

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																							

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

REVIEW

**BALDOR
RELIANCE**

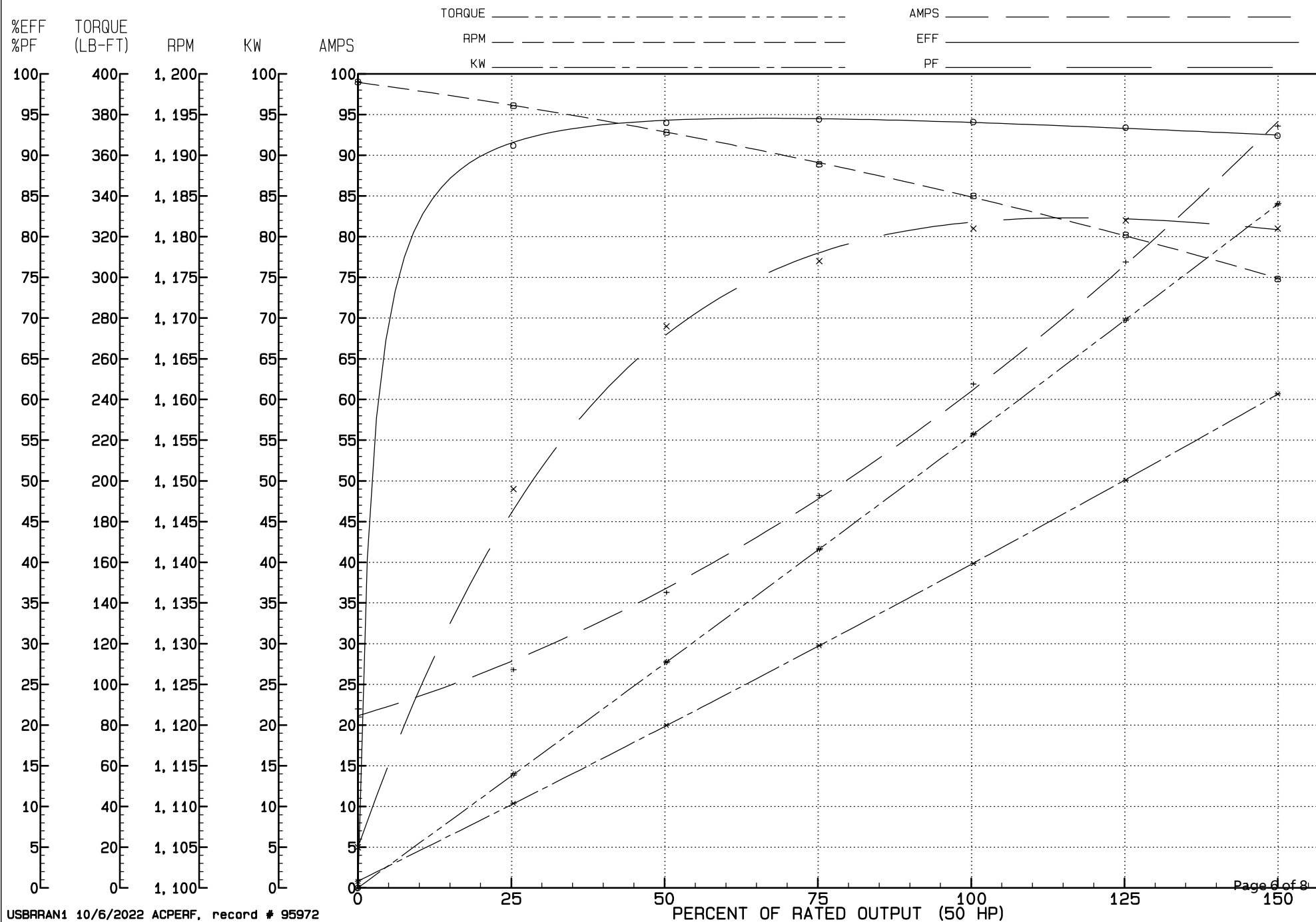
CUSTOMER INFORMATION PACKET

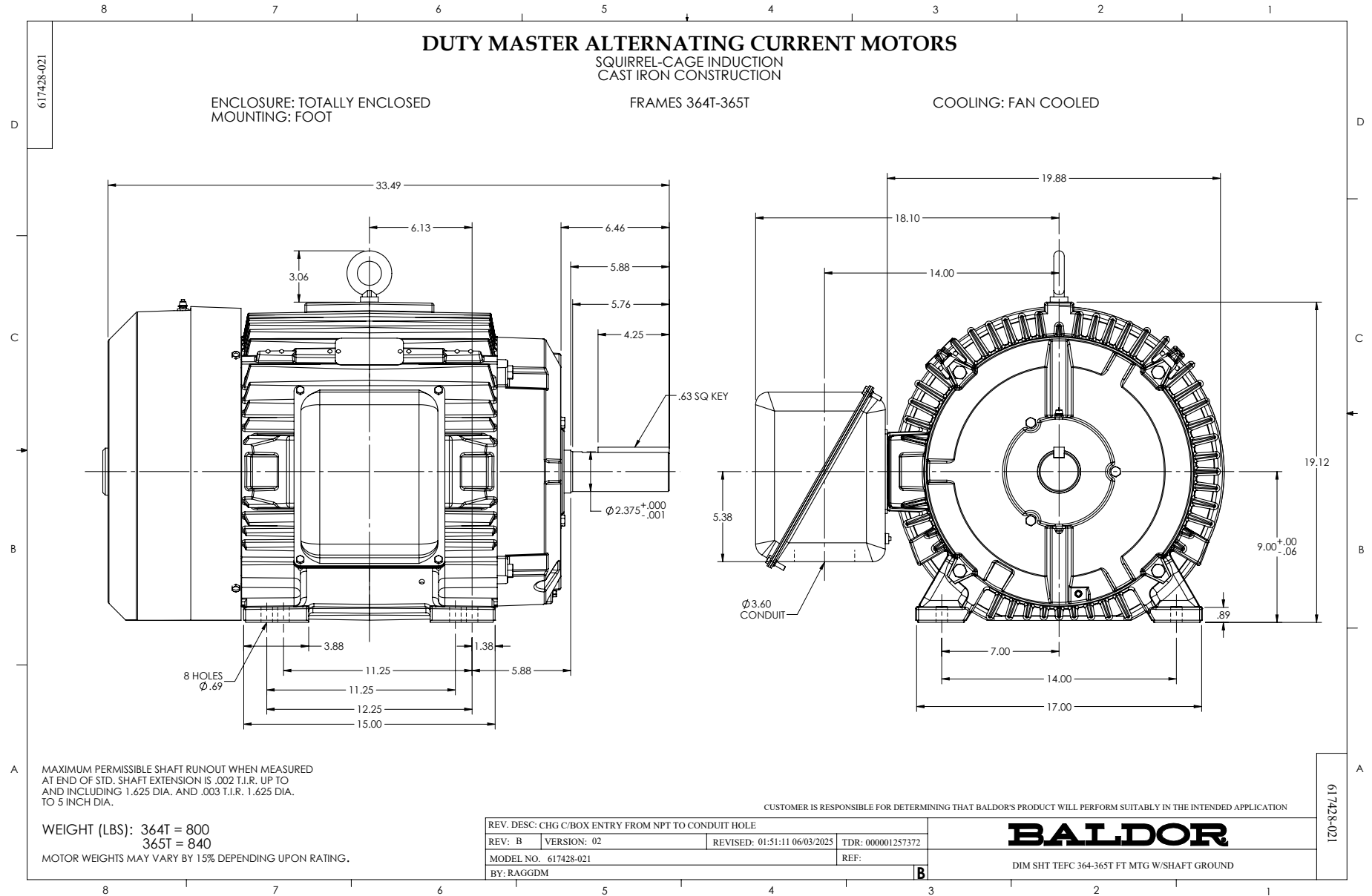
EM4312T-G - 50HP, 1185RPM, 3PH, 60HZ, 365T, A3668M, TEFC, F

WINDING # A36WG4262

50 HP 3 PH 60 HZ 1185 RPM 460 V A3668M

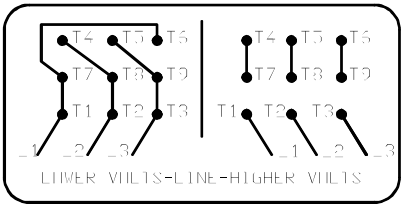
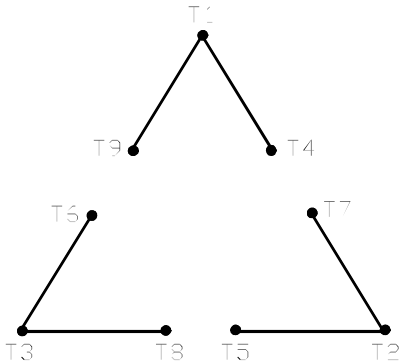
TORQUES (LB-FT): PO=540.00 PU=319.00 LR=394.00 LRA=366.00





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
SH 1 of 1

416820-002