

ABB BALDOR RELIANCE III

Customer information packet

EM4316TS

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	365TS
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 CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
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	X
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4076
Layout	617428-076
Eff. date	02-13-2025
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	12-17-2010

KVA Code	G
Lifting Lugs	No Lifting Lugs
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	31.36 IN
Power Factor	86
Product Family	Other
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	1.875 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 - Bearing	None
Thermal Device - Winding	None

Nameplate
NP3979LUA

CAT #		EM4316TS				SER				CC		010A				
SPEC		P36G3434				RATING		40C AMB-CONT								
HZ		VOLTS		AMPS		RPM		HP	CODE	-	SF	DES	PF	NEMA NOM. EFF		
60		230/460		172/86		1780		75	G		1.15	B	86	%	95.4	%
		-												%		%
PH	3	CL	F	MAX CORR KVAR		15.8										
BRG		DE	6313	ODE	6313	ENCL	TEFC	FR	365TS			IP54				
GREASE		POLYREX EM								MTR WT		903	LBS			
USABLE AT		50HZ 60HP 190/380V 168/84A								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		2700														

Parts List

Part number	Description	Quantity
SA213587	SA P36G3434	1.000 ea
RA200807	RA P36G3434	1.000 ea
421948032	LABEL, MYLAR	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP3979LUA	SS SUPER-E UR CSA-C-US-EEV NEMA PREM CC	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
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
085922073B	BRKT 360 085922072WCC KB	1.000 ea
415045002E	SLGR	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
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
MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.250 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 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
034180016GA	KEY 1/2X1/2X2 L	1.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea

Accessories

Part number	Description	Multiplier
K36G2	C-FACE KIT	A8
085922068B	BRKT,E360,D-FLG,313,FINISHED-TURNED	P1

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

REVIEW

**ABB BALDOR
RELIANCE III**

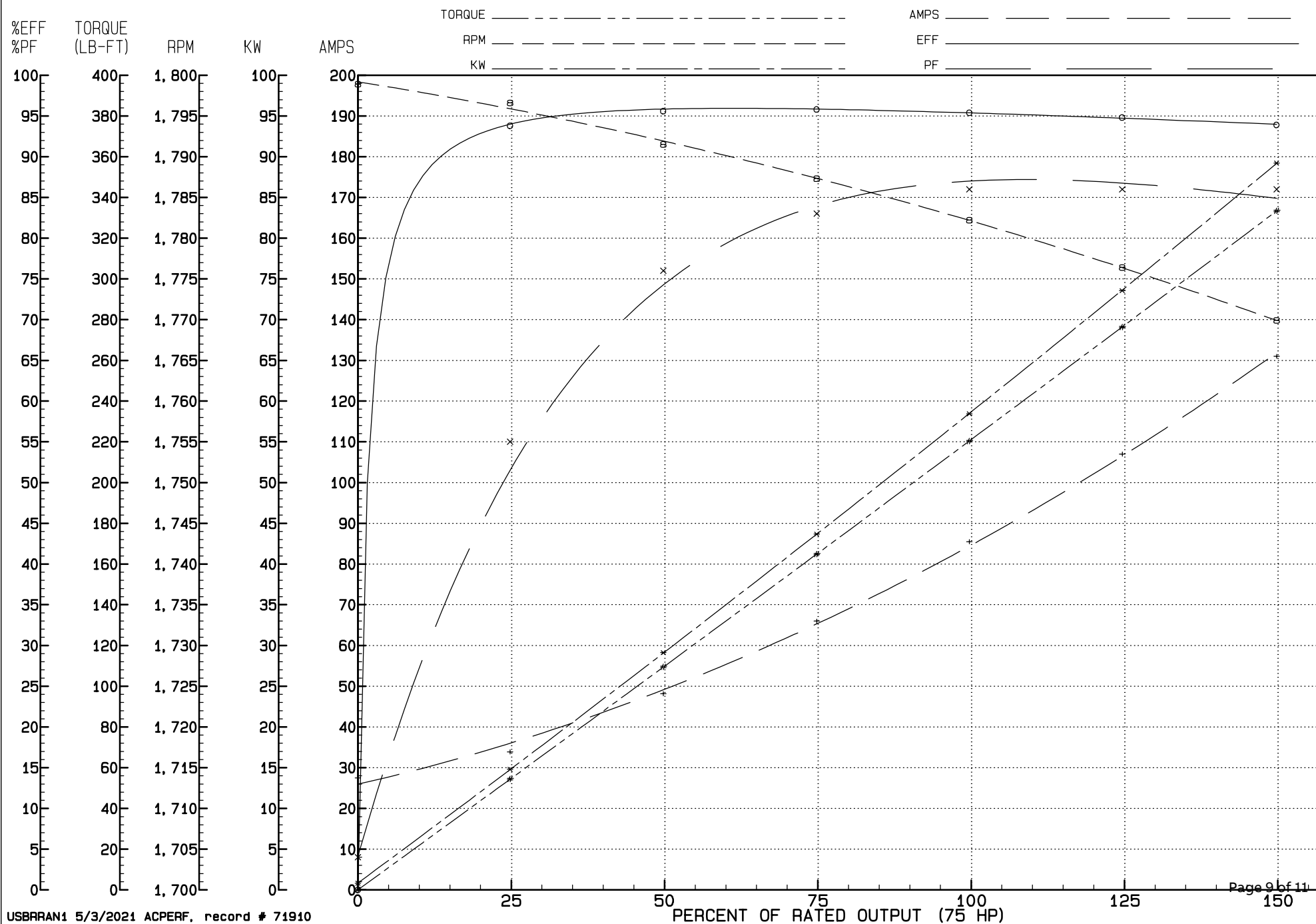
CUSTOMER INFORMATION PACKET

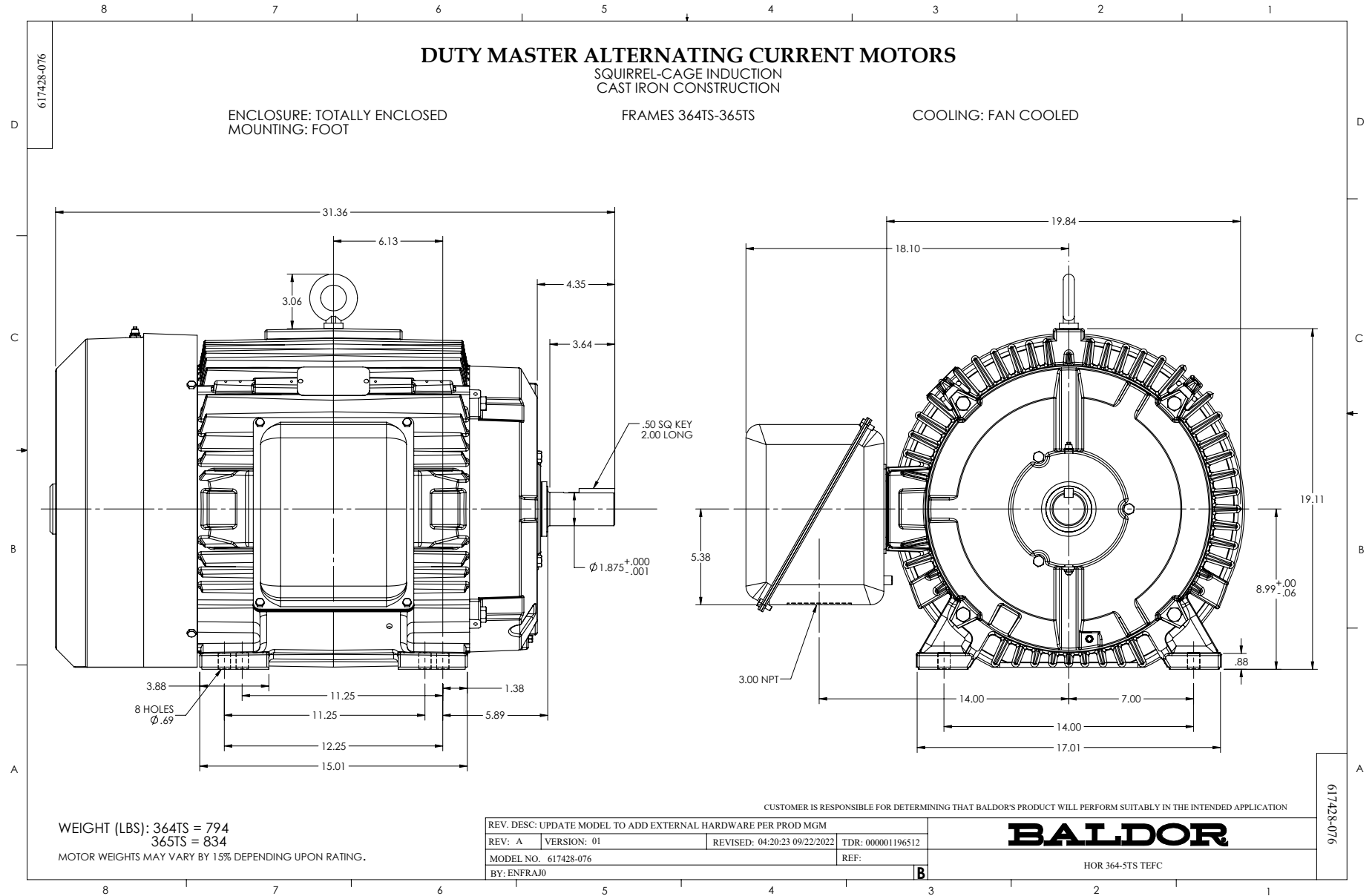
EM4316TS - 75HP, 1780RPM, 3PH, 60HZ, 365TS, A36070M, TEFC

WINDING # A36WG4076

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

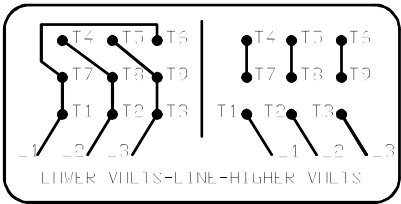
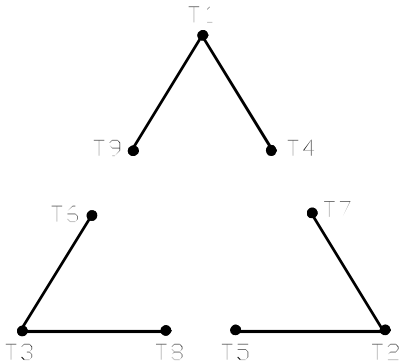
TORQUES (LB-FT): PO=618.00 PU=341.00 LR=434.00 LRA=545.00





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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