

ABB BALDOR RELIANCE III

Customer information packet

JPDRX21744TY-5

7.5HP, 1770RPM, 3PH, 60HZ, 213TCZ, XPFC, F1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	213TCZ
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	7.500 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	7.5 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGX817
Layout	07LYK202
Eff. date	02-14-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	08-05-2019

IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.65 IN
Power Factor	81
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1401XPSLEV											
NO.						CC	010A				
S/N						TEMP CODE	T3C				
SPEC.	07-0000-0224					INV.TYPE	PWM				
CAT.NO.	JPDRX21744TY-5					C HP FR	60	C HP TO	90		
HP	7.5					CT HZ FROM	6	CT HZ TO	60		
VOLTS	575					VT HZ FROM	6	VT HZ TO	60		
AMPS	7.5					MAG CUR	3.7				
RPM	1770					MX RPM	2700				
HZ	60	PH	3	CL	F	NOM.EFF.	91.7				
SER.F.	1.00	DES	A	SL HZ	1	WK2	0.934				
FRAME	213TCZ		RATING		40C AMB-CONT						
	55C AMB @ 1.0 SF										
	1.15 SF SINEWAVE					NEMA MG-1 PT 5,IP55					

Parts List

Part number	Description	Quantity
SA372717	SA 07-0000-0224	1.000 ea
RA362470	RA 07-0000-0224	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP1401XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-C&D	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1081F	ALUM XP CAUTION LABEL (FS PLANT ONLY-	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
07FH1003A05	FAN HOUSING 307 EXPLOSION PROOF W/ GREAS	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	4.000 ea
37FN3002A01SP	EXFN, PLASTIC, 9.00 OD, 1.155 ID	1.000 ea
51XB1214A20	12-14X1.25 HWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
07EP1707A17	FREP XP GR C W/DRAINS, GRSRS	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
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 ea
HW4506A02	BREATHING/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
07EP1708A12	PUEP 213-5TC 307M "DRILL RIG DUTY" SLING	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HA2065A02	ALUM SLINGER 307 BRGS DRILL RIG MOTOR	1.000 ea
80XN1032J07	10-32 X 7/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
10XN2520A32	1/4 X 2 HEX HEAD CAP SCR, GRADE 2	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea

HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 ea
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HA6059A05	ADAPTER FOR 8.50" RABBET TO 4.50" RABBET	1.000 ea
84XN5013J16S	1/2-13 X 1 LOW HEAD HEX SOC HD	4.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
07CB1000A01	CONDUIT BOX MACH	1.000 ea
10XN3118A16	5/16-18X1 HEX HD CAP	4.000 ea
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
07CB1502A01	CONDUIT BOX LID MACH (DUCTILE IRON)	1.000 ea
84XN2520J16	1/4-20 X 1 SOC HD CAP SCREW	4.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.022 ga
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.022 ga
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 ea
HW2501D14	KEY, 3/16 SQ X 1.500	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt

AC Induction Motor Performance Data

Record # 77546

Typical performance - not guaranteed values

Winding: 07WGX817-R033			Type: 0738M		Enclosure: XPFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		7.5	Full Load Torque		22.1 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		7.5	Breakdown Torque		73 LB-FT	
R.P.M.		1770	Pull-up Torque		33.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	44.4 LB-FT	
NEMA Design Code	A	KVA Code	J	Starting Current	58.7 A	
Service Factor (S.F.)			1	No-load Current	3.66 A	
NEMA Nom. Eff.	91.7	Power Factor	81	Line-line Res. @ 25°C	2.23 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load	42°C	
				Locked-rotor Power Factor	37.9	
				Rotor inertia	0.934 LB-FT2	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	40	62	73	79	82	84
Efficiency	86.8	91.4	92.1	91.7	90.8	89.7
Speed	1793	1786	1779	1771	1761	1751
Line amperes	4.07	4.98	6.23	7.7	9.4	11.2

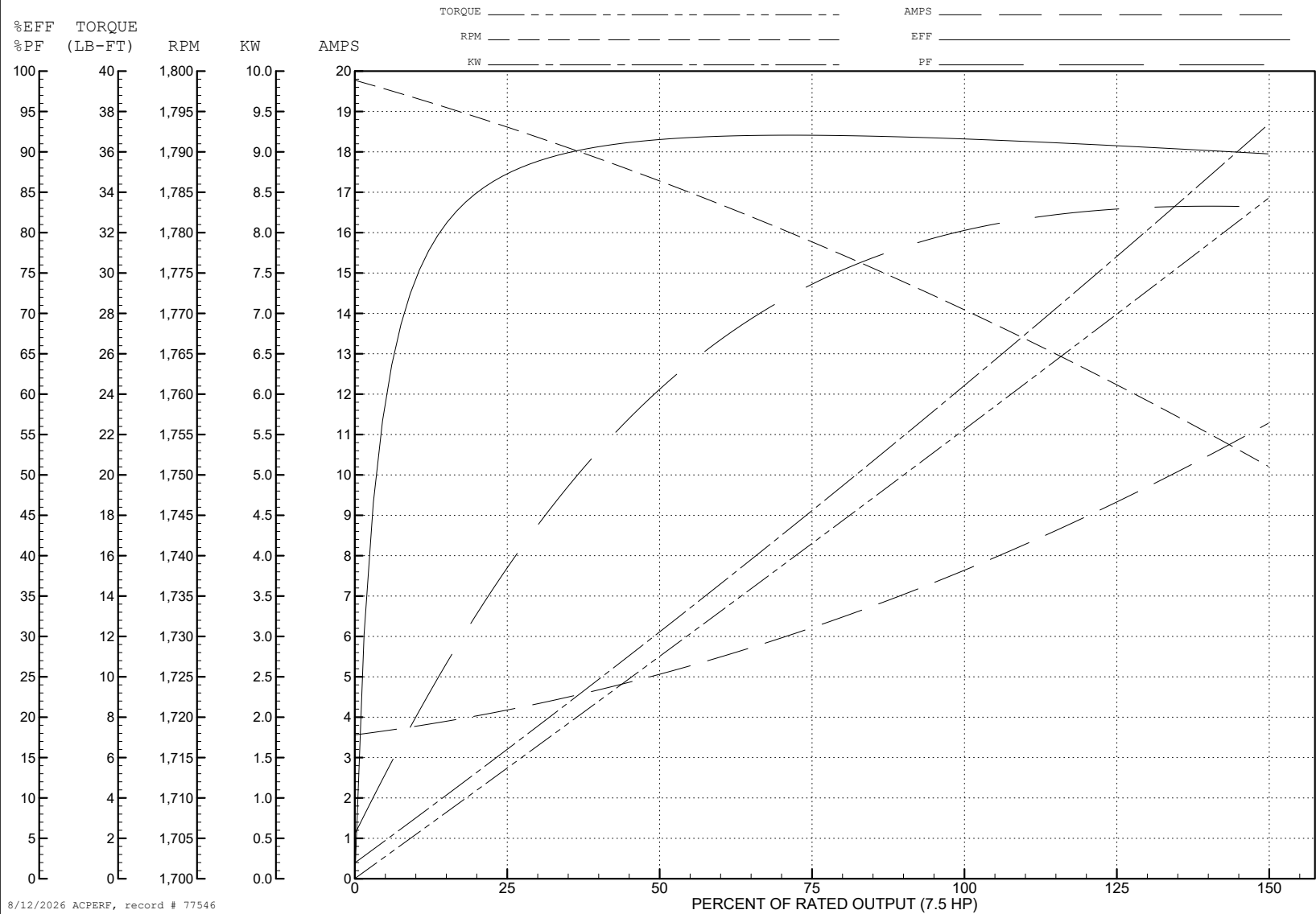
ABB Motors and Mechanical Inc.

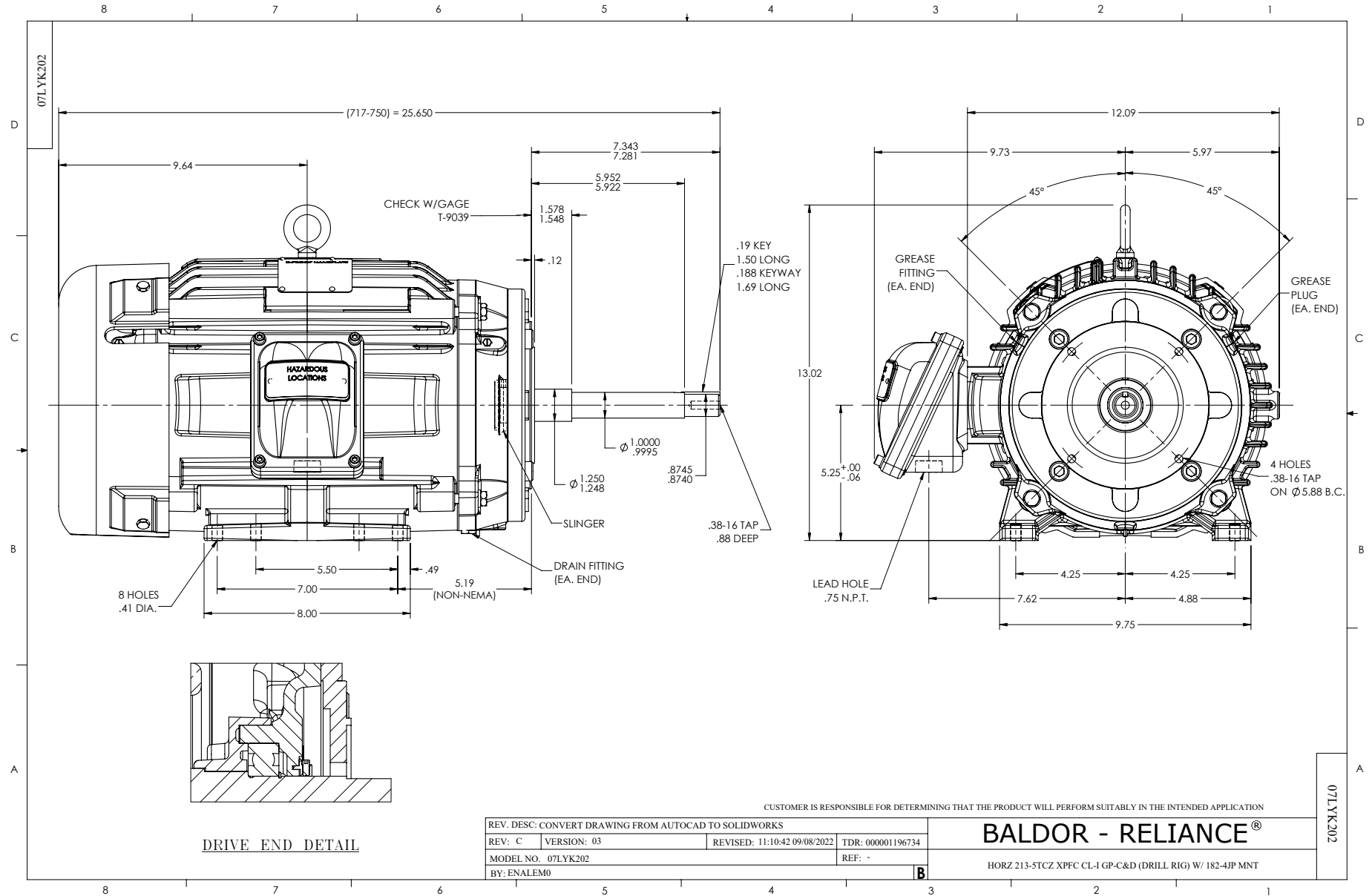
WINDING # 07WGX817

Typical performance - not guaranteed values.

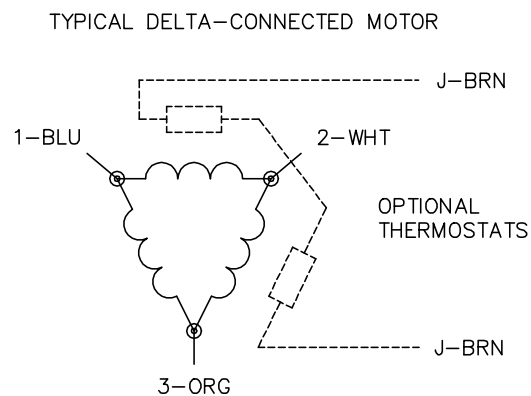
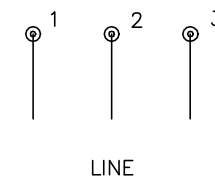
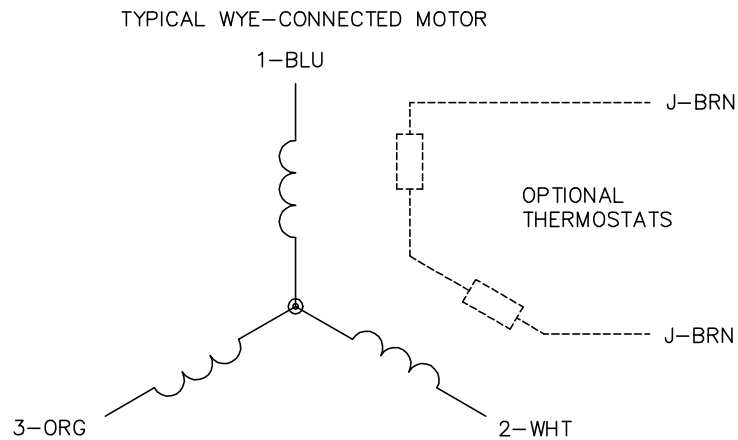
7.5 HP 3 PH 60 HZ 1770 RPM 575 V 0738M

TORQUES (LB-FT): PO=73 PU=33.7 LR=44.4 LRA=58.7





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

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

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

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