



Customer information packet

EM4314T

60HP, 1780RPM, 3PH, 60HZ, 364T, A3658M, 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	60.000 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 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	140.000 A @ 230.0 V 152.000 A @ 208.0 V 70.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	70.0 a
Insulation Class	F

Part detail

Revision	R
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4075
Layout	617428-012
Eff. date	07-08-2024
CD Diagram	CD0180
Poles	04
Leads	3#4,6#6 Y
Proprietary	False
Created date	05-16-2019

Inverter Code	Inverter Ready
IP Rating	NONE
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	A3658M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.48 IN
Power Factor	84
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	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3979LUA

CAT #	EM4314T		SER			CC	010A						
SPEC	A36-6172-4075		RATING	40C AMB-CONT									
HZ	VOLTS		AMPS	RPM	HP	CODE	SF	DES	PF	NEMA NOM. EFF			
60	230/460		140/70	1780	60	G	1.15	B	84 %	95 %			
	-								%	%			
PH	3	CL	F	MAX CORR KVAR	15								
BRG	DE	6313	ODE	6313	ENCL	TEFC	FR	364T	54				
GREASE	POLYREX EM					MTR WT	912	LBS					
USABLE AT	50HZ 50HP 190/380V 138/69A					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												

AC induction motor performance data

Record #72794 - Typical performance - not guaranteed values

Winding	A36WG4075
Type	A3658M
Enclosure	TEFC

Nameplate data

Rated Output			60
Volts			230/460
Full Load Amps			140/70
R.P.M.			1780
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	95	Power Factor	84
Duty			CONT
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	176.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	422 LB-FT
Pull-up Torque	276 LB-FT
Locked-rotor Torque	352 LB-FT
Starting Current	462 A
No-load Current	24.8
Line-line Res. @ 25°C	0.10816 Ω
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	70°C
Locked-rotor Power Factor	32.3
Rotor inertia	0

Load Characteristics 460 V, 60 Hz, 60 HP

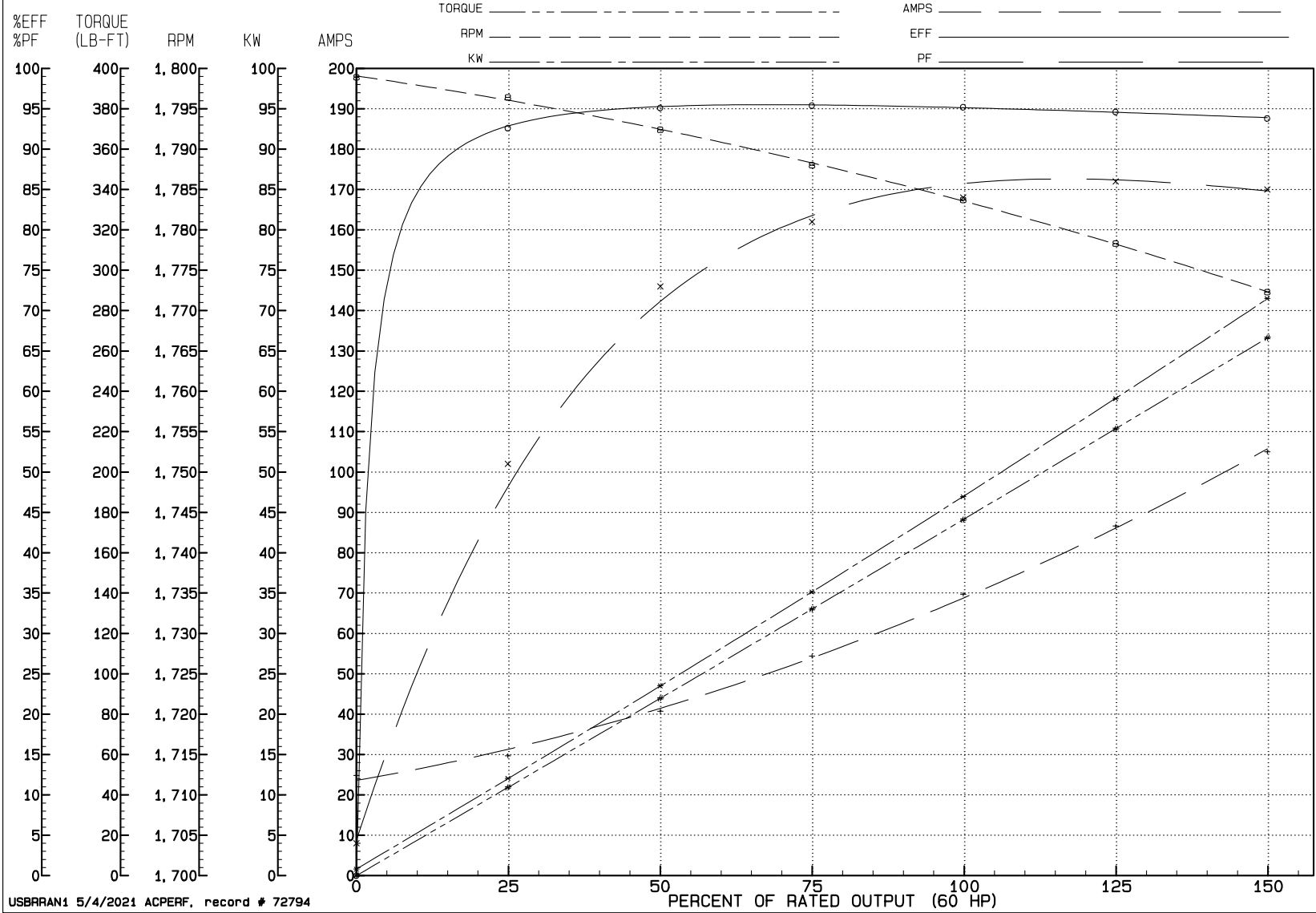
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	51	73	81	84	86	85	85
Efficiency	0	92.6	95.1	95.4	95.2	94.6	93.8	94.8
Speed	1798.9	1796.4	1792.4	1788	1783.7	1778.3	1772.3	1780
Line amperes	24.8	29.7	40.7	54.4	69.7	86.6	105	79.8

REVIEW

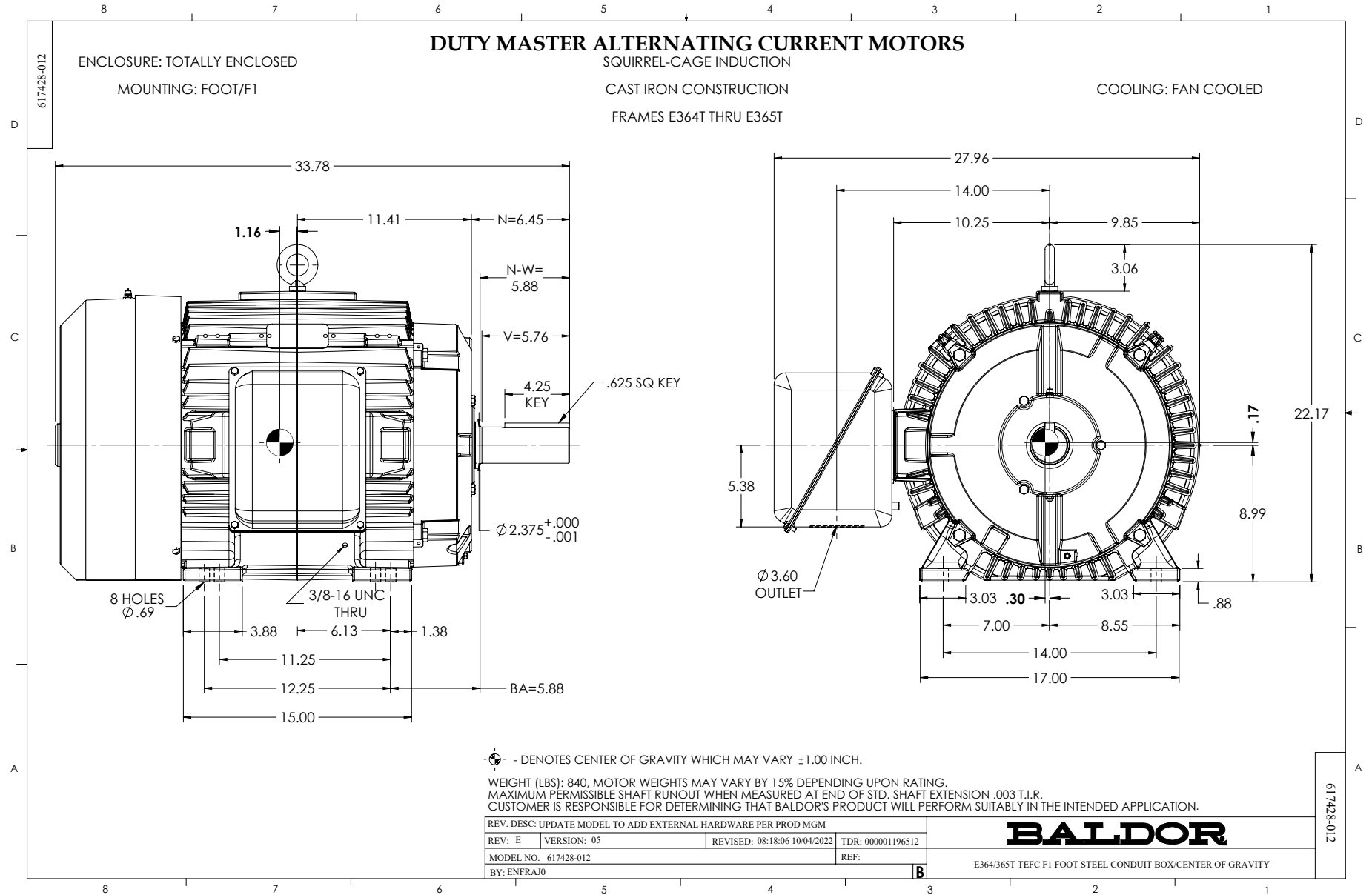
WINDING # A36WG4075

60 HP 3 PH 60 HZ 1780 RPM 460 V A3658M

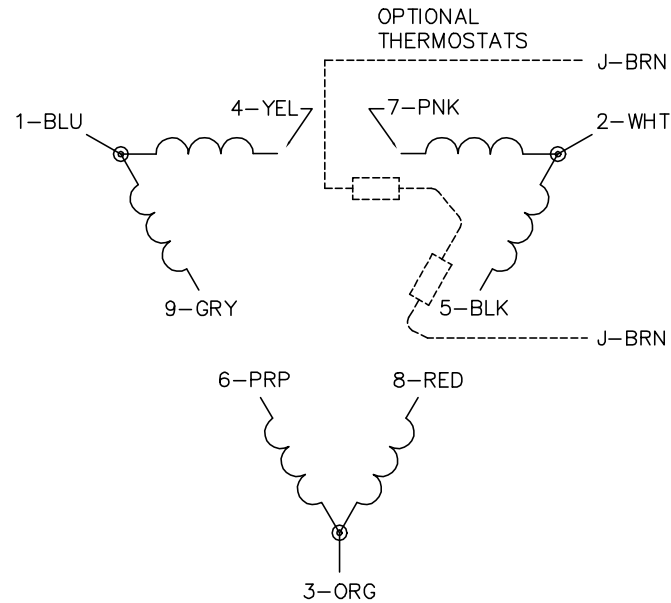
TORQUES (LB-FT): P0=422.00 PU=276.00 LR=352.00 LRA=462.00



USBRRAN1 5/4/2021 ACPERF, record # 72794



CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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