

BALDOR • RELIANCE

Customer information packet

AEM2334-4

20HP, 1770RPM, 3PH, 60HZ, 286U, 1046M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286U
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CSA
Ambient Temperature	65 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	23.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part detail

Revision	L
Type	AC
Mech. spec.	10M36
Base	
Status	PRD/A
Elec. spec.	10WGY977
Layout	10LYM036
Eff. date	07-19-2023
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	02-21-2015

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.81 IN
Power Factor	84
Product Family	Automotive (Not For DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1404									
CAT.NO.	AEM2334-4								
SPEC.	10M036Y977G1								
VOLTS	460								
AMP	23								
RPM	1770		HP	20					
FRAME	286U	HZ	60	PH	3				
SER.F.	1.00	CODE	G	DES	B	CL	F		
NEMA-NOM-EFF	93	PF	84						
G.MIN.EFF	91.7	CC	010A						
RATING	65C AMB-CONT								
LUBRICATION	POLYREX EM								
DE	6311	ODE	6309						
ENCL	TEFC	SER. #							

Parts list

Part number	Description	Quantity
SA294166	SA 10M036Y977G1	1.000 ea
RA280248	RA 10M036Y977G1	1.000 ea
10CB1000A09P	KOBX, MACH W/1.50 NPT & PRIMER	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
HA4001A01SP	DRAIN PLUG, PLASTIC (MICRO PLAS)	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10EP1105A01P	MACH'D EPOXY PRIMED EP	1.000 ea
10XN2520K36	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10FH1007P	FAN COVER, CAST W/EPOXY PRIMER	1.000 ea
10XN3118K20	5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED	3.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
HA1005A04	SLINGER, OD 3.620, ID 1.98,	1.000 ea
HA1005A26	SLINGER, OD 3.00, ID 1.75, 309 BRG	1.000 ea
10CB1500P	CONDUIT BOX LID, CAST W/EPOXY PRIMER	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.031 ea
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.033 ea

HW2501G32	KEY, 3/8 SQ X 3.750	1.000 ea
WD1000B07	T&B C71, RING TERM 10-12 AWG, .25" STUD	3.000 ea
10EP1104A01PP13	FREP, MACH W/PRIMER & PAINT	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HW4500A20	1/8NPT SL PIPE PLUG	3.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025G02	WILKOFAS, 782.02, LIGHT GRAY	0.070 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP1404	SS UL CSA CC "AUTOMOTIVE"	1.000 ea
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 49354

Typical performance - not guaranteed values

Winding: 10WGY977-R014		Type: 1046M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	20	Full Load Torque	59.3 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	23	Breakdown Torque	189 LB-FT		
R.P.M.	1770	Pull-up Torque	76.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	95.9 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	145 A
Service Factor (S.F.)	1	No-load Current	7.85 A		
NEMA Nom. Eff.	93	Power Factor	84	Line-line Res. @ 25°C	0.368 Ω
Rating - Duty	65C AMB-CONT		Temp. Rise @ Rated Load	40°C	
			Locked-rotor Power Factor	31.8	
			Rotor inertia	3.66 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	57	78	85	87	88	87
Efficiency	88.4	92.3	93.5	93.5	93.3	92.6
Speed	1793	1785	1779	1771	1763	1755
Line amperes	9.5	13.1	17.7	22.9	28.4	34.6

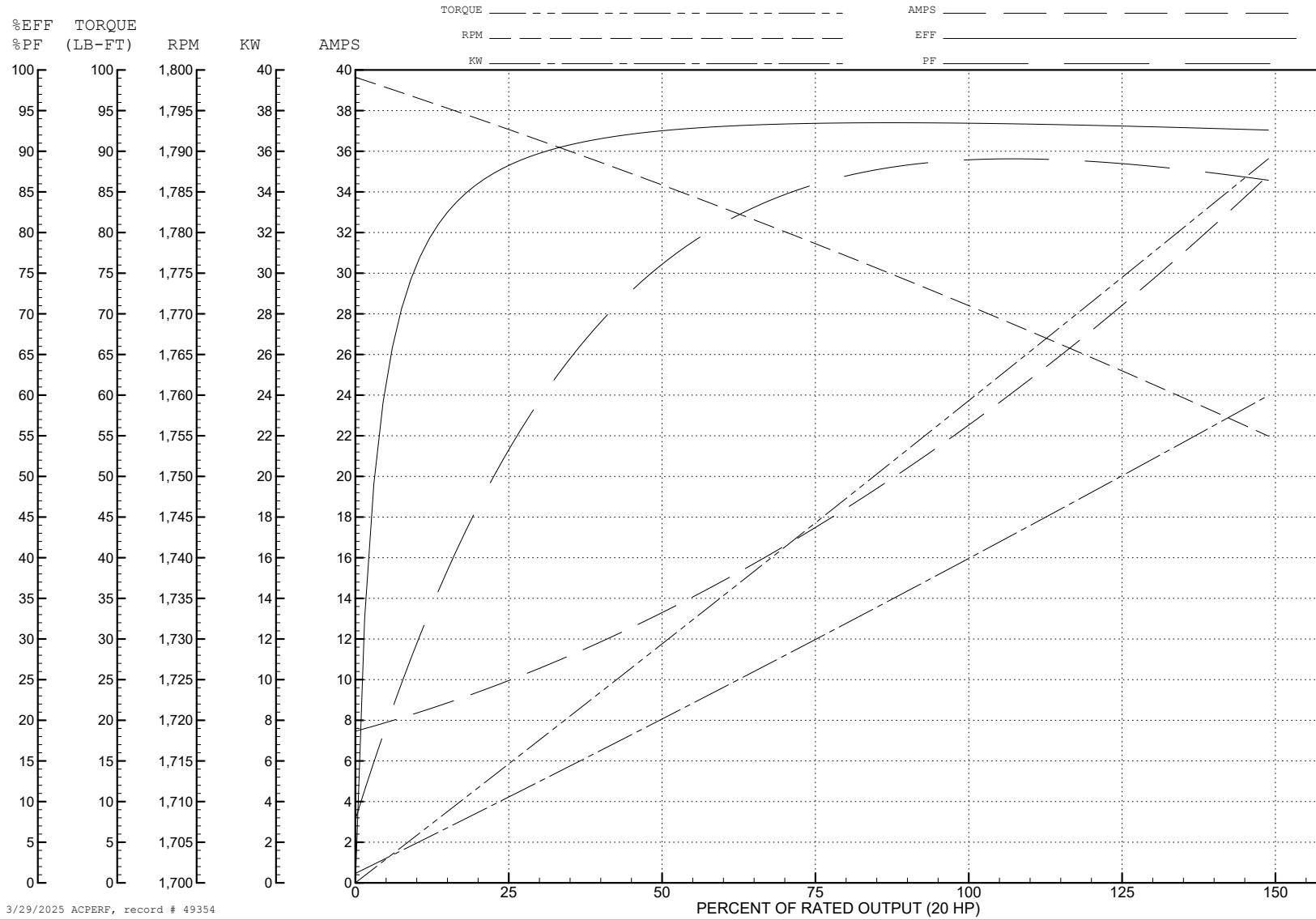
ABB Motors and Mechanical Inc.

WINDING # 10WGY977

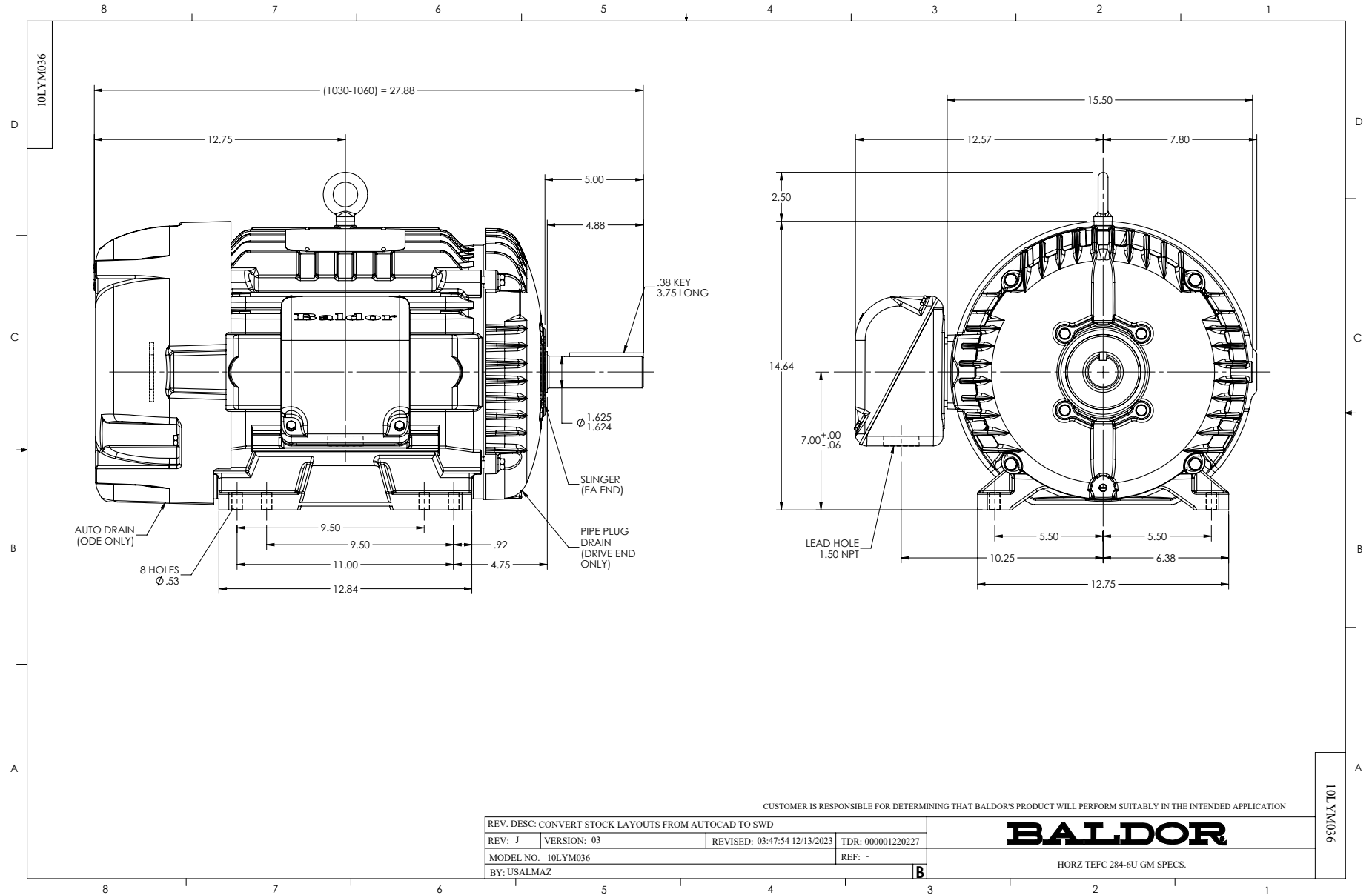
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1770 RPM 460 V 1046M

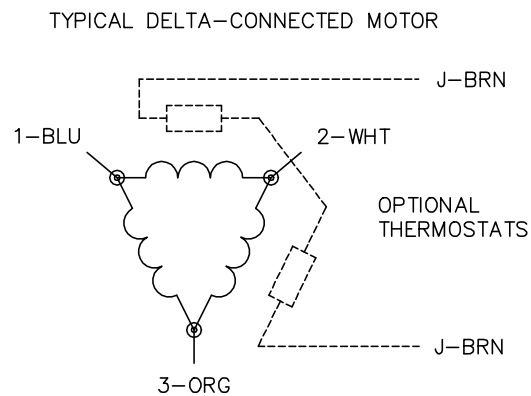
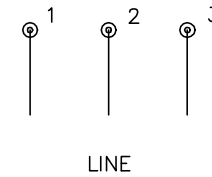
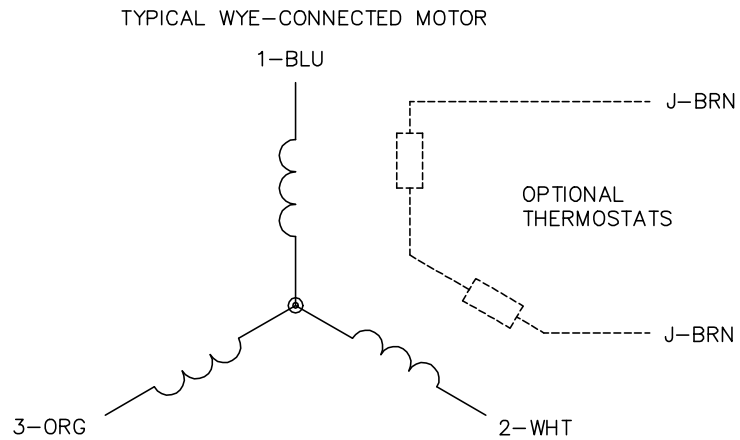
TORQUES (LB-FT): PO=189 PU=76.6 LR=95.9 LRA=145



3/29/2025 ACPERF, record # 49354



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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