

ABB BALDOR RELIANCE III

Customer information packet

EM4108T-G

30HP, 3520RPM, 3PH, 60HZ, 286TS, 0950M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286TS
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	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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
Current @ Voltage	68.000 A @ 230.0 V 74.000 A @ 208.0 V 34.000 A @ 460.0 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
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	L
Type	AC
Mech. spec.	09J963
Base	
Status	PRD/A
Elec. spec.	09WGT474
Layout	09LYJ963
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	11-09-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	34.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0950M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	24.70 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3443LUA												
CAT.NO.	EM4108T-G				CUST. P/N				ENCL			TEFC
SPEC.	09J963T474G1	CC	010A	FRAME	286TS	SER.NO.						
HP	30		CLASS	H	HZ	60						
R.P.M.	3520		PH.	3	DES.	A						
VOLTS	230/460		CODE		J	ODE BRG		6208	DE BRG	6311		
AMPS	68/34											
RATING	40C AMB-CONT		NEMA NOM. EFF.			91.7		GREASE		POLYREX EM		
P.F.	89	SER.F.	1.15		CT6-60H(10:1)VT3-60H(20:1							
USABLE AT	50HZ 30HP 190/380V 82/41A			SF1.0								
VOLTS	AMPS	MAX. SPACE HEATER TEMP.										

Parts List

Part number	Description	Quantity
SA347595	SA 09J963T474G1	1.000 ea
RA336152	RA 09J963T474G1	1.000 ea
09FN3001D01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLOCKWASHER	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
09EP1100A14	FREP ASSM, (FOR INTRL ROUTING PURPOSE)	1.000 ea
HA3400A33	STUD- 3/8-16 X 4.96 HEX	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
09EP1116A01	PU ENDPLATE, MACH	1.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 ea
09FH4000SP	309 FH - BLACK PRIMER	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501G17	KEY, 3/8 SQ X 1.875	1.000 ea
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea

HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3443LUA	SS SUPER-E,CURUS-EEV,NEMA PREM, CC	1.000 ea
40PA1005	PACKAGING GROUP, 09 STD	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 67901

Typical performance - not guaranteed values

Winding: 09WGT474-R003			Type: 0950M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30	Full Load Torque		44.65 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		68/34	Breakdown Torque		173 LB-FT		
R.P.M.		3520	Pull-up Torque		87.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		104 LB-FT	
NEMA Design Code		A	KVA Code	J		Starting Current	283 A
Service Factor (S.F.)		1.15	No-load Current		10.9 A		
NEMA Nom. Eff.		91.7	Power Factor	89		Line-line Res. @ 25°C	0.2527 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		79°C
S.F. Amps			Temp. Rise @ S.F. Load		97°C		
			Locked-rotor Power Factor		28		

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	89	90	91	90
Efficiency	87.7	91.8	92.4	92.1	91.3	90.2	91.6
Speed	3580.7	3562.2	3542.3	3521	3497.7	3471	3507
Line amperes	13.7	19.4	26.4	34.2	42.4	51.3	39.1

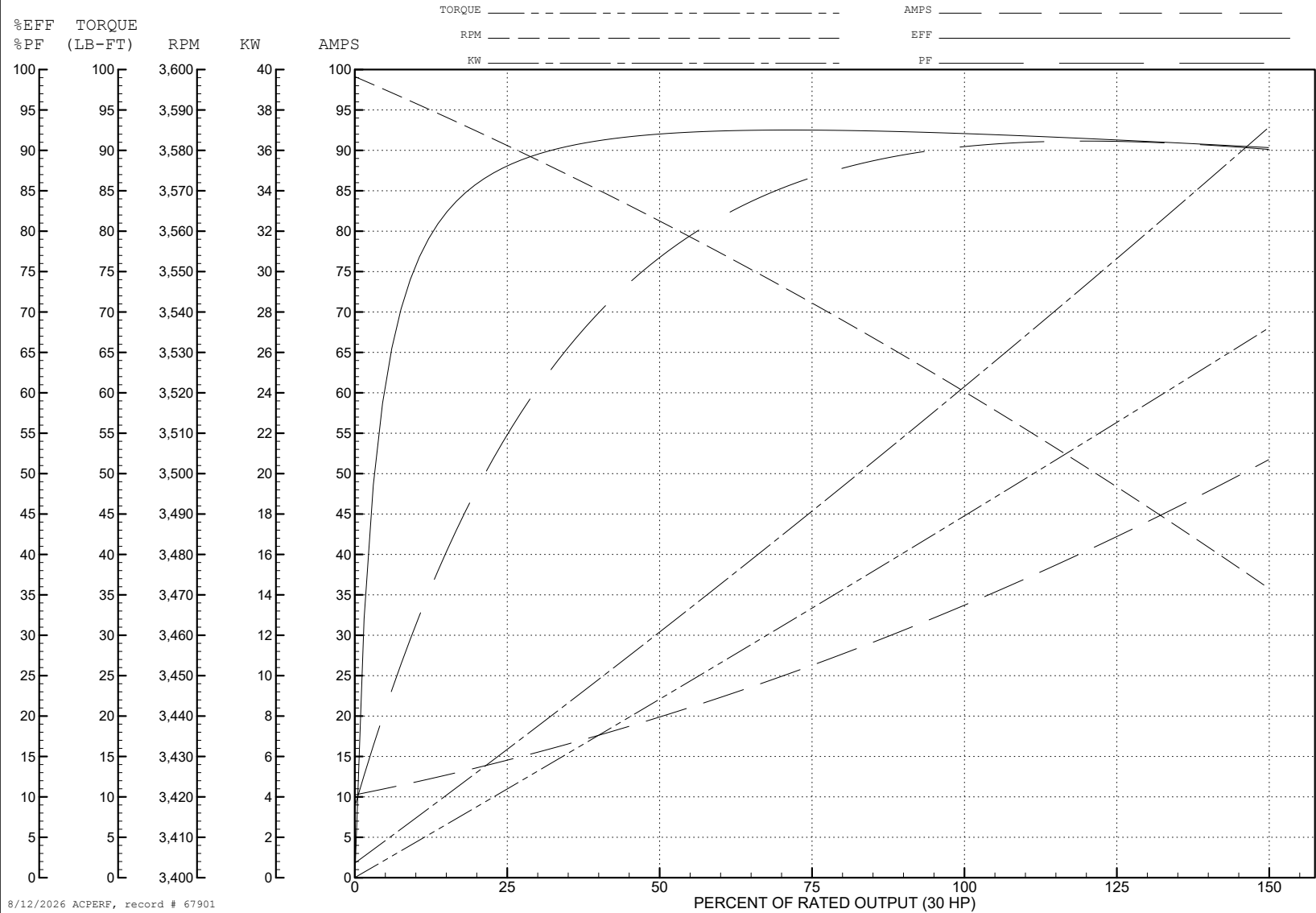
ABB Motors and Mechanical Inc.

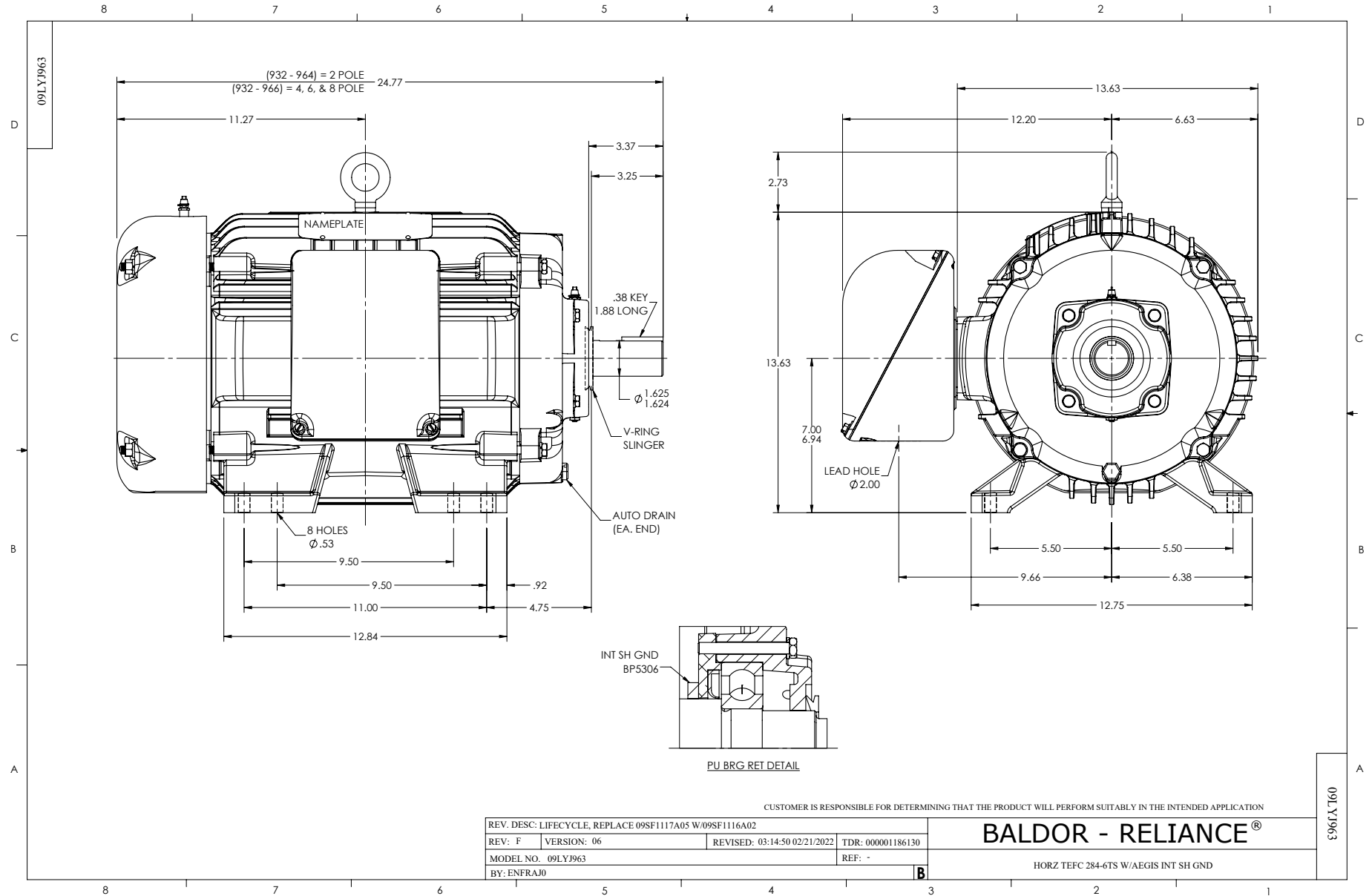
WINDING # 09WGT474

Typical performance - not guaranteed values.

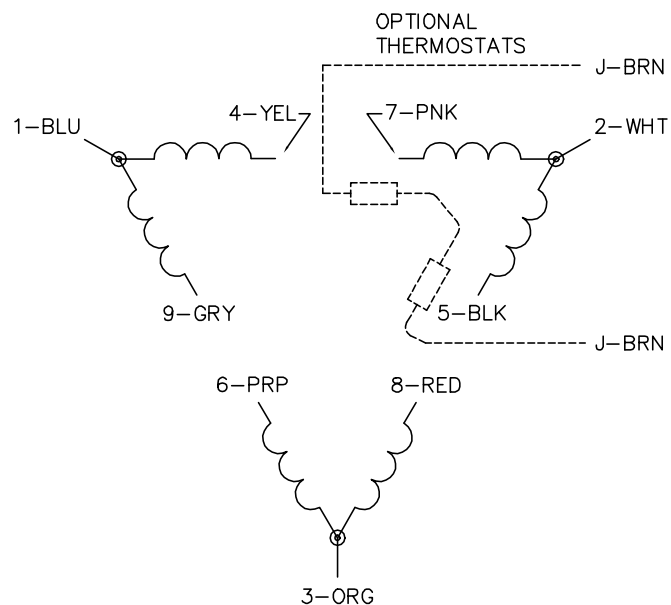
30 HP 3 PH 60 HZ 3520 RPM 460 V 0950M

TORQUES (LB-FT): PO=173 PU=87.6 LR=104 LRA=283

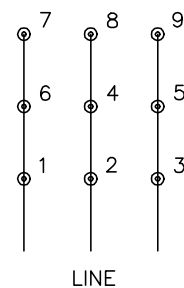




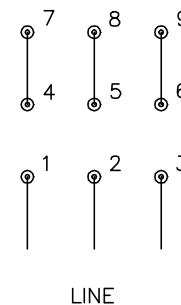
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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