

ABB BALDOR RELIANCE III

Customer information packet

FDEM4316T-5

75HP, 1780RPM, 3PH, 60HZ, 365T, A36070M, TEFC

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	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV UR NEMA PREMIUM (OLD LOGO) NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	86.000 A @ 460.0 V 188.000 A @ 208.0 V 172.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	86.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4076
Layout	617428-032
Eff. date	07-24-2025
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	07-23-2025

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.47 IN
Power Factor	86
Product Family	FARM DUTY
Pulley End Bearing Type	Ball
Service Factor	1.15
Shaft Diameter	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

NP3159L

SPEC NO.	A36-0050-4078			CAT.NO.	FDEM4316T-5					FRAME	365T	
HP	75	VOLTS	230/460		PHASE	3	DESIGN	B	TYPE	P		
RPM	1780	AMPS	172/86		HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	65BC03JGG30A		DUTY	CONT	INSUL.CLASS		F					
OPP D.E. BEARING	65BC03JGG30A		ENCL	TEFC	CODE	G						
SER.NO.				POWER FACTOR	86	NEMA-NOM-EFFICIENCY					95.4	
					MAX CORR KVAR				15.8	GUARANTEED EFFICIENCY		94.5
					NEMA NOM/CSA QUOTED EFF							
										MOTOR WEIGHT		965

Parts List

Part number	Description	Quantity
SA439840	SA A36-0050-4078	1.000 ea
RA432232	RA A36-0050-4078	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP3159L	SUPER-E FARM DUTY, SS, CC, CSA-C US,	1.000 ea
085922073B	BRKT 360 085922072WCC KB	1.000 ea
415072001B	CLAMP	1.000 ea
078559042CA	FAN CVR E360 TEFC	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
415045002E	SLGR	1.000 ea
410700004F	WSHR	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
085922093AE	BRKT 360 085922072WCC	1.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
415045002E	SLGR	1.000 ea
415028001Y	SEAL - 360	1.000 ea
423709011C	WASHER	3.000 ea

077176000L	C/BOX, PAINTED 440	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
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
MG1025C02	WILKOFASST SG, 787.105, TAN	0.380 ga
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180034HA	KEY 5/8X5/8X4-1/4 L	1.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea
HW1000A32	5/16 FL WASHER WIDE,ID=.344,OD=1.125	3.000 ea
032509020C	CARRIAGE BOLT - 360	3.000 ea

AC Induction motor performance data

Record #71910 - Typical performance - not guaranteed values

Winding	A36WG4076
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output	75
Volts	230 / 460
Full Load Amps	172 / 86
R.P.M.	1780
Hz	60
Phase	3
KVA Code	G
S.F.	1.15
NEMA Nom. Eff.	95.4
Power Factor	86
Duty	CONT
S.F. Amps	

460 V. 60 Hz:

High Voltage Connection

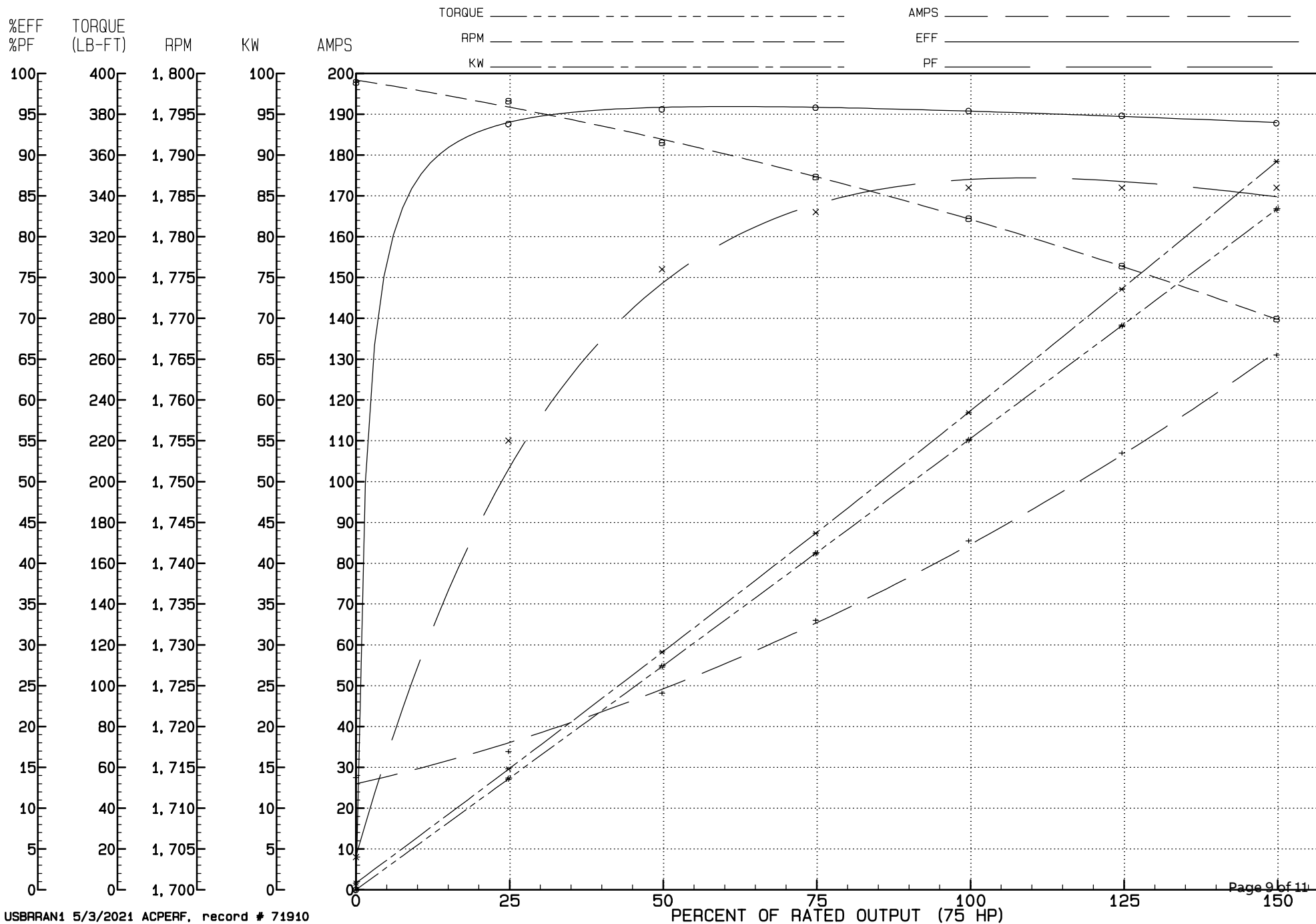
Full Load Torque	220.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	618 LB-FT
Pull-up Torque	341 LB-FT
Locked-rotor Torque	434 LB-FT
Starting Current	545 A
No-load Current	27.5
Line-line Res. @ 25°C	0.081965 Ω
Temp. Rise @ Rated Load	60°C
Temp. Rise @ S.F. Load	75°C
Locked-rotor Power Factor	31.8
Rotor inertia	0

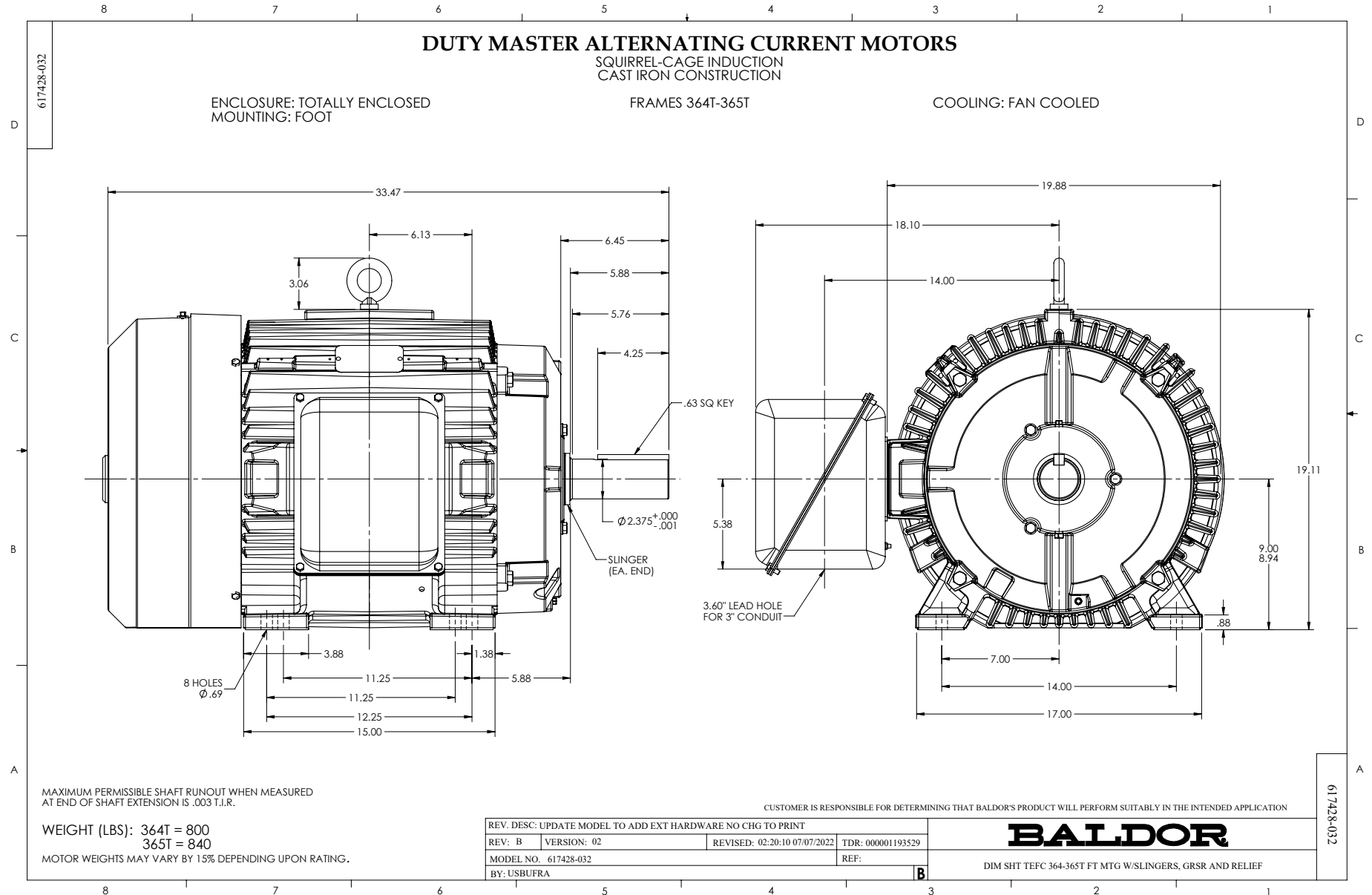
Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	55	76	83	86	86	86	86
Efficiency	0	93.8	95.6	95.8	95.4	94.8	93.9	95
Speed	1798.9	1796.6	1791.5	1787.3	1782.2	1776.4	1769.9	1779
Line amperes	27.5	33.9	48.2	66	85.5	107	131	98.4

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

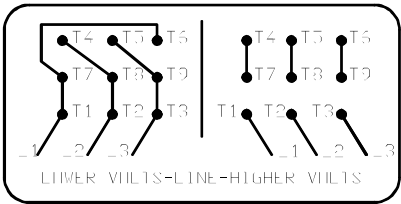
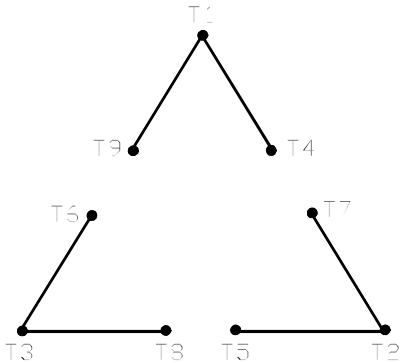
TORQUES (LB-FT): PO=618.00 PU=341.00 LR=434.00 LRA=545.00





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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