



Customer information packet

EM4312T

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
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
XP Class and Group	None
XP Division	Not Applicable
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	F
Inverter Code	Inverter Ready

Part detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4262
Layout	617428-012
Eff. date	01-12-2023
CD Diagram	416820-002
Poles	06
Leads	3#4,6#6
Proprietary	False
Created date	04-01-2022

IP Rating	NONE
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	No 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		SER			CC	010A							
SPEC	A36-8068-4262		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	365T			54			
GREASE	POLYREX EM				MTR WT		996	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

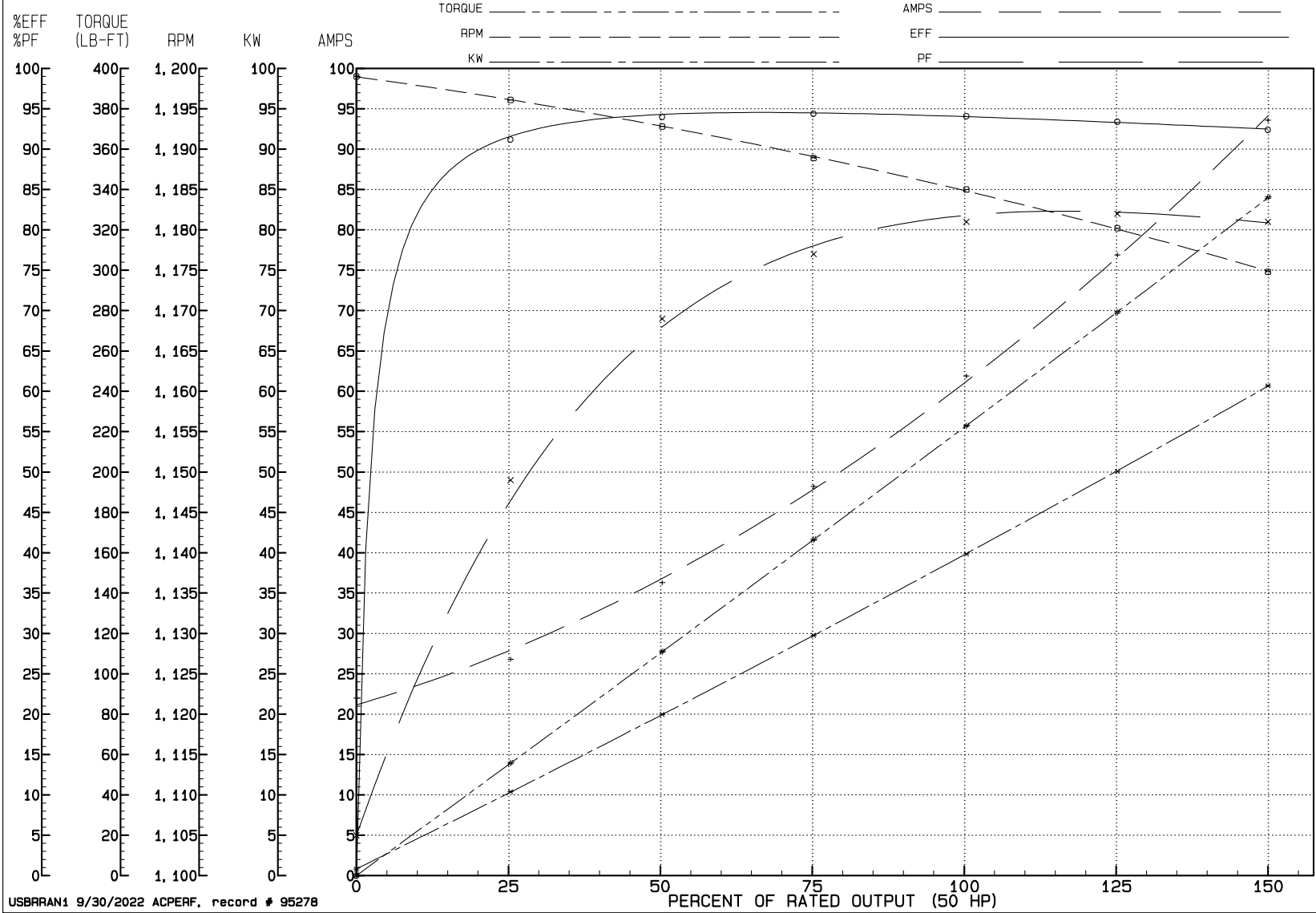
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	49	69	77	81	82	81	82
Efficiency	0	91.2	94	94.4	94.1	93.4	92.4	93.7
Speed	1199	1196.1	1192.8	1188.9	1185	1180.2	1174.8	1182
Line amperes	22	26.8	36.3	48.2	61.9	76.9	93.6	70.9

REVIEW

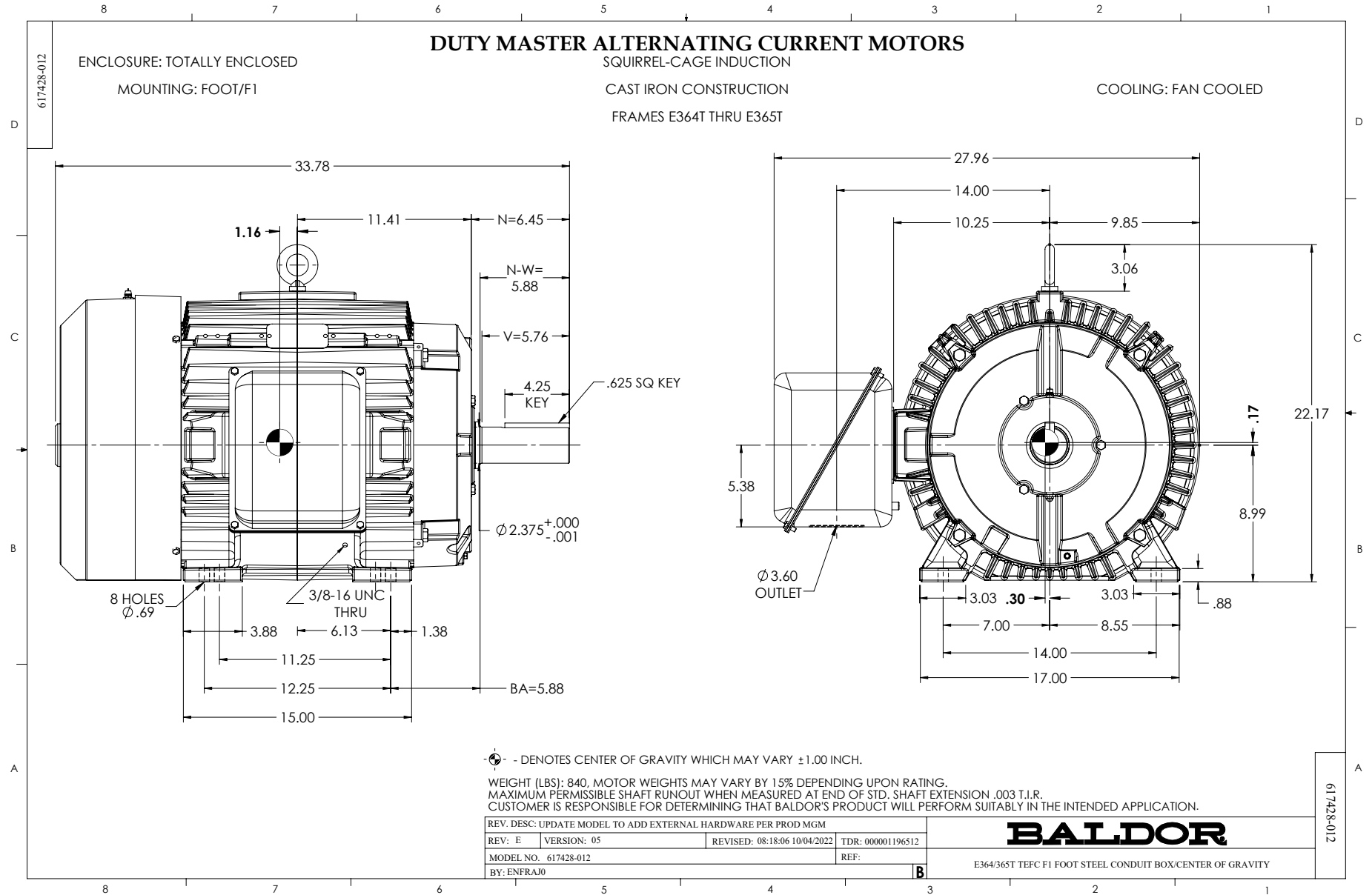
WINDING # A36WG4262

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



(N.P. 1575-B)

416820-002

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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