

ABB BALDOR RELIANCE III

Customer information packet

EM4312T-G

50HP, 1185RPM, 3PH, 60HZ, 365T, A3668M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	365T
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	62.000 A @ 460.0 V 132.000 A @ 208.0 V 124.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	62.0 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4262
Layout	617428-021
Eff. date	05-23-2025
CD Diagram	416820-002
Poles	06
Leads	3#4,6#6
Proprietary	False
Created date	09-30-2022

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A3668M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	33.48 IN
Power Factor	81
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1185 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate
NP3979LUA

CAT #		EM4312T-G				SER				CC		010A															
SPEC		A36-8071-4262				RATING		40C AMB-CONT																			
HZ		VOLTS		AMPS		RPM		HP		CODE		SF		DES		PF		NEMA NOM. EFF									
60		230/460		124/62		1185		50		G		1.15		B		81 %		94.1 %									
		-														% %		% %									
PH		3		CL H		MAX CORR KVAR		15.8																			
BRG		DE		6313		ODE		6313		ENCL		TEFC		FR		365T		54									
GREASE		POLYREX EM										MTR WT		908		LBS											
USABLE AT		50HZ 40HP 190/380V 120/60A										SF1.0															
INVERTER DUTY		CT		15-60		HZ		4:1		VT		3-60		HZ		20:1		CHP		60-90		HZ		1.5:1		1.0 SF VPWM	
MAX RPM		1800		SFA 142/71																							

Parts List

Part number	Description	Quantity
SA407915	SA A36-8071-4262	1.000 ea
RA399432	RA A36-8071-4262	1.000 ea
421948032	LABEL, MYLAR	1.000 ea
NP3979LUA	SS SUPER-E UR CSA-C-US-EEV NEMA PREM CC	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
085922073B	BRKT 360 085922072WCC KB	1.000 ea
415072001B	CLAMP	1.000 ea
078559001A	+FANCV - 360	1.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
702676001C	FAN 360	1.000 ea
004824015A	GREASE POLYREX EM	0.540 lb
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018008AK	HHCS 1/4-20X1 PLATED	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
410700004F	WSHR	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
415045002E	SLGR	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
085922073B	BRKT 360 085922072WCC KB	1.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
077176000L	C/BOX, PAINTED 440	1.000 ea
BP5327	SHAFT GRD BRUSH (SGR-74.7-3CFHAT2)	1.000 ea
077176001A	CBOX Cover 360-400	1.000 ea

043292000AJ	GASK 320-400	1.000 ea
402731001A	GASK 360-440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.250 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180034HA	KEY 5/8X5/8X4-1/4 L	1.000 ea
HW1000A32	5/16 FL WASHER WIDE,ID=.344,OD=1.125	3.000 ea
032509020C	CARRIAGE BOLT - 360	3.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea

AC Induction Motor performance data

Record #95972 - Typical performance - not guaranteed values

Winding	A36WG4262
Type	A3668M
Enclosure	TEFC

Nameplate data

Rated Output	50
Volts	230 / 460
Full Load Amps	124 / 62
R.P.M.	1185
Hz	60
Phase	3
KVA Code	G
S.F.	1.15
NEMA Nom. Eff.	94.1
Power Factor	81
Duty	CONT
S.F. Amps	

460 V. 60 Hz:

High Voltage Connection

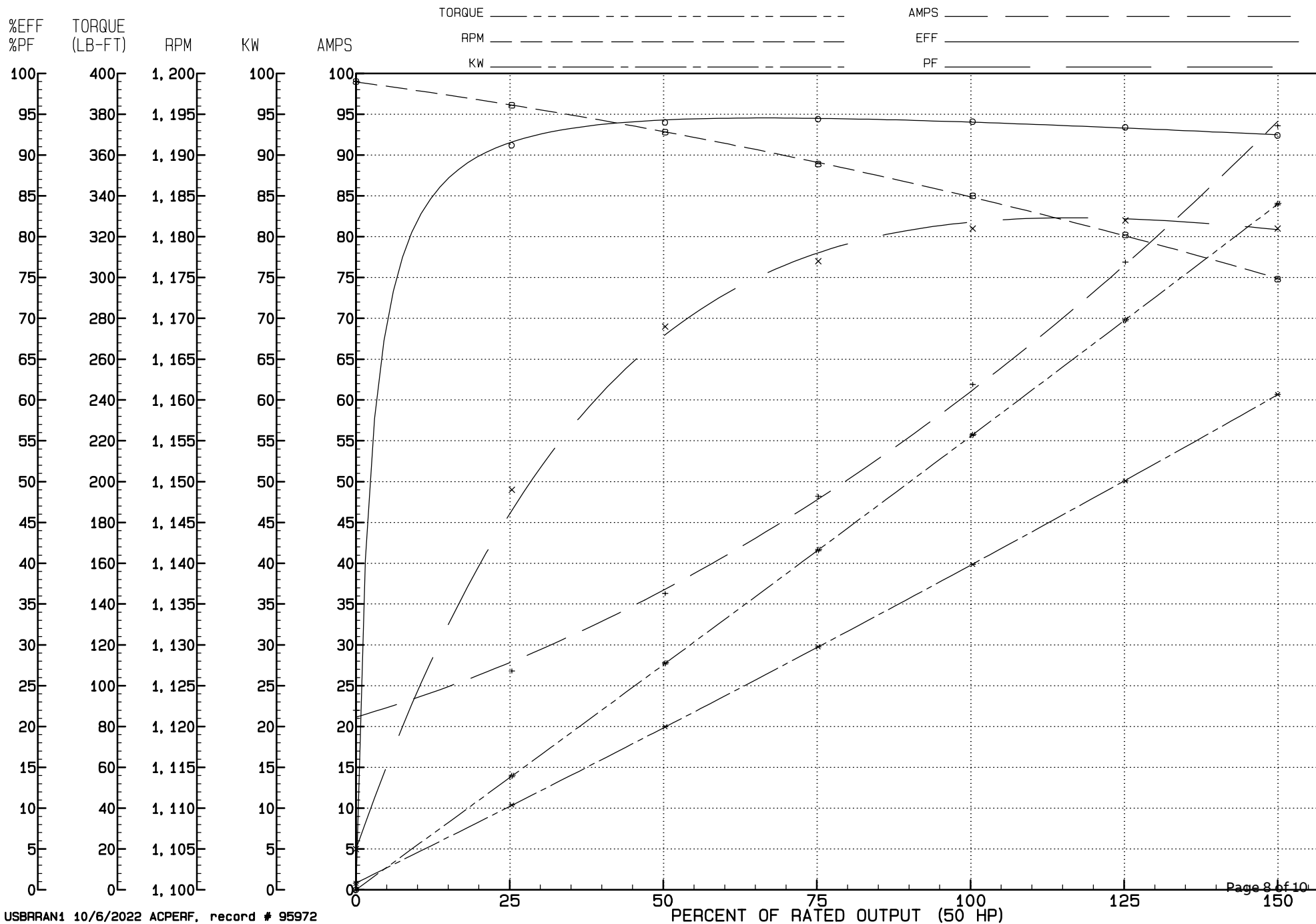
Full Load Torque	222.9 LB-FT
Start Configuration	direct on line
Breakdown Torque	540 LB-FT
Pull-up Torque	319 LB-FT
Locked-rotor Torque	394 LB-FT
Starting Current	366 A
No-load Current	22
Line-line Res. @ 25°C	0.11998 Ω
Temp. Rise @ Rated Load	64°C
Temp. Rise @ S.F. Load	79°C
Locked-rotor Power Factor	28
Rotor inertia	22 lb-ft ²

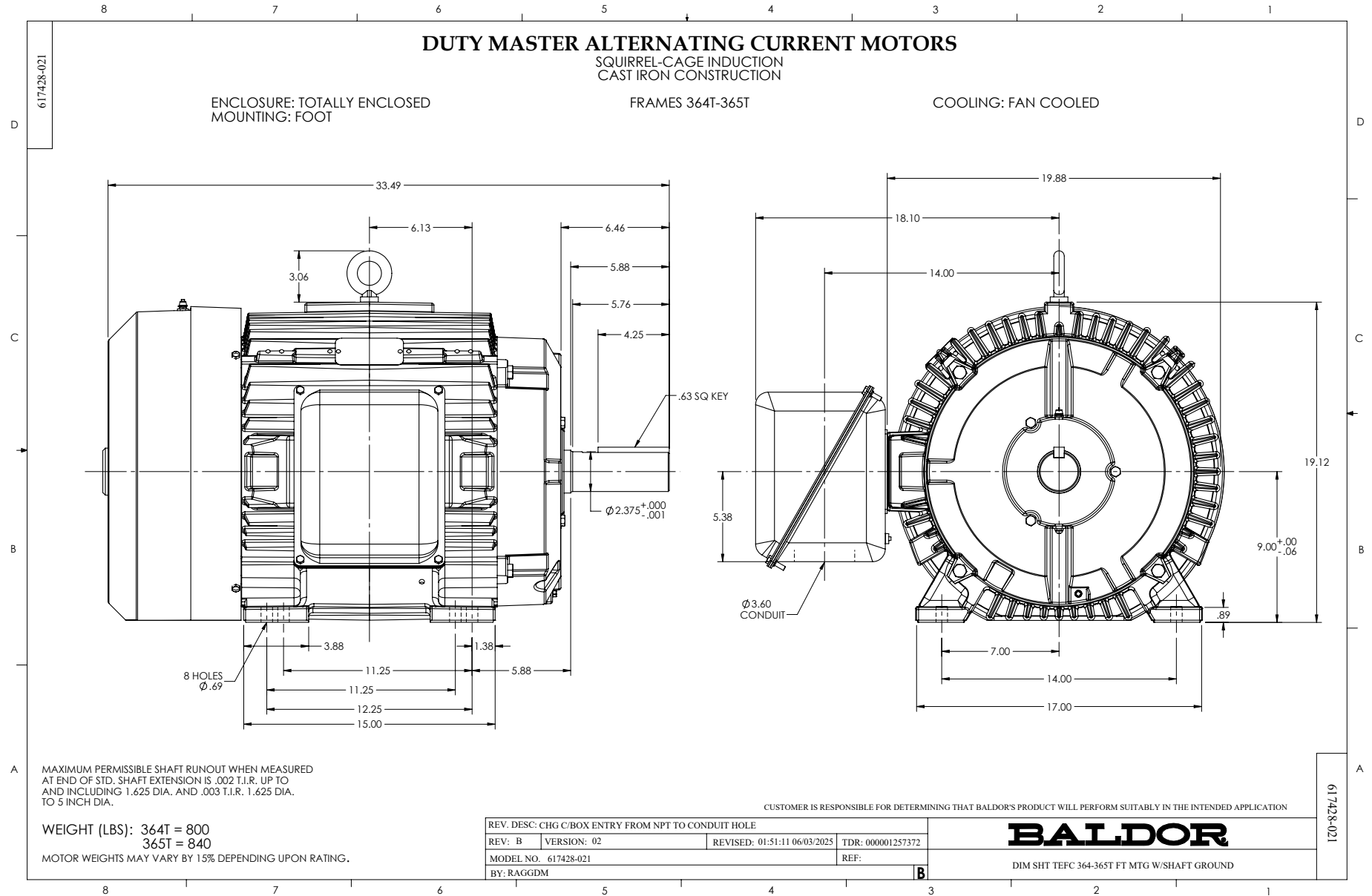
Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	49	69	77	81	82	81	82
Efficiency	0	91.2	94	94.4	94.1	93.4	92.4	93.7
Speed	1199	1196.1	1192.8	1188.9	1185	1180.2	1174.8	1182
Line amperes	22	26.8	36.3	48.2	61.9	76.9	93.6	70.9

50 HP 3 PH 60 HZ 1185 RPM 460 V A3668M

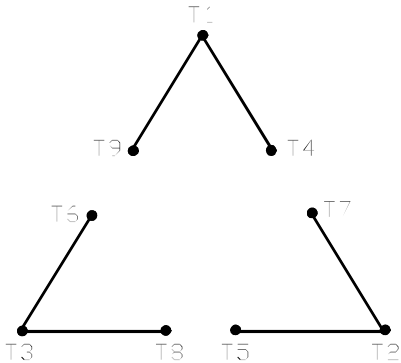
TORQUES (LB-FT): PO=540.00 PU=319.00 LR=394.00 LRA=366.00





416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
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BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
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