

**BALDOR • RELIANCE**

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# 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
Auxillary 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	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4262
Layout	617428-021
Eff. date	07-08-2024
CD Diagram	416820-002
Poles	06
Leads	3#4,6#6
Proprietary	False
Created date	09-30-2022

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

**Nameplate**

**NP3979LUA**

<b>CAT #</b>	EM4312T-G		<b>SER</b>			<b>CC</b>	010A						
<b>SPEC</b>	A36-8071-4262		<b>RATING</b>	40C AMB-CONT									
<b>HZ</b>	<b>VOLTS</b>		<b>AMPS</b>	<b>RPM</b>	<b>HP</b>	<b>CODE</b>	<b>SF</b>	<b>DES</b>	<b>PF</b>	<b>NEMA NOM. EFF</b>			
60	230/460		124/62	1185	50	G	1.15	B	81 %	94.1 %			
	-								%		%		
<b>PH</b>	3	<b>CL</b>	H	<b>MAX CORR KVAR</b>	15.8								
<b>BRG</b>	<b>DE</b>	6313	<b>ODE</b>	6313	<b>ENCL</b>	TEFC	<b>FR</b>	365T		54			
<b>GREASE</b>	POLYREX EM				<b>MTR WT</b>	908	<b>LBS</b>						
<b>USABLE AT</b>	50HZ 40HP 190/380V 120/60A				<b>SF1.0</b>								
<b>INVERTER DUTY</b>	<b>CT</b>	15-60	<b>HZ</b>	4:1	<b>VT</b>	3-60	<b>HZ</b>	20:1	<b>CHP</b>	60-90	<b>HZ</b>	1.5:1	<b>1.0 SF VPWM</b>
<b>MAX RPM</b>	1800	<b>SFA</b>	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 <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 50 HP

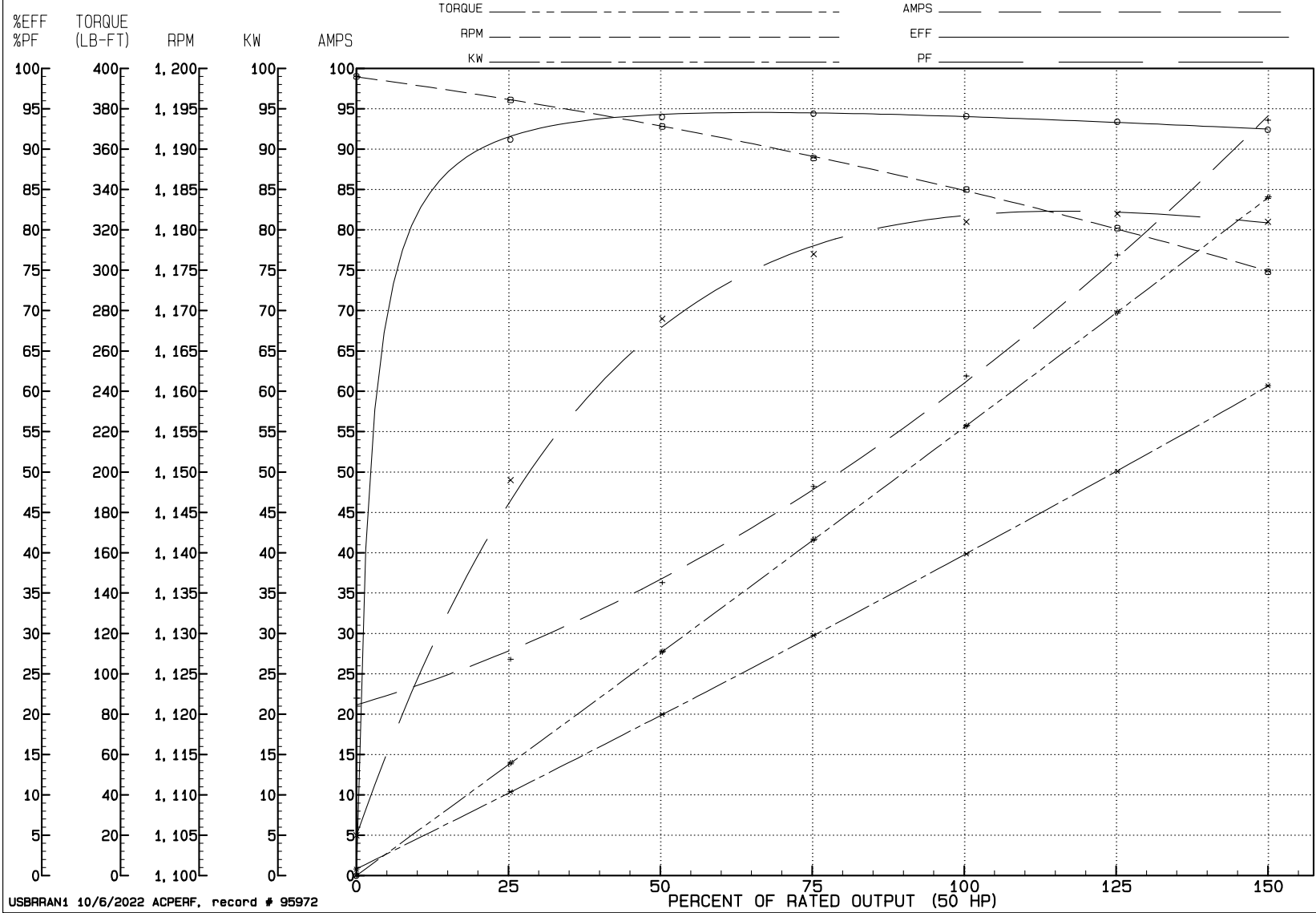
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	49	69	77	81	82	81	82
Efficiency	0	91.2	94	94.4	94.1	93.4	92.4	93.7
Speed	1199	1196.1	1192.8	1188.9	1185	1180.2	1174.8	1182
Line amperes	22	26.8	36.3	48.2	61.9	76.9	93.6	70.9

# REVIEW

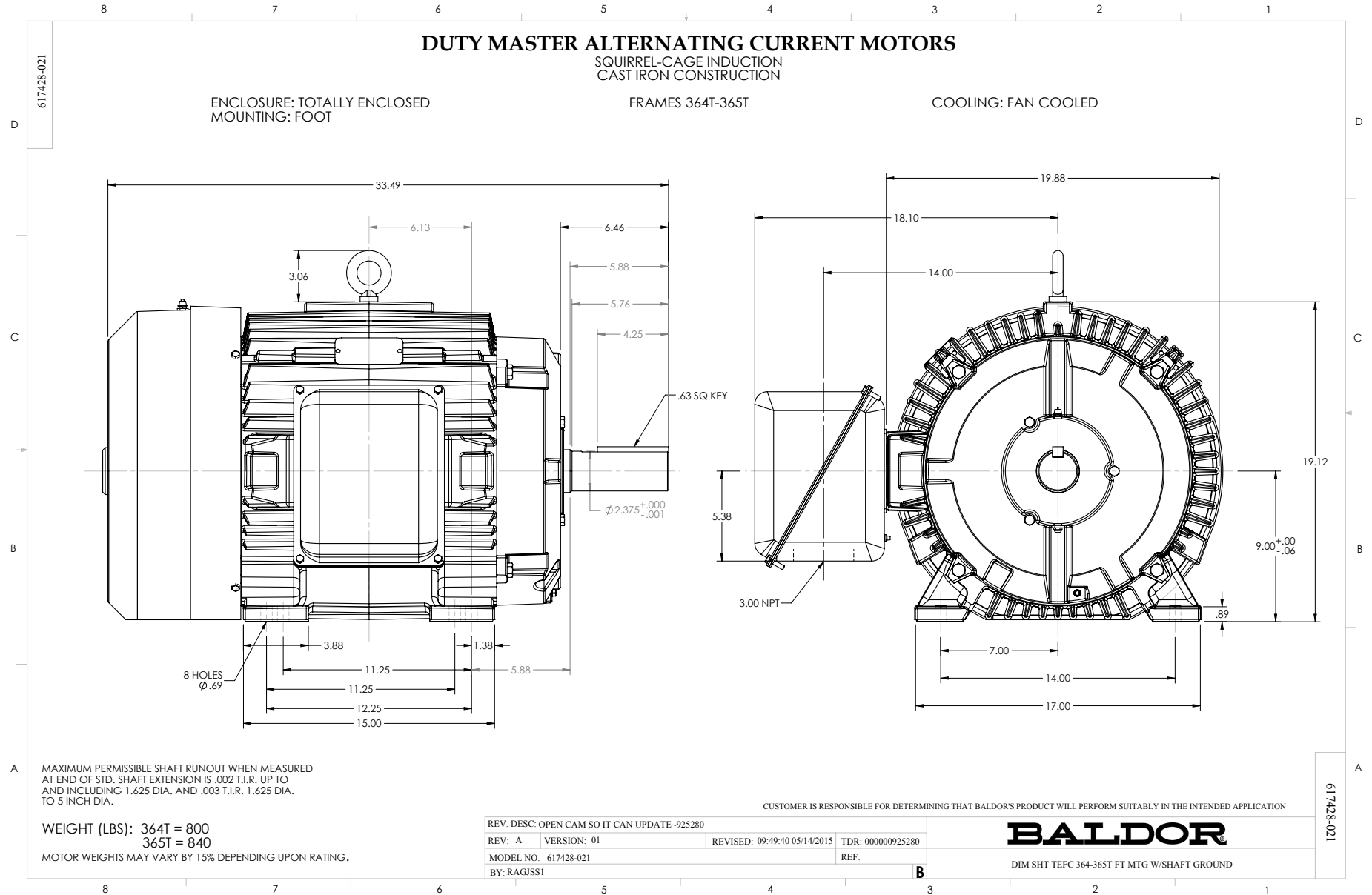
WINDING # A36WG4262

50 HP 3 PH 60 HZ 1185 RPM 460 V A3668M

TORQUES (LB-FT): P0=540.00 PU=319.00 LR=394.00 LRA=366.00

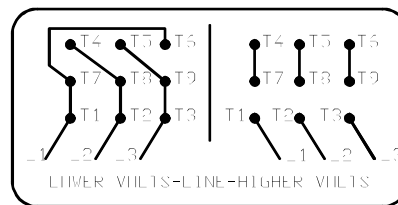
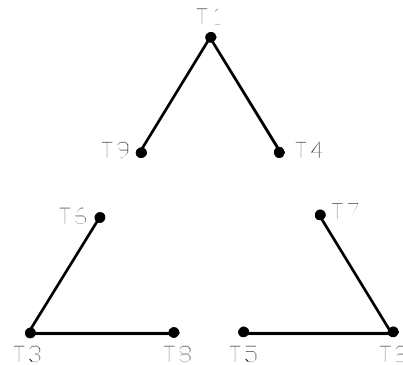


USBRRAN1 10/6/2022 ACPERF, record # 95972



416820-002

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



(N.P. 1575-B)

416820-002

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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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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