

BALDOR • RELIANCE

Customer information packet

EFM4316T

75HP, 1780RPM, 3PH, 60HZ, 365T, 1482M, TEFC, F2

Class - None

Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	365T
Frame Material	Iron
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
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	87.000 A @ 460.0 V 189.000 A @ 208.0 V 174.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	87.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4148
Layout	617428-078
Eff. date	07-01-2022
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	11-08-2021

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	A36070M
Mounting Arrangement	F2
Number of Poles	4
Overall Length	33.44 IN
Power Factor	86
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	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3979LUA

CAT #	EFM4316T		SER			CC	010A						
SPEC	A36-0007-4148		RATING	40C AMB-CONT									
HZ	VOLTS		AMPS		RPM	HP	CODE	SF	DES	PF	NEMA NOM. EFF		
60	230/460		174/87		1780	75	G	1.15	B	86 %	95.4 %		
	-									%	%		
PH	3	CL	F	MAX CORR KVAR	16	USABLE AT 208V		189	A				
BRG	DE	6313	ODE	6313	ENCL	TEFC	FR	365T	IP54				
GREASE	POLYREX EM					MTR WT			LBS				
USABLE AT	50HZ 60HP 190/380V 168/84A					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	SFA 198/99											

AC induction motor performance data

Record #83645 - Typical performance - not guaranteed values

Winding	A36WG4148
Type	A36070M
Enclosure	TEFC

Nameplate data

Rated Output			75
Volts			230/460
Full Load Amps			174/87
R.P.M.			1780
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	95.4	Power Factor	86
Duty			CONT
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	220 LB-FT
Start Configuration	direct on line
Breakdown Torque	487 LB-FT
Pull-up Torque	350 LB-FT
Locked-rotor Torque	420 LB-FT
Starting Current	542 A
No-load Current	28.17
Line-line Res. @ 25°C	0.0948 Ω
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	71°C
Locked-rotor Power Factor	35.7
Rotor inertia	16.2 lb-ft ²

Load Characteristics 460 V, 60 Hz, 75 HP

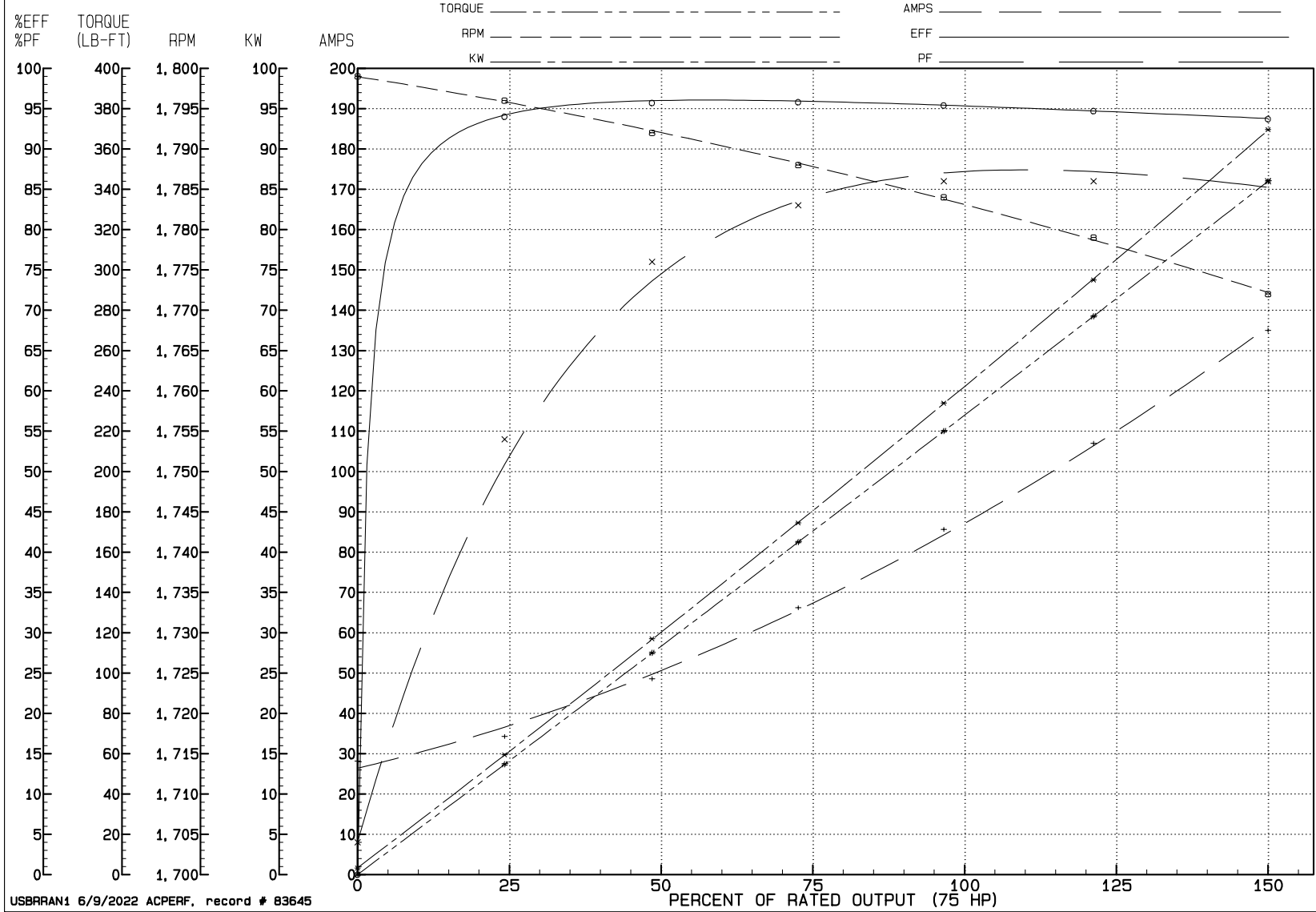
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	54	76	83	86	86	86	86
Efficiency	0	94	95.7	95.8	95.4	94.7	93.7	94.8
Speed	1799	1796	1792	1788	1784	1779	1772	1779
Line amperes	28.17	34.3	48.59	66.19	85.65	107	135	99.2

REVIEW

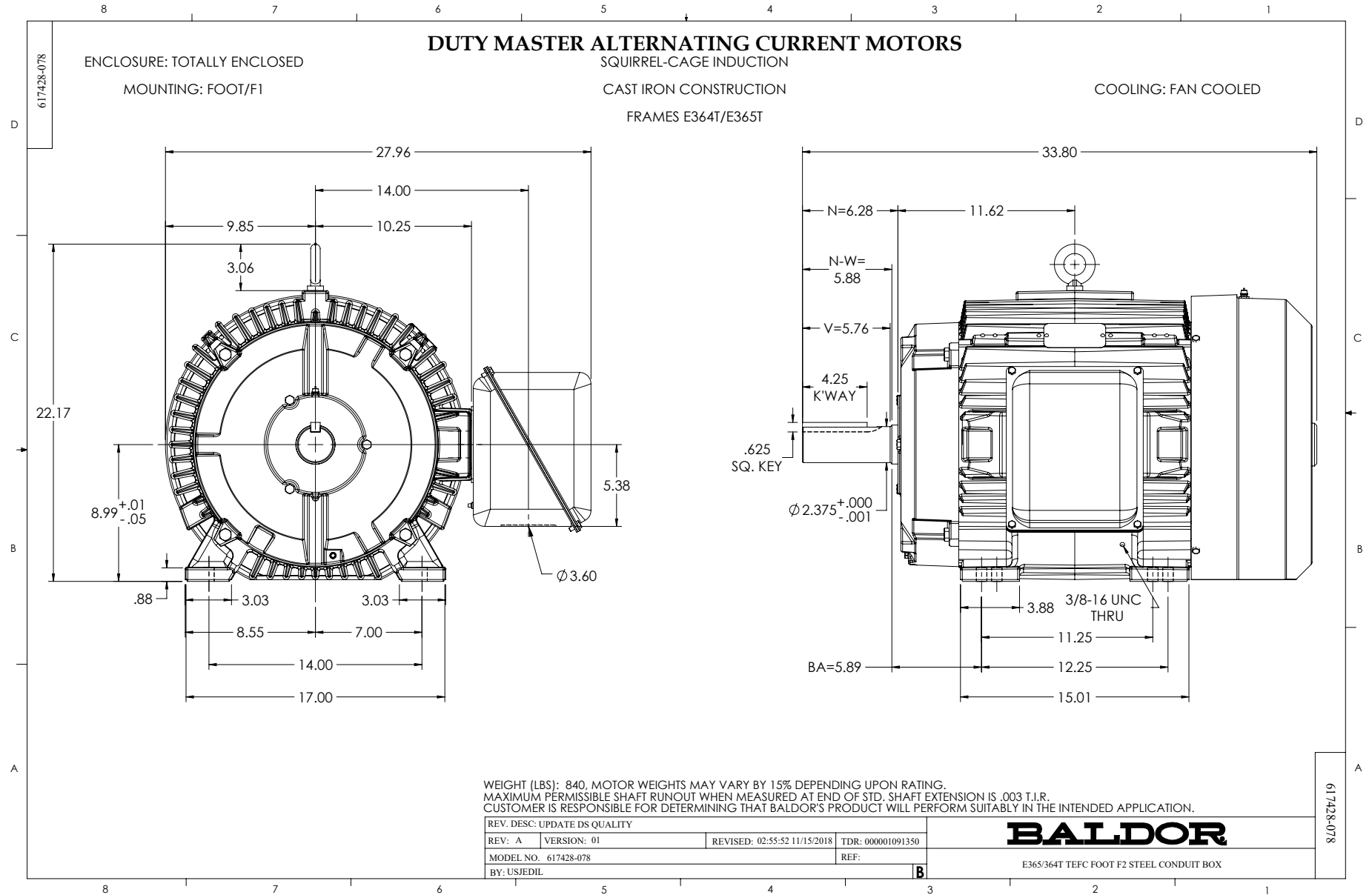
WINDING # A36WG4148

75 HP 3 PH 60 HZ 1780 RPM 460 V A36070M

TORQUES (LB-FT): PO=487.00 PU=350.00 LR=420.00 LRA=542.00

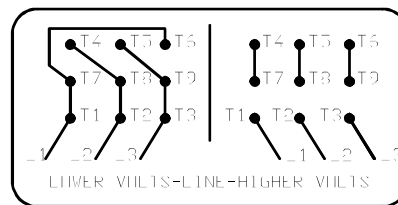
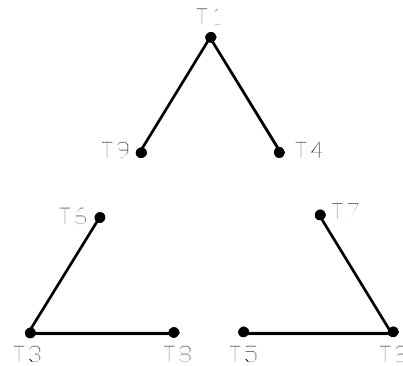


USBRRAN1 6/9/2022 ACPERF, record # 83645



416820-002

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



(N.P. 1575-B)

416820-002

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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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