

BALDOR • RELIANCE

Customer information packet

ECTM4312T-G

50HP, 1185RPM, 3PH, 60HZ, 364T, A3668M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	364T
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	Heater Included, 115 V
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	617438-196
Eff. date	06-06-2023
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	33.78 IN
Power Factor	81
Product Family	Cooling Tower
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.374 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1185 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3979LUA

CAT #	ECTM4312T-G		SER			CC	010A						
SPEC	A36-8070-4262		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	F	MAX CORR KVAR	15.8	USABLE AT 208V	N/A	A					
BRG	DE	6313	ODE	6313	ENCL	TEFC	FR	364T	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 #95278 - 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

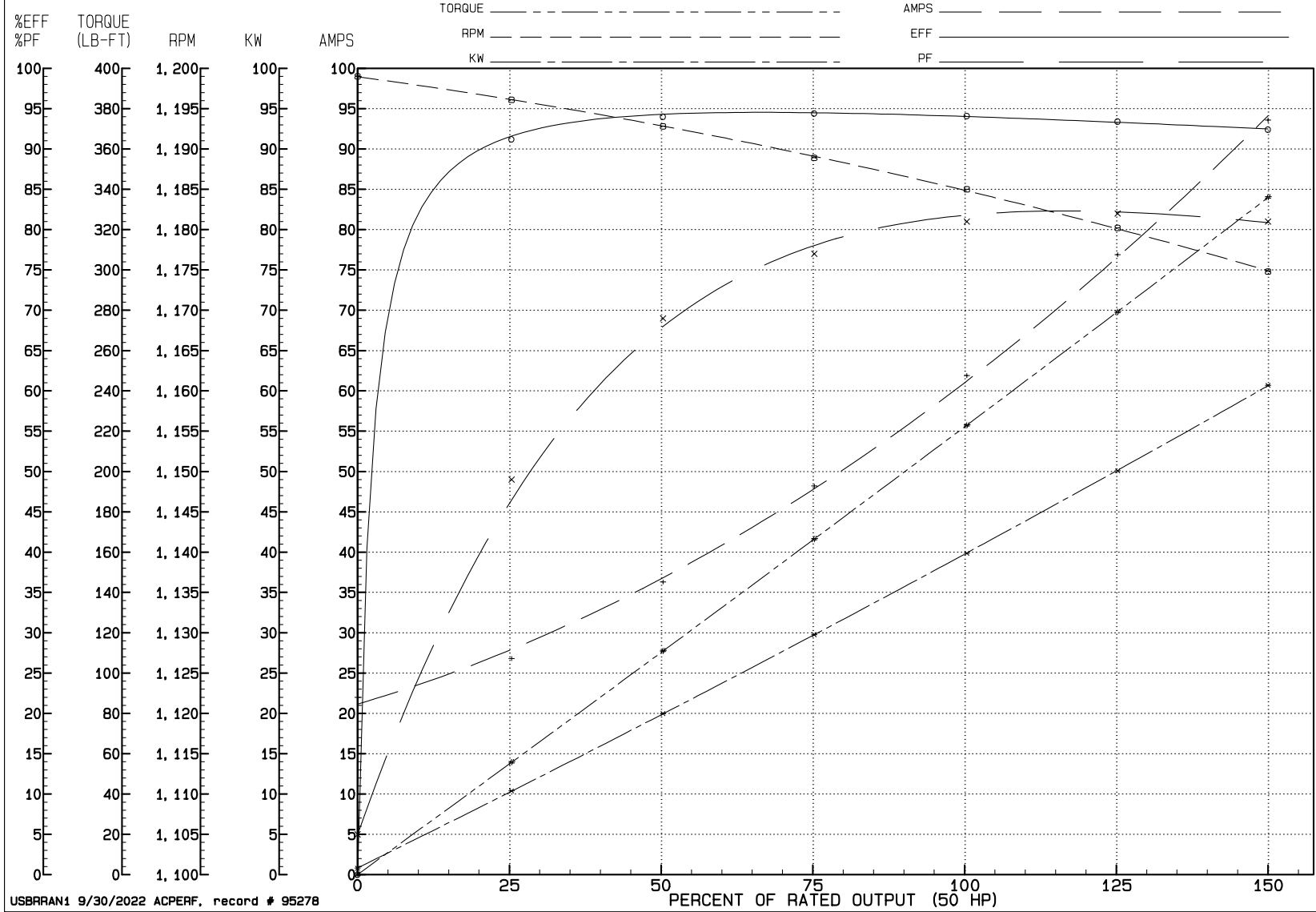
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	49	69	77	81	82	81	82
Efficiency	0	91.2	94	94.4	94.1	93.4	92.4	93.7
Speed	1199	1196.1	1192.8	1188.9	1185	1180.2	1174.8	1182
Line amperes	22	26.8	36.3	48.2	61.9	76.9	93.6	70.9

REVIEW

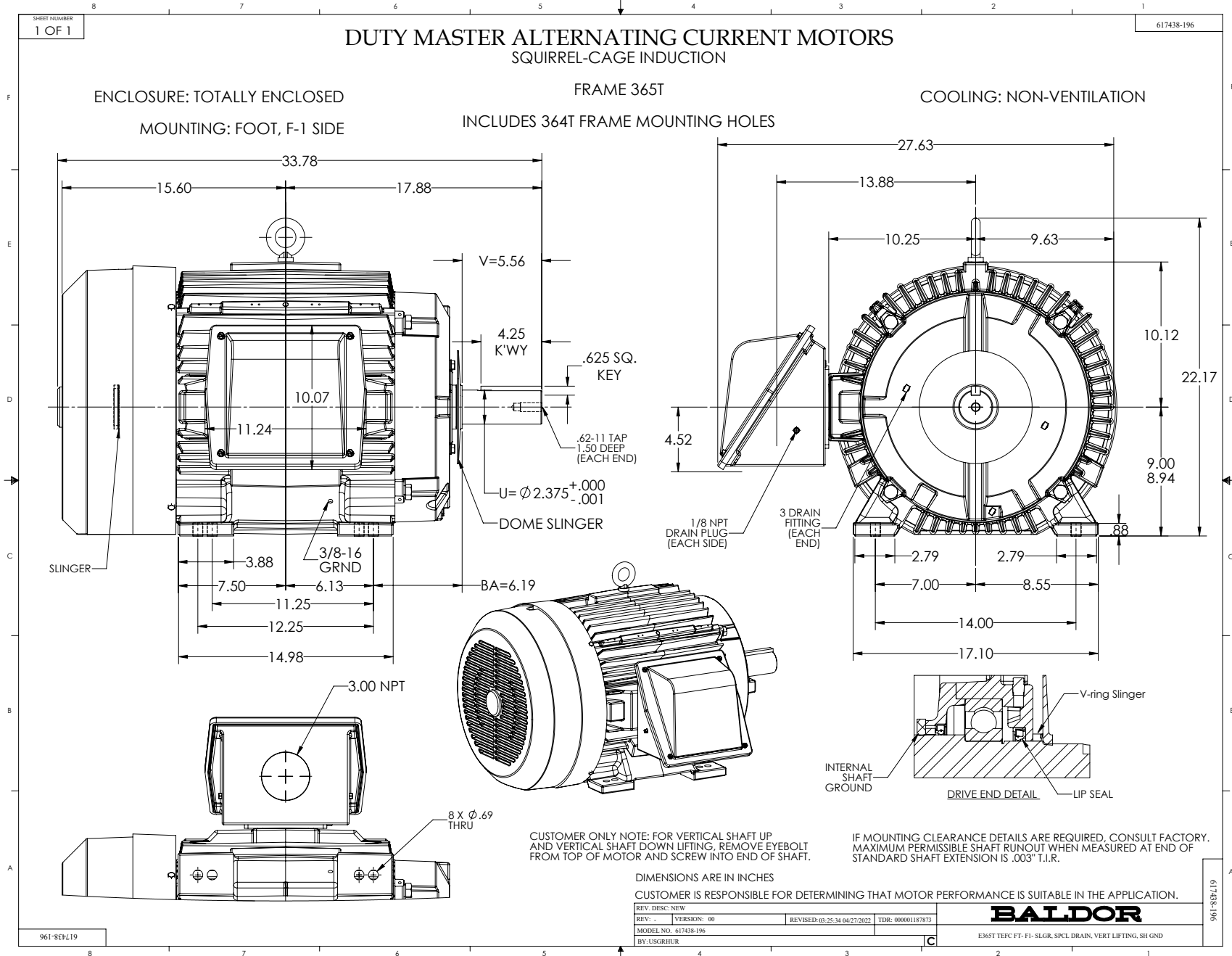
WINDING # A36WG4262

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

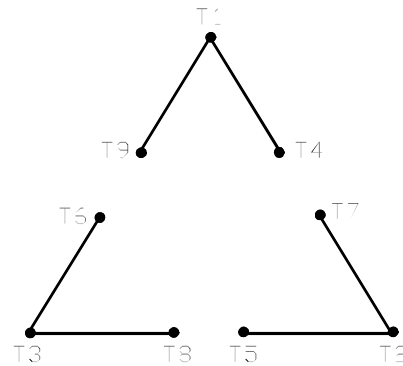


USBRRAN1 9/30/2022 ACPERF, record # 95278



416820-002

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



LOWER VOLTS-LINE-HIGHER VOLTS

(N.P. 1575-B)

416820-002

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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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