fittings
- Labyrinth Type Metal Flinger on Both Ends for Frames 280TS to 6800
- Rubber Flinger on Drive-End for Frames 140T to 280T
- Cast Iron Inner and Outer Bearing Caps on Both Ends for Frames 280TS to 6800
- Grounding Terminal Inside Main Box
- ABS Type Certified 350 HP and Larger, UL Recognized and CSA Approved for Inverter Duty per NEMA MG 1, Part 31 – 300 HP and Below. 350 HP and Above are Suitable for Inverter Duty per NEMA MG 1, Part 31, 4.4.2 - Note (5)
- HPE Stator Wire Capable of Withstanding Voltage Spikes of Up to 2200 Volts
- Precautions should be taken to eliminate or reduce shaft currents that may be imposd on the motor by the VFD.
- Insulated Non-Drive End Bearing on 3600 rpm motors 600 HP and larger
- Speed Ranges: 20:1 VT, 10:1 CT. 350 HP and larger are 3:1 CT
- 9 Leads -5 HP and Below, 12 Leads - 7.5 HP to 125 HP, 6 Leads - 150 HP and Larger

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) NEMA Premium Efficiency levels only applies to 1-500 HP, 3600, 1800, 1200 RPM.
(2) 208V or the current Rating will not Appear on the Motor Nameplate. Please see Modification for Nameplate adder TWMC carries minimal 575V stock. Please check availability to ensure required motors are in stock. Ratings may be available from our Canadian warehouses at a higher price, or from our factory with longer lead time.
(3) Please consult factory for suitability in higher ambients and higher elevations.
(4) Additional charge for Division II nameplate, Self Certification applies to 300 HP and above.
(5) Motor service factor is 1.0 when operated on a VFD.
(6) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD.

MAX-E1™ NEMA PREMIUM EFFICIENCY

TYPE AEHE, AEHH8N

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V or 575V)*	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
E0/78	3/4	900	145T	70.0	53.5	1.90	85	780
E0/785	3/4	900	145T	70.0	53.5	1.52	85	780
EP0012	1	3600	143T	82.5	85.0	1.34	68	423
EP00125	1	3600	143T	82.5	85.0	1.07	68	423
EP0014(C)	1	1800	143T	85.5	73.0	1.50	78	426
EP00145(C)	1	1800	143T	85.5	73.0	1.20	78	426
EP0016	1	1200	145T	82.5	65.5	1.73	83	552
EP00165	1	1200	145T	82.5	65.5	1.38	83	552
E0018	1	900	182T	77.0	58.5	2.10	105	917
E00185	1	900	182T	77.0	58.5	1.68	105	917
EP1/52	1.5	3600	143T	84.0	83.5	2.00	80	486
EP1/525	1.5	3600	143T	84.0	83.5	1.60	80	486
EP1/54(C)	1.5	1800	145T	86.5	78.0	2.08	80	488
EP1/545(C)	1.5	1800	145T	86.5	78.0	1.66	80	488
EP1/56	1.5	1200	182T	87.5	63.5	2.53	125	574
EP1/565	1.5	1200	182T	87.5	63.5	2.02	125	574
E1/58	1.5	900	184T	77.0	60.5	3.00	125	1,093
E1/585	1.5	900	184T	77.0	60.5	2.40	125	1,093
EP0022	2	3600	145T	86.5	86.0	2.52	95	513
EP00225	2	3600	145T	86.5	86.0	2.02	95	513
EP0024(C)	2	1800	145T	86.5	78.0	2.78	110	520
EP00245(C)	2	1800	145T	86.5	78.0	2.22	110	520
EP0026(C)	2	1200	184T	88.5	70.5	3.00	136	647
EP00265(C)	2	1200	184T	88.5	70.5	2.40	136	647
E0028(C)	2	900	213T	85.5	64.0	5.00	173	1,272
E00285(C)	2	900	213T	85.5	64.0	4.00	173	1,272
EP0032	3	3600	182T	88.5	90.0	3.53	125	603
EP00325	3	3600	182T	88.5	90.0	2.82	125	603
EP0034(C)	3	1800	182T	89.5	84.0	3.74	130	589
EP00345(C)	3	1800	182T	89.5	84.0	2.99	130	589
EP0036(C)	3	1200	213T	89.5	78.0	4.02	180	849
EP00365(C)	3	1200	213T	89.5	78.0	3.22	180	849
E0038(C)	3	900	215T	85.5	66.0	5.00	192	1,675
E00385(C)	3	900	215T	85.5	66.0	4.00	192	1,675
EP0052	5	3600	184T	88.5	92.5	5.72	145	746
EP00525	5	3600	184T	88.5	92.5	4.58	145	746
EP0054(C)	5	1800	184T	89.5	85.5	6.12	150	680
EP00545(C)	5	1800	184T	89.5	85.5	4.90	150	680
EP0056(C)	5	1200	215T	91.0	82.5	6.24	225	1,217
EP00565(C)	5	1200	215T	91.0	82.5	4.99	225	1,217
E0058	5	900	254T	86.5	72.0	7.50	305	2,279
E00585	5	900	254T	86.5	72.0	6.00	305	2,279
EP7/52	7.5	3600	213T	91.0	89.0	8.67	200	1008
EP7/525	7.5	3600	213T	91.0	89.0	6.94	200	1008
EP7/54(C)	7.5	1800	213T	91.7	86.5	8.85	210	1012
EP7/545(C)	7.5	1800	213T	91.7	86.5	7.08	210	1012
EP7/56(C)	7.5	1200	254T	91.0	80.5	9.59	325	1,712
EP7/565(C)	7.5	1200	254T	91.0	80.5	7.67	325	1,712
E7/58(C)	7.5	900	256T	85.5	71.5	11.50	365	2,901
E7/585(C)	7.5	900	256T	85.5	71.5	9.20	365	2,901

Notes:
(5) at end of catalog number denotes 575V.
(C) Meets NEMA Design C torque

MAX-E1™ NEMA PREMIUM EFFICIENCY

CCOO2A

TYPE AEHE, AEHH8N

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V or 575V)*	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
EP0102	10	3600	215T	91.0	89.5	11.5	235	1,169
EP01025	10	3600	215T	91.0	89.5	9.2	235	1,169
EP0104(C)	10	1800	215T	91.7	88.0	11.6	265	1,217
EP01045(C)	10	1800	215T	91.7	88.0	9.3	265	1,217
EP0106(C)	10	1200	256T	91.0	80.5	12.8	380	2,082
EP01065(C)	10	1200	256T	91.0	80.5	10.2	380	2,082
E0108(C)	10	900	284T	89.5	73.5	14.2	445	3,655
E01085(C)	10	900	284T	89.5	73.5	11.4	445	3,655
EP0152	15	3600	254T	92.4	91.5	16.6	345	1,653
EP01525	15	3600	254T	92.4	91.5	13.3	345	1,653
EP0154(C)	15	1800	254T	92.4	88.0	17.3	350	1,609
EP01545(C)	15	1800	254T	92.4	88.0	13.8	350	1,609
EP0156(C)	15	1200	284T	92.4	83.5	18.2	460	2,851
EP01565(C)	15	1200	284T	92.4	83.5	14.6	460	2,851
E0158	15	900	286T	89.5	78.0	20.1	510	4,794
E01585	15	900	286T	89.5	78.0	16.1	510	4,794
EP0202	20	3600	256T	92.4	92.5	21.9	405	2,102
EP02025	20	3600	256T	92.4	92.5	17.5	405	2,102
EP0204(C)	20	1800	256T	93.0	87.5	23.0	410	2,028
EP02045(C)	20	1800	256T	93.0	87.5	18.4	410	2,028
EP0206(C)	20	1200	286T	91.7	84.0	24.3	550	3,595
EP02065(C)	20	1200	286T	91.7	84.0	19.4	550	3,595
E0208(C)	20	900	324T	90.2	81.0	25.6	585	5,780
E02085(C)	20	900	324T	90.2	81.0	20.5	585	5,780
EP0252	25	3600	284TS	92.4	91.0	27.8	498	2,694
EP02525	25	3600	284TS	92.4	91.0	22.2	498	2,694
EP0254(C)	25	1800	284T	93.6	86.0	29.1	520	2,474
EP0254S(C)	25	1800	284TS	93.6	86.0	29.1	520	2,474
EP02545(C)	25	1800	284T	93.6	86.0	23.3	520	2,474
EP0256(C)	25	1200	324T	93.0	83.0	30.3	725	4,456
EP02565(C)	25	1200	324T	93.0	83.0	24.2	725	4,456
E0258(C)	25	900	326T	90.2	79.5	25.6	684	6,832
E02585(C)	25	900	326T	90.2	79.5	20.5	684	6,832
EP0302	30	3600	286TS	93.0	91.0	33.2	530	3,204
EP03025	30	3600	286TS	93.0	91.0	26.7	530	3,204
EP0304(C)	30	1800	286T	93.6	87.5	34.3	558	3,043
EP0304S(C)	30	1800	286TS	93.6	87.5	34.3	558	3,043
EP03045(C)	30	1800	286T	93.6	87.5	27.4	558	3,043
EP0306(C)	30	1200	326T	93.0	80.5	37.5	775	5,022
EP03065(C)	30	1200	326T	93.0	80.5	30.0	775	5,022
E0308(C)	30	900	364T	93.0	77.5	39.0	757	7,945
E03085(C)	30	900	364T	93.0	77.5	31.2	757	7,945
EP0402	40	3600	324TS	94.1	90.0	44.2	755	4,186
EP04025	40	3600	324TS	94.1	90.0	35.4	755	4,186
EP0404(C)	40	1800	324T	94.1	86.0	46.3	750	4,039
EP0404S(C)	40	1800	324TS	94.1	86.0	46.3	750	4,039
EP04045(C)	40	1800	324T	94.1	86.0	37.0	750	4,039
EP0406(C)	40	1200	364T	94.1	86.5	46.0	980	6,587
EP04065(C)	40	1200	364T	94.1	86.5	36.8	980	6,587
E0408(C)	40	900	365T	91.7	76.5	53.4	1,020	9,813
E04085(C)	40	900	365T	91.7	76.5	42.7	1,020	9,813

Notes:

(5) at end of catalog number denotes 575V
(S) at end of catalog number denotes "TS" Short Shaft
(C) Meets NEMA Design C torque

MAX-E1™ NEMA PREMIUM EFFICIENCY

TYPE AEHE, AEHH8N

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V or 575V)*	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
EP0502	50	3600	326TS	94.1	91.0	54.7	815	5,580
EP05025	50	3600	326TS	94.1	91.0	43.8	815	5,580
EP0504(C)	50	1800	326T	94.5	87.0	56.9	845	5,129
EP0504S(C)	50	1800	326TS	94.5	87.0	56.9	845	5,129
EP05045(C)	50	1800	326T	94.5	87.0	45.5	845	5,129
EP0506(C)	50	1200	365T	94.1	86.0	57.8	1,105	8,125
EP05065(C)	50	1200	365T	94.1	86.0	46.2	1,105	8,125
E0508(C)	50	900	404T	93.0	80.5	53.4	1,098	11,578
E05085(C)	50	900	404T	93.0	80.5	42.7	1,098	11,578
EP0602	60	3600	364TS	94.1	93.0	64.2	960	7,353
EP06025	60	3600	364TS	94.1	93.0	51.4	960	7,353
EP0604(C)	60	1800	364T	95.0	86.5	68.4	945	6,626
EP0604S(C)	60	1800	364TS	95.0	86.5	68.4	945	6,626
EP06045(C)	60	1800	364T	95.0	86.5	54.7	945	6,626
EP0606(C)	60	1200	404T	94.5	87.0	68.3	1,305	9,552
EP06065(C)	60	1200	404T	94.5	87.0	54.6	1,305	9,552
E0608(C)	60	900	405T	93.0	81.0	74.6	1,410	13,414
E06085(C)	60	900	405T	93.0	81.0	59.7	1,410	13,414
EP0752	75	3600	365TS	94.5	93.0	79.9	995	9,391
EP07525	75	3600	365TS	94.5	93.0	63.9	995	9,391
EP0754(C)	75	1800	365T	95.4	86.5	85.1	1,045	8,463
EP0754S(C)	75	1800	365TS	95.4	86.5	85.1	1,045	8,463
EP07545(C)	75	1800	365T	95.4	86.5	68.1	1,045	8,463
EP0754R(C)	75	1800	365T	95.4	86.5	85.1	1,045	8,463
EP07545R(C)	75	1800	365T	95.4	86.5	68.1	1,045	8,463
EP0756(C)	75	1200	405T	94.5	86.5	85.9	1,440	11,376
EP07565(C)	75	1200	405T	94.5	86.5	68.7	1,440	11,376
EP0756R(C)	75	1200	405T	94.5	86.5	85.9	1,440	11,376
EP07565R(C)	75	1200	405T	94.5	86.5	68.7	1,440	11,376
E0758	75	900	444T	93.0	79.0	95.6	1,790	16,933
E07585	75	900	444T	93.0	79.0	95.6	1,790	16,933
E0758R	75	900	444T	93.0	79.0	76.5	1,790	16,933
E07585R	75	900	444T	93.0	79.0	76.5	1,790	16,933
EP1002	100	3600	405TS	95.4	92.0	107.0	1,386	12,737
EP10025	100	3600	405TS	95.4	92.0	85.6	1,386	12,737
EP1004(C)	100	1800	405T	95.4	87.5	112.0	1,415	11,874
EP1004S(C)	100	1800	405TS	95.4	87.5	112.0	1,415	11,874
EP10045(C)	100	1800	405T	95.4	87.5	89.6	1,415	11,874
EP1004R(C)	100	1800	405T	95.4	87.5	112.0	1,415	11,874
EP10045R(C)	100	1800	405T	95.4	87.5	89.6	1,415	11,874
EP1006	100	1200	444T	94.1	82.5	119.0	1,783	14,615
EP10065	100	1200	444T	94.1	82.5	95.2	1,783	14,615
EP1006R	100	1200	444T	94.1	82.5	119.0	1,783	14,615
EP10065R	100	1200	444T	94.1	82.5	95.2	1,783	14,615
E1008	100	900	445T	93.0	79.0	127.0	2,088	21,995
E10085	100	900	445T	93.0	79.0	102.0	2,088	21,995
E1008R	100	900	445T	93.0	79.0	127.0	2,088	21,995
E10085R	100	900	445T	93.0	79.0	102.0	2,088	21,995

Notes:

(5) at end of catalog number denotes 575V.
(S) at end of catalog number denotes "TS" Short Shaft
"R" = Motor stocked standard with a drive-end roller bearing.
(C) Meets NEMA Design C torque

MAX-E1™ NEMA PREMIUM EFFICIENCY

TYPE AEHE, AEHH8N

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V or 575V)*	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
EP1252	125	3600	444TS	95.0	86.0	143	1,656	15,835
EP12525	125	3600	444TS	95.0	86.0	114	1,656	15,835
EP1254	125	1800	444T	95.4	84.0	146	1,830	14,741
EP1254S	125	1800	444TS	95.4	84.0	146	1,830	14,741
EP12545	125	1800	444T	95.4	84.0	117	1,830	14,741
EP1254R	125	1800	444T	95.4	84.0	146	1,830	14,741
EP12545R	125	1800	444T	95.4	84.0	117	1,830	14,741
EP1256	125	1200	445T	95.0	83.0	148	2,193	19,182
EP12565	125	1200	445T	95.0	83.0	118	2,193	19,182
EP1256R	125	1200	445T	95.0	83.0	148	2,193	19,182
EP12565R	125	1200	445T	95.0	83.0	118	2,193	19,182
E1258	125	900	447T	93.6	80.0	156	2,490	25,292
E12585	125	900	447T	93.6	80.0	125	2,490	25,292
E1258R	125	900	447T	93.6	80.0	156	2,490	25,292
E12585R	125	900	447T	93.6	80.0	125	2,490	25,292
EP1502(1)	150	3600	445TS	95.0	87.0	170	1,783	18,964
EP15025(1)	150	3600	445TS	95.0	87.0	136	1,783	18,964
EP1504(1)	150	1800	445T	95.8	84.0	175	2,005	16,982
EP1504S(1)	150	1800	445TS	95.8	84.0	175	2,005	16,982
EP15045(1)	150	1800	445T	95.8	84.0	140	2,005	16,982
EP1504R(1)	150	1800	445T	95.8	84.0	175	2,005	16,982
EP15045R(1)	150	1800	445T	95.8	84.0	140	2,005	16,982
EP1506(1)	150	1200	447T	95.8	83.5	176	2,547	21,458
EP1506R(1)	150	1200	447T	95.8	83.5	141	2,547	21,458
EP15065(1)	150	1200	447T	95.8	83.5	176	2,547	21,458
EP15065R(1)	150	1200	447T	95.8	83.5	141	2,547	21,458
E1508(1)	150	900	449T	93.6	80.0	242	2,903	30,378
E15085(1)	150	900	449T	93.6	80.0	194	2,903	30,378
E1508R(1)	150	900	449T	93.6	80.0	242	2,903	30,378
E15085R(1)	150	900	449T	93.6	80.0	194	2,903	30,378
EP2002(1)	200	3600	447TS	95.4	87.0	226	2,444	25,973
EP20025(1)	200	3600	447TS	95.4	87.0	181	2,444	25,973
EP2004(1)	200	1800	447T	96.2	84.5	230	2,547	22,203
EP2004S(1)	200	1800	447TS	96.2	84.5	230	2,547	22,203
EP20045(1)	200	1800	447T	96.2	84.5	184	2,547	22,203
EP2004R(1)	200	1800	447T	96.2	84.5	230	2,547	22,203
EP20045R(1)	200	1800	447T	96.2	84.5	184	2,547	22,203
EP2006(1)	200	1200	449T	95.8	84.0	233	2,785	28,028
EP20065(1)	200	1200	449T	95.8	84.0	186	2,785	28,028
EP2006R(1)	200	1200	449T	95.8	84.0	133	2,785	28,028
EP20065R(1)	200	1200	449T	95.8	84.0	186	2,785	28,028
E2008(1)	200	900	5007B	95.8	82.0	306	3,570	38,215
E20085(1)	200	900	5007B	95.8	82.0	245	3,570	38,215
E2008R(1)	200	900	5007C	94.4	82.0	306	3,570	38,215
E20085R(1)	200	900	5007C	94.4	82.0	245	3,570	38,215
EP2502(1)	250	3600	449TS	95.8	88.0	278	2,547	33,849
EP2504(1)	250	1800	449T	96.2	85.5	285	2,720	28,550
EP25045(1)	250	1800	449T	96.2	85.5	285	2,720	28,550
EP2506(1)	250	1200	449T	95.8	84.5	289	2,925	29,353
EP2506R(1)	250	1200	449T	95.8	84.5	289	2,925	29,353
E2508(1)	250	900	5009B	94.5	81.0	306	4,200	42,984
E2508R(1)	250	900	5009C	94.5	81.0	306	4,200	42,984

Notes:

(5) at end of catalog number denotes 575V.
(S) at end of catalog number denotes "TS" Short Shaft
"R" = Motor stocked standard with a drive-end roller bearing.

MAX-E1™ NEMA PREMIUM EFFICIENCY

TYPE AEHE, AEHH8N

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
EP3002(1)	300	3600	449TS	95.8	88.0	333	2,647	36,455
EP3004(1)	300	1800	449T	96.2	85.5	342	2,855	29,897
EP3004R(1)	300	1800	449T	96.2	85.5	342	2,855	29,897
EP3006(1)(3)	300	1200	449T	95.8	86.5	339	3,430	30,784
EP3006R(1)(3)	300	1200	449T	95.8	86.5	339	3,430	30,784
E3008(1)	300	900	5009B	94.6	81.0	366	4,410	47,183
E3008R(1)	300	900	5009C	94.6	81.0	366	4,410	47,183
EP3502(1)(3)	350	3600	449TS	95.8	91.6	373	2,785	38,480
EP3504(1)(3)	350	1800	449T	96.2	90.0	379	3,280	32,346
EP3504R(1)(3)	350	1800	449T	96.2	90.0	379	3,280	32,346
EP3506(1)	350	1200	5011B	95.8	87.0	393	5,565	50,932
EP3506R(1)	350	1200	5011C	95.8	87.0	393	5,565	50,932
E3508(1)	350	900	5011B	94.8	81.0	426	5,040	57,973
E3508R(1)	350	900	5011C	94.8	81.0	426	5,040	57,973
EP4002(1)(2)	400	3600	5009A	95.8	91.6	427	3,623	51,490
EP4004(1)	400	1800	5009B	96.2	90.0	433	4,025	45,886
EP4004R(1)	400	1800	5009C	96.2	90.0	433	4,025	45,886
EP4006(1)	400	1200	5011B	95.8	87.0	449	5,803	58,597
EP4006R(1)	400	1200	5011C	95.8	87.0	449	5,803	58,597
E4008(1)	400	900	5808B	94.8	82.5	478	5,355	74,687
E4008R(1)	400	900	5808C	94.8	82.5	478	5,355	74,687
EP4502(1)(2)	450	3600	5011A	95.8	91.7	480	4,410	60,575
EP4504(1)	450	1800	5011B	96.2	90.0	487	5,040	54,819
EP4504R(1)	450	1800	5011C	96.2	90.0	487	5,040	54,819
EP4506(1)	450	1200	5808B	95.8	88.0	500	5,803	65,680
EP4506R(1)	450	1200	5808C	95.8	88.0	500	5,803	65,680
E4508(1)	450	900	5808B	95.0	82.5	537	5,723	77,582
E4508R(1)	450	900	5808C	95.0	82.5	537	5,723	77,582
EP5002(1)(2)	500	3600	5011A	95.8	91.7	533	4,830	63,570
EP5004(1)	500	1800	5011B	96.2	90.0	541	5,250	60,227
EP5004R(1)	500	1800	5011C	96.2	90.0	541	5,250	60,227
EP5006(1)	500	1200	5808B	95.8	88.0	555	6,330	71,086
EP5006R(1)	500	1200	5808C	95.8	88.0	555	6,330	71,086
E5008(1)	500	900	5810B	95.2	82.5	596	6,300	83,031
E5008R(1)	500	900	5810C	95.2	82.5	596	6,300	83,031
E6002(1)(2)	600	3600	5810A	95.4	90.5	650	6,355	72,975
E6004(1)	600	1800	5808B	95.5	90.0	654	6,360	68,099
E6004R(1)	600	1800	5808C	95.5	90.0	654	6,360	68,099
E6006(1)	600	1200	5810B	95.6	86.8	677	6,720	80,584
E6006R(1)	600	1200	5810C	95.6	86.8	677	6,720	80,584
E6008(1)	600	900	6808B	95.5	84.0	700	8,750	98,305
E6008R(1)	600	900	6808C	95.5	84.0	700	8,750	98,305
E7002(1)(2)	700	3600	5810A	95.5	90.5	758	6,500	80,449
E7004(1)	700	1800	5810B	95.6	90.0	762	7,140	80,040
E7004R(1)	700	180	5810C	95.6	90.0	762	7,140	80,040
E7006(1)	700	1200	5810B	95.8	86.8	788	7,245	91,049
E7006R(1)	700	1200	5810C	95.8	86.8	788	7,245	91,049
E7008(1)	700	900	6808B	95.6	84.0	816	8,925	105,385
E7008R(1)	700	900	6808C	95.6	84.0	816	8,925	105,385
E8002(1)(2)	800	3600	6808A	95.5	90.5	867	8,850	107,856
E8004(1)	800	1800	5810B	95.6	90.5	866	7,613	85,750
E8004R(1)	800	1800	5810C	95.6	90.5	866	7,613	85,750
E8006(1)	800	1200	6808B	96.0	87.0	897	8,000	103,401
E8006R(1)	800	1200	6808C	96.0	87.0	897	8,000	103,401
E8008(1)	800	900	6808B	95.6	84.0	933	9,293	111,433
E8008R(1)	800	900	6808C	95.6	84.0	933	9,293	111,433

Notes:

(1) Ratings 150 HP and larger are 460V only.

(2) Motors are unidirectional, counter clockwise rotation, facing the drive-end side. To change direction of rotation please consult factory for adder. "R" = Motor stocked standard with a drive-end roller bearing.

(3) D-Flange Not Available

MAX-E1™ NEMA PREMIUM EFFICIENCY

TYPE AEHH8NCF, FOOTED WITH C-FACE

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
EP0012C	1	3600	143TC	82.5	85.0	1.34	59	503
EP0014C(C)	1	1800	143TC	85.5	73.0	1.50	80	531
EP0016C	1	1200	145TC	82.5	65.5	1.73	88	689
EP1/52C	1.5	3600	143TC	84.0	83.5	2.00	82	607
EP1/54C(C)	1.5	1800	145TC	86.5	78.0	2.08	82	609
EP1/56C	1.5	1200	182TC	87.5	63.5	2.53	135	716
EP0022C	2	3600	145TC	86.5	86.0	2.52	97	641
EP0024C(C)	2	1800	145TC	86.5	78.0	2.78	112	649
EP0026C	2	1200	184TC	88.5	70.5	3.00	146	806
EP0032C	3	3600	182TC	88.5	90.0	3.53	128	751
EP0034C(C)	3	1800	182TC	89.5	84.0	3.74	133	734
EP0036C	3	1200	213TC	89.5	78.0	4.02	195	1,059
EP0052C	5	3600	184TC	88.5	92.5	5.72	148	886
EP0054C(C)	5	1800	184TC	89.5	85.5	6.12	153	843
EP0056C	5	1200	215TC	91.0	82.5	6.24	240	1,405
EP7/52C	7.5	3600	213TC	91.0	89.0	8.67	204	1,197
EP7/54C(C)	7.5	1800	213TC	91.7	86.5	8.85	214	1,202
EP7/56C	7.5	1200	254TC	91.0	80.5	9.59	350	1,910
EP0102C	10	3600	215TC	91.0	89.5	11.5	240	1,387
EP0104C(C)	10	1800	215TC	91.7	88.0	11.6	270	1,405
EP0106C	10	1200	256TC	91.0	80.5	12.8	400	2,247
EP0152C	15	3600	254TC	92.4	91.5	16.6	352	1,888
EP0154C(C)	15	1800	254TC	92.4	88.0	17.3	357	1,833
EP0156C	15	1200	284TC	92.4	83.5	18.2	485	3,146
EP0202C	20	3600	256TC	92.4	92.5	21.9	413	2,292
EP0204C(C)	20	1800	256TC	93.0	87.5	23.0	418	2,219
EP0206C	20	1200	286TC	91.7	84.0	24.3	575	3,932
EP0252C	25	3600	284TSC	92.4	91.0	27.8	508	3,090
EP0254C(C)	25	1800	284TC	93.6	86.0	29.1	530	2,910
EP0256C	25	1200	324TC	93.0	83.0	30.3	755	4,888
EP0302C	30	3600	286TSC	93.0	91.0	33.2	541	3,562
EP0304C(C)	30	1800	286TC	93.6	87.5	34.3	569	3,427
EP0306C	30	1200	326TC	93.0	80.5	37.5	805	5,393
EP0402C	40	3600	324TSC	94.1	90.0	44.2	770	4,663
EP0404C(C)	40	1800	324TC	94.1	86.0	46.3	765	4,494
EP0406C	40	1200	364TC	94.1	86.5	46.0	1,025	7,135
EP0502C	50	3600	326TSC	94.1	91.0	54.7	831	6,067
EP0504C(C)	50	1800	326TC	94.5	87.0	56.9	862	5,618
EP0506C	50	1200	365TC	94.1	86.0	57.8	1,145	8,651
EP0602C	60	3600	364TSC	94.1	93.0	64.2	979	7,865
EP0604C(C)	60	1800	364TC	95.0	86.5	68.4	964	7,247
EP0606C	60	1200	404TC	94.5	87.0	68.3	1,345	10,449
EP0752C	75	3600	365TSC	94.5	93.0	79.9	1,015	9,887
EP0754C(C)	75	1800	365TC	95.4	86.5	85.1	1,066	8,988
EP0756C	75	1200	405TC	94.5	86.5	85.9	1,490	12,191
EP1002C	100	3600	405TSC	95.4	92.0	107.0	1,414	13,370
EP1004C(C)	100	1800	405TC	95.4	87.5	112.0	1,443	12,583

Notes:
(C) Meets NEMA Design C torque

MAX-E1™ NEMA PREMIUM EFFICIENCY

TYPE AEUH8NDC, ROUND BODY, C-FACE WITH CAST IRON DRIP COVER

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
EPV0012C	1	3600	143TC	82.5	85.0	1.34	59	575
EPV0014C(C)	1	1800	143TC	85.5	73.0	1.50	80	607
EPV0016C	1	1200	145TC	82.5	65.5	1.73	88	749
EPV1/52C	1.5	3600	143TC	84.0	83.5	2.00	82	693
EPV1/54C(C)	1.5	1800	145TC	86.5	78.0	2.08	82	696
EPV1/56C	1.5	1200	182TC	87.5	63.5	2.53	135	818
EPV0022C	2	3600	145TC	86.5	86.0	2.52	97	732
EPV0024C(C)	2	1800	145TC	86.5	78.0	2.78	112	741
EPV0026C	2	1200	184TC	88.5	70.5	3.00	146	922
EPV0032C	3	3600	182TC	88.5	90.0	3.53	128	858
EPV0034C(C)	3	1800	182TC	89.5	84.0	3.74	133	839
EPV0036C	3	1200	213TC	89.5	78.0	4.02	195	1,338
EPV0052C	5	3600	184TC	88.5	92.5	5.72	148	1,012
EPV0054C(C)	5	1800	184TC	89.5	85.5	6.12	153	963
EPV0056C	5	1200	215TC	91.0	82.5	6.24	240	1,605
EPV7/52C	7.5	3600	213TC	91.0	89.0	8.67	204	1,368
EPV7/54C(C)	7.5	1800	213TC	91.7	86.5	8.85	214	1,374
EPV7/56C	7.5	1200	254TC	91.0	80.5	9.59	350	2,183
EPV0102C	10	3600	215TC	91.0	89.5	11.5	240	1,586
EPV0104C(C)	10	1800	215TC	91.7	88.0	11.6	270	1,605
EPV0106C	10	1200	256TC	91.0	80.5	12.8	400	2,568
EPV0152C	15	3600	254TC	92.4	91.5	16.6	352	2,157
EPV0154C(C)	15	1800	254TC	92.4	88.0	17.3	357	2,095
EPV0156C	15	1200	284TC	92.4	83.5	18.2	485	3,595
EPV0202C	20	3600	256TC	92.4	92.5	21.9	413	2,619
EPV0204C(C)	20	1800	256TC	93.0	87.5	23.0	418	2,536
EPV0206C	20	1200	286TC	91.7	84.0	24.3	575	4,269
EPV0252C	25	3600	284TSC	92.4	91.0	27.8	508	3,254
EPV0254C(C)	25	1800	284TC	93.6	86.0	29.1	530	3,065
EPV0256C	25	1200	324TC	93.0	83.0	30.3	755	5,147
EPV0302C	30	3600	286TSC	93.0	91.0	33.2	541	3,751
EPV0304C(C)	30	1800	286TC	93.6	87.5	34.3	569	3,609
EPV0306C	30	1200	326TC	93.0	80.5	37.5	805	5,679
EPV0402C	40	3600	324TSC	94.1	90.0	44.2	770	4,910
EPV0404C(C)	40	1800	324TC	94.1	86.0	46.3	765	4,733
EPV0406C	40	1200	364TC	94.1	86.5	46.0	1,025	7,513
EPV0502C	50	3600	326TSC	94.1	91.0	54.7	831	6,389
EPV0504C(C)	50	1800	326TC	94.5	87.0	56.9	862	5,916
EPV0506C	50	1200	365TC	94.1	86.0	57.8	1,145	9,111
EPV0602C	60	3600	364TSC	94.1	93.0	64.2	979	8,034
EPV0604C(C)	60	1800	364TC	95.0	86.5	68.4	964	7,403
EPV0606C	60	1200	404TC	94.5	87.0	68.3	1,345	10,674
EPV0752C	75	3600	365TSC	94.5	93.0	79.9	1,015	10,100
EPV0754C(C)	75	1800	365TC	95.4	86.5	85.1	1,066	9,182
EPV0756C	75	1200	405TC	94.5	86.5	85.9	1,490	12,453
EPV1002C	100	3600	405TSC	95.4	92.0	107.0	1,414	13,658
EPV1004C(C)	100	1800	405TC	95.4	87.5	112.0	1,443	12,854

Notes:
(C) Meets NEMA Design C torque

MAX-E2™ NEMA PREMIUM EFFICIENCY

TYPE AEHH

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressors
- Mixers
- Conveyors
- Any Severe Duty/ Petro-Chem/ Pulp & Paper Application

FEATURES:

- 1 - 300 HP
- 3600, 1800, 1200 RPM
- Totally Enclosed Fan Cooled (IP55 Rating)
- IEEE 841 Ready
- Meets GM 7E-TA Specifications
- Meets IEEE 45 Marine Duty
- NEMA Premium Efficient
- Department of Energy Efficiency Certification #CC002A
- 36 Month Warranty from Date of Manufacture
- 3 Phase, 60 Hz , 460V
- 1.15 Service Factor – Continuous
- NEMA Design B Torques as a Minimum
- Class B Temperature Rise, Class F Insulation with Phenolic Alkyd Resin Varnish – 2 Dips and Bakes
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrance – F1 Mounted. F2 Available – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- CSA Certified for Class I, Division II, Groups B, C, D, Temp Code T3C, Non-Sparking, Non-Static Fan - Note (3)
- Bi-Directional Rotation
- Cast Iron Frame, End Bells, Fan Cover, and Main Conduit Box
- Cast Iron Inner and Outer Bearing Caps
- Dual Drilled Feet – Longer Frames. (i.e. 145T Drilled Also for 143T)
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: 2 Part Epoxy
- Paint Color: Blue – Munsell 5PB 3/ 8
- Vacuum De-Gassed Regreasable Ball Bearings Using Polyrex EM Grease
- Automatic Grease Discharge Fittings
- Grounding Terminal Inside Main Box with Provisions for Grounding on Foot
- Stainless Steel Nameplate and Hardware
- Stainless Steel Automatic Breather Drains
- UL Recognized and CSA Approved for Inverter Duty per NEMA MG 1, Part 31 - Note (4)
- HPE Stator Wire Capable of Withstanding Voltage Spikes of Up to 2200 Volts
- Speed Ranges: 20:1 VT, 10:1 CT
- 3 Leads Only
- Vibration Not to Exceed 0.08 Inches per Second
- Noise Level Not to Exceed 85 dB(A) at 1 Meter Unloaded

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.
(3) Additional charge for Division II nameplate.
(4) Motor service factor is 1.0 when operated on a VFD.

MAX-E2™ NEMA PREMIUM EFFICIENCY

TYPE AEHH

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING. WT. (lbs.)	LIST PRICE
HH0012	1	3600	143T	82.5	85.0	1.34	58	510
HH0014(C)	1	1800	143T	85.5	73.0	1.50	58	488
HH0016	1	1200	145T	82.5	65.5	1.73	97	608
HH1/52	1.5	3600	143T	84.0	83.5	2.00	58	528
HH1/54(C)	1.5	1800	145T	86.5	78.0	2.08	65	560
HH1/56	1.5	1200	182T	87.5	63.5	2.53	130	628
HH0022	2	3600	145T	86.5	86.0	2.52	78	572
HH0024(C)	2	1800	145T	86.5	78.0	2.78	97	597
HH0026(C)	2	1200	184T	88.5	70.5	3.00	150	721
HH0032	3	3600	182T	88.5	90.0	3.53	100	667
HH0034(C)	3	1800	182T	89.5	84.0	3.74	130	673
HH0036(C)	3	1200	213T	89.5	78.0	4.02	220	935
HH0052	5	3600	184T	88.5	92.5	5.72	140	832
HH0054(C)	5	1800	184T	89.5	85.5	6.12	150	794
HH0056(C)	5	1200	215T	91.0	82.5	6.24	235	1,359
HH7/52	7.5	3600	213T	91.0	89.0	8.67	202	1,121
HH7/54(C)	7.5	1800	213T	91.7	86.5	8.85	202	1,127
HH7/56(C)	7.5	1200	254T	91.0	80.5	9.59	323	1,885
HH0102	10	3600	215T	91.0	89.5	11.5	224	1,306
HH0104(C)	10	1800	215T	91.7	88.0	11.6	224	1,341
HH0106(C)	10	1200	256T	91.0	80.5	12.8	380	2,304
HH0152	15	3600	254T	92.4	91.5	16.6	323	1,829
HH0154(C)	15	1800	254T	92.4	88.0	17.3	345	1,780
HH0156(C)	15	1200	284T	92.4	83.5	18.2	540	3,098
HH0202	20	3600	256T	92.4	92.5	21.9	367	2,296
HH0204(C)	20	1800	256T	93.0	87.5	23.0	425	2,243
HH0206(C)	20	1200	286T	91.7	84.0	24.3	565	3,839
HH0252	25	3600	284TS	92.4	91.0	27.8	490	2,854
HH0254(C)	25	1800	284T	93.6	86.0	29.1	555	2,684
HH0256(C)	25	1200	324T	93.0	83.0	30.3	759	4,635
HH0302	30	3600	286TS	93.0	91.0	33.2	535	3,356
HH0304(C)	30	1800	286T	93.6	87.5	34.3	656	3,317
HH0306(C)	30	1200	326T	93.0	80.5	37.5	795	5,299
HH0402	40	3600	324TS	94.1	90.0	44.2	755	4,404
HH0404(C)	40	1800	324T	94.1	86.0	46.3	740	4,247
HH0406(C)	40	1200	364T	94.1	86.5	46.0	898	7,080
HH0502	50	3600	326TS	94.1	91.0	54.7	782	5,720
HH0504(C)	50	1800	326T	94.5	87.0	56.9	845	5,215
HH0506(C)	50	1200	365T	94.1	86.0	57.8	1110	8,426
HH0602	60	3600	364TS	94.1	93.0	64.2	853	7,747
HH0604(C)	60	1800	364T	95.0	86.5	68.4	955	7,475
HH0606(C)	60	1200	404T	94.5	87.0	68.3	1355	10,057
HH0752	75	3600	365TS	94.5	93.0	79.9	1015	9,648
HH0754(C)	75	1800	365T	95.4	86.5	85.1	1040	9,377
HH0756(C)	75	1200	405T	94.5	86.5	85.9	1363	11,619
HH1002	100	3600	405TS	95.4	92.0	107	1330	13,107
HH1004(C)	100	1800	405T	95.4	87.5	112	1385	12,093
HH1006	100	1200	444T	95.0	82.5	119	1833	16,171
HH1252	125	3600	444TS	95.0	86.0	143	1783	17,123
HH1254	125	1800	444T	95.4	84.0	146	1833	15,900
HH1256	125	1200	445T	95.0	83.0	148	1961	19,949
HH1502	150	3600	445TS	95.0	87.0	170	1808	20,521
HH1504	150	1800	445T	95.8	84.0	175	2037	18,516
HH1506	150	1200	447T	95.8	83.5	176	2400	22,327
HH2002	200	3600	447TS	95.4	87.0	226	2317	26,548
HH2004	200	1800	447T	96.2	84.5	230	2426	22,960
HH2006	200	1200	449T	95.8	84.0	233	2801	28,796
HH2502	250	3600	449TS	95.8	88.0	278	2725	34,416
HH2504	250	1800	449T	96.2	85.5	285	2710	29,277
HH2506	250	1200	449T	95.8	84.5	289	3080	37,099
HH3002	300	3600	449TS	95.8	88.0	333	2928	41,240
HH3004	300	1800	449T	96.2	85.5	342	2980	35,320

Notes:

(5) at end of catalog number denotes 575V.
(C) Meets NEMA Design C torque

MAX-E2/841™ NEMA PREMIUM EFFICIENCY

TYPE AEHH8B

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Fans & Blowers
- Pumps
- Crushers
- Compressors
- Mixers
- Conveyors
- Any Severe Duty/ Petro-Chem/ Pulp & Paper Application

FEATURES:

- 1 - 500 HP
- 3600, 1800, 1200 RPM
- Totally Enclosed Fan Cooled (IP55 Rating)
- Meets or Exceeds IEEE 841 Standards - Note (1)
- Meets GM 7E-TA Specifications
- Meets IEEE 45 Marine Duty and **ABS Type Certified**
- NEMA Premium Efficient
- Department of Energy Efficiency Certification #CC002A
- 60 Month Warranty from Date of Manufacture
- 3 Phase, 60 Hz , 460V
- 1.15 Service Factor – Continuous
- NEMA Design B Torques as a Minimum
- Class B Temperature Rise, Class F Insulation with Phenolic Alkyd Resin Varnish – 2 Dips and Bakes
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrance – F1 Mounted. F2 Available – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature - Note (2)
- Designed for 3300 ft. Elevation - Note (2)
- CSA Certified for Class I, Division II, Groups B, C, D, Temp Code T3C, Non-Sparking, Non-Static Fan - Note (3)
- Bi-Directional Rotation – Except for 3600 rpm 400 HP and Larger
- Cast Iron Frame, End Bells, Fan Cover, and Main Conduit Box
- Cast Iron Inner and Outer Bearing Caps
- Dual Drilled Feet – Longer Frames. (i.e. 145T Drilled Also for 143T)
- 1045 Carbon Steel Shaft
- Aluminum Die-Cast Squirrel Cage Rotor Construction
- Paint System: 2 Part Epoxy
- Paint Color: Blue – Munsell 5PB 3/ 8
- Vacuum De-Gassed Regreasable Ball Bearings Using Polyrex EM Grease
- Automatic Grease Discharge Fittings
- Grounding Terminal Inside Main Box with Provisions for Grounding on Foot
- Stainless Steel Nameplate and Hardware
- Stainless Steel Automatic Breather Drains
- UL Recognized and CSA Approved for Inverter Duty per NEMA MG 1, Part 31 - Note (4) 300 HP and Below
- HPE Stator Wire Capable of Withstanding Voltage Spikes of Up to 2200V
- Speed Ranges: 20:1 VT, 10:1 CT. 350 HP and Larger are 3:1 CT
- 3 Leads Only
- Vibration Not to Exceed 0.08 Inches per Second
- Noise Level Not to Exceed 85 dB(A) at 1 Meter Unloaded
- INPRO™ Seals Installed on Both Ends

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Main conduit box on 444-449T/ TS and larger is TWMC standard size.
(2) Please consult factory for suitability in higher ambients and higher elevations.
(3) Additional charge for Division II nameplate.
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD.

MAX-E2/841™ NEMA PREMIUM EFFICIENCY

TYPE AEHH8B

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
HB0014(C)	1	1800	143T	85.5	73.0	1.50	58	928
HB0016	1	1200	145T	82.5	65.5	1.73	97	1,013
HB1/52	1.5	3600	143T	84.0	83.5	2.00	58	958
HB1/54(C)	1.5	1800	145T	86.5	78.0	2.08	65	970
HB1/56	1.5	1200	182T	87.5	63.5	2.53	130	1,120
HB0022	2	3600	145T	86.5	86.0	2.52	78	978
HB0024(C)	2	1800	145T	86.5	78.0	2.78	97	985
HB0026(C)	2	1200	184T	88.5	70.5	3.00	150	1,233
HB0032	3	3600	182T	88.5	90.0	3.53	100	1,154
HB0034(C)	3	1800	182T	89.5	84.0	3.74	130	1,126
HB0036(C)	3	1200	213T	89.5	78.0	4.02	220	1,620
HB0052	5	3600	184T	88.5	92.5	5.72	140	1,345
HB0054(C)	5	1800	184T	89.5	85.5	6.12	150	1,259
HB0056(C)	5	1200	215T	91.0	82.5	6.24	235	1,962
HB7/52	7.5	3600	213T	91.0	89.0	8.67	202	1,752
HB7/54(C)	7.5	1800	213T	91.7	86.5	8.85	202	1,733
HB7/56(C)	7.5	1200	254T	91.0	80.5	9.59	323	2,754
HB0102	10	3600	215T	91.0	89.5	11.5	224	1,874
HB0104(C)	10	1800	215T	91.7	88.0	11.6	224	1,901
HB0106(C)	10	1200	256T	91.0	80.5	12.8	380	3,182
HB0152	15	3600	254T	92.4	91.5	16.6	323	2,703
HB0154(C)	15	1800	254T	92.4	88.0	17.3	345	2,648
HB0156(C)	15	1200	284T	92.4	83.5	18.2	540	3,901
HB0202	20	3600	256T	92.4	92.5	21.9	367	3,232
HB0204(C)	20	1800	256T	93.0	87.5	23.0	425	3,120
HB0206(C)	20	1200	286T	91.7	84.0	24.3	565	4,596
HB0252	25	3600	284TS	92.4	91.0	27.8	490	3,816
HB0254(C)	25	1800	284T	93.6	86.0	29.1	555	3,689
HB0256(C)	25	1200	324T	93.0	83.0	30.3	759	5,758
HB0302	30	3600	286TS	93.0	91.0	33.2	535	4,062
HB0304(C)	30	1800	286T	93.6	87.5	34.3	656	3,963
HB0306(C)	30	1200	326T	93.0	80.5	37.5	795	6,131
HB0402	40	3600	324TS	94.1	90.0	44.2	755	5,547
HB0404(C)	40	1800	324T	94.1	86.0	46.3	740	5,434
HB0406(C)	40	1200	364T	94.1	86.5	46.0	898	9,137
HB0502	50	3600	326TS	94.1	91.0	54.7	782	6,590
HB0504(C)	50	1800	326T	94.5	87.0	56.9	845	6,088
HB0506(C)	50	1200	365T	94.1	86.0	57.8	1,110	10,292
HB0602	60	3600	364TS	94.1	93.0	64.2	853	10,067
HB0604(C)	60	1800	364T	95.0	86.5	68.4	955	9,568
HB0606(C)	60	1200	404T	94.5	87.0	68.3	1,355	11,631
HB0752	75	3600	365TS	94.5	93.0	79.9	1,015	11,405
HB0754(C)	75	1800	365T	95.4	86.5	85.1	1,040	10,645
HB0756(C)	75	1200	405T	94.5	86.5	85.9	1,363	12,840

MAX-E2/841™ NEMA PREMIUM EFFICIENCY

TYPE AEHH8B

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
HB1002	100	3600	405TS	95.4	92.0	107	1,330	14,432
HB1004(C)	100	1800	405T	95.4	87.5	112	1,385	13,108
HB1006	100	1200	444T	95.0	82.5	119	1,833	17,430
HB1252	125	3600	444TS	95.0	86.0	143	1,783	18,290
HB1254	125	1800	444T	95.4	84.0	146	1,833	17,381
HB1256	125	1200	445T	95.0	83.0	148	1,961	21,576
HB1502	150	3600	445TS	95.0	87.0	170	1,808	21,197
HB1504	150	1800	445T	95.8	84.0	175	2,037	19,269
HB1506	150	1200	447T	95.8	83.5	176	2,400	22,978
HB2002	200	3600	447TS	95.4	87.0	226	2,317	27,075
HB2004	200	1800	447T	96.2	84.5	230	2,426	23,132
HB2006	200	1200	449T	95.8	84.0	233	2,801	29,166
HB2502	250	3600	449TS	95.8	88.0	278	2,725	35,116
HB2504	250	1800	449T	96.2	85.5	285	2,710	31,548
HB2506	250	1200	449T	95.8	84.5	289	3,080	37,791
HB3002	300	3600	449TS	95.8	88.0	333	2,928	43,497
HB3004	300	1800	449T	96.2	85.5	342	2,980	37,085
HB3006(2)	300	1200	449T	95.8	86.5	339	3,430	56,232
HB3502(2)	350	3600	449TS	95.8	91.6	373	2,785	64,913
HB3504(2)	350	1800	449T	96.2	90.0	379	3,280	55,397
HB3506	350	1200	5011B	95.8	87.0	393	5,565	77,184
HB4002(1)	400	3600	5009A	95.8	91.6	427	3,623	76,400
HB4004	400	1800	5009B	96.2	90.0	433	4,025	71,099
HB4006	400	1200	5011B	95.8	87.0	449	5,803	85,011
HB4502 (1)	450	3600	5011A	95.8	91.7	480	4,410	84,588
HB4504	450	1800	5011B	96.2	90.0	487	5,040	80,510
HB4506	450	1200	5808B	95.8	88.0	500	5,803	101,369
HB5002 (1)	500	3600	5011A	95.8	91.7	533	4,830	93,063
HB5004	500	1800	5011B	96.2	90.0	541	5,250	85,644
HB5006	500	1200	5808B	95.8	88.0	555	6,330	103,997

Notes:

(1) Motors are unidirectional, counter clockwise facing the drive-end. To change direction of rotation please consult factory for adder.
(2) D-Flange not available
(C) Meets NEMA Design C torque

MAX-E2/841™ NEMA PREMIUM EFFICIENCY

TYPE AEHH8BCF, FOOTED WITH C-FACE

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
HB0012C	1	3600	143TC	82.5	85.0	1.34	58	1,113
HB0014C(C)	1	1800	143TC	85.5	73.0	1.50	61	1,107
HB0016C	1	1200	145TC	82.5	65.5	17.3	102	1,187
HB1/52C	1.5	3600	143TC	84.0	83.5	2.00	61	1,125
HB1/54C(C)	1.5	1800	145TC	86.5	78.0	2.08	68	1,176
HB1/56C	1.5	1200	182TC	87.5	63.5	2.53	137	1,370
HB0022C	2	3600	145TC	86.5	86.0	2.52	82	1,159
HB0024C(C)	2	1800	145TC	86.5	78.0	2.78	102	1,193
HB0026C(C)	2	1200	184TC	88.5	70.5	3.00	158	1,547
HB0032C	3	3600	182TC	88.5	90.0	3.53	105	1,370
HB0034C(C)	3	1800	182TC	89.5	84.0	3.74	137	1,370
HB0036C(C)	3	1200	213TC	89.5	78.0	4.02	231	2,164
HB0052C	5	3600	184TC	88.5	92.5	5.72	147	1,587
HB0054C(C)	5	1800	184TC	89.5	85.5	6.12	158	1,542
HB0056C(C)	5	1200	215TC	91.0	82.5	6.24	247	2,324
HB7/52C	7.5	3600	213TC	91.0	89.0	8.67	212	2,067
HB7/54C(C)	7.5	1800	213TC	91.7	86.5	8.85	212	2,101
HB7/56C(C)	7.5	1200	254TC	91.0	80.5	9.59	339	3,203
HB0102C	10	3600	215TC	91.0	89.5	11.5	235	2,215,
HB0104C(C)	10	1800	215TC	91.7	88.0	11.6	235	2,255
HB0106C(C)	10	1200	256TC	91.0	80.5	12.8	399	3,706
HB0152C	15	3600	254TC	92.4	91.5	16.6	339	3,146
HB0154C(C)	15	1800	254TC	92.4	88.0	17.3	362	3,135
HB0156C(C)	15	1200	284TC	92.4	83.5	18.2	567	4,539
HB0202C	20	3600	256TC	92.4	92.5	21.9	385	3,757
HB0204C(C)	20	1800	256TC	93.0	87.5	23.0	446	3,706
HB0206C(C)	20	1200	286TC	91.7	84.0	24.3	593	5,476
HB0252C	25	3600	284TSC	92.4	91.0	27.8	515	4,287
HB0254C(C)	25	1800	284TC	93.6	86.0	29.1	583	4,238
HB0256C(C)	25	1200	324TC	93.0	83.0	30.3	797	6,525
HB0302C	30	3600	286TSC	93.0	91.0	33.2	562	4,569
HB0304C(C)	30	1800	286TC	93.6	87.5	34.3	689	4,569
HB0306C(C)	30	1200	326TC	93.0	80.5	37.5	835	6,984
HB0402C	40	3600	324TSC	94.1	90.0	44.2	793	6,326
HB0404C(C)	40	1800	324TC	94.1	86.0	46.3	777	6,155
HB0406C(C)	40	1200	364TC	94.1	86.5	46.0	943	10,337
HB0502C	50	3600	326TSC	94.1	91.0	54.7	821	7,282
HB0504C(C)	50	1800	326TC	94.5	87.0	56.9	887	7,122
HB0506C(C)	50	1200	365TC	94.1	86.0	57.8	1,166	12,006
HB0602C	60	3600	364TSC	94.1	93.0	64.2	896	11,133
HB0604C(C)	60	1800	364TC	95.0	86.5	68.4	1,003	10,807
HB0606C(C)	60	1200	404TC	94.5	87.0	68.3	1,423	13,459
HB0752C	75	3600	365TSC	94.5	93.0	79.9	1,066	12,614
HB0754C(C)	75	1800	365TC	95.4	86.5	85.1	1,092	12,061
HB0756C(C)	75	1200	405TC	94.5	86.5	85.9	1,431	14,652
HB1002C	100	3600	405TSC	95.4	92.0	107.0	1,484	15,829
HB1004C(C)	100	1800	405TC	95.4	87.5	112.0	1,515	14,774

Notes:
(C) Meets NEMA Design C torque

MAX-E2/841™ NEMA PREMIUM EFFICIENCY

TYPE AEUH8BDC, ROUND BODY C-FACE WITH CAST IRON DRIP COVER

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
HBV0012C	1	3600	143TC	82.5	85.0	1.34	59	1,256
HBV0014C (C)	1	1800	143TC	85.5	73.0	1.50	62	1,631
HBV0016C	1	1200	145TC	82.5	65.5	1.73	104	1,457
HBV1/52C	1.5	3600	143TC	84.0	83.5	2.00	62	1,457
HBV1/54C (C)	1.5	1800	145TC	86.5	78.0	2.08	70	2,268
HBV1/56C	1.5	1200	182TC	87.5	63.5	2.53	139	1,669
HBV0022C	2	3600	145TC	86.5	86.0	2.52	84	1,626
HBV0024C (C)	2	1800	145TC	86.5	78.0	2.78	104	2,425
HBV0026C (C)	2	1200	184TC	88.5	70.5	3.00	161	2,175
HBV0032C	3	3600	182TC	88.5	90.0	3.53	107	2,208
HBV0034C (C)	3	1800	182TC	89.5	84.0	3.74	139	3,339
HBV0036C (C)	3	1200	213TC	89.5	78.0	4.02	236	2,317
HBV0052C	5	3600	184TC	88.5	92.5	5.72	150	2,360
HBV0054C (C)	5	1800	184TC	89.5	85.5	6.12	161	3,834
HBV0056C (C)	5	1200	215TC	91.0	82.5	6.24	252	3,285
HBV7/52C	7.5	3600	213TC	91.0	89.0	8.67	216	3,274
HBV7/54C (C)	7.5	1800	213TC	91.7	86.5	8.85	216	4,704
HBV7/56C (C)	7.5	1200	254TC	91.0	80.5	9.59	346	3,883
HBV0102C	10	3600	215TC	91.0	89.5	11.5	240	3,834
HBV0104C (C)	10	1800	215TC	91.7	88.0	11.6	240	5,623
HBV0106C (C)	10	1200	256TC	91.0	80.5	12.8	407	4,452
HBV0152C	15	3600	254TC	92.4	91.5	16.6	346	4,399
HBV0154C (C)	15	1800	254TC	92.4	88.0	17.3	369	6,725
HBV0156C (C)	15	1200	284TC	92.4	83.5	18.2	578	4,725
HBV0202C	20	3600	256TC	92.4	92.5	21.9	393	4,725
HBV0204C (C)	20	1800	256TC	93.0	87.5	23.0	455	7,177
HBV0206C (C)	20	1200	286TC	91.7	84.0	24.3	605	6,530
HBV0252C	25	3600	284TSC	92.4	91.0	27.8	525	6,362
HBV0254C (C)	25	1800	284TC	93.6	86.0	29.1	594	10,576
HBV0256C (C)	25	1200	324TC	93.0	83.0	30.3	813	7,467
HBV0302C	30	3600	286TSC	93.0	91.0	33.2	573	7,309
HBV0304C (C)	30	1800	286TC	93.6	87.5	34.3	703	12,213
HBV0306C (C)	30	1200	326TC	93.0	80.5	37.5	851	11,355
HBV0402C	40	3600	324TSC	94.1	90.0	44.2	809	11,034
HBV0404C (C)	40	1800	324TC	94.1	86.0	46.3	793	13,744
HBV0406C (C)	40	1200	364TC	94.1	86.5	46.0	962	12,807
HBV0502C	50	3600	326TSC	94.1	91.0	54.7	838	12,266
HBV0504C (C)	50	1800	326TC	94.5	87.0	56.9	905	14,918
HBV0506C (C)	50	1200	365TC	94.1	86.0	57.8	1,189	16,070
HBV0602C	60	3600	364TSC	94.1	93.0	64.2	914	15,033
HBV0604C (C)	60	1800	364TC	95.0	86.5	68.4	1,023	7,403
HBV0606C (C)	60	1200	404TC	94.5	87.0	68.3	1,451	10,674
HBV0752C	75	3600	365TSC	94.5	93.0	79.9	1,087	10,100
HBV0754C (C)	75	1800	365TC	95.4	86.5	85.1	1,114	9,182
HBV0756C (C)	75	1200	405TC	94.5	86.5	85.9	1,460	12,453
HBV1002C	100	3600	405TSC	95.4	92.0	107.0	1,514	13,658
HBV1004C (C)	100	1800	405TC	95.4	87.5	112.0	1,545	12,854

Notes:

Motors come standard with Cast Iron Drip Covers

(C) Meets NEMA Design C torque

HIGH EFFICIENCY WASHDOWN DUTY

TYPE AEGECW, AEGEFW, AEHECW, AETECW

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Any Application Where the Motor Will be Subjected to High Pressure Spray Down

FEATURES:

- 1/2 - 10 HP
- 3600, 1800 RPM
- Totally Enclosed Fan Cooled Enclosure (IP56)
- C-Flange with Feet (1/2 - 2 HP 1800 RPM Available with Round Body)
- 36 Month Warranty from Date of Manufacture
- 60 Hz - 230/460V (Usable on 208V)
- 1.15 Service Factor – Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – F1 Mounted
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation
- Rolled Steel Frame and Stainless Steel Conduit Box for 56C and 140TC Frames, Cast Iron for 180TC and 210TC
- Aluminum Alloy End Brackets for 56C and 140TC Frames, Cast Iron for 180TC and 210TC
- Rolled Steel Fan Cover
- SUS304 Stainless Steel Shaft
- 2 Drain Holes on Bottom of Frame and One in End Bracket and C-Flange
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Rust Proof Primer with USDA Approved Epoxy Top Coat
- Paint Color: White
- Interior Surfaces and C-Flange Treated with Rust and Corrosion Proofing
- Double Sealed Bearings Pre-Packed with MULTEMP SRL Grease
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate and Hardware
- Contact Lip Seal and V-Ring on Both Ends
- 9 Leads
- Motors are UL Recognized and CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.

HIGH EFFICIENCY WASHDOWN DUTY

TYPE AEGECW, AEGEFW, AEHECW, AETECW

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	FR. MAT.*	LIST PRICE
W0/52C	1/2	3600	A56C	70.0	80.0	0.9	32	RS	517
W0/54C	1/2	1800	A56C	72.0	69.0	1.0	32	RS	578
WV0/54C(1)	1/2	1800	A56C	72.0	69.0	1.0	32	RS	578
W0/72C	3/4	3600	A56C	76.0	84.0	1.1	34	RS	565
W0/74C	3/4	1800	A56C	73.0	66.0	1.5	34	RS	647
WV0/74C(1)	3/4	1800	A56C	73.0	66.0	1.5	34	RS	647
W0012C	1	3600	A56C	78.5	78.0	1.5	34	RS	644
WF0014C	1	1800	B56C	84.0	79.0	1.4	36	RS	689
W0014C	1	1800	143TC	84.0	79.0	1.4	36	RS	689
WV0014C(1)	1	1800	143TC	84.0	79.0	1.4	36	RS	689
WF1/52C	1.5	3600	B56C	84.0	82.0	2.1	37	RS	705
W1/52C	1.5	3600	143TC	84.0	82.0	2.1	37	RS	705
WF1/54C	1.5	1800	C56C	84.0	84.0	2.0	47	RS	716
W1/54C	1.5	1800	145TC	84.0	84.0	2.0	47	RS	716
WV1/54C(1)	1.5	1800	145TC	84.0	84.0	2.0	47	RS	716
WF0022C	2	3600	C56C	84.0	84.0	2.7	47	RS	794
W0022C	2	3600	145TC	84.0	84.0	2.7	47	RS	794
WF0024C	2	1800	C56C	84.0	81.0	2.8	47	RS	805
W0024C	2	1800	145TC	84.0	81.0	2.8	47	RS	805
WV0024C(1)	2	1800	145TC	84.0	81.0	2.8	47	RS	805
W0032C	3	3600	182TC	87.5	90.5	3.5	105	CI	882
W0034C	3	1800	182TC	88.5	82.5	3.8	110	CI	969
W0052C	5	3600	184TC	88.5	92.5	5.7	121	CI	1,209
W0054C	5	1800	184TC	89.5	86.0	6.1	130	CI	1,110
W7/52C	7.5	3600	213TC	91.0	89.0	8.7	172	CI	1,529
W7/54C	7.5	1800	213TC	91.0	86.5	8.9	182	CI	1,409
W0102C	10	3600	215TC	91.0	90.5	11.4	200	CI	1,817
W0104C	10	1800	215TC	91.0	88.5	11.7	205	CI	1,608

Notes:

(1) Type AETECW motors are round body C-Face mounted.

* Frame Material:

RS = Rolled Steel
CI = Cast Iron

CLOSED COUPLED PUMP JP/JM

TYPE AEEANEJM, AEEANEJP

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Pumps

FEATURES:

- 1 - 50 HP
- JM and JP Shafts
- 3600, 1800, 1200 RPM
- Totally Enclosed Fan Cooled (IP54)
- Meets or Exceeds EPACT Efficiency Levels
- Department of Energy Efficiency Certificate # CC002A
- 36 Month Warranty from Date of Manufacture
- 60 Hz - 230/ 460V (Usable on 208V)
- 1.15 Service Factor – Continuous
- 50 Hz Data on Nameplate - 190/380V at 1.0 S.F.
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Class B Temperature Rise
- NEMA Design B torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments - Fully Gasketed with NPT Threaded Entrance - F1 Mounted. F2 Available - See Modification Pricing
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Factory Self Certified for Class 1, Div. 2, Groups B, C, D Temp Code T3C, 400T and Below - Note (3)
- Bi-Directional Rotation
- Cast Iron Frame, End Brackets, Main Conduit Box and Rolled Steel Fan Cover
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue Gray – Munsell 7.5BG 4/ 2
- Vacuum De-Gassed Re-Greasable Bearings Frames 280-360 with Polyrex EM Grease
- Double Shielded Bearings on Frames 140-280 Pre-Packed with MULTEMP SRL Grease
- Labyrinth Type Metal Flinger on Both Ends for Frames 280-360
- Cast Iron Inner and Outer Bearing Caps for Frames 280-360
- Rubber Flinger on Drive-End for Frames 140 - 280
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- VFD Rated per NEMA MG1 Part 30 - Note (4) and (5)
- Speed Ranges: 10:1 VT, 5:1 CT
- 9 Leads
- CE Mark on Nameplate, CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.
(3) There is an additional charge for Division II Nameplate - See modifications section
(4) Motor service factor is 1.0 when operated on a VFD.
(5) Maximum lead length is 150 feet with a carrier frequency of 3kHz. Addition of output reactor or filter may allow for increased carrier frequency. Please consult TWMC if lead length and carrier frequency surpass these values.

CLOSED COUPLED PUMP JM/JP

TYPE AEEAJP, AEEAJM

Effective 12-01-08
Supercedes 03-01-08

JP CATALOG NO.	JM CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	JP APPROX. SHIPPING WT. (lbs.)	JM APPROX. SHIPPING WT. (lbs.)	LIST PRICE
*JP0/76	*JM0/76	3/4	1200	143JP/JM	74.0	65.5	1.5	101	101	551
*JPN0014	JMN0014	1	1800	143JP/JM	82.5	77.0	1.48	60	80	466
*JPN0016	*JMN0016	1	1200	145JP/JM	80.0	63.5	1.85	110	110	579
JPN1/52	JMN1/52	1.5	3600	143JP/JM	82.5	85.0	2.01	79	75	483
JPN1/54	JMN1/54	1.5	1800	145JP/JM	84.0	80.5	2.08	47	58	513
*JPN1/56	*JMN1/56	1.5	1200	182JP/JM	85.5	66.5	2.47	139	139	612
JPN0022	JMN0022	2	3600	145JP/JM	84.0	88.5	2.52	81	80	551
JPN0024	JMN0024	2	1800	145JP/JM	84.0	82.5	2.70	85	75	551
*JPN0026	*JMN0026	2	1200	184JP/JM	86.5	67.0	3.23	152	152	685
JPN0032	JMN0032	3	3600	182JP/JM	85.5	90.0	3.65	108	105	644
JPN0034	JMN0034	3	1800	182JP/JM	87.5	82.5	3.89	110	105	626
*JPN0036	*JMN0036	3	1200	213JP/JM	87.5	76.5	4.20	184	184	841
JPN0052	JMN0052	5	3600	184JP/JM	87.5	91.5	5.85	125	165	806
JPN0054	JMN0054	5	1800	184JP/JM	87.5	86.5	6.20	130	120	736
*JPN0056	JMN0056	5	1200	215JP/JM	87.5	76.5	7.00	223	210	1,256
JPN7/52	JMN7/52	7.5	3600	213JP/JM	88.5	87.0	9.10	178	180	994
JPN7/54	JMN7/54	7.5	1800	213JP/JM	89.5	88.0	8.90	143	180	958
*JPN7/56	JMN7/56	7.5	1200	254JP/JM	89.5	81.0	9.70	287	310	1,696
JPN0102	JMN0102	10	3600	215JP/JM	89.5	90.0	11.6	205	205	1,164
JPN0104	JMN0104	10	1800	215JP/JM	89.5	89.5	11.7	235	230	1,140
*JPN0106	JMN0106	10	1200	256JP/JM	89.5	82.5	12.7	342	325	2,112
JPN0152	JMN0152	15	3600	254JP/JM	90.2	91.5	17.0	281	246	1,641
JPN0154	JMN0154	15	1800	254JP/JM	91.0	88.0	17.6	340	330	1,614
*JPN0156	JMN0156	15	1200	284JP/JM	90.2	83.0	18.8	450	470	2,764
JPN0202	JMN0202	20	3600	256JP/JM	90.2	92.0	22.6	370	307	2,097
JPN0204	JMN0204	20	1800	256JP/JM	91.0	88.0	23.4	370	370	2,025
*JPN0206	JMN0206	20	1200	286JP/JM	90.2	83.5	24.9	513	520	3,591
JPN0252	JMN0252	25	3600	284JP/JM	91.0	90.5	28.4	515	470	2,504
JPN0254	JMN0254	25	1800	284JP/JM	92.4	89.0	28.5	431	431	2,382
*JPN0256	*JMN0256	25	1200	324JP/JM	91.7	81.5	31.3	660	660	4,322
JPN0302	JMN0302	30	3600	286JP/JM	91.0	91.0	33.9	565	535	3,049
JPN0304	JMN0304	30	1800	286JP/JM	92.4	88.0	34.6	574	560	2,865
*JPN0306	*JMN0306	30	1200	326JP/JM	91.7	80.5	38.1	671	671	4,970
JPN0402	JMN0402	40	3600	324JP/JM	91.7	89.5	45.7	695	695	4,037
JPN0404	JMN0404	40	1800	324JP/JM	93.0	89.0	45.3	715	730	3,863
*JPN0406	*JMN0406	40	1200	364JP/JM	93.0	86.5	46.6	785	785	6,610
JPN0502	*JMN0502	50	3600	326JP/JM	92.4	90.5	56.0	671	671	5,357
JPN0504	*JMN0504	50	1800	326JP/JM	93.0	89.5	56.0	741	741	4,914
*JPN0506	NA	50	1200	365JP/JM	93.0	85.5	59.0	913	N/A	7,644

Notes:

* Refer to factory for availability

TEXP HE HIGH EFFICIENCY EXPLOSION PROOF FAMILY

TYPE AEHHXU, AEHHXF, AEUHXF

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Grain Elevators
- Pumps
- Blowers
- Applications Where Explosive Gases are Present
- Applications Where Explosive Dusts/ Grains are Present

FEATURES:

- 1 - 150 HP – Foot Mounted
- 1 - 100 HP – Foot Mounted with C-Flange or Round Body with C-Flange
- 3600, 1800, 1200 RPM
- Toally Enclosed Fan Cooled - Explosion Proof (IP55 Rating)
- UL and CSA Listed for Class I, Division I, Group D and Class II, Groups E, F, G, Temp Code T3B 2
- UL File #: E84757
- CSA File #: 64671
- High Efficient Design
- Meets or Exceeds EPACT Efficiency Levels
- Department of Energy Efficiency Certification #CC002A
- 36 Month Warranty from Date of Manufacture
- 60 Hz - 230/ 460V (Usable on 208V). 150 HP is 460V Only
- 1.15 Service Factor – Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Standard with Klixon 9700K Temp. Limiting Switch, 1 per Phase
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrance – F1 Mounted
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation
- Cast Iron Frame, Fan Cover, End Bells, and Main Conduit Box. Capable of Withstanding Explosion Force as Required by UL.
- Stainless Steel Breather Drains with Bronze Filters
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Dark Blue – Munsell 5PB 4.5/ 2
- Vacuum De-Gassed Regreasable Ball (or Roller) Bearings on Frames 280TS-445T/ TS Using Polyrex EM Grease
- Double Shielded Bearings on Frames 140T-280T Pre-Packed with MULTEMP SRL Grease
- Brass Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps for Frames 280TS-445T/ TS
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- UL Listed for Inverter Duty - Note (3)
- HPE Stator Wire Capable of Withstanding Voltage Spikes of Up to 2200 Volts
- Speed Ranges: VT = 3 - 60 Hz CT for 140 - 210 frames = 10 - 60Hz.
  CT for 250 - 320 frames = 13 - 60 Hz CT for 360 - 440 frames = 16 - 60Hz
- 9 Leads for 5 HP and Below, 12 Leads for 7.5 HP to 125 HP, 6 Leads for 150 HP

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed. - Note (4)

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.
(3) Motor service factor is 1.0 when operated on a VFD.
(4) Extras/options are limited on TEXP products.

TEXP HIGH EFFICIENCY EXPLOSION PROOF

TYPE AEHHXU

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
X0014	1	1800	143T	84.0	73.0	1.5	64	615
X0016(1)	1	1200	145T	82.5	65.5	1.7	93	713
X1/52(1)	1.5	3600	143T	84.0	83.5	2.0	78	700
X1/54	1.5	1800	145T	85.5	78.0	2.1	80	697
X1/56(1)	1.5	1200	182T	87.5	63.5	2.5	125	773
X0022(1)	2	3600	145T	86.5	86.0	2.5	68	725
X0024	2	1800	145T	84.0	78.0	2.9	80	692
X0026(1)	2	1200	184T	88.5	70.5	3.0	148	893
X0032(1)	3	3600	182T	88.5	90.0	3.5	130	835
X0034	3	1800	182T	88.5	82.0	3.9	135	839
X0036	3	1200	213T	88.5	80.5	3.9	240	1,129
X0052	5	3600	184T	87.5	92.5	5.8	153	1,031
X0054	5	1800	184T	87.5	87.5	6.1	145	970
X0056(1)	5	1200	215T	89.5	83.5	6.3	235	1,454
X7/52(1)	7.5	3600	213T	90.2	88.0	8.9	235	1,397
X7/54	7.5	1800	213T	90.2	87.5	8.9	200	1,366
X7/56(1)	7.5	1200	254T	91.0	80.5	9.6	365	1,898
X0102	10	3600	215T	89.5	89.5	11.7	250	1,471
X0104	10	1800	215T	89.5	88.5	11.8	265	1,592
X0106(1)	10	1200	256T	91.0	80.5	12.8	420	2,325
X0152(1)	15	3600	254T	92.4	91.5	16.6	400	1,913
X0154(1)	15	1800	254T	92.4	88.0	17.3	390	2,198
X0156(1)	15	1200	284T	92.4	83.5	18.2	575	3,174
X0202(1)	20	3600	256T	92.4	92.5	21.9	440	2,579
X0204	20	1800	256T	91.7	87.5	23.4	455	2,577
X0206	20	1200	286T	91.0	84.5	24.4	600	3,765
X0252(1)	25	3600	284TS	92.4	91.0	27.9	460	3,171
X0254	25	1800	284T	93.0	86.0	29.3	585	3,332
X0256	25	1200	324T	92.4	83.0	30.5	825	4,638
X0302(1)	30	3600	286TS	93.0	91.0	33.2	583	3,744
X0304	30	1800	286T	93.0	87.5	34.5	565	3,859
X0306(1)	30	1200	326T	93.0	80.5	37.5	787	5,667
X0402(1)	40	3600	324TS	94.1	90.0	44.2	805	5,280
X0404	40	1800	324T	93.6	89.5	44.7	708	5,486
X0406	40	1200	364T	93.6	86.5	46.3	980	7,451
X0502(1)	50	3600	326TS	94.1	91.0	54.5	890	6,622
X0504	50	1800	326T	93.6	89.0	56.0	925	6,321
X0506	50	1200	365T	93.6	86.0	58.0	1,125	7,522
X0602(1)	60	3600	364TS	94.1	93.0	64.0	1,015	7,844
X0604	60	1800	364T	94.5	86.5	68.5	1,010	7,821
X0606	60	1200	404T	94.1	88.0	68.0	1,322	10,910
X0752(1)	75	3600	365TS	94.5	93.0	80.0	1,085	9,331
X0754	75	1800	365T	95.0	86.5	85.5	1,110	9,167
X0756	75	1200	405T	94.1	87.0	86.0	1,540	12,814
X1002(1)	100	3600	405TS	95.4	92.0	106.5	1,495	14,452
X1004	100	1800	405T	94.5	84.5	117.5	1,545	12,811
X1006	100	1200	444T	94.5	83.0	119.0	1,920	16,945
X1006R	100	1200	444T	94.5	83.0	119.0	1,920	19,216
X1252(1)	125	3600	444TS	95.0	86.5	142.0	1,800	17,842
X1254	125	1800	444T	95.0	85.0	145.0	1,970	22,697
X1254R	125	1800	444T	95.0	85.0	145.0	1,970	22,305
X1256(1)	125	1200	445T	95.0	84.0	147.0	2,100	21,672
X1256R(1)	125	1200	445T	95.0	84.0	147.0	2,100	21,616
X1502(1)(2)	150	3600	445TS	95.0	87.5	169.0	1,940	21,243
X1504(2)	150	1800	445T	95.0	85.0	174.0	2,120	20,640
X1504R(2)	150	1800	445T	95.0	85.0	174.0	2,120	20,640

Notes:

(1) Ratings Meet NEMA Premium Level.

(2) Ratings 150 HP and larger are 460V only.

"R" = Motor stocked standard with a drive-end roller bearing.

TEXP HIGH EFFICIENCY EXPLOSION PROOF C-FACE

TYPE AEHHXF, AEUHXF

Effective 12-01-08
Supercedes 03-01-08

FOOTED CATALOG NO.	FOOTLESS CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	FOOTED APPROX. SHIPPING WT. (lbs.)	FOOTLESS APPROX. SHIPPING WT. (lbs.)	LIST PRICE
X0014C	XV0014C	1	1800	143TC	84.0	73.0	1.5	68	68	870
X0016C (1)	XV0016C (1)	1	1200	145TC	82.5	65.5	1.7	100	100	992
X1/52C (1)	XV1/52C (1)	1.5	3600	143TC	84.0	83.5	2.0	104	104	974
X1/54C	XV1/54C	1.5	1800	145TC	85.5	78.0	2.1	100	100	938
X1/56C (1)	XV1/56C (1)	1.5	1200	182TC	87.5	63.5	2.5	154	154	1,045
X0022C (1)	XV0022C (1)	2	3600	145TC	86.5	86.0	2.5	110	110	1,011
X0024C	XV0024C	2	1800	145TC	84.0	78.0	2.9	110	110	969
X0026C (1)	XV0026C (1)	2	1200	184TC	88.5	70.5	3.0	150	150	1,199
X0032C (1)	XV0032C (1)	3	3600	182TC	88.5	90.0	3.5	150	150	1,125
X0034C	XV0034C	3	1800	182TC	88.5	82.0	3.9	150	150	1,133
X0036C	XV0036C	3	1200	213TC	88.5	80.5	3.9	240	240	1,432
X0052C	XV0052C	5	3600	184TC	87.5	92.5	5.8	170	170	1,322
X0054C	XV0054C	5	1800	184TC	87.5	87.5	6.1	165	160	1,314
X0056C (1)	XV0056C (1)	5	1200	215TC	89.5	83.5	6.3	270	270	1,890
X7/52C (1)	XV7/52C (1)	7.5	3600	213TC	90.2	88.0	8.9	230	230	1,772
X7/54C	XV7/54C	7.5	1800	213TC	90.2	87.5	8.9	250	250	1,851
X7/56C (1)	XV7/56C (1)	7.5	1200	254TC	91.0	80.5	9.6	365	360	2,396
X0102C	XV0102C	10	3600	215TC	89.5	89.5	11.7	265	285	1,995
X0104C	XV0104C	10	1800	215TC	89.5	88.5	11.8	275	325	2,155
X0106C (1)	XV0106C (1)	10	1200	256TC	91.0	80.5	12.8	430	430	2,911
X0152C (1)	XV0152C (1)	15	3600	254TC	92.4	91.5	16.6	390	390	2,411
X0154C (1)	XV0154C (1)	15	1800	254TC	92.4	88.0	17.3	400	435	2,675
X0156C (1)	XV0156C (1)	15	1200	284TC	92.4	83.5	18.2	560	510	3,950
X0202C (1)	XV0202C (1)	20	3600	256TC	92.4	92.5	21.9	430	420	3,216
X0204C	XV0204C	20	1800	256TC	91.7	87.5	23.4	465	460	3,227
X0206C	XV0206C	20	1200	286TC	91.0	84.5	24.4	614	604	4,702
X0252C (1)	XV0252C (1)	25	3600	284TSC	92.4	91.0	27.9	523	513	4,045
X0254C	XV0254C	25	1800	284TC	93.0	86.0	29.3	590	640	4,131
X0256C	XV0256C	25	1200	324TC	92.4	83.0	30.5	787	780	6,431
X0302C (1)	XV0302C (1)	30	3600	286TSC	93.0	91.0	33.2	561	551	4,831
X0304C	XV0304C	30	1800	286TC	93.0	87.5	34.5	640	617	4,808
X0306C (1)	XV0306C (1)	30	1200	326TC	93.0	80.5	37.5	869	859	7,460
X0402C (1)	XV0402C (1)	40	3600	324TSC	94.1	90.0	44.2	770	760	6,859
X0404C	XV0404C	40	1800	324TC	93.6	89.5	44.7	795	790	6,889
X0406C	XV0406C	40	1200	364TC	93.6	86.5	46.3	1051	1040	9,867
X0502C (1)	XV0502C (1)	50	3600	326TSC	94.1	91.0	54.5	853	840	7,941
X0504C	XV0504C	50	1800	326TC	93.6	89.0	56.0	875	865	7,821
X0506C	XV0506C	50	1200	365TC	93.6	86.0	58.0	1133	1120	12,033
X0602C (1)	XV0602C (1)	60	3600	364TSC	94.1	93.0	64.0	1012	1000	9,988
X0604C	XV0604C	60	1800	364TC	94.5	86.5	68.5	1100	1010	10,228
X0606C	N/A	60	1200	404TC	94.1	88.0	68.0	1430	N/A	14,138
X0752C (1)	XV0752C (1)	75	3600	365TSC	94.5	93.0	80.0	1084	1085	13,236
X0754C	XV0754C	75	1800	365TC	95.0	86.5	85.5	1200	1110	12,333
X0756C	N/A	75	1200	405TC	94.1	87.0	86.0	1562	N/A	15,342
X1002C (1)	N/A	100	3600	405TSC	95.4	92.0	106.5	1500	N/A	16,846
X1004C	N/A	100	1800	405TC	94.5	84.5	117.5	1600	N/A	15,342

Notes:
(1) Ratings Meet NEMA Premium Level.

METRIC HIGH EFFICIENCY

CCOO2A

Effective 12-01-08
Supercedes 03-01-08

TYPE AEHBUA

APPLICATIONS:

- Fans & Blowers
- Pumps
- Compressors
- Any Application that Requires IEC Mounting Dimensions

FEATURES:

- 1 - 100 HP (3/4 - 75 kW)
- 3600, 1800, 1200 RPM
- Totally Enclosed Fan Cooled (IP55 rating)
- Meets or Exceeds EPACT Efficiency Levels
- Department of Energy Efficiency Certification #CC002A
- 36 Month Warranty from Date of Manufacture
- 60 Hz - 230/ 460V
- 1.15 Service Factor – Continuous
- 50 Hz Data on Nameplate – 190/ 380V at 1.0 S.F.
- Class F Insulation with Phenolic Alkyd Resin Varnish
- Standard with Thermistors 1/ Phase 160 Frame and Larger
- Class B Temperature Rise
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – F2 Mounted. F1 Available – See EXTRAS/ OPTIONS Below
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation
- Cast Iron Frame, End Bells, and Main Conduit Box
- Rolled Steel Fan Cover
- Standard with Metric Tapped Shaft
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Gray – Munsell N5
- Vacuum De-Gassed Regreasable Ball (or Roller) Bearings on Frames 180-250 Using Polyrex EM Grease
- Double Shielded Bearings, Pre-Packed with MULTEMP SRL Grease on Frames 80 - 180M (1800 and RPM)
- Cast Iron Inner and Outer Bearing Caps for Frames 180M (3600 RPM) to 250M
- V Ring Oil Seal on Both Ends
- Grounding Terminal Inside Main Box
- Stainless Steel Nameplate
- 9 Leads for 5.5 HP and Below. 12 Leads for 7.5 HP and Above.
- Motors are CSA Approved and CE Marked

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.

METRIC HIGH EFFICIENCY

TYPE AEHBUA

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	KW	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
M0012	1	0.75	3600	D80	82.5	83.5	1.36	73	420
M0014	1	0.75	1800	D80	82.5	72.0	1.58	73	422
M0016	1	0.75	1200	D90S	82.5	67.5	1.68	82	504
M1/52	1.5	1.1	3600	D80	84.0	87.5	1.91	73	471
M1/54	1.5	1.1	1800	D90S	84.0	80.5	2.08	82	471
M1/56	1.5	1.1	1200	D90L	85.5	70.0	2.35	90	597
M0022	2	1.5	3600	D90S	86.5	85.0	2.55	82	504
M0024	2	1.5	1800	D90L	85.5	77.5	2.83	90	501
M0026	2	1.5	1200	D100L	86.5	71.5	3.03	112	651
M0032	3	2.2	3600	D90L	86.5	87.5	3.71	90	606
M0034	3	2.2	1800	D100L	88.5	82.0	3.87	135	587
M0036	3	2.2	1200	D112M	87.5	70.5	4.55	137	847
M0042	4	3	3600	D100L	88.5	89.5	4.73	112	742
M0044	4	3	1800	D100L	87.5	85.0	5.04	112	686
M0046	4	3	1200	D132S	90.2	79.0	5.26	200	1,167
M5/52	5.5	4	3600	D112M	90.2	92.0	6.21	150	776
M5/54	5.5	4	1800	D112M	89.5	85.0	6.77	145	709
M5/56	5.5	4	1200	D132M	90.2	79.5	7.18	225	1,181
M7/52	7.5	5.5	3600	D132S	90.2	89.0	8.75	200	1,013
M7/54	7.5	5.5	1800	D132S	91.0	84.5	9.13	200	1,026
M7/56	7.5	5.5	1200	D132M	90.2	83.0	9.38	230	1,674
M0102	10	7.5	3600	D132S	90.2	89.0	11.7	235	1,167
M0104	10	7.5	1800	D132M	91.7	86.5	11.8	216	1,222
M0106	10	7.5	1200	D160M	91.0	80.5	12.8	355	1,993
M0152	15	11	3600	D160M	91.0	91.0	17.0	350	1,674
M0154	15	11	1800	D160M	91.7	87.5	17.5	370	1,685
M0156	15	11	1200	D160L	91.7	80.5	19.0	385	2,696
M0202	20	15	3600	D160M	92.4	90.0	22.5	345	2,076
M0204	20	15	1800	D160L	92.4	87.5	23.2	415	2,102
M0206	20	15	1200	D180L	91.7	84.5	24.2	486	3,401
M0252	25	18.5	3600	D160L	92.4	91.0	27.8	383	2,735
M0254	25	18.5	1800	D180M	93.0	86.5	29.1	515	2,557
M0256	25	18.5	1200	D200L	91.7	81.5	31.3	651	4,620
M0302	30	22	3600	D180M	92.4	89.0	34.2	495	3,171
M0304	30	22	1800	D180L	93.0	86.5	34.9	550	3,123
M0306	30	22	1200	D200L	92.4	82.5	36.8	775	4,909
M0402	40	30	3600	D200L	93.0	90.0	44.7	651	4,698
M0404	40	30	1800	D200L	93.6	88.5	45.2	745	4,578
M0406	40	30	1200	D225M	93.0	86.5	46.6	968	6,944
M0502	50	37	3600	D200L	93.0	91.0	55.3	768	5,699
M0504	50	37	1800	D225S	94.5	86.5	57.3	935	5,966
M0506R	50	37	1200	D250S	94.1	87.0	57.2	1,161	9,753
M0602	60	45	3600	D225M	93.6	93.0	64.5	895	7,649
M0604	60	45	1800	D225M	94.5	86.5	68.7	950	7,029
M0606R	60	45	1200	D250M	94.1	87.5	68.2	1,278	11,369
M0752	75	55	3600	D250S	94.5	91.5	81.2	1,069	11,096
M0754R	75	55	1800	D250S	95.0	87.0	85.0	1,157	10,029
M1002	100	75	3600	D250M	95.0	92.0	107.0	1,223	15,138
M1004R	100	75	1800	D250M	95.0	87.5	113.0	1,335	11,953

"R" = Motor stocked standard with a drive-end roller bearing.

2 SPEED, 1 WINDING, VARIABLE TORQUE

Effective 12-01-08
Supercedes 03-01-08

TYPE AECA

APPLICATIONS:

- Fans & Blowers
- Pumps
- Cooling Towers

FEATURES:

- 100 - 300 HP
- 1800/ 900 RPM
- 2 Speed, 1 Winding - Variable Torque
- Totally Enclosed Fan Cooled (IP55)
- High Efficient, Severe Duty
- 36 Month Warranty from Date of Manufacture
- 60 Hz, 460 Volt Only
- 1.15 Service Factor - Continuous
- Class F Insulation with Phenolic Alkyd Resin Varnish - Two Dips and Bakes
- Class B Temperature Rise
- NEMA Design B Torques as a Minimum
- Oversized Main Conduit Box Rotatable in 90˚ Degree Increments - Fully Gasketed with NPT Threaded
- Entrance - F1 Mounted. F2 Available - See Modification Pricing
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Self Certified for Class 1, Div. 2, Groups B, C, D, Temp Code T3C, Non Sparking, Non Static Fan - Note (3)
- Bi-Directional Rotation
- Cast Iron Frame, End Brackets, Fan Cover and Main Conduit Box (4)
- Dual Drilled Feet - Longer Frames
- 1045 Carbon Steel Shaft
- Aluminum Die Cast Squirrel Cage Rotor Construction
- Paint System: 2 Part Epoxy
- Paint Color: Blue Gray - Munsell 7.5BG 4/ 2
- Epoxy Coated Internals
- Vacuum De-Gassed Re-Greasable Bearings with Polyrex EM Grease
- Automatic Grease Discharge on Frames on Re-Greasable Motors
- Grounding Terminal Inside Main Box with Provisions for Grounding on Frame.
- Stainless Steel Nameplate and Hardware
- Stainless Steel Automatic Breather Drain
- 6 Leads Only
- Noise Level Not to Exceed 85 dB(A) at 1 Meter Unloaded

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitablity in higher ambients.
(2) Please consult factory for suitablity in higher elevations.
(3) Additional charge for Division II nameplate - See Modification Pricing.
(4) 5000 frame will have steel fan cover.

2 SPEED, 1 WINDING, VARIABLE TORQUE

TYPE AECA

Effective 08-01-06
Supercedes 08-22-05

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
CP1004/8	100/25	1800/900	444T	92.5 / 88.0	90.0 / 62.0	112 / 42.9	1,900	27,720
CP1254/8	125/31	1800/900	445T	92.5 / 88.0	90.0 / 62.0	141 / 53.2	2,200	33,957
CP1504/8	150/37	1800/900	447T	93.0 / 90.0	90.0 / 62.0	168 / 62.9	2,460	41,580
CP2004/8	200/50	1800/900	449T	93.5 / 90.0	90.5 / 62.0	221 / 83.9	3,160	49,896
CP2504/8	250/69.5	1800/900	449T	94.0 / 90.0	90.5 / 62.0	275 / 105	3,700	62,370
CP3004/8	300/75	1800/900	5009B	94.5 / 92.0	91.0 / 72.0	327 / 106	5,000	67,914

GLOBAL-HD WPI MEDIUM VOLTAGE

TYPE ASHA

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Pumps
- Fans & Blowers
- Compressors

FEATURES:

- 100 - 1250 HP
- 3600, 1800, 1200, 900 RPM Normally in Stock. Slower Speeds Available.
- Weather Protected Type I Enclosure (IP23 rating)
- Standard Efficient Design
- 36 Month Warranty from Date of Manufacture
- 3 Phase, 60 Hz, 2300/ 4160V
- Standard with 120V Space Heaters Terminated in Separate Auxiliary Box
- Standard with 100 Ohm Platinum Stator RTDs, 2 per Phase, Terminated in Separate Auxiliary Box
- 1.15 Service Factor – Continuous
- Class F Thermalastic® Epoxy Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrances - F1 Mounted.
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Bi-Directional Rotation Except 2 Pole Motors, 5000 Frame and Larger which are Unidirectional CCW Facing the Drive-End. See EXTRAS/ OPTIONS Below if CW Rotation is Required.
- Cast Iron Frame, End Bells, and Conduit Box
- 1045 Carbon Steel Shaft
- Copper / Copper Alloy Rotor Construction with the Exception of 440T/ TS Frame which have Die Cast Aluminum
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue Gray – Munsell 7.5BG 4/ 2
- Vacuum De-Gassed Regreasable Ball Bearings Using Polyrex EM Grease
- Insulated Non-Drive End Bearing on 3600 RPM motors 600 HP and Larger
- Labyrinth Type Metal Grease Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- Suitable for Use on a VFD - Notes (3)(4)(5)(6)
- 6 Leads
- Motors are CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.
(3) Service factor is 1.0 when motor is used on a VFD.
(4) An isolation transformer or other method of mitigating common mode voltages from motor terminals must be utilized.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD.
(6) Please contact TWMC for variable and constant torque speed ranges.

GLOBAL-HD WPI MEDIUM VOLTAGE

TYPE ASHA

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
*P1002	100	3600	444TS	91.0	90.2	22.8	1,292	16,146
P1004	100	1800	444T	91.0	87.5	23.5	1,680	16,514
P1006R	100	1200	445T	91.0	80.0	25.7	2,205	20,814
*P1008R	100	900	447T	91.0	77.0	26.7	1,943	25,491
P1252	125	3600	444TS	91.0	90.2	28.5	1,370	19,022
P1254	125	1800	444T	91.0	87.5	29.4	1,490	18,672
*P1256R	125	1200	447T	91.7	80.0	32.0	1,943	25,829
*P1258R	125	900	449T	91.0	77.0	33.0	2,258	29,795
P1502	150	3600	445TS	91.7	90.2	34.0	1,450	21,542
P1504	150	1800	445T	91.7	87.5	35.0	1,645	21,891
*P1506R	150	1200	449T	91.7	80.0	38.0	2,310	29,441
*P1508R	150	900	5007C	91.0	77.0	40.0	2,940	33,378
*P2002	200	3600	447TS	91.7	90.2	45.0	1,733	26,500
P2004	200	1800	447T	91.7	87.5	47.0	2,050	25,482
P2006R	200	1200	5007C	91.7	81.5	50.1	3,057	33,741
*P2008R	200	900	5009C	91.7	78.5	52.0	3,833	40,564
P2502	250	3600	449TS	92.4	91.0	56.0	2,095	31,582
P2504	250	1800	449T	92.4	87.5	58.0	2,668	30,510
P2506R	250	1200	5007C	92.4	84.0	60.3	3,362	39,489
P2508R	250	900	5009C	92.4	78.5	64.5	3,990	47,032
P3002	300	3600	449TS	93.0	91.0	66.0	2,280	36,610
P3004	300	1800	5007B	93.0	88.5	68.3	3,255	35,176
P3006R	300	1200	5009C	93.0	84.0	71.9	3,945	43,790
*P3008R	300	900	5808C	93.0	80.0	75.5	4,515	52,765
P3502[1]	350	3600	5007A	93.0	90.2	78.1	2,991	41,997
*P3504	350	1800	5007B	93.6	88.5	79.1	3,465	40,201
*P3506R	350	1200	5009C	93.0	84.0	83.9	3,938	48,812
*P3508R	350	900	5808C	93.0	80.0	88.1	4,673	57,793

Notes:

(1) Motors are unidirectional, counter clockwise facing the drive-end. To change direction of rotation please consult factory for adder.
"R" = Motor stocked standard with a drive-end roller bearing.
* Refer to factory for availability

GLOBAL-HD WPI MEDIUM VOLTAGE

TYPE ASHA

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
P4002(1)	400	3600	5009A	93.6	90.5	88.4	3,485	46,306
P4004	400	1800	5009B	93.6	89.5	89.4	4,065	43,790
P4006R	400	1200	5808C	93.6	85.5	93.6	5,055	53,125
*P4008R	400	900	5808C	93.0	81.5	98.8	5,250	62,815
P4502(1)	450	3600	5808A	93.6	91.0	98.9	5,145	50,970
*P4504	450	1800	5808B	93.6	88.5	102.0	4,200	47,378
P4506R	450	1200	5808C	93.6	85.5	105.0	5,640	57,423
*P4508R	450	900	5810C	93.0	82.5	110.0	5,565	67,946
P5002(1)	500	3600	5808A	94.1	91.0	109.0	4,680	55,280
P5004	500	1800	5808B	94.1	89.5	111.0	5,115	50,970
P5006R	500	1200	5808C	94.1	85.5	116.0	6,038	61,735
*P5008R	500	900	5810C	93.6	82.5	121.0	6,325	72,503
P6002(1)	600	3600	5808A	94.5	91.3	130.0	5,135	61,735
P6004	600	1800	5808B	94.1	89.5	133.0	5,418	57,423
P6006R	600	1200	5810C	94.1	86.5	138.0	6,120	67,839
*P6008R	600	900	6806C	94.1	84.0	142.0	6,983	82,557
P7002(1)	700	3600	5810A	94.5	91.7	151.0	5,410	66,765
*P7004	700	1800	5808B	94.5	90.2	154.0	5,355	63,177
*P7006R	700	1200	5810C	94.5	86.5	160.0	6,625	73,577
*P70008R	700	900	680C	94.5	84.0	165.0	7,860	91,172
P8002(1)	800	3600	5810A	95.0	91.7	172.0	5,475	69,993
*P8004	800	1800	5810B	94.5	90.2	176.0	5,828	68,204
*P8006R	800	1200	6806C	94.5	86.5	183.0	7,770	80,411
*P8008R	800	900	6808C	94.5	84.5	188.0	8,820	100,864
P9002(1)	900	3600	5810A	95.0	91.7	193.0	5,685	82,529
*P9004	900	1800	5810B	95.0	90.2	197.0	6,143	73,945
*P9006R	900	1200	6806C	95.0	86.5	205.0	8,190	88,657
P10002(1)	1000	3600	5810A	95.0	92.0	214.0	5,950	92,425
*P10004	1000	1800	6806B	95.0	90.2	219.0	7,750	79,693
*P10006R	1000	1200	6808C	95.0	86.5	228.0	8,610	95,122
*P12504	1250	1800	6808B	95.0	90.2	273.0	7,193	93,332

Notes:

(1) Motors are unidirectional, counter clockwise facing the drive-end. To change direction of rotation please consult factory for adder.
"R" = Motor stocked standard with a drive-end roller bearing.
* Refer to factory for availability

GLOBAL-PLUS TEFC NEMA PREMIUM EFFICIENCY

TYPE AEHGTK, AEHA

Effective 12-01-08
Supercedes 03-01-08

APPLICATIONS:

- Pumps
- Fans & Blowers
- Compressors

FEATURES:

- 100 - 900 HP
- 3600, 1800, 1200, 900 RPM
- Totally Enclosed Fan Cooled (IP55 Rating)
- NEMA Premium Efficient Design (250 HP - 500 HP, 2, 4, 6, Pole)
- 36 Month Warranty from Date of Manufacture
- 3 Phase, 60 Hz, 2300/ 4160V
- Standard with 120V Space Heaters Terminated in Separate Auxiliary Box
- Standard with 100 Ohm Platinum Stator RTDs, 2 per Phase, Terminated in Separate Auxiliary Box
- Factory Self Certified for Class I, Division II, Groups B, C, D, T3B - Note (1)
- 1.15 Service Factor – Continuous
- Class F Thermalastic® Epoxy Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrances - F1 Mounted.
- Designed for 40˚C Ambient Temperature - Note (2)
- Designed for 3300 ft. Elevation - Note (3)
- Bi-Directional Rotation Except 2 Pole Motors which are Unidirectional CCW Facing the Drive-End. See EXTRAS/ OPTIONS Below if CW Rotation is Required.
- Cast Iron Frame, End Bells, and Conduit Box
- Rolled Steel Fan Cover
- 1045 Carbon Steel Shaft
- Copper/ Copper Alloy Rotor Construction with the Exception of 5000 Frame 900 RPM and 440T/ TS Frame Motors which have Die Cast Aluminum
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue Gray – Munsell 7.5BG 4/ 2
- Vacuum De-Gassed Regreasable Ball Bearings Using Polyrex EM Grease
- Insulated Non-Drive End Bearing on 3600 RPM motors 600 HP and larger
- Labyrinth Type Metal Grease Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- Suitable for Use on a VFD - Notes (4)(5)(6)(7)
- 6 Leads
- Motors are CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

Notes:

(1) Please see modifications section if auxiliary nameplate stating this info is required.
(2) Please consult factory for suitability in higher ambients.
(3) Please consult factory for suitability in higher elevations.
(4) Service factor is 1.0 when motor is used on a VFD.
(5) An isolation transformer or other method of mitigating common mode voltages from motor terminals must be utilized.
(6) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD.
(7) Please contact TWMC for variable and constant torque speed ranges.

GLOBAL-PLUS TEFC NEMA PREMIUM EFFICIENCY

TYPE AEHGTK

Effective 12-01-08
Supercedes 03-01-08

CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
K1002	100	3600	444TS	90.6	87.5	23.6	1,470	22,097
K1004	100	1800	444T	91.7	84.0	24.3	2,079	21,720
K1006R	100	1200	445T	91.7	80.0	25.6	2,903	25,397
K1008R	100	900	447T	91.7	77.0	26.6	2,363	34,250
K1252	125	3600	445TS	90.6	87.5	29.5	1,838	27,611
K1254	125	1800	445T	91.7	84.0	30.4	1,990	25,036
K1256R	125	1200	447T	92.4	80.0	31.7	2,415	36,081
K1258R	125	900	449T	91.7	77.0	33.2	2,835	51,542
K1502	150	3600	447TS	92.4	90.2	33.8	2,600	29,454
K1504	150	1800	447T	92.4	85.5	35.6	2,375	29,083
K1506R	150	1200	449T	92.4	80.0	38.0	2,765	40,156
KG1508R	150	900	5007C	93.6	77.0	37.7	3,600	50,476
K2002	200	3600	449TS	92.4	90.2	45.0	2,495	41,825
K2004	200	1800	449T	92.4	85.5	46.4	2,775	40,683
KG2006R	200	1200	5007C	95.0	86.0	45.9	3,550	54,553
KG2008R	200	900	5009C	94.1	80.0	49.8	4,150	65,333
KG2502(1)	250	3600	5007A	95.0	88.5	55.7	3,200	54,779
KG2504	250	1800	5007B	95.0	90.0	54.8	3,500	54,352
KG2506R	250	1200	5009C	95.0	86.0	57.3	4,100	62,650
KG2508R	250	900	5009C	95.0	80.0	61.6	4,300	79,372
KG3002(1)	300	3600	5009A	95.4	90.5	65.1	3,500	66,408
KG3004	300	1800	5009B	95.4	90.0	65.4	4,000	60,795
KG3006R	300	1200	5009C	95.0	86.2	68.6	4,620	71,058
KG3008R	300	900	5011C	95.0	80.5	73.5	4,750	89,613
KG3502(1)	350	3600	5009A	95.4	90.5	75.9	3,800	72,218
KG3504	350	1800	5009B	95.4	90.0	76.4	4,350	72,631
KG3506R	350	1200	5011C	95.0	86.3	79.9	4,750	81,088
KG3508R	350	900	5808C	95.0	81.0	85.1	5,100	103,265
KG4002(1)	400	3600	5011A	95.4	91.0	86.3	4,800	79,168
KG4004	400	1800	5011B	95.4	90.0	87.2	4,450	78,519
KG4006R	400	1200	5011C	95.0	86.3	91.4	4,500	88,704
KG4008R	400	900	5808C	95.0	81.0	97.3	5,300	118,215
KG4502(1)	450	3600	5011A	95.4	91.0	97.1	5,050	93,474
KG4504	450	1800	5011B	95.4	90.5	97.6	4,800	85,289
KG4506R	450	1200	5808C	95.4	86.5	102.1	5,300	102,045
KG4508R	450	900	5810C	95.0	81.5	108.8	5,900	125,388
KG5002(1)	500	3600	5808A	95.4	91.0	108.0	4,700	101,998
KG5004	500	1800	5808B	95.8	90.5	108.0	5,000	98,301
KG5006R	500	1200	5810C	95.4	87.0	113.0	5,300	116,426
KG5008R	500	900	6808C	95.4	85.0	115.4	7,400	154,089
KG6002(1)	600	3600	5810A	95.8	91.0	129.0	5,950	111,495
KG6004	600	1800	5810B	95.8	90.5	130.0	5,600	118,295
KG6006R	600	1200	5810C	95.4	87.0	135.4	5,800	135,274
KG6008R	600	900	6808C	95.4	85.0	139.0	7,900	163,809
KG7002(1)	700	3600	5810A	96.2	91.0	150.0	6,600	118,011
KG7004	700	1800	5810B	95.8	90.5	151.2	5,750	136,580
KG7006R	700	1200	6808C	95.8	87.2	157.0	7,550	150,499
KG7008R	700	900	6808C	95.4	86.0	160.0	8,650	164,970
KG8002(1)	800	3600	6808A	96.2	91.5	170.0	8,350	161,222
KG8004	800	1800	6808B	95.8	90.5	172.8	7,700	147,334
KG8006R	800	1200	6808C	95.8	87.2	179.3	8,400	164,082
KG9004	900	1800	6808B	95.8	90.5	194.4	8,500	155,419

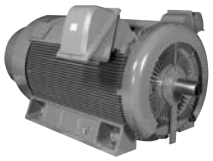
Notes:

(1) Motors are unidirectional, with counter clockwise rotation, facing the drive-end. To change direction of rotation, please consult factory for adder.
"R" = Motor stocked standard with a drive-end roller bearing.
Catalog numbers starting with "K" are not NEMA Premium Efficient.

GLOBAL-PLUS

TYPE AEJHTK

Effective 12-01-08
Supercedes 03-01-08



APPLICATIONS:

- Pumps
- Fans & Blowers
- Compressors

FEATURES:

- 800 – 2000 HP
- 1800, 1200, 900 RPM
- Totally Enclosed Fan Cooled (IP55 Rating)
- Premium Efficient Design
- 36 Month Warranty from Date of Manufacture
- 3 Phase, 60 Hz, 2300/ 4160V
- Standard with 120V Space Heaters Terminated in Separate Auxiliary Box
- Standard with 100 Ohm Platinum Stator RTDs, 2 per Phase, Terminated in Separate Auxiliary Box
- 1.15 Service Factor – Continuous
- Class F Thermalastic® Epoxy Insulation
- Class B Temperature Rise
- NEMA Design B Torques
- Oversized Main Conduit Box Rotatable in 90 Degree Increments – Fully Gasketed with NPT Threaded Entrances - F1 Mounted.
- Designed for 40˚C Ambient Temperature - Note (1)
- Designed for 3300 ft. Elevation - Note (2)
- Cast Iron Frame, End Bells, and Conduit Box
- Rolled Steel Fan Cover
- 1045 Carbon Steel Shaft
- Copper/ Copper Alloy Rotor Construction
- Paint System: Phenolic Rust Proof Base Plus Polyurethane Top Coat
- Paint Color: Blue Gray – Munsell 7.5BG 4/ 2
- Vacuum De-Gassed Regreasable Ball Bearings Using Polyrex EM Grease
- Insulated Non – Drive-End Bearing on 500 Frames and Larger
- Labyrinth Type Metal Grease Flinger on Both Ends
- Dust Flinger on Both Ends
- Cast Iron Inner and Outer Bearing Caps
- Grounding Terminal Inside Main Box and on Motor Foot
- Stainless Steel Nameplate
- Suitable for Use on a VFD - Notes (3)(4)(5)(6)
- 6 Leads
- CSA Approved

EXTRAS/ OPTIONS:

Please refer to pages 62 - 66 for common modifications that can be performed.

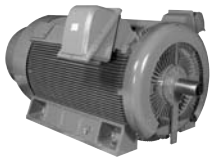
Notes:

(1) Please consult factory for suitability in higher ambients.
(2) Please consult factory for suitability in higher elevations.
(3) Service factor is 1.0 when motor is used on a VFD.
(4) An isolation transformer or other method of mitigating common mode voltages from motor terminals must be utilized.
(5) Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD.
(6) Please contact TWMC for variable and constant torque speed ranges.

GLOBAL-PLUS

TYPE AEJHTK

Effective 12-01-08
Supercedes 03-01-08



CATALOG NO.	HP	RPM	FRAME	FL EFF	FL PF	FL AMPS (2300V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE
JH08008	800	900	450C	95.8	87.0	180	8,600	168,977
*JH09006	900	1200	450C	95.8	88.0	200	8,950	166,436
JH09008	900	900	500C	95.8	87.5	201	11,000	172,173
*JH10004	1000	1800	450C	96.2	90.0	216	8,600	158,813
*JH10006	1000	1200	500C	96.2	89.0	219	11,200	180,642
JH10008	1000	900	500C	95.8	87.5	223	11,600	194,940
*JH12504	1250	1800	500C	96.2	90.0	270	11,000	165,356
*JH12506	1250	1200	500C	96.2	89.5	272	11,600	194,940
JH12508	1250	900	560C	96.0	84.0	290	16,000	212,013
*JH15004	1500	1800	500C	96.5	90.0	323	11,700	179,998
*JH15006	1500	1200	560C	96.2	86.0	340	11,900	217,705
JH15008	1500	900	560C	96.0	84.0	348	18,000	220,550
*JH17504	1750	1800	560C	96.5	90.5	375	12,600	197,783
JH17506	1750	1200	560C	96.2	86.0	396	18,000	221,974
JH20004	2000	1800	560C	96.5	90.5	415	17,000	219,128

Notes:

- For other voltages, please refer to factory.

* Rating now carried in stock.

C-FLANGE KITS

Effective 12-01-08
Supercedes 03-01-08

NEMA FRAME	LIST PRICE	ODP ASHE CATALOG NO.	MAX-SE™ AEEANE CATALOG NO.	MAX-E1™ AEHE CATALOG NO.	MAX-E2™ AEHH CATALOG NO.	MAX-E2/841™(1) AEHH8B LIST PRICE	MAX-E2/841™ AEHH8B CATALOG NO.
140T	108.15	N/A	CFN140T	CFE140T	CFHH140T	332.85	CFHB140T
180T	161.70	N/A	CFN180T	CFE180T	CFHH180T	457.80	CFHB180T
210T	275.10	N/A	CFN210T	CFE210T	CFHH210T	620.55	CFHB210T
250T	353.85	CFDH250T	CFN250T	CFE250T	CFHH250T	670.95	CFHB250T
280TS	472.50	CFDH280TS	CFN280TS	CFE280TS	CFHH280TS	1,053.15	CFHB280TS
280T	472.50	CFDH280T	CFN280T	CFE280T	CFHH280T	1,053.15	CFHB280T
320TS	580.65	CFDH320	CFN320	CFE320	CFHH320	1,152.90	CFHB320
320T	580.65	CFDH320	CFN320	CFE320	CFHH320	1,152.90	CFHB320
360TS	623.70	CFDH360TS	CFN360TS	CFE360TS	CFHH360TS	1,197.00	CFHB360TS
360T	623.70	CFDH360T	CFN360T	CFE360T	CFHH360T	1,247.40	CFHB360T
404TS/405TS	820.05	CFDH400TS	CFN400TS	CFE400TS	CFHH400TS	1,507.80	CFHB400TS
404T/405T	820.05	CFDH400T	CFN400T	CFE400T	CFHH400T	1,716.75	CFHB400T
444TS/445TS	1,765.05	CFDH444/5TS	CFN444/5TS	CFE444/5TS	CFHH444/5TS	3,352.65	CFHB444/5TS
444T/445T	1,765.05	CFDH444/5T	CFN444/5T	CFE444/5T	CFHH444/5T	3,664.50	CFHB444/5T
447TS/449TS	1,803.90	CFDH447/9TS	CFN447/9TS	CFE447/9TS	CFHH447/9TS	3,621.45	CFHB447/9TS
447T/449T	1,803.90	CFDH447/9T	CFN447/9T	CFE447/9T	CFHH447/9T	3,933.30	CFHB447/9T
HYBRID 449TS	1,950.00	N/A	N/A	CFE449TS	HYBRID	N/A	N/A
HYBRID 449T	1,950.00	N/A	N/A	CFE449T	HYBRID	N/A	N/A

NEMA FRAME	LIST PRICE	ROLLED STEEL ASGA/ASGANE CATALOG NO.	SINGLE PHASE BEGC(CC,CS)FD CATALOG NO.	3 PHASE FRACTIONAL AEGA CATALOG NO.
56	82.95	CFDS56	CFS56	CFG56
140T	82.95	CFDT140T	CFS140T	N/A
180T	141.75	CFDT180T	CFS180T	N/A
210T	149.10	CFDT210T	CFS210T	N/A
250T	211.05	CFDT250T	N/A	N/A
280TS	417.90	CFDT280TS	N/A	N/A
280T	458.85	CFDT280T	N/A	N/A

Notes:

- For frame sizes larger than 449T, please refer to factory.

* HYBRID Ratings are EP3006, EP3502, EP3504, HB3006, HB3502 and HB3504

(1) For MAX-E2/841™ (AEHH8B) INPRO™ seal is included in the price.

METRIC FRAME	TEFC LIST PRICE	METRIC AEHBUA CATALOG NO.
80	67.20	CFM80
90S/90L	82.95	CFM90
100L	99.75	CFM100
112M	99.75	CFM112
132S/132M	134.40	CFM132
160M/160L	215.25	CFM160
180 - 2 pole	N/A	N/A
180 - 4 or 6 pole	N/A	N/A
200L	N/A	N/A
225 - 2 pole	N/A	N/A
225 - 4 or 6 pole	N/A	N/A

D-FLANGE KITS

Effective 12-01-08
Supercedes 03-01-08

NEMA FRAME	TEFC LIST PRICE	MAX-SE™ AEEANE CATALOG NO.	MAX-E1™ AEHE CATALOG NO.	MAX-E2™ AEHH CATALOG NO.	MAX-E2/841™(1) AEHH8B LIST PRICE	MAX-E2/841™ AEHH8B CATALOG NO.
140T	112	N/A	N/A	DFHH140T	333	DFHB140T
180T	173	N/A	N/A	DFHH180T	446	DFHB180T
210T	N/A	N/A	N/A	N/A	N/A	N/A
250T	299	DFN250T	N/A	DFHH250T	688	DFHB250T
280TS	473	DFN280TS	N/A	DFHH280	1,053	DFHB280
280T	473	DFN280T	N/A	DFHH280	880	DFHB280
320TS	581	DFN320	DFE320	DFHH320	1,176	DFHB320
320T	581	DFN320	DFE320	DFHH320	1,176	DFHB320
360TS	624	DFN360TS	DFE360TS	DFHH360TS	1,223	DFHB360TS
360T	624	DFN360T	DFE360T	DFHH360T	1,277	DFHB360T
404TS/405TS	861	DFN400TS	DFE400TS	DFHH400TS	1,548	DFHB400TS
404T/405T	861	DFN400T	DFE400T	DFHH400T	1,758	DFHB400T
444TS/445TS	1,632	DFN444/5TS	DFE444/5TS	DFHH444/5TS	3,406	DFHB444/5TS
444T/445T	1,632	DFN444/5T	DFE444/5T	DFHH444/5T	3,718	DFHB444/5T
447TS/449TS	1,731	DFN447/9TS	DFE447/9TS	DFHH447/9TS	3,507	DFHB447/9TS
447T/449T	1,731	DFN447/9T	DFE447/9T	DFHH447/9T	3,819	DFHB447/9T

NEMA FRAME	ODP LIST PRICE	HIGH EFF ODP ASHE CATALOG NO.
56	N/A	N/A
140T	N/A	N/A
180T	N/A	N/A
210T	N/A	N/A
250T	233	DFDH250T
280TS	418	DFDH280TS
280T	418	DFDH280T
320TS	518	DFDH320
320T	518	DFDH320
360TS	562	DFDH360TS
360T	562	DFDH360T
404TS/405TS	917	DFDH400TS
404T/405T	820	DFDH400T
444TS/445TS	1,733	DFDH444/5TS
444T/445T	1,733	DFDH444/5T
447TS/449TS	2,686	DFDH447/9TS
447T/449T	2,686	DFDH447/9T

METRIC FRAME	TEFC LIST PRICE	METRIC AEHBUA CATALOG NO.
80	N/A	N/A
90S/90L	N/A	N/A
100L	N/A	N/A
112M	N/A	N/A
132S/132M	N/A	N/A
160M/160L	245	DFM160
180 - 2 pole	328	DFM180MA
180 - 4 or 6 pole	328	DFM180
200L	468	DFM200
225 - 2 pole	499	DFM225MA
225 - 4 or 6 pole	499	DFM225
250 - 2 pole	1,559	DFM250MA
250 - 4 or 6 pole	1,404	DFM250MC

Notes:

- For frame sizes larger than 449T, please refer to factory.
  D-Flanges are not available for EP3006, EP3502, EP3504, HB3006, HB3502 and HB3504

(1) For MAX-E2/841™ (AEHH8B) INPRO™ seal is included in the price.

DRIP COVERS & PAINT

Effective 12-01-08
Supercedes 03-01-08

DRIP COVERS

NEMA FRAME	ROLLED STEEL LIST PRICE	ROLLED STEEL CATALOG NO.	CAST IRON CATALOG NO.	CAST IRON LIST PRICE
140T	76	RSDC140T	CIDC140T	312
180T	119	RSDC180T	CIDC180T	400
210T	187	RSDC210T	CIDC210T	449
250T	355	RSDC250T	CIDC250T	624
280TS	442	RSDC280TS	CIDC280TS	923
280T	442	RSDC280T	CIDC280T	923
320TS	564	RSDC320	CIDC320	1,135
320T	564	RSDC320	CIDC320	1,135
360TS	1,413	RSDC360TS	CIDC360	1,965
360T	1,413	RSDC360T	CIDC360	1,965
404TS/ 405TS	N/A	N/A	CIDC400	2,045
404T/ 405T	N/A	N/A	CIDC400	2,045

PAINT

MOTOR TYPE	PAINT PART NUMBER	COLOR	PAINT #	LIST PRICE
MAX-SE™, ALL MEDIUM VOLTAGE, AEEAHD, AEEAFB, AEEAGD, AEEAJMJP	5D98549H03	DARK GRAY	Munsell 7.5BG 4/ 2	67 / can
MAX-E1™, LOW VOLTAGE ODP, METRIC	5D98549H04	LIGHT GRAY	Munsell N5.0	67 / can
MAX-E2/841™	5D98549H05	BLUE	Munsell 5PB 3/ 8	67 / can
SINGLE PHASE FARM DUTY	5D98549H07	GREEN	Munsell 5G 4/ 4	67 / can
EXPLOSION PROOF	5D98549H08	DARK BLUE	Munsell 5PB 4.5/ 2	67 / can

Notes:

- Minimum order is three cans of paint, freight prepaid and added; allow 3-5 days for delivery.

FACTORY MODIFICATION PRICING

Effective 12-01-08
Supercedes 03-01-08

MODIFICATION LEAD TIME

1. TWMC standard lead time for all modifications is 5-10 working days. If shorter lead time is required, please contact TWMC. Expediting fees may apply.
2. Modification lead time does not include transit time.
3. Lead time is based upon availability of parts.

Note: M2X is the only modification that can be done to our x-proof motors

MOD. NUMBER	DESCRIPTION	LIST PRICE									
		56-180T	210T	250T	280T	320T	360T	400T	440T	5000	5800 & UP
M1	Nameplate Change	95	95	95	95	95	95	95	95	95	95
M1A	Additional Nameplate	127	127	127	127	127	127	127	127	127	127
M2(1)	Space Heater	370	370	446	486	549	549	612	751	1,525	1,733
M2A(1)	Space Heater w/ Aux. Box	801	801	907	978	1,047	1,116	1,185	1,325	1,925	2,137
M2X	Space Heater "Explosion Proof"	558	558	697	838	978	978	1,116	1,395	N/A	N/A
M3C(2)	Installation of C-Face	300	384	468	677	823	1,047	1,475	2,093	5,580	6,278
M3C841(2)	With INPRO™ Seal (MAX-E2/841 only)	613	873	1,256	1,395	1,744	1,953	2,372	2,372	N/A	N/A
M3D(7)	Installation of D-Flange	300	N/A	468	677	823	1,047	1,475	2,093	5,580	6,278
M3D841(2)	With INPRO™ Seal (MAX-E2/841 only)	613	N/A	1,256	1,395	1,744	1,953	2,372	2,372	N/A	N/A
M4(3)	Winding RTD's 100 Ohm Platinum	809	924	982	982	1,116	1,116	1,271	1,271	1,617	1,617
M4A(3)	Winding RTD's w/ Aux. Box	1,271	1,386	1,395	1,395	1,675	1,744	1,744	1,744	2,232	2,302
M5	Thermistors	558	838	838	838	1,116	1,116	1,116	1,116	1,395	1,395
M5A	Thermistors w/ Aux. Box	1,271	1,386	1,395	1,395	1,675	1,744	1,744	1,744	2,232	2,302
M6	Thermostats	279	418	418	418	558	589	670	670	697	697
M6A	Thermostats w/ Aux. Box	801	942	978	978	1,116	1,185	1,185	1,185	1,535	1,604
M7(4)	Bearing RTD's 100 Ohm Platinum	N/A	N/A	N/A	N/A	N/A	N/A	1,502	1,502	1,502	1,502
M8(4)	Bearing Conversion Roller to Ball or Ball to Roller	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,437	5,082	5,544
M8A(4)	Convert to Insulated or Ceramic Bearings	998	1,575	1,680	1,838	2,520	3,413	4,095	6,563	11,025	14,175
M9	Change Rotation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,587	2,587
M9A	Change to Non-Sparking Fan	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,675	2,587	2,587
M9B	Change to Low Noise Fan/ Fan Cover	N/A	N/A	N/A	N/A	N/A	N/A	N/A	QUOTE	QUOTE	QUOTE
M10	Short Shaft	1,256	1,256	1,256	1,256	1,395	1,535	1,675	1,953	3,070	3,070
M11	F1 to F2 Mounting Conversion	210	264	377	377	377	503	503	589	9,486	9,486
M11A	Oversized Main Conduit Box	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4,620	4,620	4,620
M11B	Full Loaded Main Conduit Box	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18,480	18,480	18,480

Notes:

(1) Please double the List Price for 240 Volt Space Heaters operated on 120 Volts.
(2) Price includes the flange.
(3) Add $1,500 to List Price for two per phase Winding RTD's.
(4) Price is per bearing.
(5) Not required for MAX-E2 or MAX-E2/841
(6) For Frames 140T through 400T, Please use MAX-E2/841.
(7) Not available for Hybrid 449T/ TS Frames EP3006, EP3502, EP3504, HB3006, HB3502 and HB3504

FACTORY MODIFICATION PRICING

Effective 12-01-08
Supercedes 03-01-08

MODIFICATION LEAD TIME

1. TWMC standard lead time for all modifications is 5-10 working days. If shorter lead time is required, please contact TWMC. Expediting fees may apply.
2. Modification lead time does not include transit time.
3. Lead time is based upon availability of parts.

MOD. NUMBER	DESCRIPTION	LIST PRICE									
		56-180T	210T	250T	280T	320T	360T	400T	440T	5000	5800 & UP
M12	Stainless Steel Breather Drains	210	264	377	377	377	503	503	589	589	670
M13	Tropicalization/ Fungus Protection	284	284	284	284	284	284	284	323	364	384
M14	Provisions for Vertical Jacking	N/A	N/A	N/A	N/A	N/A	N/A	1,185	1,185	Included	Included
M15	Grease	314	364	364	427	508	589	670	751	809	809
M16	Chico Motor Leads	210	264	377	377	377	503	549	549	N/A	N/A
M17(5)	Epoxy Paint	838	838	1,152	1,152	1,152	1,152	1,152	1,152	1,535	1,535
M18(6)(4)	INPRO™ Seals	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,003	3,003	3,003
M19	Grounding Provisions on Frame	140	140	140	140	140	140	140	Included	Included	Included
M20	Drip Cover (TEFC) Rolled Steel	347	404	578	962	1,213	1,386	2,195	N/A	N/A	N/A
M20A	Drip Cover (TEFC) Cast Iron	572	771	922	1,116	1,451	1,688	2,617	N/A	N/A	N/A
M21	Extend Lead - Connections behind Box Price based on 4' Leads	628	628	628	669	757	855	991	1,049	1,028	1,427
M21A	Extend Lead - Connections inside Box Price based on 4' leads	450	450	450	491	584	681	809	866	947	1,240
M22(4)(7)	Shaft Grounding Ring	742	834	834	834	834	834	989	1,587	1,587	2,285
M23(4)	Provisions for Vibration Switch/ Transmitter	204	295	295	295	295	295	384	384	384	384
M23A(4)	Furnish and Install Vibration Switch/ Transmitter	3,442	3,533	3,533	3,533	3,533	3,533	3,533	3,533	3,533	3,533
M24	Mill off Motor Feet	816	838	884	928	1,019	1,155	1,382	1,608	1,857	2,151
M25(8)	Inline Blower for 1000:1 Speed Range	508	681	951	1,109	1,756	1,860	2,044	6,999	12,249	17,499
M26(8)	Installation of Encoder	2,573	2,573	2,678	2,783	3,019	3,019	3,281	3,615	6,825	8,138
M27	Installation of Brake	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE	QUOTE
M28	Lock Nut and Washer for Vertical Shaft Down	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,397	3,397
M29	Provisions for Oil Mist(9)	788	1,313	1,313	1,444	1,706	1,838	1,969	2,756	5,250	7,875
M29A	Oil Mist Ready (9)	1,444	1,969	1,969	2,100	2,363	2,494	2,625	3,413	6,563	9,188

Notes:
(1) Please double the List Price for 240 Volt Space heaters operated on 120 Volts.
(2) Price includes the flange.
(3) Add $1,500 to List Price for two per phase Winding RTD's.
(4) Price is per bearing.
(5) Not required for MAX-E2 or MAX-E2/841
(6) For Frames 140T through 400T, please use MAX-E2/841.
(7) Shaft Grounding Ring required on both ends for frames 360TS/ T and Larger.
(8) "M8A" Mod required as well from frames 440TS/T and Larger.
(9) Must Start with Max-E2/841 if applicable

FACTORY MODIFICATION DESCRIPTIONS

Effective 12-01-08
Supercedes 03-01-08

M1. Nameplate Change:

Add new nameplate displaying approved data changes such as new voltage and frequency, revised HP and service factor, higher or lower ambient temperature, etc.

M1A. Additional Nameplate:

Add second data plate with customer part number, order number, or other data.

M2. Space Heater:

Add wrap around space heaters with leads brought out to main terminal box. Standard voltage is 115V, however other voltages are available. Please specify voltage when ordering. All heaters are single phase.

M2A. Space Heater w/ Auxiliary Box:

Same as M2, except an auxiliary terminal box is added to the side of the main terminal box and the space heater leads are brought out to the auxiliary terminal box.

M2X. Space Heater "Explosion Proof":

Add wrap around space heaters with leads brought out to main terminal box. Standard voltage is 115V, however other voltages are available. Please specify voltages when ordering. All heaters are single phase. This applies to TWMC's explosion proof line of motors.

M3C. Installation of C-Face:

Remove drive-end bracket and replace with C-Face: Modification Price includes the C-Face.

M3C841. Installation of C-Face w/ INPRO™ Seals:

Remove drive-end bracket and replace with C-Face and INPRO™ Seal: Only Available on MAX-E2/841 Line.

M3D. Installation of D-Flange:

Remove drive-end bracket and replace with D-Flange: Modification Price includes the D-Flange.

M3D841. Installation of D-Flange w/ INPRO™ Seals:

Remove drive-end bracket and replace with D-Flange and INPRO™ Seal: Only Available on MAX-E2/841 Line

M4. Stator Winding RTD's:

Provide 100 Ohm platinum resistant temperature detectors (RTD's), one per phase, on the winding end turns with leads brought out to main terminal box. Note TWMC's medium voltage line of products come standard with 100 Ohm platinum RTD's, two per phase.

M4A. Stator Winding RTD's w/ Auxiliary Box:

Provide 100 Ohm platinum resistant temperature detectors (RTD's) one per phase on the winding end turns with leads terminated in an auxiliary terminal box. Note that on motors 449T frame and smaller, the auxiliary box will be located on the same side as the main terminal box. On 5000 frames and larger, the auxiliary box will be located on the F-2 side, or on the opposite side as the main lead box.

M5. Thermistors:

Provide (3) PTC thermistors (140˚C) on the winding end turns with leads brought out to main terminal box.
Note: these are standard on the Metric motors with frames 160L andl larger.

M5A. Thermistors w/ Auxiliary Box:

Provide (3) PTC thermistors (140˚C) on the winding end turns with leads brought out to an auxiliary terminal box. The auxiliary box will be located on the side of the main terminal box.

M6. Thermostats:

Addition of (3) normally closed thermostats (140˚C) to the winding end turns, connected in series with the leads brought out to the main terminal box. This is standard on Explosion Proof Motors.

M6A. Thermostats w/ Auxiliary Box:

Addition of (3) normally closed thermostats (140˚C) to the winding end turns, connected in series with the leads brought out to an auxiliary terminal box. The auxiliary box will be located off the side of the main terminal box.

FACTORY MODIFICATION DESCRIPTIONS

Effective 12-01-08
Supercedes 03-01-08

M7. BEARING RTD'S:

Add 100 Ohm platinum bearing resistance temperature detectors, one per bearing. Specify if alternate type is required.

M8. CONVERT BEARINGS:

Convert from Roller Bearings to Ball Bearings or Ball Bearings to Roller Bearings. The Roller to Ball conversion requires some machining on bearing caps to allow for thermal growth.

M8A. CONVERT TO INSULATED OR CERAMIC BEARINGS:

Replace existing bearing(s) with either ceramic ball bearings, or ceramic coated bearings. This would be to reduce/ eliminate shaft currents. TWMC's standard is on the Non-Drive End bearing only.

M9. CHANGE ROTATION:

This modification only applies to 2-Pole (3600/ 3000 RPM) motors in 5000 frames and larger. Standard direction of rotation is counter clockwise, facing the drive-end of the motor. This modification will change either the internal or external fans for operation in the clockwise direction, facing the drive-end.

M9A. CHANGE TO NON-SPARKING FAN:

Replace existing fan with a non-sparking fan. This is for motors that will be located in Class 1, Division II environments.

M10. SHORTEN SHAFT:

Machine shafts to TS Dimensions per NEMA MG1. Any other short shaft requirements will have to be approved by TWMC. Note, this does not include new bearings. (May result in a step key configuration.)

M11. F1 TO F2 MOUNTING:

Convert terminal box location from standard F1 to F2, or F2 to F1, depending on the product line. On medium voltage motors, the auxiliary terminal boxes will be on the opposite side as the main terminal box as standard. If the requirement is to have all terminal boxes on either the F1 side or the F2 side, please specify.

M11A. SUPPLY OVERSIZED MAIN CONDUIT BOX:

Replace existing conduit box with an oversized main conduit box. This would be done if TWMC standard box does not meet customer's requirement.

M11B. SUPPLY FULLY LOADED MAIN LEAD BOX:

Replace existing conduit box with a fully loaded box. The box will be TWMC standard size and will contain TWMC standard lightning arrestors, surge capacitors and current transformers (50:5). Box is not self supporting and will require the customer to support.

M12. STAINLESS STEEL BREATHER DRAINS:

Drill and tap the existing drain holes to accommodate a Crous-Hinds stainless steel breather drain. Note, this is standard on MAX-E2, MAX-E2/841 and Explosion Proof motors.

M13. TROPICALIZATION / FUNGUS PROTECTION:

Involves disassembling the motor and spraying the internal windings.

M14. PROVISIONS FOR VERTICAL JACK SCREWS:

Drill and tap 2 holes per motor.

M15. ALTERNATE GREASE:

Purge and repack lubricant in end brackets with TWMC standard high temp. or low temp, grease. Please contact TWMC for alternates.

M16. CHICO MOTORS LEADS

Apply a compound between terminal box and frame of motor. This feature is standard for XP motors.

M17. EPOXY PAINT FINISH:

Standard paint finish will be changed to Epoxy paint like (e.g. MAX-E2™ Epoxy Paint (Blue)).

FACTORY MODIFICATION DESCRIPTIONS

Effective 12-01-08
Supercedes 03-01-08

M18. Shaft INPRO™ Seals:

Add INPROTM seals to drive-end only of MAX-E2™ motors 140T~449T/TS frames. This modification is only available for frames 440T and larger. The price reflects drive-end only.

M19. Grounding Provisions on Frame:

Drill and tap the motor frame. This is standard on MAX-E2™, MAX-E2/841™, Oil Well Pump motors, and motors 5000 frames and larger. All motors have a grounding lug inside the main lead box as a standard.

M20. Drip Cover Rolled Steel:

Replace the existing fan cover with a rolled steel drip cover. This is only for motors mounted vertically.

M20A. Drip Cover Cast Iron:

Replace the existing fan cover with a cast iron drip cover. This is only for motors mounted vertically.

M21A. Extend Leads - Connection Behind Conduit Box:

Extend existing leads to the length specified by customer. The splice will be made behind the conduit box so it is not seen.

M21B. Extend Leads - Connection in Conduit Box:

Extend existing leads to the length specified by customer. The splice will be made in the conduit box.

M22. Supply Shaft Grounding Ring:

Install AEGIS shaft grounding ring as made by ELECTRO STATIC TECHNOLOGY. This would be to reduce or eliminate shaft currents. For other methods of shaft grounding, please contact TWMC.

M23. Provisions for Vibration Sensor:

Drill, tap and machine end bracket(s) to accommodate vibration sensor. Customer is required to submit specifications of vibration sensor. Price is per bracket.

M23A. Provide and Install Vibration Switch (Does not Include Cabling or Terminations):

Drill, tap and machine end bracket(s) to accommodate vibration sensor. TWMC standard switch will be provided as made by METRIX, ROBERTSHAW, PREDICTECH, or STI. For details or pricing to provide another brand, please contact TWMC. Price is per bracket.

M24. Mill Motor Feet Off:

TWMC will cut off the feet of a footed motor to create round body type motor. Second lifting lug available for an additional price adder.

M25. Inline Blower for 1000:1 Speed Range:

Remove existing fan and fan cover and replace with TWMC standard inline blower/ fan cover configuration. Blower motor will require a separate power source. This modification will also require an "M8A" for 440TS/T frames and larger.

M26. Installation of Encoder:

Install TWMC Standard Encoder as made by Dynapar. Other brands available upon request for an additional price adder

M27. Installation of Brake:

Please Contact TWMC for pricing and delivery.

M28. Lock Nut and Washer for Vertical Shaft Down Mounting.

M29. Provisions for Oil Mist:

TWMC to prepare motors for future Oil Mist Lubrication. Must use 841 motors if applicable.

M29A. Oil Mist Ready:

TWMC to prepare motors for immediate Oil Mist Lubrication. Must use 841 if applicable.

DIMENSIONS - AC MACHINES

Dimension for Foot - Mounted Machines with Single Straight - Shaft Extension

Effective 12-01-08
Supercedes 03-01-08

FRAME	A MAX	D*	E	2F	BA	H	U	N - W	V MIN	R	KEYSEAT ES MIN	S	AA MIN
56	–	3.50	2.44	3.00	2.75	0.34 slot	0.625	1.88	–	0.517	1.41	0.188	–
143T	7.0	3.50	2.75	4.00	2.25	0.34 hole	0.8750	2.25	2.00	0.771	1.41	0.188	3\4
145T	7.0	3.50	2.75	5.00	2.25	0.34 hole	0.8750	2.25	2.00	0.771	1.41	0.188	3\4
182T	9.0	4.50	3.75	4.50	2.75	0.41 hole	1.1250	2.75	2.50	0.986	1.78	0.25	3\4
184T	9.0	4.50	3.75	5.50	2.75	0.41 hole	1.1250	2.75	2.50	0.986	1.78	0.25	3\4
213T	10.5	5.25	4.25	5.50	3.50	0.41 hole	1.3750	3.38	3.12	1.201	2.41	0.312	1
215T	10.5	5.25	4.25	7.00	3.50	0.41 hole	1.3750	3.38	3.12	1.201	2.41	0.312	1
254T	12.5	6.25	5.00	8.25	4.25	0.53 hole	1.6250	4.00	3.75	1.416	2.91	0.375	1-1\4
256T	12.5	6.25	5.00	10.00	4.25	0.53 hole	1.6250	4.00	3.75	1.416	2.91	0.375	1-1\4
284T	14.0	7.00	5.50	9.50	4.75	0.53 hole	1.875	4.62	4.38	1.591	3.28	0.5	1-1\2
284TS	14.0	7.00	5.50	9.50	4.75	0.53 hole	1.625	3.25	3.00	1.416	1.91	0.375	1-1\2
286T	14.0	7.00	5.50	11.00	4.75	0.53 hole	1.875	4.62	4.38	1.591	3.28	0.5	1-1\2
286TS	14.0	7.00	5.50	11.00	4.75	0.53 hole	1.625	3.25	3.00	1.416	1.91	0.375	1-1\2
324T	16.0	8.00	6.25	10.50	5.25	0.66 hole	2.125	5.25	5.00	1.845	3.91	0.5	2
324TS	16.0	8.00	6.25	10.50	5.25	0.66 hole	1.875	3.75	3.50	1.591	2.03	0.5	2
326T	16.0	8.00	6.25	12.00	5.25	0.66 hole	2.125	5.25	5.00	1.845	3.91	0.5	2
326TS	16.0	8.00	6.25	12.00	5.25	0.66 hole	1.875	3.75	3.50	1.591	2.03	0.5	2
364T	18.0	9.00	7.00	11.25	5.88	0.66 hole	2.375	5.88	5.62	2.021	4.28	0.625	3
364TS	18.0	9.00	7.00	11.25	5.88	0.66 hole	1.875	3.75	3.50	1.591	2.03	0.5	3
365T	18.0	9.00	7.00	12.25	5.88	0.66 hole	2.375	5.88	5.62	2.021	4.28	0.625	3
365TS	18.0	9.00	7.00	12.25	5.88	0.66 hole	1.875	3.75	3.5	1.591	2.03	0.5	3
404T	20.0	10.00	8.00	12.25	6.62	0.81 hole	2.875	7.25	7.00	2.45	5.65	0.75	3
404TS	20.0	10.00	8.00	12.25	6.62	0.81 hole	2.125	4.25	4.00	1.845	2.78	0.5	3
405T	20.0	10.00	8.00	13.75	6.62	0.81 hole	2.875	7.25	7.00	2.45	5.65	0.75	3
405TS	20.0	10.00	8.00	13.75	6.62	0.81 hole	2.125	4.25	4.00	1.845	2.78	0.5	3
444T	22.0	11.00	9.00	14.50	7.50	0.81 hole	3.375	8.50	8.25	2.88	6.91	0.875	3
444TS	22.0	11.00	9.00	14.50	7.50	0.81 hole	2.375	4.75	4.50	2.021	3.03	0.625	3
445T	22.0	11.00	9.00	16.50	7.50	0.81 hole	3.375	8.50	8.25	2.88	6.91	0.875	3
445TS	22.0	11.00	9.00	16.50	7.50	0.81 hole	2.375	4.75	4.50	2.021	3.03	0.625	3
447T	22.0	11.00	9.00	20.00	7.50	0.81 hole	3.375	8.50	8.25	2.88	6.91	0.875	3
447TS	22.0	11.00	9.00	20.00	7.50	0.81 hole	2.375	4.75	4.50	2.021	3.03	0.625	3
449T	22.0	11.00	9.00	25.00	7.50	0.81 hole	3.375	8.50	8.25	2.88	6.91	0.875	3
449TS	22.0	11.00	9.00	25.00	7.50	0.81 hole	2.375	4.75	4.50	2.021	3.03	0.625	3

All dimensions in inches.

* The tolerances on the D dimension for rigid base motors shall be +0.00 inches, -0.06 inches. No tolerance has been established for the D dimension of resilient mounted motors.

- Frame 56 - The tolerance for the 2F dimension shall be +0.03 inches and for the H dimension (width of slot) shall be +0.02 inch, -0.00 inches.
- Frames 143T to 500, inclusive - The tolerance for the 2E and 2F dimensions shall be +0.03 inches and for the H dimension shall be +0.05 inches, -0.00 inches.
- The values of the H dimension represent standard bolt sizes plus dimensional clearances.
- H dimension: Frames 143T to 365T inclusive - The clearance of the std bolt to hole size is 0.03.
- The tolerance is +0.05, -0.00 inches
- Frames 404T to 449T inclusive - The clearance of std bolt to hole size is 0.06 inches.
- The tolerance is +0.020 inch, -0.00 inches

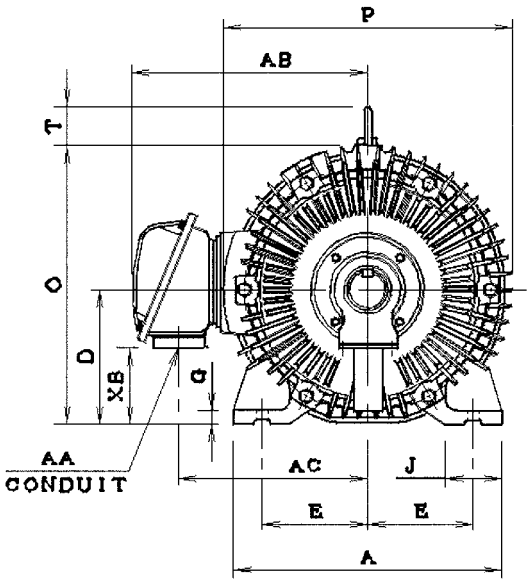
FRAME	D	E	2F	BA	AB	H	U	N-W	V	R	S	AA(1)	AA(2)
5007A	12.50	10.00	22.00	8.50	26.20	0.94	2.625	5.75	5.50	2.275	0.625	NPT2	NPT4
5009A	12.50	10.00	28.00	8.50	26.20	0.94	2.625	5.75	5.50	2.275	0.625	NPT2	NPT4
5007C	12.50	10.00	22.00	8.50	26.20	0.94	3.875	11.62	11.12	3.309	1.000	NPT2	NPT4
5009B/C	12.50	10.00	28.00	8.50	26.20	0.94	3.875	11.62	11.12	3.309	1.000	NPT2	NPT4
5011A	12.50	10.00	36.00	8.50	26.20	0.94	2.625	5.75	5.50	2.275	0.625	NPT2	–
5011B	12.50	10.00	36.00	8.50	26.20	0.94	3.875	11.62	11.12	3.309	1.000	NPT2	NPT4
5808A	14.50	11.50	28.00	10.00	29.35	1.10	2.625	5.75	5.50	2.275	0.625	NPT3.5	2-NPT3
5806B	14.50	11.50	22.00	10.00	29.35	1.10	4.875	11.88	11.38	4.169	1.250	–	2-NPT3
5808B	14.50	11.50	28.00	10.00	29.35	1.10	4.875	11.88	11.38	4.169	1.250	NPT3.5	2-NPT3
5810A	14.50	11.50	36.00	10.00	29.35	1.10	2.625	5.75	5.50	2.275	0.625	NPT3.5	–
5810B	14.50	11.50	36.00	10.00	29.35	1.10	4.875	11.88	11.38	4.169	1.250	NPT3.5	–
6806A	17.00	13.50	28.00	11.50	32.10	1.38	2.625	5.75	5.50	2.275	0.625	NPT3.5	–
6806B	17.00	13.50	28.00	11.50	32.10	1.38	4.875	11.88	11.38	4.169	1.250	NPT3.5	–
6808B	17.00	13.50	36.00	11.50	32.10	1.38	4.875	11.88	11.38	4.169	1.250	NPT3.5	–

AA(1): Medium Voltage
AA(2): Low Voltage

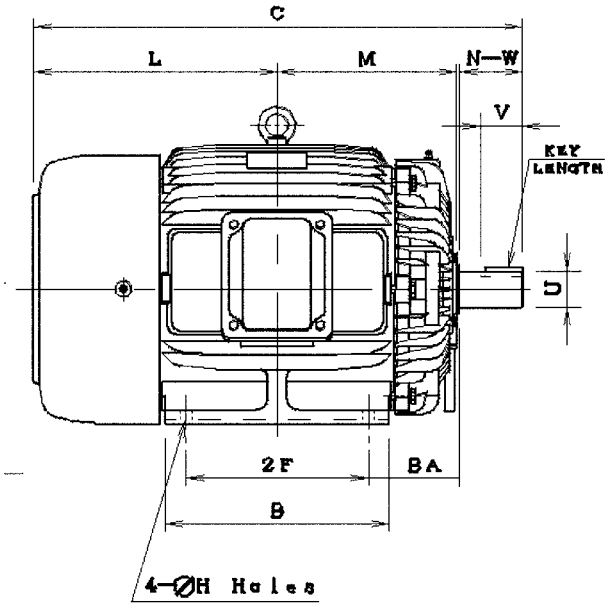
DIMENSIONS - AC MACHINES

Effective 12-01-08
Supercedes 03-01-08

LETTER SYMBOLS FOR FOOT-MOUNTED MACHINES - DRIVE END VIEW



LETTER SYMBOLS FOR FOOT-MOUNTED MACHINES - SIDE VIEW



WORLD SERIES MOTORS

Effective 12-01-08
Supercedes 03-01-08

WORLD SERIES MOTORS: SETTING THE STANDARD OF EXCELLENCE

Building on over 100 years of Westinghouse motor experience, TECO-Westinghouse World Series Motors represent the induction motor at its highest state of evolution. We began with a product known for excellence, and through computer-aided design and the use of advanced materials, made it even better. We have made it leaner, more efficient, and highly refined. Yet the World Series line of motors retains all the original quality features that established Westinghouse as the world leader among large motor manufacturers – features such as rugged copper bar rotor construction, Thermalastic® insulation, and heavy-duty frame construction.

At TECO-Westinghouse Motor Company, we pride ourselves on service. As our customer, you can tap the strength of our resources for superior front-end services, including engineering support, computer-aided engineering studies, product information and quotation assistance. Once your World Series Motor is in place, you can rely on our worldwide field service and engineering network to service and protect your investment.

World Series Motors offer a full range of benefits to fill your large induction motor requirements. For more information, contact your local TECO- Westinghouse representative, or call us direct at our Round Rock, Texas headquarters: 1-800-451-8798.

WORLD SERIES VERTICAL MOTORS FOR HIGH-THRUST CONDITIONS

A long and successful history with vertical motor construction goes into the making of every vertical motor in the World Series line.

Used primarily for pump applications, World Series vertical motors are designed to handle virtually any thrust load that might be imposed (loads well in excess of 100,000 lbs., continuous downward thrust). High-thrust load capability is achieved by utilizing Kingsbury-type tilting-pad thrust bearings. Both sleeve and ball bearings are available for guide bearings, depending on the application.

For long wear and reliability, the thrust bearings and guide bearings are air-cooled through constant ventilation and are also oil lubricated from a large reservoir. Special water-cooling coils can also be added when needed.

World Series vertical motors reflect the same high quality construction and insulation processes that distinguish all the various components of our horizontal motors. Our vertical motors are readily adaptable to a variety of specific needs. For example, non-reverse ratchets are available. Also, flywheels can be included in the design when required. Our vertical motors can also be started from zero-speed or reverse-speed and can be designed to accommodate overspeed situations, as in a hydro-generator.

WORLD SERIES MOTORS

Effective 12-01-08
Supercedes 03-01-08

QUALITY FEATURES AND TIME-TESTED PERFORMANCE

- Copper rotor bars provide high conductivity and outstanding reliability.
- High frequency induction brazing ensures uniform end ring connections.
- Swaging contributes to long motor life by minimizing rotor bar movement.
- Rugged frame construction ensures lateral and torsional stability.
- Innovative PAM motors provide two-speed operation with only one winding.
- Thermalastic® insulation provides excellent protection from environmental contaminants.
- 250 HP to 30,000 HP ranges available for a wide variety of applications.
- High operating efficiency yields low life cycle cost.
- Split-sleeve bearings offer outstanding service and are easy to inspect.
- Adjustable frequency capability is available when specified.
- Each motor is custom designed for the most demanding applications.
- Over 100 years of experience goes into every motor we produce.

AVAILABLE ENCLOSURES

World Series Motors are offered in a complete range of enclosures to meet the toughest demands of any industry. IEC enclosures are also supplied. Available NEMA enclosures include the following configurations:

- Open Drip Proof (Guarded)
- Weather Protected Type I
- Weather Protected Type II
- Totally Enclosed Water-to-Air Cooled
- Totally Enclosed Air-to-Air Cooled
- Totally Enclosed Pipe Ventilated

TERMINAL BOXES

World Series Motors feature main lead and auxiliary terminal boxes constructed of 12-gauge steel. Each terminal box is gasketed for air-tight, dust-free, and weather-proof protection of terminal leads. Available for F1 or F2 locations, terminal boxes can be modified to include any customer terminations and accessory devices.

The main lead terminal box provides termination of the motor's main power leads. Available terminal box options include lightning arresters, surge capacitors, current transformers, special grounding devices, cable or bus bar terminations, and top or bottom lead entry.

A key feature of the auxiliary box is the "box within a box" system. Designed to meet National Electric Code (NEC) specifications, the auxiliary box provides safe, protected termination for all auxiliary motor devices, regardless of voltage.

WORLD SERIES AIR CABINETS DESIGN LIST

Effective 12-01-08
Supercedes 03-01-08

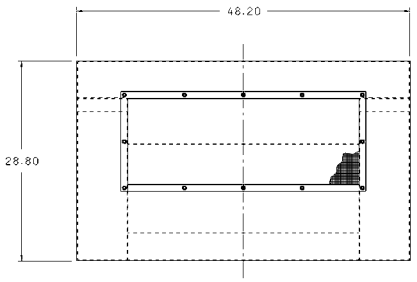
REPLACEMENT WPII AIR CABINETS FOR AGING TECO-WESTINGHOUSE AND WESTINGHOUSE MOTORS

Features and Benefits:

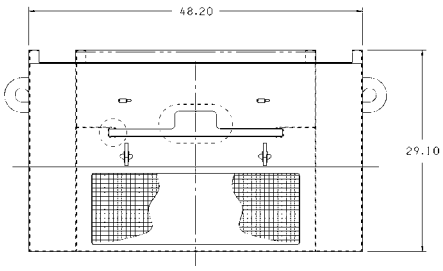
- Replacements for corroded air cabinets on aged motors.
- Meets NEMA MG 1 requirements for WPI and WPII enclosures.
- Tested to MIL-STD-810E for water-tightness.
- Split-hinge design (Fig-2); for inlets, allowing for fast and safe filter replacement without the use of hand tools. Filter replacement possible without motor shutdown.
- Air cabinet changeout achievable onsite without motor removal.
- Minimal differences in overall dimensions between old and new design. Example shown below for frame 3509; actual dimensions will vary with frame size.

Standard Construction:

- A36 carbon steel – 11 gauge
- Full acoustic lining
- #4 Mesh stainless steel screens
- Stainless steel filters included.



WORLD SERIES DESIGN
FIGURE 1



UNIVERSAL DESIGN
FIGURE 2

WORLD SERIES AIR CABINETS DESIGN LIST

Effective 12-01-08
Supercedes 03-01-08

WORLD SERIES FRAME SIZE	UNIVERSAL AIR CABINET PART NUMBER
3505	2563F39G04
3506	2563F39G08
3507	2563F39G12
3508	2563F39G16
3509	2563F39G20
3510	2563F39G24
4008	2563F40G04
4009	2563F40G08
4010	2563F40G12
4011	2563F40G16
4509	2563F41G04
4510	2563F41G08
4511	2563F41G12
4512	2563F41G16
5010	2563F42G04
5011	2563F42G08
5012	2563F42G12
5014	2563F42G16
5611	2563F43G04
5612	2563F43G08
5614	2563F43G12
5616	2563F43G16

WORLD SERIES FRAME SIZE	UNIVERSAL AIR CABINET PART NUMBER
6312	6D47635G04
6314	6D47635G08
6316	6D47635G12
6318	6D47635G16
7112	6D45158G04
7114	6D45158G08
7116	6D45158G12
7118	6D45158G16
8014	2565F19G04
8016	2565F19G08
8018	2565F19G12
8020	2565F19G16
9016	2573F69G04
9018	2573F69G08
9020	2573F69G12
9022	2573F69G16

Available Options:

- All stainless steel construction
- Differential pressure devices
- Manometers
- Air temperature devices
- Mufflers
- Heat Shield

NOTE:

Universal air cabinets are also available for Westinghouse Buffalo LifeLine D Series and TECO-Westinghouse Round Rock LifeLine D Series. For information, contact Renewal Parts Personnel at (888) 754-5006 or visit our website at www.tecowestinghouse.com.

SYNCHRONOUS MOTORS

Effective 12-01-08
Supercedes 03-01-08

SYNCHRONOUS MACHINES: THE OPTIMAL CHOICE OF HEAVY INDUSTRY

TECO-Westinghouse Motor Company synchronous motors and generators provide superior value in terms of proven reliability, low maintenance performance, and long life in arduous applications. Our synchronous machines offer numerous benefits, including:

- Constant-speed operation
- High-efficiency ratings
- Low inrush currents
- Leading power factor (for corrective kVA capability)
- Horsepower range from 1000 HP to 100,000 HP

For more information, contact your local TECO-Westinghouse representative, or call us direct at our Round Rock, Texas headquarters: 1-800-451-8798.

PROVEN FEATURES FOR EFFICIENT SYNCHRONOUS MOTOR PERFORMANCE

TECO-Westinghouse Motor Company synchronous machines feature high efficiency designs in which great care is taken to minimize losses. To ensure maximum operating efficiencies and trouble free operations, the following features are standard on these motors:

- Airgap, slot openings, and slot ratios are selected to reduce pole face losses due to flux pulsations.
- Low loss, core-plated, non-aging, silicon steel stator punchings are used to reduce core losses.
- The stator copper is stranded to minimize eddy current losses.
- The number of stator slots, slot width, slot depth, and stator core depths are dimensioned to reduce magnetic noise.
- Pole punchings are designed for reduced pole leakage flux and field excitation to minimize field copper losses.
- Blowers are carefully selected to reduce windage loss.
- Stator end-plates are designed to ensure a tight and rigid core assembly, to minimize noise due to core distortion, and to transmit torque to the frame bulkhead.

DC MOTORS

Effective 12-01-08
Supercedes 03-01-08

DC MOTOR APPLICATIONS

TECO-Westinghouse Motor Company DC motors are ideally suited to a multitude of industrial and marine applications in which high torque and variable speed are required. These applications include ship propulsion, mine hoists, and steel rolling mills. They also drive many other types of industrial equipment such as fans, Banbury mixers, and extruders.

To meet the needs of a broad range of applications, our rugged DC motors are available in sizes ranging from 12-inch to 12-foot armature diameters, with available power ratings from 250 HP to over 35,000 HP.

For more information, contact your local TECO- Westinghouse representative, or call us direct at our Round Rock, Texas headquarters: 1-800-451-8798.

CUSTOM DESIGNS AS A STANDARD FEATURE

TECO-Westinghouse Motor Company DC motors are designed and built for long life and minimum maintenance. Over 100 years of motor industry experience has yielded design features that add up to precision, performance, and reliability.

Our DC motors and generators are custom designed to meet your specified needs. We can incorporate existing foundations, space limitations, service conditions, and enhanced sparing capabilities into our motor and generator designs. In addition, you can apply our DC machines to any quality brand of controls with total confidence.

USEFUL FORMULAS

Effective 12-01-08
Supercedes 03-01-08

kW	=	HP * .746
Torque in lb-ft	=	$\frac{\text{HP} * 5250}{\text{RPM}}$
Motor synchronous speed in RPM	=	$\frac{120 * \text{Hz}}{\text{Number of Poles}}$
Three-Phase Full-Load Amp	=	$\frac{\text{HP} * .746}{1.73 * \text{kV} * \left(\frac{\text{Efficiency}}{100}\right) * \left(\frac{\text{Power Factor}}{100}\right)}$
Rated Motor kVA	=	$\frac{\text{HP} * .746}{\text{Efficiency} * \text{Power Factor}}$
kW Loss	=	$\frac{(\text{HP} * .746) * (1.0 - \text{Efficiency})}{\text{Efficiency}}$
Wk^2 Referred to Motor Shaft Speed	=	[Driven Machine Wk^2 (Driven Machine RPM/Motor RPM)^2]+ Gear Wk^2 at Motor Speed
Accelerating Time	=	$\frac{0.462\ (Wk^2 \text{ of Motor and Load})\ RPM^2}{\text{Motor Rated kW} * 104 * \text{Per-Unit Effective Accelerating Torque}}$
kVA inrush	=	Percent Inrush * Rated kVA
Approximate Voltage Drop (%)	=	$\frac{\text{Motor kVA Inrush}}{\text{Transformer kVA}}$ * Transformer Impedance (Normally 5% to 7%)
Stored Kinetic Energy in kW-sec	=	2.31 * (Total Wk^2) * RPM^2 x 10^{-7}
Inertia Constant (H) in Seconds	=	$\frac{\text{Stored Kinetic Energy in kW Seconds}}{\text{HP} * .746}$
Conversion Factors:		
CV	=	(Metric HP) = 735.5 Watts = 75 KW-m/sec
Wk^2 (lb-ft)	=	5.93 x GD^2 ($kg\text{-}m^2$)

Derating motor for change in elevation: For each 330 foot increase in elevation above 3300 feet above sea level, derate motor horsepower 1 percent.
Cooling-water requirements: 2 gpm of water for each kW of loss.
Ventilating-air requirements: 100-125 cfm of 40˚C air at 1/2 water pressure for each W of loss.


TECO
PA7301
TECO
MA7201
440V CLASS
TECO
FM50
110V 0.2kW 1/4HP
TECO
N3 TECO
AC Drive

EV MICRO DRIVE

MEDIUM DUTY

Effective 12-01-08
Supercedes 03-01-08

A compact, low cost, and versatile AC Drive that is easy to program and ideal for OEM's.

APPLICATIONS:

- Mixing
- Fans
- Small Conveyors
- Treadmills
- AC Contactor Replacement
- Pumps

FEATURES:

- **Chassis Style Enclosure (IP20)**
- **Sensorless Vector or V/ Hz**
- **0.25 to 1 HP, 115V, 50/ 60Hz, 1-Phase**
- **0.25 to 3 HP, 230V, 50/ 60Hz, 1-Phase**
- **0.5 to 3 HP, 230V, 50/ 60Hz, 3-Phase**
- **1 to 3 HP, 460V, 50/ 60Hz, 3-Phase**
- **Micro Drive with Din Rail Option**
- **PID Control**
- **0 to 200Hz Speed Range**
- **24VDC, 50mA External Sensor Supply Built-in**
- **8 Preset Speeds**
- **Multi-function Analog Input/ Output**
- **Options Include: RS485, RS232, Copy Unit, Remote Keypad, I/ O Expansion**
- **Built-in Filter for EMC Compliance (Optional)**
- **UL, cUL, and CE Approved**

115V 1-Phase Input/ 3-Phase 230VAC Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE CHASSIS
			HEIGHT	WIDTH	DEPTH		
JNEV-1P2-H1	.25	1.7	5.20	3.03	5.13	1	240
JNEV-1P5-H1	.50	3.1	5.20	3.03	5.13	2	258
JNEV-101-H1	1	4.2	5.20	3.03	5.13	2	266

230V 1-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TOQRUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE CHASSIS
			HEIGHT	WIDTH	DEPTH		
JNEV-2P2-H1	.25	1.7	5.20	3.03	5.13	1	240
JNEV-2P5-H1	.50	3.1	5.20	3.03	5.13	1	258
JNEV-201-H1	1	4.2	5.20	3.03	5.13	1	266
JNEV-202-H1	2	7.5	5.20	4.65	5.83	2	360
JNEV-203-H1	3	10.5	5.20	4.65	5.83	2	438

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE CHASSIS
			HEIGHT	WIDTH	DEPTH		
JNEV-2P5-H3	.50	3.1	5.20	3.03	5.13	1	258
JNEV-201-H3	1	4.2	5.20	3.03	5.13	1	266
JNEV-202-H3	2	7.5	5.20	4.65	5.83	2	360
JNEV-203-H3	3	10.5	5.20	4.65	5.83	2	438

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE CHASSIS
			HEIGHT	WIDTH	DEPTH		
JNEV-401-H3	1	2.3	5.20	4.65	5.83	3	363
JNEV-402-H3	2	3.8	5.20	4.65	5.83	3	406
JNEV-403-H3	3	5.2	5.20	4.65	5.83	3	492

Miscellaneous Options

PART NO.	DESCRIPTION	LIST PRICE
SIF-485	Communications Interface RS485	30
SIF-232	RS232 Interface Card with Wire to PC	25
SIF-MP	Copy Module	15
SDOP-LED-2M	Remote LED Keypad with Cable to EV	75
SIF-I/ O	I/ O Expansion Module	50
JNSWPDA	PDA Interface Module	18
TL-ENC-01	TECO Link Kit - Includes box label, wiring diagram, SIF - 232, CD with software and drive user manuals, USB-RS485 converter	425

NOTE:
H1 = 1-Phase
H3 = 3-Phase

EV MICRO DRIVE

NEW!

NEMA 4 with OPERATOR DEVICES

Effective 12-01-08
Supercedes 03-01-08

A compact, low cost and versatile AC Drive that operates in harsh environments. Now available with a 115VAC input.

APPLICATIONS:

- Mixing
- Fans
- Conveyors
- Food Processing
- Beverage
- Pharmaceutical

FEATURES:

- **Micro AC Inverter**
- **Has all the Software Features of the Chassis Style EV Micro Drives**
- **NEMA 4 for Harsh Environments (Indoor Use Only)**
- **1 HP, 115 V, 50/ 60Hz, (1-Phase 230V, 3-Phase Output)**
- **0.5 – 3 HP, 230V, 50/ 60Hz, 3-Phase**
- **1 – 3 HP, 460V, 50/ 60 Hz, 3-Phase**
- **Low Cost**
- **Space Saving Design**
- **Digital Keypad**
- **115V/ 230V/ 460V Ratings from .25 - 3 HP**
- **UL, cUL, and CE Approved**

Effective 12-01-08
Supercedes 03-01-08

115V 1-Phase Input/ 3-Phase 230VAC Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE NEMA 4
			HEIGHT	WIDTH	DEPTH		
JNEV-101-H1N4FS	1	4.2	8.49	5.54	7.19	8	620

230V 1-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE NEMA 4
			HEIGHT	WIDTH	DEPTH		
JNEV-2P5-H1FN4S	.50	2.3	8.49	5.54	7.19	8	546
JNEV-201-H1FN4S	1	4.2	8.49	5.54	7.19	8	560
JNEV-202-H1FN4S	2	7.5	11.62	9.14	8.33	14	775
JNEV-203-H1FN4S	3	10.5	11.62	9.14	8.33	14	835

460V 3-Phase Input Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE NEMA 4
			HEIGHT	WIDTH	DEPTH		
JNEV-401-H3FN4S	1	2.3	11.62	9.14	8.33	13	850
JNEV-402-H3FN4S	2	3.8	11.62	9.14	8.33	14	905
JNEV-403-H3FN4S	3	5.2	11.62	9.14	8.33	14	995

FM50

NEMA 4 with KEYPAD

Effective 12-01-08
Supercedes 03-01-08

A compact, low cost, and versatile AC Drive that operates in harsh environments.

APPLICATIONS:

- Mixing
- Fans
- Conveyors
- Food Processing
- Beverage
- Pharmaceutical

FEATURES:

- **Micro AC Inverter**
- **NEMA 4 for Harsh Environments (Indoor Use Only)**
- **Low Cost**
- **Space Saving Design**
- **Digital Keypad**
- **115V/ 230V/ 460V Ratings from .25 - 3 HP**

FM50

NEMA 4 with KEYPAD

Effective 12-01-08
Supercedes 03-01-08

115V 1-Phase Input/ 3-Phase 230VAC Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE NEMA 4
FM50-1P5-N4	.50	2.3	8.49	5.54	6.70	8	409
FM50-101-N4	1	4.2	8.49	5.54	6.70	8	434

230V 1-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE NEMA 4
FM50-201-N4	1	4.2	8.49	5.54	6.70	8	448

230V 1-Phase or 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE NEMA 4
FM50-202-N4	2	7.5	11.62	9.14	7.11	14	643
FM50-203-N4	3	10.5	11.62	9.14	7.11	14	718

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE NEMA 4
FM50-401-N4	1	2.3	11.62	9.14	7.11	13	736
FM50-402-N4	2	3.8	11.62	9.14	7.11	14	793
FM50-403-N4	3	5.2	11.62	9.14	7.11	14	889

Please Consult Factory for Availability.

N3 COMPACT DRIVE

MEDIUM DUTY

Effective 12-01-08
Supercedes 03-01-08

A compact, low cost, and versatile AC Drive that can operate in constant torque, variable torque, or sensorless vector modes for maximum application flexibility.

APPLICATIONS:

- Fan and Pump Systems
- Larger Conveyors
- Mixers
- Centrifugal Applications
- OEM Products

FEATURES:

- **IP20 Enclosure: 1 to 10 HP, 230V, 1 to 15 HP, 460V (NEMA 1 Option kits available for IP20 Enclosures)**
- **NEMA 1 Enclosure: 15 HP and above (230V), 20 HP and above (460V)**
- **Sensorless Vector or V/Hz**
- **0.5 to 3 HP, 230V, 50/ 60Hz, 1-Phase**
- **0.5 to 40 HP, 230V, 50/ 60Hz, 3-Phase**
- **1 to 75 HP, 460V, 50/ 60Hz, 3-Phase**
- **PID Control**
- **Sleep Mode**
- **0-400Hz Speed Range**
- **Standard Unit with LED Display**
- **LCD Digital Operator (Optional)**
- **Dynamic Braking Transistor Standard through 20 HP Models**
- **PC Programming Software/ Pocket PC/ Copy Unit**
- **RS485 Interface Option**
- **RS232 Interface Option**
- **Multi-function Digital and Analog Inputs/ Outputs**
- **UL, cUL, and CE Approved**

N3 COMPACT DRIVE

MEDIUM DUTY

Effective 12-01-08
Supercedes 03-01-08

230V 1-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE
			HEIGHT	WIDTH	DEPTH		
*N3-2P5-CS	.5	3.1	6.42	3.54	5.79	3	325
*N3-201-CS	1	4.5	6.42	3.54	5.79	3	360
*N3-202-CS	2	7.5	7.36	5.04	5.83	4	470
*N3-203-CS	3	10.5	7.36	5.04	5.83	5	640

230V 3-Phase Input/ 3-Phase Output ***

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE
			HEIGHT	WIDTH	DEPTH		
*N3-2P5-C	.5	3.1	6.42	3.54	5.79	3	325
*N3-201-C	1	4.5	6.42	3.54	5.79	3	350
*N3-202-C	2	7.5	6.42	3.54	5.79	3	430
*N3-203-C	3	10.5	7.36	5.04	5.83	4	575
*N3-205-C	5	17.5	7.36	5.04	5.83	5	680
*N3-207-C	7.5	26.0	10.24	7.32	7.68	13	980
*N3-210-C	10	35.0	10.24	7.32	7.68	13	1,100
*N3-215-N1	15	48.0	14.17	10.43	9.70	27	1,651
*N3-220-N1	20	64.0	14.17	10.43	9.70	27	1,908
N3-225-N1	25	80.0	14.17	10.43	9.70	29	2,528
**N3-230-N1	30	96.0	25.45	10.60	12.00	67	3,524
**N3-240-N1	40	130.0	25.45	10.60	12.00	67	4,751

NOTE:
Suffix CS = Chassis (IP20) Unit 1-Phase
C = Chassis (IP20) Unit 3-Phase
N1 = NEMA 1

All Chassis Units will Ship with NEMA 1 Boxes for Field Installation

*** Includes Dynamic Braking Transistor**
**** Includes DC Bus Link Reactor**
***** Do Not Apply Single Phase Input Power to these Models.**

Effective 12-01-08
Supercedes 03-01-08

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE
*N3-401-C	1	2.3	6.42	3.54	5.79	3	440
*N3-402-C	2	3.8	6.42	3.54	5.79	3	500
*N3-403-C	3	5.2	7.36	5.04	5.83	4	625
*N3-405-C	5	8.8	7.36	5.04	5.83	4	750
*N3-407-C	7.5	13.0	10.24	7.32	7.68	13	1,075
*N3-410-C	10	17.5	10.24	7.32	7.68	13	1,135
*N3-415-C	15	25.0	10.24	7.32	7.68	13	1,350
*N3-420-N1	20	32.0	14.17	10.43	9.70	27	1,977
N3-425-N1	25	40.0	14.17	10.43	9.70	29	2,488
N3-430-N1	30	48.0	14.17	10.43	9.70	29	2,737
**N3-440-N1	40	64.0	25.45	10.60	12.00	67	3,538
**N3-450-N1	50	80.0	25.45	10.60	12.00	67	4,415
**N3-460-N1	60	96.0	29.39	12.13	15.20	102	5,017
**N3-475-N1	75	128.0	29.39	12.13	15.20	102	5,763

NOTE:
C = Chassis (IP20) Unit 3-Phase
N1 = NEMA 1

All Chassis Units will Ship with NEMA 1 Boxes for Field Installation.

*** Includes Dynamic Braking Transistor**
**** Includes DC Bus Link Reactor**

Miscellaneous Options

OPTION MODEL NUMBER	DESCRIPTION	LIST PRICE
SIF-485	Communications Interface RS485	30
SIF-232	RS232 Interface Card with Wire to PC	25
SIF-MP	Copy Module	15
N3-LED-W	LED Keypad	30
N3-LCD-W	LCD Keypad	45
SW30P5	Remote Wire for Keypad (0.5m)	50
SW3001	Remote Wire for Keypad (1.0m)	52
SW3002	Remote Wire for Keypad (2.0m)	54
SW3003	Remote Wire for Keypad (3.0m)	57
SW3005	Remote Wire for Keypad (5.0m)	61
3H300C0830001	JNEP-16 Remote Analog Operator	100
**SNA201	NEMA 1 Box for Frame 1	15
**SNA202	NEMA 1 Box for Frame 2	16
**SNA203	NEMA 1 Box for Frame 3	21
TL-ENC-01	TECO Link Kit - Includes box label, wiring diagram, SIF - 232, CD with software and drive user manuals, USB-RS485 converter	425
***BRAKING RESISTOR		
JNBRN2-201	Braking Resistor for N3-2P5, 201	30
JNBRN2-202	Braking Resistor for N3-202	35
JNBRN2-203	Braking Resistor for N3-203	50
JNBRN2-205	Braking Resistor for N3-205	70
JNBRN2-208	Braking Resistor for N3-207	125
JNBRN2-210	Braking Resistor for N3-210	150
JNBRN2-401	Braking Resistor for N3-401	30
JNBRN2-402	Braking Resistor for N3-402	35
JNBRN2-403	Braking Resistor for N3-403	50
JNBRN2-405	Braking Resistor for N3-405	75
JNBRN2-408	Braking Resistor for N3-407	125
JNBRN2-410	Braking Resistor for N3-410	150
EMC FILTER		
FS 6146-11-07	1-Phase 11A, 170~264V for N3-2P5/201-CS	85
FS 6146-27-07	1-Phase 27A, 170~264V for N3-202/203-CS	160
FS 6147-8.9-07	3-Phase 8.9A, 170~264V for N3-2P5/201/202-C	225
FS 6147-19-07	3-Phase 19A, 170~264V for N3-203/205-C	275
FS 6147-39-07	3-Phase 39A, 170~264V for N3-207/210-C	400
FS 6149-4.6-07	3-Phase 4.6A, 323~528V for N3-401/402-C	200
FS 6149-10-07	3-Phase 10A, 323~528V for N3-403/405-C	250
FS 6149-28-07	3-Phase 28A, 323~528V for N3-407/410/415-C	350

** **Frame 1 2P5-CS, 201-CS, 2P5-C, 201-C, 202-C, 401-C, 402-C**
Frame 2 202-CS, 203-CS, 203-C, 205-C, 403-C, 405-C
Frame 3 207-C, 210-C, 407-C, 410-C, 415-C

*** **For higher HP ratings, please refer to the Brake Modules and Resistors Section on pages 104 - 105.**

MA7200 PLUS

MEDIUM DUTY

Effective 12-01-08
Supercedes 03-01-08

A general purpose V/ Hz or sensorless vector drive that is capable of handling a wide variety of applications. The MA7200 Plus contains an enhanced parameter set for HVAC and wastewater applications.

APPLICATIONS:

- Mixing
- Conveyors
- Process Lines
- Fans
- Pumps (Centrifugal, Positive Displacement, Metering, etc.)
- Mechanical Drive Upgrade/ Replacement
- Multi-Stage Operations

FEATURES:

- **Multi-Purpose AC Drive**
- **1 to 40 HP, 230V, 50/ 60 Hz, 3-Phase**
- **1 to 75 HP, 460V, 50/ 60 Hz, 3-Phase**
- **Sensorless Vector, V/ Hz, and PG Feedback Control**
- **2 Line English LCD Keypad/ Copy Unit**
- **Flexible Input/ Output Configurations**
- **0 to 400 Hz Speed Range**
- **PID Control**
- **UL, cUL, and CE Approved**
- **Built-in RS485 Communications (Modbus)**
- **Diagnostic Registers for Troubleshooting**
- **Pump Control Software Package Included**

Effective 12-01-08
Supercedes 03-01-08

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	DRIVE AMPS CONSTANT TORQUE	DRIVE AMPS VARIABLE TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE CHASSIS
			HEIGHT	WIDTH	DEPTH		
*MA7200-2001-N1	4.8	5.6	8.54	5.20	5.65	6	462
*MA7200-2002-N1	6.4	7.6	8.54	5.20	5.65	6	494
*MA7200-2003-N1	9.6	9.8	11.00	5.51	6.95	9	665
*MA7200-2005-N1	17.5	22.7	11.00	5.51	6.95	9	799
*MA7200-2007-N1	24.0	32.0	11.81	8.32	8.46	13	1,200
*MA7200-2010-N1	32.0	32.0	11.81	8.32	8.46	13	1,311
*MA7200-2015-N1	48.0	56.7	14.17	10.43	8.86	27	1,705
*MA7200-2020-N1	64.0	70.9	14.17	10.43	8.86	27	2,053
MA7200-2025-N1	80.0	80.0	14.17	10.43	8.86	29	2,654
**MA7200-2030-N1	96.0	108.0	25.45	10.60	10.91	67	4,280
**MA7200-2040-N1	130.0	130.0	25.45	10.60	10.91	67	4,909

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	DRIVE AMPS CONSTANT TORQUE	DRIVE AMPS VARIABLE TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE CHASSIS
			HEIGHT	WIDTH	DEPTH		
*MA7200-4001-N1	2.6	2.9	8.54	5.20	5.65	6	550
*MA7200-4002-N1	4.0	4.6	8.54	5.20	5.65	6	602
*MA7200-4003-N1	4.8	4.9	11.00	5.51	6.95	9	780
*MA7200-4005-N1	8.7	12.5	11.00	5.51	6.95	9	854
*MA7200-4007-N1	12.0	15.4	11.81	8.32	8.46	13	1,277
*MA7200-4010-N1	15.0	22.7	11.81	8.32	8.46	13	1,485
*MA7200-4015-N1	24.0	30.3	14.17	10.43	8.86	27	1,759
*MA7200-4020-N1	32.0	38.0	14.17	10.43	8.86	27	2,026
MA7200-4025-N1	40.0	44.0	14.17	10.43	8.86	29	2,613
MA7200-4030-N1	48.0	48.0	14.17	10.43	8.86	29	2,799
**MA7200-4040-N1	64.0	71.0	25.45	10.60	10.91	67	3,774
**MA7200-4050-N1	80.0	80.0	25.45	10.60	10.91	67	4,562
**MA7200-4060-N1	96.0	108.0	29.39	12.13	11.11	102	5,184
**MA7200-4075-N1	128.0	140.0	29.39	12.13	11.11	102	5,972

*** Includes Dynamic Braking Transistor**
**** Includes DC Bus Link Reactor**

Miscellaneous Options

OPTION MODEL NAME	DESCRIPTION	LIST PRICE
4H000D0250001	JUNFOC046S Zero-Sequence Noise Ferrite Core	275
4H332D0010000	1 Meter Extension Cable with Blank Operator (No Interface)	30
4H332D0030001	2 Meter Extension Cable with Blank Operator (No Interface)	35
4H332D0020005	3 Meter Extension Cable with Blank Operator (No Interface)	40
4H332D0040006	5 Meter Extension Cable with Blank Operator (No Interface)	50
4H339D0170008	60mm Cable for MA7200 Digital Operator and RS232 Port	15
4H339D0130006	120mm Cable for MA7200 Digital Operator and RS232 Port	20
3H300C0830001	JNEP-16, Remote Analog Operator for MA7200	100
4H300C0020003	JNEP-31, LCD Digital Operator	165
4H300C0050000	JNEP-36, LCD Digital Operator	175
4H300D0290009	MA-SP, Profibus Communication Card	400
TL-MQ-01	TECO Link Kit - Includes box, label, wiring diagram, CD with MA link software and drive user manuals, USB-RS485 converter	475

For Braking Resistors, please refer to the Brake Modules and Resistors Section on pages 104 - 105.

MA7200 PLUS NEMA 4/ 12

MEDIUM DUTY

Effective 08-01-06
Supercedes 08-22-05

APPLICATIONS:

- Mixers
- Process Lines
- Food, Beverage, and Pharmaceutical Processes
- Pumps (Centrifugal, Positive Displacement, Metering, etc.)

FEATURES:

- **Multi-Purpose AC Drive**
- **1 - 20 HP, 230V and 460V, 50/ 60 Hz, 3-Phase**
- **NEMA 4/ 12 for Harsh Environments (Indoor Use Only)**
- **Sensorless Vector, V/ Hz, and PG Feedback Control**
- **2 Line English LCD Keypad**
- **Enclosure Mounted Potentiometer**
- **Flexible Input/ Output Configurations**
- **0 to 400 Hz Speed Range**
- **PID Control**
- **UL, cUL, and CE Approved**
- **Built-in RS485 Communications (Modbus) as Standard**
- **Diagnostic Registers for Troubleshooting**
- **Dynamic Braking Transistor as Standard**
- **Pump Control Software Package Included**

Effective 12-01-08
Supercedes 03-01-08

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS VARIABLE TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE NEMA 4
MA7200-2001-N4	4.8	5.6	13.19	7.80	8.54	17	780
MA7200-2002-N4	6.4	7.6	13.19	7.80	8.54	17	825
MA7200-2003-N4	9.6	9.8	13.19	7.80	8.54	17	1,151
MA7200-2005-N4	17.5	22.7	13.19	7.80	8.54	17	1,295
MA7200-2007-N4	24.0	32.0	18.11	8.78	9.65	36	1,783
MA7200-2010-N4	32.0	32.0	18.11	8.78	9.65	36	1,957
MA7200-2015-N4	48.0	56.7	18.11	8.78	9.65	36	2,451
MA7200-2020-N4	64.0	70.9	18.11	8.78	9.65	36	2,626

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS VARIABLE TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE NEMA 4
MA7200-4001-N4	2.6	2.9	13.19	7.80	8.54	17	836
MA7200-4002-N4	4.0	4.6	13.19	7.80	8.54	17	891
MA7200-4003-N4	4.8	4.9	13.19	7.80	8.54	17	1,151
MA7200-4005-N4	8.7	12.5	13.19	7.80	8.54	17	1,295
MA7200-4007-N4	12.0	15.4	18.11	8.78	9.65	36	1,820
MA7200-4010-N4	15.0	22.7	18.11	8.78	9.65	36	1,975
MA7200-4015-N4	24.0	30.3	18.11	8.78	9.65	36	2,488
MA7200-4020-N4	32.0	38.0	18.11	8.78	9.65	36	2,663

Miscellaneous Options

OPTIONAL MODEL NAME	DESCRIPTION	LIST PRICE
CVR-MAN4-F1	NEMA 4 complete cover for 1 - 5 HP	200
CVR-MAN4-F2	NEMA 4 complete cover for 7.5 - 20 HP	210

All ratings shown above include Dynamic Braking Transistor.
See pages 104-105 for Dynamic Braking Resistors.

PA7300 FAN AND PUMP DRIVE

NORMAL DUTY VARIABLE TORQUE ONLY

Effective 12-01-08
Supercedes 03-01-08

The PA7300 is equipped with the right ratings and features to cover fan and pump applications in HVAC, wastewater, and industrial installations.

APPLICATIONS:

- Fans
- Pumps
- Multi-Pump Sequencing (Via Option Card)
- Chillers and Refrigeration

FEATURES:

- **Designed for Variable Torque Applications**
- **5 to 100 HP, 208V, 50/ 60 Hz, 3-Phase**
- **5 to 125 HP, 230V, 50/ 60 Hz, 3-Phase**
- **5 to 500 HP, 460V, 50/ 60 Hz, 3-Phase**
- **5 to 100 HP, 600V, 50/ 60 Hz, 3-Phase**
- **PID & Auto Energy Savings Functions**
- **PID Sleep Mode Function**
- **0 to 180 Hz Speed Range**
- **Diagnostic Registers for Troubleshooting**
- **Supports a Wide Range of Optional RS485 Communication Protocols**
- **UL and CE Approved**

PA7300 FAN AND PUMP DRIVE

NORMAL DUTY VARIABLE TORQUE ONLY

Effective 12-01-08
Supercedes 03-01-08

208V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP VARIABLE TORQUE	DRIVE AMPS VARIABLE TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE
			HEIGHT	WIDTH	DEPTH		
*PA7300-2007-N1	5	24.0	11.81	8.32	8.46	13	1,200
*PA7300-2010-N1	7.5	32.0	11.81	8.32	8.46	13	1,311
*PA7300-2010-N1	10	32.0	11.81	8.32	8.46	13	1,311
*PA7300-2015-N1	15	48.0	14.17	10.43	8.86	27	1,705
*PA7300-2020-N1	20	64.0	14.17	10.43	8.86	27	1,894
**PA7300-2030-N1	25	88.0	29.33	11.48	12.09	84	4,211
**PA7300-2030-N1	30	88.0	29.33	11.48	12.09	84	4,211
**PA7300-2040-N1	40	117.0	29.33	11.48	12.09	84	4,517
**PA7300-2050-N1	50	144.0	29.33	11.48	12.09	84	5,015
**PA7300-2075-N1	60	212.0	37.20	13.86	12.78	115	6,412
**PA7300-2075-N1	75	212.0	37.20	13.86	12.78	115	6,412
**PA7300-2100-N1	100	288.0	43.50	18.19	12.78	192	9,532

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP VARIABLE TORQUE	DRIVE AMPS VARIABLE TORQUE	DIMENSIONS (Inches)			APPROX. WT. (lbs.)	LIST PRICE
			HEIGHT	WIDTH	DEPTH		
*PA7300-2005-N1	5	16.0	11.81	8.32	8.46	13	799
*PA7300-2007-N1	7.5	24.0	11.81	8.32	8.46	13	1,200
*PA7300-2010-N1	10	32.0	11.81	8.32	8.46	13	1,311
*PA7300-2015-N1	15	48.0	14.17	10.43	8.86	27	1,705
*PA7300-2020-N1	20	64.0	14.17	10.43	8.86	27	1,894
*PA7300-2025-N1	25	72.0	14.17	10.43	8.86	27	2,488
**PA7300-2030-N1	30	88.0	29.33	11.48	12.09	84	4,211
**PA7300-2040-N1	40	117.0	29.33	11.48	12.09	84	4,517
**PA7300-2050-N1	50	144.0	29.33	11.48	12.09	84	5,015
**PA7300-2060-N1	60	167.0	37.20	13.86	12.78	111	5,838
**PA7300-2075-N1	75	212.0	37.20	13.86	12.78	115	6,412
**PA7300-2100-N1	100	288.0	43.50	18.19	12.78	192	9,532
**PA7300-2125-N1	125	327.0	43.50	18.19	12.78	192	10,298

*** Includes Dynamic Braking Transistor**
**** Include DC Bus Link Reactor**

PA7300 FAN AND PUMP DRIVE

NORMAL DUTY VARIABLE TORQUE ONLY

Effective 12-01-08
Supercedes 03-01-08

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP	DRIVE AMPS	DIMENSIONS (Inches)			APPROX.	LIST PRICE
	VARIABLE TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH	WT. (lbs.)	
*PA7300-4005-N1	5	8.0	11.81	8.32	8.46	13	854
*PA7300-4007-N1	7.5	12.0	11.81	8.32	8.46	13	1,177
*PA7300-4010-N1	10	16.0	11.81	8.32	8.46	13	1,252
*PA7300-4015-N1	15	24.0	14.17	10.43	8.86	27	1,690
*PA7300-4020-N1	20	32.0	14.17	10.43	8.86	27	1,805
*PA7300-4025-N1	25	38.0	14.17	10.43	8.86	27	2,414
**PA7300-4030-N1	30	44.0	14.17	10.43	8.86	27	2,642
**PA7300-4040-N1	40	59.0	29.33	11.48	12.09	84	3,774
**PA7300-4050-N1	50	75.0	29.33	11.48	12.09	84	4,211
**PA7300-4060-N1	60	86.0	37.20	13.86	12.78	111	4,996
**PA7300-4075-N1	75	111.0	37.20	13.86	12.78	111	5,647
**PA7300-4100-N1	100	151.0	37.20	13.86	12.78	111	7,154
**PA7300-4125-N1	125	189.0	43.50	18.19	12.78	188	10,327
**PA7300-4150-N1	150	231.0	43.50	18.19	12.78	188	11,778
**PA7300-4175-N1	175	267.0	43.50	18.19	12.80	190	12,815
**PA7300-4200-N1	200	304.0	51.38	23.70	15.02	298	15,449
**PA7300-4250-N1	250	340.0	51.38	23.70	15.02	298	17,854
**PA7300-4300-N1	300	380.0	51.38	23.70	15.02	307	20,342
***PA7300-4350-N1	350	516.0	52.36	28.74	15.04	366	27,393
***PA7300-4400-N1	400	585.0	52.36	28.74	15.04	390	29,881
***PA7300-4500-N1	500	732.0	52.36	28.74	15.04	435	36,517

*** Includes Dynamic Braking Transistor**
**** Include DC Bus Link Reactor**
***** External 3% Impedance 460V Line Reactor Required. A failure to use Line Reactor may Void Warranty. (See Line Reactor Price Section for Part Number Selection)**

PA7300 FAN AND PUMP DRIVE

NORMAL DUTY VARIABLE TORQUE ONLY

Effective 12-01-08
Supercedes 03-01-08

600V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP	DRIVE AMPS	DIMENSIONS (Inches)			APPROX.	LIST PRICE
	VARIABLE TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH	WT. (lbs.)	
*PA7300-5005-N1	5	6.1	11.81	8.32	8.46	13	1,496
*PA7300-5007-N1	7.5	9.0	11.81	8.32	8.46	13	1,564
*PA7300-5010-N1	10	11.0	11.81	8.32	8.46	13	1,757
*PA7300-5015-N1	15	17.0	14.17	10.43	8.86	27	2,441
*PA7300-5020-N1	20	22.0	14.17	10.43	8.86	27	2,927
*PA7300-5025-N1	25	27.0	14.17	10.43	8.86	27	3,604
**PA7300-5030-N1	30	32.0	29.33	11.48	12.09	84	3,990
**PA7300-5040-N1	40	41.0	29.33	11.48	12.09	84	4,685
**PA7300-5050-N1	50	52.0	29.33	11.48	12.09	84	6,388
**PA7300-5060-N1	60	62.0	29.33	11.48	12.09	84	7,506
**PA7300-5075-N1	75	77.0	37.20	13.86	12.78	111	9,366
**PA7300-5100-N1	100	99.0	37.20	13.86	12.78	111	11,125

Miscellaneous Options

OPTION MODEL NUMBER	DESCRIPTION	LIST PRICE
4H332D0010000	1 Meter Extension Cable with Blank Operator (No Interface)	30
4H332D0030001	2 Meter Extension Cable with Blank Operator (No Interface)	35
4H332D0020005	3 Meter Extension Cable with Blank Operator (No Interface)	40
4H332D0040006	5 Meter Extension Cable with Blank Operator (No Interface)	50
3H300C0830001	JNEP-16, Remote Analog Operator for PA7300	100
4H300C0030009	JNEP-32, LCD Digital Operator for PA7300	165
4H300C0040004	JNEP-33, LED Digital Operator for PA7300	95
PA-P	Profibus Communication Card	200
PA-C	Metasys Communication Card	200
PA-L	LonWorks Communication Card	600
PA-V2A	4 - 20mA Output Card	150
PA-PID	1 - 8 PID Relay Card	225
TL-PA-01	TECO Link Kit - Includes box, label, wiring diagram, PA-M Communication Card, CD with PA link software and drive user manuals, USB-RS485 converter	650

*** Includes Dynamic Braking Transistor**
**** Include DC Bus Link Reactor**

7200GS DRIVE

HEAVY DUTY

Effective 12-01-08
Supercedes 03-01-08

A rugged and versatile drive with a wide range of ratings for specialized and more demanding applications.

APPLICATIONS:

- Crushers, Grinders
- Compressors
- Reciprocating Machinery
- Dynamometers
- Positive Displacement Pumps
- Stamping, Punch Press
- Extruders

FEATURES:

- **Torque Applications**
- **25 to 100 HP, 230V, 50/ 60 Hz, 3-Phase**
- **25 to 450 HP, 460V, 50/ 60 Hz, 3-Phase**
- **Sensorless Vector, V/ Hz, and PG Feedback Control**
- **2 Line English Language LCD Keypad**
- **PID Mode**
- **UL and CE Approved**
- **Diagnostic Registers for Troubleshooting**
- **0 to 400 Hz Speed Range**

7200GS DRIVE

HEAVY DUTY

Effective 12-01-08
Supercedes 03-01-08

230V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE
JNTEBGBB0025JK	25	80.0	29.33	11.48	12.09	74	3,950
JNTEBGBB0030JK	30	96.0	29.33	11.48	12.09	74	4,147
JNTEBGBB0040JK	40	130.0	43.50	18.19	12.78	179	8,295
JNTEBGBB0050JK	50	160.0	43.50	18.19	12.78	181	9,085
JNTEBGBB0060JK	60	183.0	43.50	18.19	12.78	188	9,874
JNTEBGBB0075JK	75	224.0	43.50	18.19	12.78	195	10,269
JNTEBGBB0100JK	100	300.0	51.38	23.70	15.02	287	13,824

460V 3-Phase Input/ 3-Phase Output

MODEL NO.	HP CONSTANT TORQUE	DRIVE AMPS CONSTANT TORQUE	DIMENSIONS (Inches) HEIGHT	WIDTH	DEPTH	APPROX. WT. (lbs.)	LIST PRICE
**JNTEBGBB0025AZ	25	40.0	14.17	10.43	8.86	27	3,100
JNTEBGBB0030AZ	30	48.0	29.33	11.48	12.09	84	3,864
JNTEBGBB0040AZ	40	64.0	29.33	11.48	12.09	84	4,497
JNTEBGBB0050AZ	50	80.0	37.20	13.86	12.78	111	5,457
JNTEBGBB0060AZ	60	96.0	37.20	13.86	12.78	111	5,719
JNTEBGBB0075AZ	75	128.0	37.20	13.86	12.78	111	6,985
JNTEBGBB0100AZ	100	165.0	37.20	13.86	12.78	144	10,259
JNTEBGBB0125AZ	125	192.0	43.50	18.19	12.78	188	11,089
JNTEBGBB0150AZ	150	224.0	43.50	18.19	12.78	190	12,922
JNTEBGBB0200AZ	200	300.0	51.38	23.70	15.02	307	18,073
JNTEBGBB0250AZ	250	340.0	51.38	23.70	15.02	307	22,963
*JNTEBGBB0300AZ	300/ 350	450.0	52.36	28.74	15.04	390	28,900
*JNTEBGBB0400AZ	400/ 500	600.0	52.36	28.74	15.04	435	37,980

*** External 3% Impedance 460V Line Reactor Required. A failure to use Line Reactor may Void Warranty. (See Line Reactor Price Section for Part Number Selection)**

**** Includes Dynamic Braking Transistor**

Miscellaneous Options

OPTION MODEL NUMBER	DESCRIPTION	LIST PRICE
4H332D0010000	1 Meter Extension Cable with Blank Operator (No Interface)	30
4H332D0030001	2 Meter Extension Cable with Blank Operator (No Interface)	35
4H332D0020005	3 Meter Extension Cable with Blank Operator (No Interface)	40
4H332D0040006	5 Meter Extension Cable with Blank Operator (No Interface)	50
3H300C0830001	JNEP-16, Remote Analog Operator for 7200GS	100
4H300C0060005	JNEP-34, Digital Operator for 7200GS	165
4H300D4560001	Modbus Interface Card SI-M	600
GS-P	Profibus Interface Card	500

EQ5 AC DRIVE

NEW!

MULTIPLE DUTY

Effective 12-01-08
Supercedes 03-01-08

A rugged and versatile drive with a wide range of ratings for specialized and more demanding applications.

APPLICATIONS:

- Crushers, Grinders
- Compressors
- Reciprocating Machinery
- Dynamometers
- Water and Wastewater
- Warehouse Automation
- Positive Displacement Pumps
- Stamping, Punch Press
- Material Handling
- Winders
- Commercial Washing Machines

FEATURES:

- Designed for Constant / Variable Torque applications
- Dynamic Torque - Sensorless Vector Control
- PID control with sleep mode function
- Backlit LCD / English language with LED monitor display / selections for 6 languages
- Keypad may be used as copy unit / remote mounting options
- Provided with low-noise control power supply
- .25 to 125 HP @ 230V & .5 to 600 HP @ 460V
- For external mounting of heatsink when installed in control panels
- Torque limit and control features
- Extensive Diagnostic Information on LCD
- Built-in RS485 communications (Modbus) / optional Profibus-DP, DeviceNet, Modbus Plus protocols
- uL and CE approved
- NEMA 1 Standard up to 30 HP
- Chassis unit 40 HP and Above
  (NEMA 1 Option Kit available)

EQ5 AC DRIVE

NEW!

MULTIPLE DUTY

Effective 12-01-08
Supercedes 03-01-08

230V 3-Phase

MODEL NO.	HP	DRIVE AMPS	APPROXIMATE DIMENSIONS (Inches)			APPROX.	LIST PRICE
	CT/VT	CT/VT	WIDTH	HEIGHT	DEPTH	WT. (lbs.)	
EQ5-20P2-N1	0.25	1.5	10.24	4.33	5.12	4.8	845
EQ5-20P5-N1	0.5	3	10.24	4.33	5.12	4.8	850
EQ5-2001-N1	1	5	10.24	4.33	5.71	5.5	1,013
EQ5-2002-N1	2	8	10.24	5.91	5.71	8.4	1,098
EQ5-2003-N1	3	11	10.24	5.91	5.71	8.4	1,159
EQ5-2005-N1	5	17	10.24	5.91	5.71	8.4	1,337
EQ5-2007-N1	5/7.5	17/22	10.24	8.66	7.68	12.6	1,575
EQ5-2010-N1	7.5/10	25/29	10.24	8.66	7.68	12.6	1,742
EQ5-2015-N1	10/15	33/42	10.24	8.66	7.68	12.6	1,975
EQ5-2020-N1	15/20	46/55	15.75	9.84	7.68	22.0	2,446
EQ5-2025-N1	20/25	59/68	15.75	9.84	7.68	22.0	2,722
EQ5-2030-N1	25/30	74/80	15.75	9.84	7.68	23.1	3,250
EQ5-2032-N1	30/30	87	15.75	9.84	7.68	23.1	3,850
EQ5-2040-C	30/40	87/115	29.7	13.5	10.0	70.0	5,395
EQ5-2050-C	40/50	115/145	29.7	13.5	10.0	70.0	6,543
EQ5-2060-C	50/60	145/180	33.1	14.9	10.6	86.0	7,783
EQ5-2075-C	60/75	180/215	38.0	14.9	10.6	106	9,291
EQ5-2100-C	75/100	215/283	38.0	14.9	10.6	110	11,140
EQ5-2125-C	100/125	283/346	41.3	21.0	11.2	172	15,834
EQ5-2150-C	125/150	346/415	50.4	26.9	14.2	282	20,616

460V 3-Phase

MODEL NO.	HP	DRIVE AMPS	DIMENSIONS (Inches)			APPROX.	LIST PRICE
	CT/VT	CT/VT	WIDTH	HEIGHT	DEPTH	WT. (lbs.)	
EQ5-40P5-N1	0.5	1.5	10.24	4.33	5.12	4.8	795
EQ5-4001-N1	1	2.5	10.24	4.33	5.71	5.5	1,034
EQ5-4002-N1	2	3.7	10.24	5.91	5.71	8.4	1,076
EQ5-4003-N1	3	5.5	10.24	5.91	5.71	8.4	1,313
EQ5-4005-N1	5	9	10.24	5.91	5.71	8.4	1,416
EQ5-4007-N1	5/7.5	9/12.5	10.24	8.66	7.68	13.4	1,750
EQ5-4010-N1	7.5/10	13/16.5	10.24	8.66	7.68	13.4	1,863
EQ5-4015-N1	10/15	18/23	10.24	8.66	7.68	13.4	2,040
EQ5-4020-N1	15/20	24/30	15.75	9.84	7.68	22.0	2,446
EQ5-4025-N1	20/25	30/37	15.75	9.84	7.68	22.0	2,940
EQ5-4030-N1	25/30	39/44	15.75	9.84	7.68	23.1	3,438
EQ5-4032-N1	30/30	45	15.75	9.84	7.68	23.1	3,750
EQ5-4040-C	30/40	45/60	29.7	13.5	10.0	70.0	4,852
EQ5-4050-C	40/50	60/75	29.7	13.5	10.0	70.0	5,208
EQ5-4060-C	50/60	75/91	29.7	14.9	10.6	82.0	6,445
EQ5-4075-C	60/75	91/112	34.6	14.9	10.6	95.0	7,584
EQ5-4100-C	75/100	112/150	34.6	14.9	10.6	97.0	8,905
EQ5-4125-C	100/125	150/176	38.0	14.9	10.6	115	11,914
EQ5-4150-C	125/150	176/210	38.0	21.0	12.4	174	13,903
EQ5-4200-C	150/200	210/253	38.0	21.0	12.4	174	15,635
EQ5-4250-C	200/250	253/304	53.1	21.0	14.2	245	20,845
EQ5-4300-C	250/300	304/377	53.1	21.0	14.2	245	23,233
EQ5-4350-C	300/350	377/415	55.1	26.9	14.2	337	28,857
EQ5-4400-C	350/400	415/485	55.1	26.9	14.2	337	29,927
EQ5-4450-C	350/450	415/520	55.1	26.9	14.2	337	34,939
EQ5-4500-C	400/500	520/650	57.1	26.9	17.7	562	61,218
EQ5-4600-C	450/600	585/740	57.1	26.9	17.7	562	66,817
EQ5-4700-C	500/700	650/840	57.1	34.6	17.7	804	76,198
EQ5-4800-C	600/800	740/960	57.1	34.6	17.7	804	83,107

Option Type	Model	Note	List Price
NEMA1 Kit	NEMA1-30G11-2	40,50 HP 230V	950
	NEMA1-55G11-2	60, 75, 100 HP 230V	1060
	NEMA1-75G11-2	125 HP, 230V	1425
	NEMA1-90G11-2	150 HP 230V	1725
	NEMA1-30G11-4	40,50 HP 460V	950
	NEMA1-55G11-4	60, 75, 100 HP 460V	1025
	NEMA1-75G11-4	125 HP 460V	1060
	NEMA1-110G11-4	150, 200 HP 460V	1275
	NEMA1-160G11-4	250, 300 HP 460V	1600
	NEMA1-220G11-4	350, 400, 450 HP 460V	1725
	NEMA1-315G11-4	500, 600 HP 460V	960
	NEMA1-400G11-4	700, 800 HP 460V	1120
Braking Unit	BU22-2C	230V 40 HP and below	720
	BU37-2C	230V 50 HP - 60 HP	1675
	BU55-2C	230V 75 HP - 100 HP	2200
	BU90-2C	230V 125 - 150 HP	3040
	BU22-4C	460V 40 HP and below	800
	BU37-4C	460V 50 HP - 60 HP	1726
	BU55-4C	460V 75 HP - 100 HP	2325
	BU90-4C	460V 125 HP - 150 HP	3040
	BU132-4C	460V 200 HP - 250 HP	4175
	BU220-4C	460V 300 HP - 450 HP 2pc for 500 HP and above	6075
Braking Resistor	DB0.75-2C	230V 1 HP and below	100
	DB2.2-2C	230V 2 HP - 3 HP	125
	DB3.7-2C	230V 7.5 HP	175
	DB5.5-2C	230V 10 HP	265
	DB7.5-2C	230V 15 HP	307
	DB11-2C	230V 20 HP	388
	DB15-2C	230V 25 HP	555
	DB22-2C	230V 30 HP - 40 HP	915
	DB30-2C	230V 50 HP	1432
	DB37-2C	230V 60 HP	1850
	DB45-2C	230V 75 HP	2265
	DB55-2C	230V 100 HP	2450

Effective 12-01-08
Supercedes 03-01-08

Option Type	Model	Note	List Price
Braking Resistor (continued)	DB75-2C	230V 125 HP	3800
	DB90-2C	230V 150 HP	4200
	DB0.75-4C	460V 1 HP	129
	DB2.2-4C	460V 2 HP - 3 HP	134
	DB3.7-4C	460V 7.5 HP	199
	DB5.5-4C	460V 10 HP	263
	DB7.5-4C	460V 15 HP	308
	DB11-4C	460V 20 HP	429
	DB15-4C	460V 25 HP	590
	DB22-4C	460 V 30 HP - 40 HP	978
	DB30-4C	460V 50 HP	1163
	DB37-4C	460V 60 HP	1873
	DB45-4C	460V 75 HP	2156
	DB55-4C	460V 100 HP	1854
	DB75-4C	460V 125 HP	3290
	DB110-4C	460V 150 HP - 200 HP	3755
	DB132-4C	460V 250 HP	4500
	DB160-4C	460V 300 HP	5425
	DB200-4C	460V 350 HP	5900
	DB220-4C	460V 400 HP - 450 HP	7540
Option Card	OPC-G11S-RY	Relay	115
	OPC-G11S-AIO	Analog Input/Output	565
	OPC-G11S-DIO	Digital Input/Output	340
	OPC-G11S-PG2	PG Feedback 5V, 4 channel	200
	OPC-G11S-PG	PG Feedback 12/15V, 2 channel	165
	OPC-G11S-SY	Synchronize	110
Option Communication Card	OPC-G11S-PDP	ProfibusDP	1557
	OPC-G11S-DEV	DeviceNet	1580
	OPC-G11S-MBP	ModBusPlus	1400
	OPC-G11S-IBS	InterbusS	1700
Keypad Extension Cable	CB3-10R-2S	2m Straight	105
	CB3-10R-1C	1m Curled (max. 5m)	160
	CB3-10R-2C	2m Curled (max. 10m)	220

***Braking resistor and braking unit based on VT rating of EQ5 Series AC Drive**

BRAKE MODULES and RESISTORS

Effective 12-01-08
Supercedes 03-01-08

Can be used for the N3, MA7200 PLUS , PA7300, and 7200GS product families.

230V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NUMBER	QTY USED	LIST PRICE	MODEL NUMBER	QTY USED	RESISTANCE OHMS	RESISTANCE WATTS	ENCLOSURE DIMENSIONS	BRAKING TORQUE %	DUTY CYCLE %	LIST PRICE
1	X	-	-	DBR-019	1	200	70	12"L X 5"W X 5"D	125	10	325
2	X	-	-	DBR-027	1	100	260	12"L X 5"W X 5"D	125	10	325
3	X	-	-	DBR-035	1	70	260	12"L X 5"W X 5"D	120	10	325
5	X	-	-	DBR-043	1	40	390	12"L X 5"W X 5"D	125	10	325
7.5	X	-	-	DBR-051	1	30	520	12"L X 7"W X 5"D	115	10	500
10	X	-	-	DBR-060	1	20	780	12"L X 7"W X 5"D	125	10	500
15	X	-	-	DBR-078	1	13.6	2400	19"L X 10"W X 5"D	125	10	1,050
20	X	-	-	DBR-086	1	10	3000	19"L X 13"W X 5"D	125	10	1,300
25	JUVPLV-60	1	712	DBR-094	1	8	4800	26.5"L X 10"W X 5"D	125	10	1,450
30	JUVPLV-60	1	712	DBR-108	1	6.8	4800	26.5"L X 10"W X 5"D	125	10	1,450
40	JUVPLV-40	2	535	DBR-086	2	10	3000	19"L X 13"W X 5"D	125	10	1,300
50	JUVPLV-40	2	535	DBR-086	2	10	3000	19"L X 13"W X 5"D	100	10	1,300
60	JUVPLV-60	2	712	DBR-094	2	8	4800	26.5"L X 10"W X 5"D	120	10	1,450
75	JUVPLV-60	2	712	DBR-094	2	8	4800	26.5"L X 10"W X 5"D	100	10	1,450
100	JUVPLV-60	3	712	DBR-094	3	8	4800	26.5"L X 10"W X 5"D	110	10	1,450

X= Transistor built-in for all MA7200, PA7300, and N3 Drives at these ratings.

For braking applications above 100 HP at 230V or above 200 HP at 460V, please consult the factory.

NOTE:
All brake resistor units include thermal overload switches.

BRAKE MODULES and RESISTORS

Effective 12-01-08
Supercedes 03-01-08

460V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR			BRAKING RESISTOR							
	MODEL NUMBER	QTY USED	LIST PRICE	MODEL NUMBER	QTY USED	RESISTANCE		ENCLOSURE DIMENSIONS	BRAKING TORQUE %	DUTY CYCLE %	LIST PRICE
						OHMS	WATTS				
1	X	-	-	DBR-116	1	750	70	12"L X 5"W X 5"D	130	10	325
2	X	-	-	DBR-124	1	400	260	12"L X 5"W X 5"D	125	10	325
3	X	-	-	DBR-132	1	250	260	12"L X 5"W X 5"D	135	10	325
5	X	-	-	DBR-141	1	150	390	12"L X 5"W X 5"D	135	10	325
7	X	-	-	DBR-159	1	100	520	12"L X 7"W X 5"D	135	10	500
10	X	-	-	DBR-167	1	75	780	12"L X 7"W X 5"D	130	10	500
15	X	-	-	DBR-175	1	50	1040	12"L X 10"W X 5"D	135	10	630
20	X	-	-	DBR-183	1	40	1560	12"L X 13"W X 5"D	125	10	775
25	JNTBU-430	1	605	DBR-191	1	32	4800	26.5"L X 13"W X 5"D	125	10	1,800
30	JNTBU-430	1	605	DBR-205	1	27.2	4800	26.5"L X 13"W X 5"D	125	10	1,800
40	JNTBU-430	1	605	DBR-213	1	20	6000	26.5"L X 13"W X 5"D	125	10	1,800
50	JUVPHV-60	1	783	DBR-221	1	16	9600	28"L X 10"W X 10"D	125	10	2,475
60	JUVPHV-60	1	783	DBR-230	1	13.6	9600	28"L X 10"W X 10"D	125	10	2,475
75	JNTBU-430	2	605	DBR-213	2	20	6000	26.5"L X 13"W X 5"D	135	10	1,800
100	JUVPHV-60	2	783	DBR-230	2	13.6	9600	28"L X 10"W X 10"D	145	10	2,475
125	JNTBU-430	3	605	DBR-213	3	20	6000	26.5"L X 13"W X 5"D	125	10	1,800
150	JNTBU-430	3	605	DBR-213	3	20	6000	26.5"L X 13"W X 5"D	100	10	1,800
175 - 200	JUVPHV-60	4	783	DBR-230	4	13.6	9600	28"L X 10"W X 10"D	140	10	2,475

X = Transistor Built-in on all MA7200, PA7300, and N3 Drives at these ratings.
For braking applications above 100 HP at 230V or above 200 HP at 460V, please consult the factory.

NOTE:
All brake resistor units include thermal overload switches.

LINE REACTORS

230V

Effective 12-01-08
Supercedes 03-01-08

Low priced and easy to install, Line Reactors provide input transient protection from harmonic distortion. When applying a reactor between the drive output and the motor, please contact the Factory.

3% IMPEDANCE, 230V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (LBS.)	LIST PRICE	PRODUCT CODE	Dimensions W x H x D (in.)	WEIGHT (LBS.)	LIST PRICE
1	4.6	KDRULA25L	4.00 x 4.18 x 3.75	4	152	KDRULA25LE01	12.25 x 12.50 x 6.75	14.5	415
1.5	6.6	KDRULA26L	4.00 x 4.18 x 3.75	4	170	KDRULA26LE01	12.25 x 12.50 x 6.75	14.5	420
2	7.5	KDRULA27L	4.00 x 4.18 x 3.75	4	172	KDRULA27LE01	12.25 x 12.50 x 6.75	14.5	430
3	10.6	KDRULA28L	4.00 x 4.18 x 3.75	4	195	KDRULA28LE01	12.25 x 12.50 x 6.75	14.5	440
5	16.7	KDRULB22L	5.00 x 6.00 x 4.00	8	260	KDRULB22LE01	12.25 x 12.50 x 6.75	18.5	525
7.5	24.2	KDRULB23L	5.00 x 6.00 x 4.00	8	281	KDRULB23LE01	12.25 x 12.50 x 6.75	18.5	535
10	30.8	KDRULD25L	5.75 x 7.20 x 4.25	12	299	KDRULD25LE01	12.25 x 12.50 x 6.75	22.5	550
15	46.2	KDRULD24L	5.75 x 7.20 x 4.25	12	306	KDRULD24LE01	12.25 x 12.50 x 6.75	22.5	595
20	59.4	KDRULD26L	5.75 x 7.20 x 4.25	12	350	KDRULD26LE01	12.25 x 12.50 x 6.75	22.5	617
25	74.8	KDRULC22L	5.75 x 7.20 x 5.00	15	500	KDRULC22LE01	12.25 x 12.50 x 6.75	25.5	780
30	88	KDRULF24L	7.00 x 9.00 x 6.00	33	540	KDRULF24LE01	19.13 x 15.43 x 15.43	67	1,050
40	114	KDRULF25L	7.00 x 9.00 x 6.00	33	750	KDRULF25LE01	19.13 x 15.43 x 15.43	67	1,250
50	143	KDRULF26L	7.00 x 9.00 x 6.00	36	900	KDRULF26LE01	19.13 x 15.43 x 15.43	67	1,400
60	169	KDRULH22L	9.00 x 11.00 x 7.00	51	1,050	KDRULH22LE01	22.12 x 20.43 x 24.37	113	1,950
75	211	KDRULI23L	9.00 x 11.00 x 7.00	56	1,072	KDRULI23LE01	22.12 x 20.43 x 24.37	117	2,000
100	273	KDRULI24L	9.00 x 11.00 x 7.00	56	1,200	KDRULI24LE01	22.12 x 20.43 x 24.37	117	2,100

5% IMPEDANCE, 230V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE	PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE
1	4.6	KDRULA25H	4.00 x 4.18 x 3.75	4	170	KDRULA25HE01	12.25 x 12.50 x 6.75	14.5	430
1.5	6.6	KDRULA27H	4.00 x 4.18 x 3.75	4	187	KDRULA27HE01	12.25 x 12.50 x 6.75	14.5	440
2	7.5	KDRULA26H	4.00 x 4.18 x 3.75	4	193	KDRULA26HE01	12.25 x 12.50 x 6.75	14.5	450
3	10.6	KDRULA28H	4.00 x 4.18 x 3.75	4	200	KDRULA28HE01	12.25 x 12.50 x 6.75	14.5	460
5	16.7	KDRULB25H	5.00 x 6.00 x 4.00	8	281	KDRULB25HE01	12.25 x 12.50 x 6.75	18.5	530
7.5	24.2	KDRULB26H	5.00 x 6.00 x 4.00	8	291	KDRULB26HE01	12.25 x 12.50 x 6.75	18.5	550
10	30.8	KDRULD21H	5.75 x 7.20 x 4.25	12	305	KDRULD21HE01	12.25 x 12.50 x 6.75	22.5	561
15	46.2	KDRULD22H	5.75 x 7.20 x 4.25	12	375	KDRULD22HE01	12.25 x 12.50 x 6.75	22.5	635
20	59.4	KDRULC22H	5.75 x 7.20 x 5.00	15	425	KDRULC22HE01	12.25 x 12.50 x 6.75	25.5	690
25	74.8	KDRULF28H	7.00 x 9.00 x 6.00	30	510	KDRULF28HE01	19.13 x 15.43 x 15.43	67	1,050
30	88	KDRULF25H	7.00 x 9.00 x 6.00	33	590	KDRULF25HE01	19.13 x 15.43 x 15.43	67	1,125
40	114	KDRULF26H	7.00 x 9.00 x 6.00	33	780	KDRULF26HE01	19.13 x 15.43 x 15.43	67	1,300
50	143	KDRULH24H	9.00 x 11.00 x 7.00	40	920	KDRULH24HE01	19.13 x 15.43 x 15.43	70	1,450
60	169	KDRULH23H	9.00 x 11.00 x 7.00	51	1,075	KDRULH23HE01	19.13 x 15.43 x 15.43	81	1,600
75	211	KDRULI22H	9.00 x 11.00 x 7.00	56	1,300	KDRULI22HE01	22.12 x 20.43 x 24.37	117	2,250
100	273	KDRULI21H	9.00 x 11.00 x 7.00	56	1,590	KDRULI21HE01	22.12 x 20.43 x 24.37	117	2,550

3% IMPEDANCE, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE	PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE
1	2.1	KDRULA8L	4.00 x 4.18 x 3.75	4	157	KDRULA8LE01	12.25 x 12.50 x 6.75	14.5	405
2	3.4	KDRULA1L	4.00 x 4.18 x 3.75	4	165	KDRULA1LE01	12.25 x 12.50 x 6.75	14.5	415
3	4.8	KDRULA2L	4.00 x 4.18 x 3.75	4	184	KDRULA2LE01	12.25 x 12.50 x 6.75	14.5	425
5	7.6	KDRULA3L	4.00 x 4.18 x 3.75	4	190	KDRULA3LE01	12.25 x 12.50 x 6.75	14.5	430
7.5	11	KDRULA4L	4.00 x 4.18 x 3.75	4	195	KDRULA4LE01	12.25 x 12.50 x 6.75	14.5	435
10	14	KDRULA5L	4.00 x 4.18 x 3.75	5	260	KDRULA5LE01	12.25 x 12.50 x 6.75	14.5	515
15	21	KDRULB2L	5.00 x 6.00 x 4.00	8	270	KDRULB2LE01	12.25 x 12.50 x 6.75	18.5	525
20	27	KDRULB1L	5.00 x 6.00 x 4.00	8	280	KDRULB1LE01	12.25 x 12.50 x 6.75	18.5	530
25	34	KDRULD1L	5.75 x 7.20 x 4.25	10	290	KDRULD1LE01	12.25 x 12.50 x 6.75	20.5	545
30	40	KDRULD2L	5.75 x 7.20 x 4.25	10	365	KDRULD2LE01	12.25 x 12.50 x 6.75	20.5	616
40	52	KDRULC1L	5.75 x 7.20 x 5.00	15	400	KDRULC1LE01	12.25 x 12.50 x 6.75	25.5	650
50	65	KDRULF2L	7.00 x 9.00 x 6.00	25	470	KDRULF2LE01	19.13 x 15.43 x 15.43	67.0	945
60	77	KDRULF4L	7.00 x 9.00 x 6.00	25	490	KDRULF4LE01	19.13 x 15.43 x 15.43	67.0	975
75	96	KDRULF3L	7.00 x 9.00 x 6.00	33	730	KDRULF3LE01	19.13 x 15.43 x 15.43	67.0	1,215
100	124	KDRULH3L	7.00 x 9.00 x 7.00	46	830	KDRULH3LE01	19.13 x 15.43 x 15.43	78.0	1,300
125	156	KDRULH2L	9.00 x 11.00 x 7.00	46	1,000	KDRULH2LE01	19.13 x 15.43 x 15.43	78.0	1,475
150	180	KDRULH1L	9.00 x 11.00 x 7.00	46	1,150	KDRULH1LE01	22.12 x 20.43 x 24.37	108.0	2,050
200	240	KDRULG3L	9.00 x 11.00 x 8.00	74	1,530	KDRULG3LE01	22.12 x 20.43 x 24.37	131.0	2,450
250	302	KDRULG1L	9.00 x 11.00 x 8.00	74	1,650	KDRULG1LE01	22.12 x 20.43 x 24.37	132.0	2,575
300	361	KDRULG2L	9.00 x 11.00 x 8.00	74	1,690	KDRULG2LE01	22.12 x 20.43 x 24.37	132.0	2,600
350	414	KDRULJ2L	9.00 x 11.00 x 9.00	80	2,000	KDRULJ2LE01	22.12 x 20.43 x 24.37	150.0	2,900
400	477	KDRULJ1L	9.00 x 11.00 x 9.00	80	2,200	KDRULJ1LE01	22.12 x 20.43 x 24.37	150.0	3,100
450	515	KDRULL1L	11.38 x 14.50 x 9.50	120	2,575	KDRULL1LE01	22.12 x 20.43 x 24.37	190.0	3,450
500	590	KDRULL2L	11.38 x 14.50 x 9.50	120	3,775	KDRULL2LE01	22.12 x 20.43 x 24.37	190.0	4,644

Effective 12-01-08
Supercedes 03-01-08

5% IMPEDANCE, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE	PART #	DIMENSIONS W x H x D (in.)	WEIGHT (lbs.)	LIST PRICE
1	2.1	KDRULA8H	4.00 x 4.18 x 3.75	4	165	KDRULA8HE01	12.25 x 12.50 x 6.75	14.5	410
2	3.4	KDRULA1H	4.00 x 4.18 x 3.75	4	175	KDRULA1HE01	12.25 x 12.50 x 6.75	14.5	416
3	4.8	KDRULA2H	4.00 x 4.18 x 3.75	4	215	KDRULA2HE01	12.25 x 12.50 x 6.75	14.5	454
5	7.6	KDRULA3H	4.00 x 4.18 x 3.75	4	225	KDRULA3HE01	12.25 x 12.50 x 6.75	14.5	464
7.5	11	KDRULA4H	4.00 x 4.18 x 3.75	5	250	KDRULA4HE01	12.25 x 12.50 x 6.75	15.5	490
10	14	KDRULA5H	4.00 x 4.18 x 3.75	5	315	KDRULA5HE01	12.25 x 12.50 x 6.75	15.5	560
15	21	KDRULB2H	5.00 x 6.00 x 4.00	7	325	KDRULB2HE01	12.25 x 12.50 x 6.75	17.5	575
20	27	KDRULC3H	5.75 x 7.20 x 5.00	15	370	KDRULC3HE01	12.25 x 12.50 x 6.75	25.5	625
25	34	KDRULC1H	5.75 x 7.20 x 5.00	15	440	KDRULC1HE01	12.25 x 12.50 x 6.75	25.5	691
30	40	KDRULE2H	5.75 x 7.20 x 5.00	16	500	KDRULE2HE01	12.25 x 12.50 x 6.75	26.5	743
40	52	KDRULF4H	7.00 x 9.00 x 6.00	25	525	KDRULF4HE01	19.13 x 15.43 x 15.43	67.0	990
50	65	KDRULF1H	7.00 x 9.00 x 6.00	25	700	KDRULF1HE01	19.13 x 15.43 x 15.43	67.0	1,215
60	77	KDRULF2H	7.00 x 9.00 x 6.00	25	730	KDRULF2HE01	19.13 x 15.43 x 15.43	67.0	1,242
75	96	KDRULH2H	9.00 x 11.00 x 7.00	52	900	KDRULH2HE01	19.13 x 15.43 x 15.43	82.0	1,380
100	124	KDRULI2H	9.00 x 11.00 x 7.00	52	1,029	KDRULI2HE01	19.13 x 15.43 x 15.43	82.0	1,575
125	156	KDRULG3H	9.00 x 11.00 x 8.00	57	1,250	KDRULG3HE01	22.12 x 20.43 x 24.37	122.0	2,100
150	180	KDRULG1H	9.00 x 11.00 x 8.00	60	1,488	KDRULG1HE01	22.12 x 20.43 x 24.37	127.0	2,350
200	240	KDRULJ1H	9.00 x 11.00 x 9.00	75	2,152	KDRULJ1HE01	22.12 x 20.43 x 24.37	136.0	2,900
250	302	KDRULL1H	11.38 x 14.50 x 9.50	105	2,307	KDRULL1HE01	22.12 x 20.43 x 24.37	162.0	3,075
300	361	KDRULL2H	11.38 x 14.50 x 9.31	105	2,350	KDRULL2HE01	22.12 x 20.43 x 24.37	162.0	3,150
350	414	KDRULL3H	11.38 x 14.50 x 9.31	109	2,700	KDRULL3HE01	22.12 x 20.43 x 24.37	166.0	3,450
400	477	KDRULL4H	11.38 x 14.50 x 9.50	135	3,400	KDRULL4HE01	22.12 x 20.43 x 24.37	176.0	4,200
450	515	KDRULL5H	11.38 x 14.50 x 11.00	135	3,500	KDRULL5HE01	36.00 x 28.39 x 30.19	295.0	5,200
500	590	KDRULL6H	11.38 x 14.50 x 11.00	135	4,200	KDRULL6HE01	36.00 x 28.39 x 30.19	295.0	5,975

OUTPUT REACTORS/ LOW PASS FILTER COMBINATIONS

460V

Effective 12-01-08
Supercedes 03-01-08

Output Reactors/ Low Pass Filter Combinations installed between an AC Drive and a motor limit the magnitude of voltage spikes at the motor. The filters also protect cables and the motor's insulation from damage caused by PWM reflected waves.

OUTPUT REACTOR / LOW PASS FILTER COMBINATION, 460V

HP	AMPS	CHASSIS UNIT				UL TYPE 1 ENCLOSURE			
		PRODUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (IBS.)	LIST PRICE	PROCUCT CODE	DIMENSIONS W x H x D (in.)	WEIGHT (IBS.)	LIST PRICE
1	3	V1K3A00	9.00 x 5.50 x 7.25	8	530	V1K3A01	9.00 x 5.50 x 10.00	11	830
2	4	V1K4A00	9.00 x 5.50 x 7.25	8	540	V1K4A01	9.00 x 5.50 x 10.00	11	840
3	6	V1K6A00	9.00 x 5.50 x 7.25	8	550	V1K6A01	9.00 x 5.50 x 10.00	11	860
5	8	V1K8A00	9.00 x 5.50 x 8.25	8	560	V1K8A01	9.00 x 5.50 x 10.00	11	875
7.5	12	V1K12A00	9.00 x 5.50 x 8.25	8	590	V1K12A01	9.00 x 5.50 x 10.00	11	900
10	18	V1K18A00	9.00 x 5.50 x 8.25	12	648	V1K18A01	9.00 x 5.50 x 10.00	15	975
15	25	V1K25A00	9.00 x 5.50 x 8.25	12	783	V1K25A01	9.00 x 5.50 x 10.00	15	1,050
20	27	V1K27A00	9.00 x 5.50 x 8.25	14	810	V1K27A01	9.00 x 5.50 x 10.00	15	1,075
25	35	V1K35A00	12.00 x 8.00 x 9.00	17	837	V1K35A01	12.00 x 8.00 x 11.50	23	1,100
30	45	V1K45A00	12.00 x 8.00 x 9.00	17	864	V1K45A01	12.00 x 8.00 x 11.50	23	1,175
40	55	V1K55A00	12.00 x 8.00 x 9.00	23	891	V1K55A01	12.00 x 8.00 x 11.50	23	1,282
50	80	V1K80A00	12.00 x 8.00 x 9.00	23	1,296	V1K80A01	12.00 x 8.00 x 11.50	29	1,648
60	80	V1K80A00	12.00 x 8.00 x 9.00	23	1,296	V1K80A01	12.00 x 8.00 x 11.50	29	1,648
75	110	V1K110A00	12.00 x 8.00 x 10.25	40	1,525	V1K110A01	16.50 x 18.00 x 15.00	68	2,268
100	130	V1K130A00	8.50 x 11.75 x 9.50	55	1,800	V1K130A01	16.50 x 18.00 x 15.00	83	2,484
125	160	V1K160A00	8.50 x 11.75 x 10.50	60	1,944	V1K160A01	16.50 x 18.00 x 15.00	83	2,592
150	200	V1K200A00	8.50 x 11.75 x 9.25	60	2,106	V1K200A01	16.50 x 18.00 x 15.00	93	2,700
200	250	V1K250A00	8.50 x 11.75 x 9.25	65	2,160	V1K250A01	16.50 x 18.00 x 15.00	93	2,900
250	305	V1K305A00	8.75 x 11.75 x 12.25	80	2,376	V1K305A01	16.50 x 18.00 x 30.00	117	3,000
300	362	V1K362A00	8.75 x 11.75 x 12.00	80	2,775	V1K362A01	16.50 x 18.00 x 30.00	117	3,200
350	420	V1K420A00	10.00 x 11.75 x 13.75	95	3,200	V1K420A01	16.50 x 18.00 x 30.00	132	3,700
400	480	V1K480A00	10.00 x 11.75 x 13.75	100	3,456	V1K480A01	16.50 x 18.00 x 30.00	138	4,000
500	600	V1K600A00	12.75 x 15.00 x 13.75	130	3,564	V1K600A01	16.50 x 18.00 x 30.00	168	4,400
600	750	V1K750A00	12.75 x 15.00 x 14.50	135	5,724	V1K750A01	16.50 x 18.00 x 30.00	180	7,600

Effective 12-01-08
Supercedes 03-01-08

Solid State Starters provide ramped starting for induction motors by either reduced voltage or torque control at start. Either method creates a soft start for motors, and reduces inrush currents.

COMBINATION PANELS INCLUDE:

- NEMA Rated Panel as Defined in Table
- Circuit Breaker Disconnect with Rotary through the Door Handle Mechanism
- Torque Controlled Soft Starter Type MSF
- ATL Rated Bypass Contactor in all NEMA 4/ 12 Units
- NEMA 1 Includes Installed Fan & Filter Kits
- Customer Terminals for Motor Connections
- Control Power Transformer
- Motor Start/ Stop and Run Pilot Device (Door Mounted)
- NEMA 4/ 12 Units are Rated for Crusher Duty
- NEMA 4/ 12 Units Include Emergency Bypass Switch (For Across-the-Line) Start

Notes:
Additional functionality can be accommodated by selecting the appropriate devices from the Options section on page 113.

NEMA 4/ 12 Units are Designed for Crusher Applications

MAX HP BY VOLTAGE				MSF AMP	NEMA 1		NEMA 4/ 12	
208V	230V	460V	575V	RATING	TECO PART NUMBER	LIST PRICE	TECO PART NUMBER	LIST PRICE
5	5	10	15	17	TMSF17CBN1	4,600	TMSF17CBN12BYP	5,000
7.5	10	20	30	30	TMSF30CBN1	5,100	TMSF30CBN12BYP	5,700
10	15	30	40	45	TMSF45CBN1	5,900	TMSF45CBN12BYP	6,800
15	20	40	60	60	TMSF60CBN1	6,300	TMSF60CBN12BYP	6,900
20	25	50	75	75	TMSF75CBN1	6,700	TMSF75CBN12BYP	7,200
25	30	60	75	85	TMSF85CBN1	7,500	TMSF85CBN12BYP	8,200
30	40	75	100	110	TMSF110CBN1	8,200	TMSF110CBN12BYP	9,000
40	50	100	125	145	TMSF145CBN1	8,500	TMSF145CBN12BYP	9,100
50	60	125	150	170	TMSF170CBN1	9,200	TMSF170CBN12BYP	9,800
60	75	150	200	210	TMSF210CBN1	11,300	TMSF210CBN12BYP	12,000
75	100	200	250	250	TMSF250CBN1	12,100	TMSF250CBN12BYP	12,900
100	125	250	300	310	TMSF310CBN1	14,000	TMSF310CBN12BYP	14,900
–	150	300	350	370	TMSF370CBN1	15,500	TMSF370CBN12BYP	16,400
–	175	350	450	450	TMSF450CBN1	20,100	TMSF450CBN12BYP	22,200
–	200	450	550	570	TMSF570CBN1	25,500	TMSF570CBN12BYP	27,700
–	–	500	700	710	TMSF710CBN1	32,000	TMSF710CBN12BYP	34,500
–	–	600	800	835	TMSF835CBN1	40,000	TMSF835CBN12BYP	49,000
–	–	800	1000	1000	TMSF1000CBN1	44,000	TMSF1000CBN12BYP	55,000
–	–	1000	1400	1400	Consult Factory			

NEMA 4/ 12 Units are in stock at TWMC

Effective 12-01-08
Supercedes 03-01-08

COMBINATION PANELS INCLUDE:

- NEMA Rated Panel as Defined in Table
- Torque Controlled Soft Starter type MSF
- ATL Rated Bypass Contactor In All NEMA 4/ 12 Units
- NEMA 1 Includes Installed Fan & Filter Kits
- Customer Terminals for Motor Connections
- Control Power Transformer
- Motor Start/ Stop and Run Pilot Device (door mounted)
- NEMA 4/ 12 units are Rated for Crusher Duty
- NEMA 4/ 12 Units includes Emergency Bypass Switch (For Across-the-Line) Start

Notes:
Additional functionality can be accommodated by selecting the appropriate devices from the Options section on page 113.

NEMA 4/ 12 Units are Designed for Crusher Applications

MAX HP BY VOLTAGE				MSF AMP	NEMA 1		NEMA 4/ 12	
208V	230V	460V	575V	RATING	TECO PART NUMBER	LIST PRICE	TECO PART NUMBER	LIST PRICE
5	5	10	15	17	TMSF17N1	3,700	TMSF17N12BYP	4,700
7.5	10	20	30	30	TMSF30N1	4,200	TMSF30N12BYP	5,300
10	15	30	40	45	TMSF45N1	4,800	TMSF45N12BYP	6,300
15	20	40	60	60	TMSF60N1	5,000	TMSF60N12BYP	6,500
20	25	50	75	75	TMSF75N1	5,700	TMSF75N12BYP	6,900
25	30	60	75	85	TMSF85N1	6,400	TMSF85N12BYP	7,800
30	40	75	100	110	TMSF110N1	6,900	TMSF110N12BYP	8,600
40	50	100	125	145	TMSF145N1	7,200	TMSF145N12BYP	9,000
50	60	125	150	170	TMSF170N1	8,200	TMSF170N12BYP	9,300
60	75	150	200	210	TMSF210N1	9,200	TMSF210N12BYP	11,500
75	100	200	250	250	TMSF250N1	9,800	TMSF250N12BYP	12,700
100	125	250	300	310	TMSF310N1	12,500	TMSF310N12BYP	14,400
–	150	300	350	370	TMSF370N1	14,400	TMSF370N12BYP	15,900
–	175	350	450	450	TMSF450N1	18,000	TMSF450N12BYP	26,000
–	200	450	550	570	TMSF570N1	22,200	TMSF570N12BYP	29,500
–	–	500	700	710	TMSF710N1	25,500	TMSF710N12BYP	34,000
–	–	600	800	835				
–	–	800	1000	1000	Consult Factory			
–	–	1000	1400	1400				

Effective 12-01-08
Supercedes 03-01-08

MODEL / AMPS	MOTOR / CONTROL VOLTAGE	LIST PRICE
TMSF 17	200-525 / 100-240 V	2,800
TMSF 30	200-525 / 100-240 V	3,100
TMSF 45	200-525 / 100-240 V	3,400
TMSF 60	200-525 / 100-240 V	3,800
TMSF 75	200-525 / 100-240 V	4,000
TMSF 85	200-525 / 100-240 V	4,500
TMSF 110	200-525 / 100-240 V	5,500
TMSF 145	200-525 / 100-240 V	6,700
TMSF 170	200-525 / 100-240 V	7,800
TMSF 210	200-525 / 100-240 V	8,900
TMSF 250	200-525 / 100-240 V	9,500
TMSF 310	200-525 / 100-240 V	12,100
TMSF 370	200-525 / 100-240 V	14,000
TMSF 450	200-525 / 100-240 V	15,600
TMSF 570	200-525 / 100-240 V	22,000
TMSF 710	200-525 / 100-240 V	24,000
TMSF 835	200-525 / 100-240 V	27,000
TMSF 1000	200-525 / 100-240 V	31,000
TMSF 1400	200-525 / 100-240 V	41,000

SOLID STATE STARTERS PANEL OPTIONS

Effective 12-01-08
Supercedes 03-01-08

MOD CODE	OPTION	DESCRIPTION		LIST PRICE
TSS	Operator Interface Controls -	Start-Stop Pushbutton		275
TOS	Mounted & Wired 30mm devices	On-Off Selector Switch		290
TJG		Jog Pushbutton		175
TRST		Reset Pushbutton		175
TSA		SS-Off-ATL Selector Switch for use with across the line contactors		350
THA		Hand-Off-Auto Selector Switch		350
THS		Hand-Off-Auto with Start-Stop Pushbutton		700
TPS		Parameter Set Selector Switch		700
TES		Emergency Stop Pushbutton		230
TRL		'Run' Green indicator light		230
TPL		'Power On' Red indicator light		230
TFL		'Fault' Amber indicator light		230
T2L		'Run' + 'Power On' (2 segment) indicator light		475
T3L		'Run' + 'Power On' + 'Fault' (3 segment) indicator light		700
TR		Relays & Timers General Purpose Control Relay, 2 Form C contacts		350
TR1		Relay as above wired to Fault Circuits		350
TT1		On Delay Timer		475
TT2		Off Delay Timer		475
TSOL		Standard Overload Relay for ATL option, w/CT's		425
TEOL		Electronic Overload Relay for ATL option, w/CT's		750
TKP	Door Mounted Keypad	Mounting of MSF keypad to the Panel Door (includes PPU)		1,200
			MSF AMPS	
TNL	Inline Contactor	Includes IEC series contactor rated for the FLA of the motor	17	350
			30	425
			45	475
			60	550
			75	650
			85	750
			110	825
			145	1,100
			170	1,400
			210	1,510
			250	1,800
			310	2,500
			370	2,900
			450	3,500
			570	3,800
			710	CF*
			835	CF*
T3R	Change Panel rating from NEMA 4/12 to 3R	Installation of Drip Shield to top of enclosure. Price applicable to all panel sizes	All	350
TMCOM	Fieldbus Communication Modules (Installed)	Modbus RS232/485		400
TTPCOM		Profibus DP		1,300
TICOM		Interbus-S		1,300
TDCOM		DeviceNet		1,100
TLCOM		Lonworks		1,300
TFCOM		FIP IO		1,700

* Consult Factory

SOLID STATE STARTERS DIMENSIONS AND WEIGHTS

Effective 12-01-08
Supercedes 03-01-08

AMPS	DIMENSIONS	CHASSIS	NEMA 1 NON COMBO	NEMA 1 COMBINATION	NEMA 4/12 NON COMBO BYPASS	NEMA 4/12 COMBO BYPASS
	H x W x D In.	12.6 x 5 x 10.25	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12
17	H x W x D mm	320 x 126 x 260	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305
	Lbs. or kg.	15 Lbs. 6.7 kg.	97 Lbs. 45 kg.	97 Lbs. 45 kg.	108 Lbs. 49 kg.	108 Lbs. 49 kg.
	H x W x D In.	12.6 x 5 x 10.25	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12
30	H x W x D mm	320 x 126 x 260	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305
	Lbs. or kg.	15 Lbs. 6.7 kg.	97 Lbs. 45 kg.	97 Lbs. 45 kg.	108 Lbs. 49 kg.	108 Lbs. 49 kg.
	H x W x D In.	12.6 x 5 x 10.25	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12
45	H x W x D mm	320 x 126 x 260	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305
	Lbs. or kg.	16 Lbs. 6.9 kg.	97 Lbs. 45 kg.	97 Lbs. 45 kg.	108 Lbs. 49 kg.	108 Lbs. 49 kg.
	H x W x D In.	12.6 x 5 x 10.25	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12
60	H x W x D mm	320 x 126 x 260	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305
	Lbs. or kg.	16 Lbs. 6.9 kg.	99 Lbs. 45 kg.	99 Lbs. 45 kg.	112 Lbs. 51 kg.	112 Lbs. 51 kg.
	H x W x D In.	12.6 x 5 x 10.25	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12
75	H x W x D mm	320 x 126 x 260	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305
	Lbs. or kg.	16 Lbs. 6.9 kg.	100 Lbs. 46 kg.	100 Lbs. 46 kg.	114 Lbs. 52 kg.	114 Lbs. 52 kg.
	H x W x D In.	12.6 x 5 x 10.25	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12	24 x 20 x 12
85	H x W x D mm	320 x 126 x 260	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305	610 x 508 x 305
	Lbs. or kg.	16 Lbs. 6.9 kg.	106 Lbs. 49 kg.	106 Lbs. 49 kg.	120 Lbs. 55 kg.	120 Lbs. 55 kg.
	H x W x D In.	15.75 x 7 x 10.25	30 x 24 x 12	30 x 24 x 12	30 x 24 x 12	30 x 24 x 12
110	H x W x D mm	400 x 176 x 260	762 x 610 x 305	762 x 610 x 305	762 x 610 x 305	762 x 610 x 305
	Lbs. or kg.	27 Lbs. 12 kg.	132 Lbs. 60 kg.	132 Lbs. 60 kg.	149 Lbs. 68 kg.	149 Lbs. 68 kg.
	H x W x D In.	15.75 x 7 x 10.25	30 x 24 x 12	30 x 24 x 12	30 x 24 x 12	30 x 24 x 12
145	H x W x D mm	400 x 176 x 260	762 x 610 x 305	762 x 610 x 305	762 x 610 x 305	762 x 610 x 305
	Lbs. or kg.	27 Lbs. 12 kg.	133 Lbs. 61 kg.	133 Lbs. 61 kg.	149 Lbs. 68 kg.	149 Lbs. 68 kg.
	H x W x D In.	19.68 x 10.25 x 10.25	36 x 30 x 12	36 x 30 x 12	36 x 30 x 12	36 x 30 x 12
170	H x W x D mm	500 x 260 x 260	914.2 x 762 x 305	914.2 x 762 x 305	914.2 x 762 x 305	914.2 x 762 x 305
	Lbs. or kg.	44 Lbs. 20 kg.	194 Lbs. 89 kg.	194 Lbs. 89 kg.	213 Lbs. 97 kg.	213 Lbs. 97 kg.
	H x W x D In.	19.68 x 10.25 x 10.25	42 x 30 x 12	42 x 30 x 12	42 x 30 x 12	42 x 30 x 12
210	H x W x D mm	500 x 260 x 260	1067 x 762 x 305	1067 x 762 x 305	1067 x 762 x 305	1067 x 762 x 305
	Lbs. or kg.	44 Lbs. 20 kg.	227 Lbs. 104 kg.	227 Lbs. 104 kg.	246 Lbs. 112 kg.	246 Lbs. 112 kg.

SOLID STATE STARTERS DIMENSIONS AND WEIGHTS

Effective 12-01-08
Supercedes 03-01-08

AMPS	DIMENSIONS	CHASSIS	NEMA 1 NON COMBO	NEMA 1 COMBINATION	NEMA 4/12 NON COMBO BYPASS	NEMA 4/12 COMBO BYPASS
	H x W x D In.	19.68 x 10.25 x 10.25	42 x 30 x 12	42 x 30 x 12	42 x 30 x 12	42 x 30 x 12
250	H x W x D mm	500 x 260 x 260	1067 x 762 x 305	1067 x 762 x 305	1067 x 762 x 305	1067 x 762 x 305
	Lbs. or kg.	44 Lbs. 20 kg.	229 Lbs. 105 kg.	229 Lbs. 105 kg.	251 Lbs. 114 kg.	251 Lbs. 114 kg.
	H x W x D In.	21 x 21.5 x 11	48 x 36 x 12	48 x 36 x 12	48 x 36 x 12	48 x 36 x 12
310	H x W x D mm	532 x 547 x 278	1219 x 914 x 305	1219 x 914 x 305	1219 x 914 x 305	1219 x 914 x 305
	Lbs. or kg.	102 Lbs. 46 kg.	330 Lbs. 150 kg.	330 Lbs. 150 kg.	352 Lbs. 160 kg.	352 Lbs. 160 kg.
	H x W x D In.	21 x 21.5 x 11	60 x 36 x 20	60 x 36 x 20	60 x 36 x 20	60 x 36 x 20
370	H x W x D mm	532 x 547 x 278	1524 x 914 x 305	1524 x 914 x 305	1524 x 914 x 305	1524 x 914 x 305
	Lbs. or kg.	102 Lbs. 46 kg.	506 Lbs. 153 kg.	506 Lbs. 153 kg.	463 Lbs. 210 kg.	463 Lbs. 210 kg.
	H x W x D In.	21 x 21.5 x 11	60 x 36 x 12	60 x 36 x 12	60 x 36 x 12	60 x 36 x 12
450	H x W x D mm	532 x 547 x 278	1524 x 914 x 305	1524 x 914 x 305	1524 x 914 x 305	1524 x 914 x 305
	Lbs. or kg.	102 Lbs. 46 kg.	435 Lbs. 198 kg.	435 Lbs. 198 kg.	474 Lbs. 215 kg.	474 Lbs. 215 kg.
	H x W x D In.	27 x 25.25 x 12	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18
570	H x W x D mm	687 x 640 x 302	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457
	Lbs. or kg.	176 Lbs. 80 kg.	766 Lbs. 348 kg.	766 Lbs. 348 kg.	805 Lbs. 366 kg.	805 Lbs. 366 kg.
	H x W x D In.	27 x 25.25 x 12	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18
710	H x W x D mm	687 x 640 x 302	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457
	Lbs. or kg.	176 Lbs. 80 kg.	772 Lbs. 351 kg.	772 Lbs. 351 kg.	816 Lbs. 371 kg.	816 Lbs. 371 kg.
	H x W x D In.	27 x 25.25 x 12	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18
835	H x W x D mm	687 x 640 x 302	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457
	Lbs. or kg.	176Lbs. 80 kg.	823 Lbs. 374 kg.	823 Lbs. 374 kg.	867 Lbs. 394 kg.	867 Lbs. 394 kg.
	H x W x D In.	35.5 x 34.5 x 13.2	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18	60 x 48 x 18
1000	H x W x D mm	900 x 875 x 336	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457	1524 x 1219 x 457
	Lbs. or kg.	385 Lbs. 175 kg.	841 Lbs. 382 kg.	841 Lbs. 382 kg.	881 Lbs. 441 kg.	881 Lbs. 441 kg.
	H x W x D In.	CF	CF	CF	CF	CF
1400	H x W x D mm	CF	CF	CF	CF	CF
	Lbs. or kg.	CF	CF	CF	CF	CF

TECO-WESTINGHOUSE DRIVES WARRANTY

Effective 12-01-08
Supercedes 03-01-08

STANDARD WARRANTY FOR TECO-WESTINGHOUSE DRIVES

All Low Voltage Motor Control Products, such as Solid State Starters and Inverters, ("products") sold by TECO-Westinghouse ("TWMC"), are warranted to be free from defects in material and workmanship for a period of 36 months from date of manufacture. A warranty of 36 months from the date of manufacture is still applicable when a TWMC Low Voltage Motor Control Product and a TWMC Inverter Duty motor (per NEMA MG1-31.4.2.2) are purchased together.

This warranty is conditioned upon the installation, operation, and maintenance of the products in accordance with TECO-Westinghouse Motor Company's recommendations or standard industry practice, and the products have at all times being operated or used under normal operating conditions for which they were designed. This warranty will not be applicable to products that have been altered without written permission from TWMC.

TECO-Westinghouse Motor Company shall, at its sole option and expense, repair or replace, F.O.B. warehouse or TWMC designated service center, any such products which are defective within the warranty period. In the event of warranty claims, TECO-Westinghouse Motor Company must be notified promptly following any product failure. The product shall be sent to a TECO-Westinghouse Motor Company authorized service center for diagnosis on the cause of failure. TWMC will not be responsible for any repair that has been preformed without prior written permission from TWMC.

The repair or replacement of defective material and workmanship shall constitute complete fulfillment of TECO-Westinghouse Motor Company's warranty liability whether the warranty claims are based on contract, tort (including negligence and strict liability), or otherwise. **THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM COURSE OF DEALING AND USAGE OF TRADE. UNDER NO CIRCUMSTANCES, SHALL TECO-WESTINGHOUSE MOTOR COMPANY BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING FREIGHT.**

WARRANTY RETURN PROCEDURE

The Product must be returned prepaid to TECO -Westinghouse Motor Company factory. A completed Return Material Authorization (RMA) form with an assigned RMA number must be included in the shipment. Contact the nearest TECO-Westinghouse location or Factory directly for RMA forms.

DRIVE RMA RETURN PROCEDURE

Effective 12-01-08
Supercedes 03-01-08

DRIVE RMA RETURN PROCEDURE

- Contact a Drives Technical Engineer for troubleshooting/RMA Qualification at (800) 279-4007.
- Customer will be sent an RMA Request Form to complete. Completed RMA Request Form should be returned via e-mail or faxed to 512-218-7378 for processing.
- An RMA Number will be issued and the customer will be notified via e-mail or fax. Detailed instructions where to ship the Drive for warranty evaluation / repair will be included with the RMA Number.

********IF PRODUCT IS NOT RETURNED WITHIN 30 DAYS RMA WILL BE CLOSED********

- The Drive is then evaluated and a Service Report is generated detailing the failure. (The evaluation process should take no longer than 5 working days).
- The Customer and Salesperson will receive a copy of the Service Report via e-mail or fax.
- If the Drive is determined to have failed under Warranty, 1 of the follwing 3 steps will take place.
  1. The drive will be repaired and returned to the customer.
  2. The drive is un-repairable and will be scrapped.
  3. No problem found, drive will be returned to customer.

******If credit is being issued, the Controls Group will fax a copy to the customer.******

If the Drive is determined to be a Non-Warranty situation, 1 of the following 3 steps will take place.

1. The drive will be returned to the customer via freight collect. There might be a $90.00 inspection fee.
2. If drive is repairable, an estimate will be sent to the customer. The customer will have to place a PO before any repairs are completed. There is a $90.00 inspection fee for the evaluation. If customer decides to repair the drive the $90.00 will go towards the repair.
3. If the drive is un-repairable or the customer decides not to have unit repaired, we can send it back via freight collect or throw it away, whichever they decide.

Please Note: All repairable & "no problem found " drives will be returned to the customers. Even if customer has placed offsetting order.

Global
RESOURCES

TECO-Westinghouse Motor Company is dedicated to servicing our customers' needs in a variety of ways. Our manufacturing plants are located in the U.S., Taiwan, Malaysia, Australia, Great Britain and China. A full line of induction, synchronous and DC motors and generators are available in both horizontal and vertical configurations from 1/4 HP to 100,000 HP. In North America there are several regional warehouses stocking a vast array of motors up to 2,000 HP for our customers' convenience. Our Round Rock, Texas facility conducts sales and marketing, customer service, engineering, drafting, manufacturing, testing, final shipment, field service and repairs of many types of large custom-designed and specialty motors.

These global resources uniquely position us to satisfy the market's diverse needs. We have the flexibility to manufacture many of our top quality products in the U.S. or the Far East.

ROTATING RIGHT

Head Office:
6120 Davies Road
Edmonton, AB
T6E 4M9

Phone: (780) 485-2010 • Toll Free: (866) 707-7867
Fax: (780) 485-1938
• Calgary • Drayton Valley • Lethbridge
www.rotatingright.com