

ABB BALDOR RELIANCE III

Customer information packet

VPECP4114T

52M 2P TEFC VER 326VP CP 32-6 DRIPCOVER

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326VP
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	50.000 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	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	56.000 A @ 460.0 V 122.000 A @ 208.0 V 112.000 A @ 230.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	G
Type	AC
Mech. spec.	12K58
Base	
Status	PRD/A
Elec. spec.	12WGY291
Layout	12LYK058
Eff. date	12-09-2025
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	05-29-2018

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	34.71 IN
Power Factor	90
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Thrust
Pulley Shaft Indicator	P-Base Groove & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3540 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate
NP3241

CAT.NO.	VPECP4114T			P/N						ENCLOSURE		TEFC				
SPEC.	12K058Y291G2			CC	010A	FRAME		326VP		S/N						
HP	50				CLASS		F	HZ	60	DES	A					
RPM	3540				RPM MAX		5400		PH	3	KVA-CODE		H			
VOLT	230/460				MOTOR WEIGHT				587							
AMP	112/56				SER.F.		1.15		PF	90	ODE BRG		6311	DE BRG	7311	
RATING	40C AMB-CONT				NEMA-NOM-EFF				93		GREASE		POLYREX EM			
									INV.TYPE		PWM					
TEMP CODE	T3	INVERTER-TEMP-CODE			200											
TEMP =	200	C HP FR	60		C HP TO		90									
CT HZ FROM	6	CT HZ TO			60											
HTR-VOLTS		HTR-AMPS			HTR-WATTS			MAX. SPACE HEATER TEMP.					VT HZ FROM	3	VT HZ TO	60

Parts List

Part number	Description	Quantity
SA356369	SA 12K058Y291G2	1.000 ea
RA345315	RA 12K058Y291G2	1.000 ea
37FN3002C04	EXFN, PLASTIC, 6.00 OD, 2.003 ID	1.000 ea
10CB1000A16P	KOBX, MACH 2.00 NPT W/#26 DRAIN W/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
10XN2520K08	1/4-20 X .50 GRADE #5, STL, ZINC PLATE	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA3400A18	STUD .50-13 X 7.50L W/4.19L HEX WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 ea
10XN3118K72	5/16-18 X 4.50" HEX HD, GRADE 5	2.000 ea
12EP1502A04P	PULLEY ENDPLATE, MACH. W/EPOXY PRIMER	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
10XN5013K40	1/2-13X 2 1/2 HEX HD X	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
12FH1002A08P	FAN COVER, MACH W/EPOXY PRIMER	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HW3203A02	1/2-13 HVY FORGED EYE-NUT	2.000 ea
12FH1500A01P	MACH DRIP COVER 310-312 MTRS	1.000 ea
10XN3816K36	3/8-16 X 2.25 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10CB1503P	CONDUIT BOX LIPPED, 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
HW2501G32	KEY, 3/8 SQ X 3.750	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	3.000 ea
10XN5013K10	1/2-13 X .625 HEX HD, GRADE 5	3.000 ea
12EP1107A14GP6	FREP, MACH W/EPOXY PRIMER & MG1025N19	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.080 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	1.000 ea
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.030 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3241	SS SUPER-E INV UL CSA-EEV PREM CC	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
18PA1080	PKG. GRP 312 VERT 14.75BC 4.9SH 40X30X30	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 70997

Typical performance - not guaranteed values

Winding: 12WGY291-R044			Type: 1252M	Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50	Full Load Torque		74.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		112/56	Breakdown Torque		292 LB-FT		
R.P.M.		3540	Pull-up Torque		112 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		139 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		408 A
Service Factor (S.F.)		1.15		No-load Current		14.9 A	
NEMA Nom. Eff.		93	Power Factor	90	Line-line Res. @ 25°C		0.11257 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		77°C	
S.F. Amps				Temp. Rise @ S.F. Load		95°C	
				Locked-rotor Power Factor		20.9	
				Rotor inertia		4.07 lb-ft²	

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	66	82	88	90	91	90	91
Efficiency	91.1	93.8	94.2	93.9	93.2	92.3	93.5
Speed	3584.1	3571.8	3558.2	3544.1	3528.2	3511.2	3535
Line amperes	20.4	30.8	42.9	55.8	69.5	84.6	64

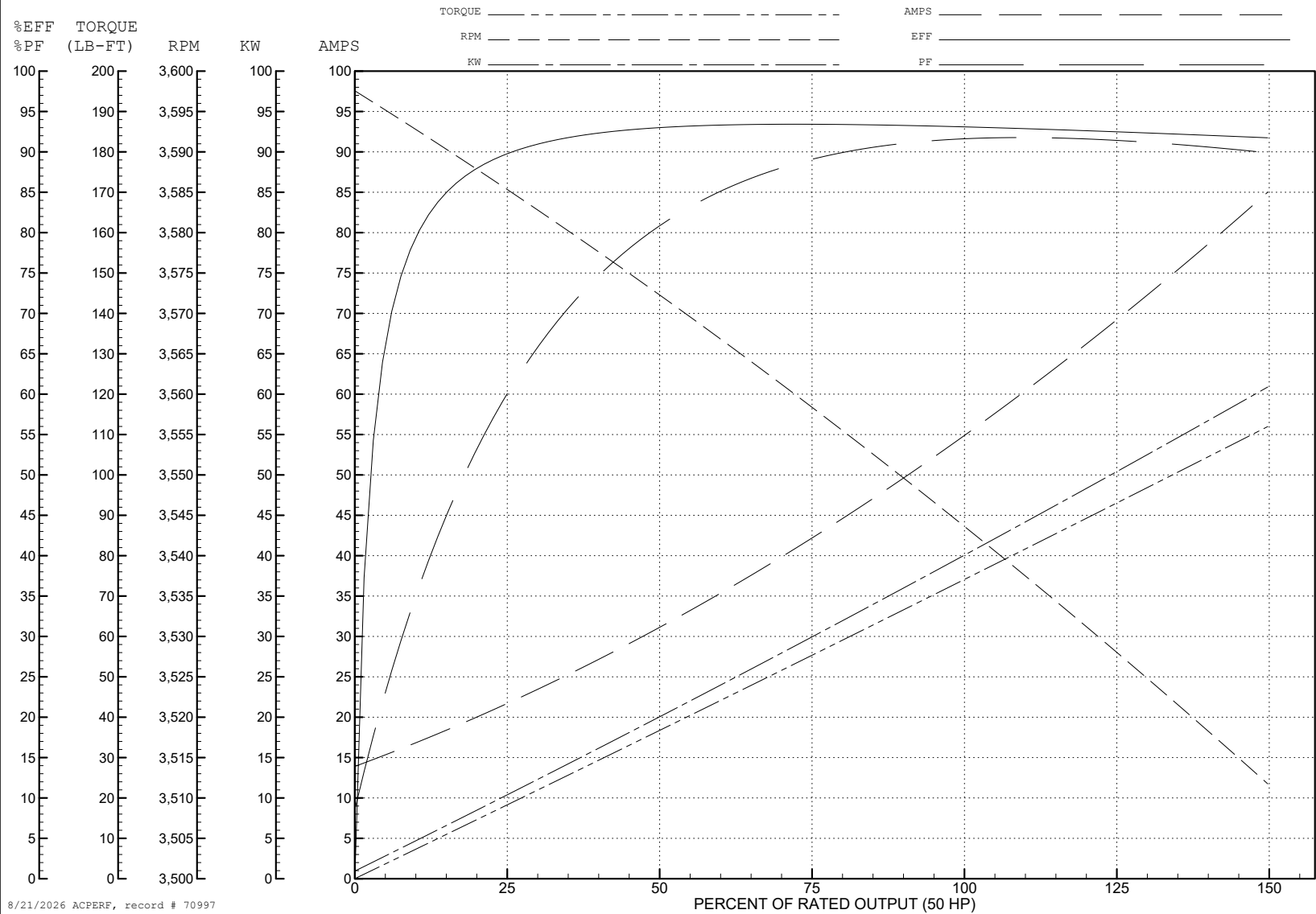
ABB Motors and Mechanical Inc.

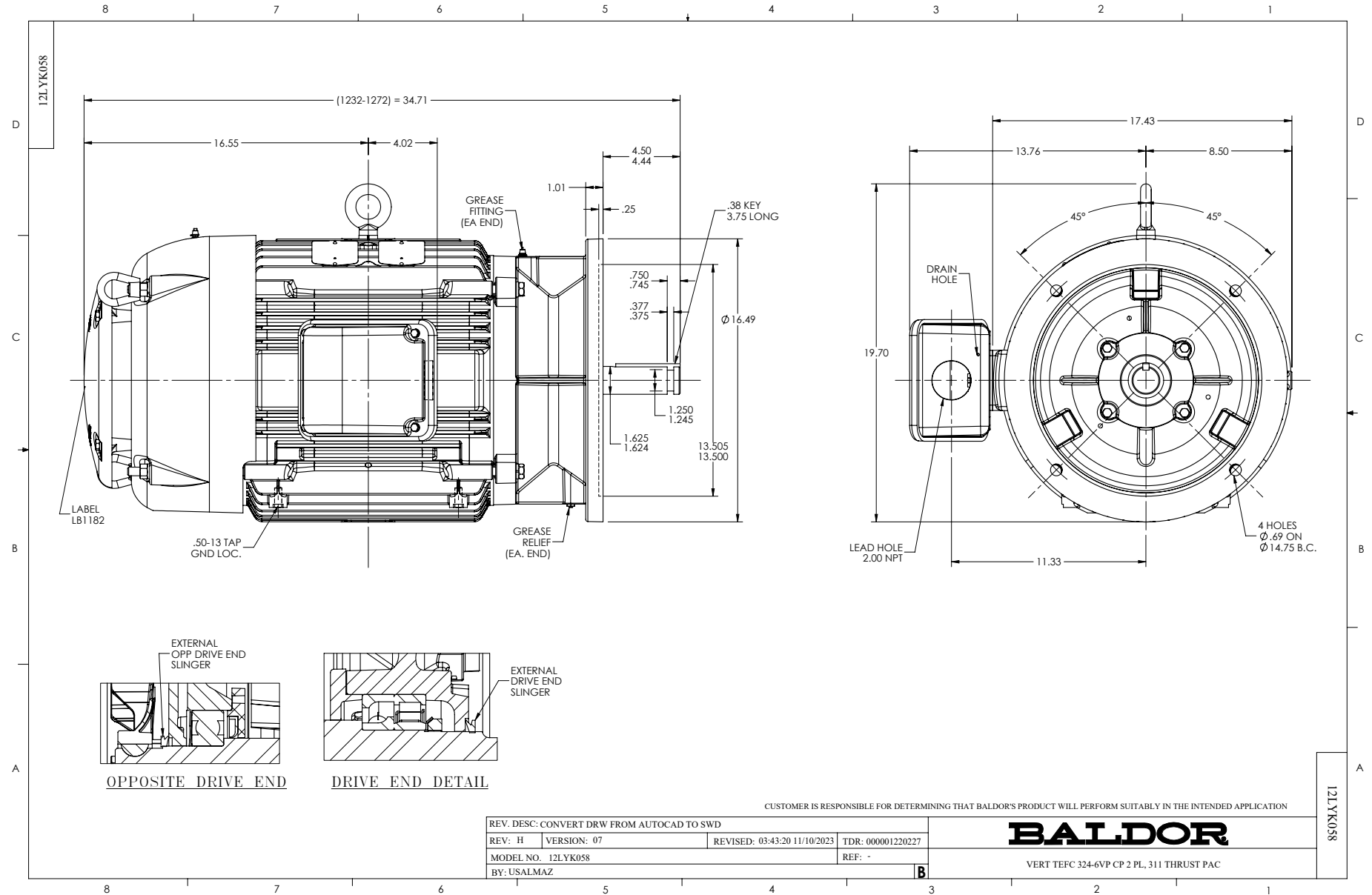
WINDING # 12WGY291

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

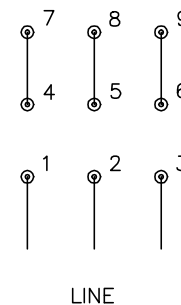
TORQUES (LB-FT): PO=292 PU=112 LR=139 LRA=408





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.

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

SH 1 of 1

CD0180