

ABB BALDOR RELIANCE III

Customer information packet

ECP84316T-5

75HP, 1780RPM, 3PH, 60HZ, 365T, A36070M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	365T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	15-60
Current @ Voltage	69.000 A @ 575.0 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	69.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4078
Layout	617428-603
Eff. date	08-26-2024
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	04-26-2021

Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	None
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.49 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	Phase Seq-Std Rot (CCWODE)
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

NP4388																		
CAT #	ECP84316T-5						FR	365T			IP56							
SPEC	A36-6000-4078						ENCL		TEFC		DES	B						
HZ	60	PH	3	CL	F	HP	75	SF	1.15	PF	86	%	CODE	G				
VOLTS	575					AMPS		69										
RPM	1780		MAX RPM			2700	SER											
NEMA NOM. EFF	95.4	%	RATING				40C AMB-CONT											
GUAR MIN. EFF	94.5	%	BRG DE				6313			BRG ODE		6313						
CL I DIV 2 GRPS A,B,C,D			CL I ZONE 2 GRPS						IIA,IIB,IIC			TEMP T		3-200		C		
CT HZ	15-60		VT HZ			0-60												
CHP HZ	60-90		INV TEMP CL					200	C									
	SFA 80						MTR WT			985	LBS							

NP4333									
CAT #		ECP84316T-5		ROTOR BARS		47			
SPEC		A36-6000-4078		STATOR SLOTS		60			
SER				MAX CORR KVAR		16			
GREASE		POLYREX EM							
ABMA DE BRG		65BC03J30X		ODE		65BC03J30X			
		SFA 80							
SPACE HEATER LEADS H1-H2:		TIE LIKE NUMBERS				TOGETHER			
MAX. SPACE HEATER TEMP.		C		V		A		W	

Record #71925 - Typical performance - not guaranteed values

Winding	A36WG4078
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output	75		
Volts	575		
Full Load Amps	69		
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			

575 V, 60 Hz:

Single Voltage Motor

Full Load Torque	220 LB-FT
Start Configuration	direct on line
Breakdown Torque	619 LB-FT
Pull-up Torque	339 LB-FT
Locked-rotor Torque	431 LB-FT
Starting Current	437 A
No-load Current	22.31
Line-line Res. @ 25°C	0.14 Ω
Temp. Rise @ Rated Load	61°C
Temp. Rise @ S.F. Load	77°C
Locked-rotor Power Factor	32.1
Rotor inertia	16.2 lb-ft ²

Load Characteristics 575 V, 60 Hz, 75 HP

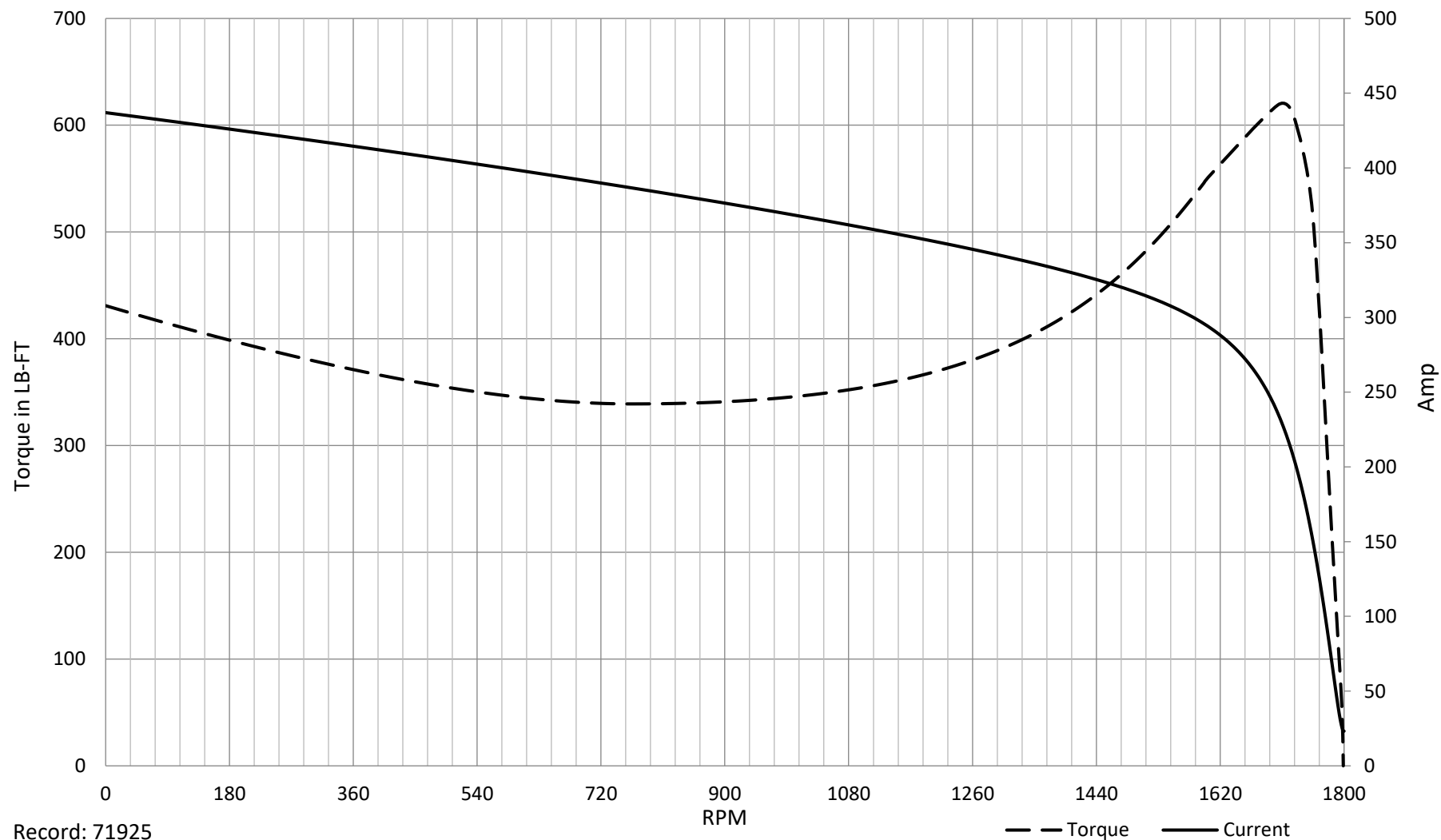
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	54	76	83	86	86	85	86
Efficiency	0	93.7	95.9	95.7	95.4	94.6	93.7	94.8
Speed	1799	1797	1792	1787	1782	1777	1770	1779
Line amperes	22.31	27.39	38.79	53.01	68.52	85.75	105	78.9

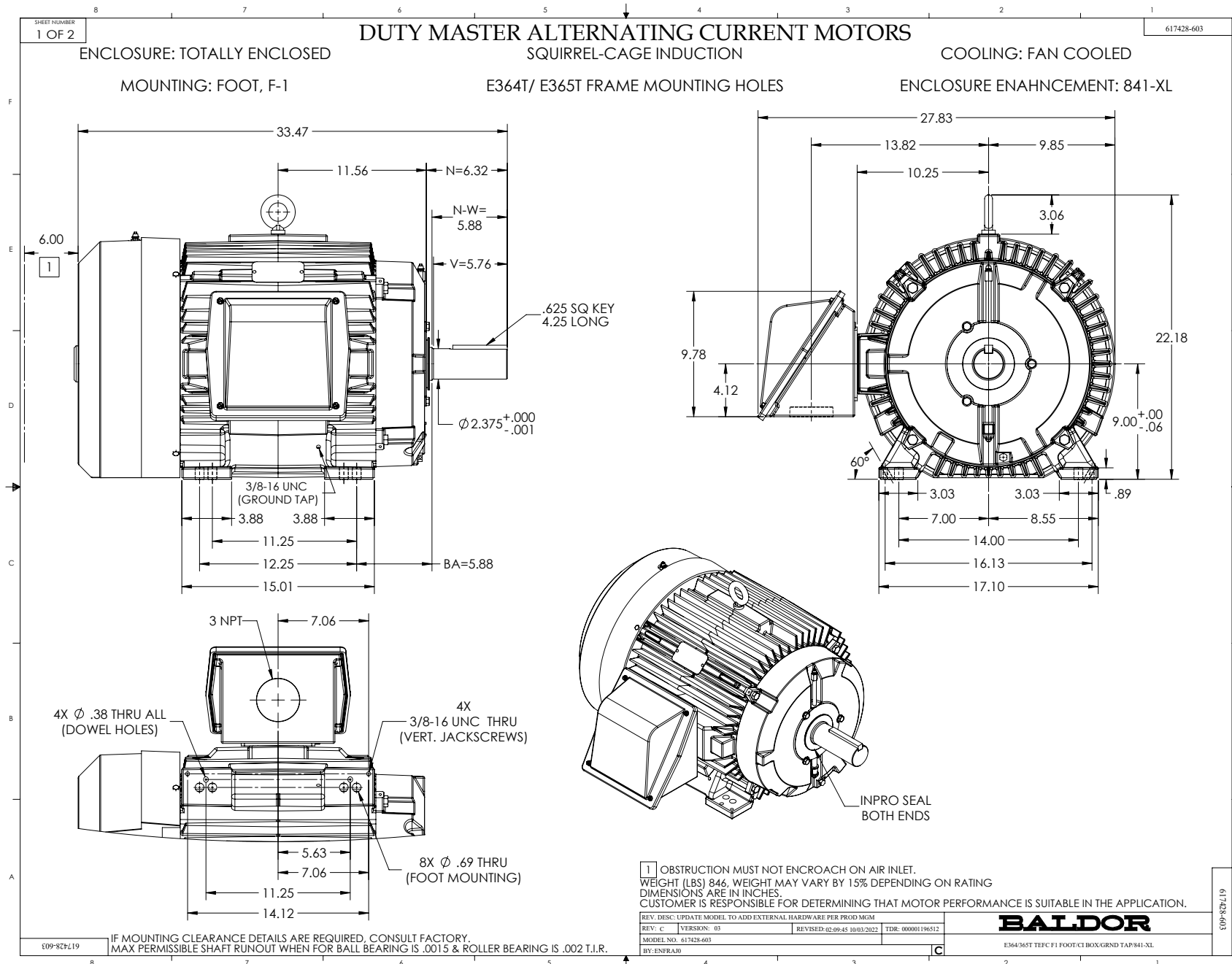
SPEED TORQUE / SPEED CURRENT CURVES

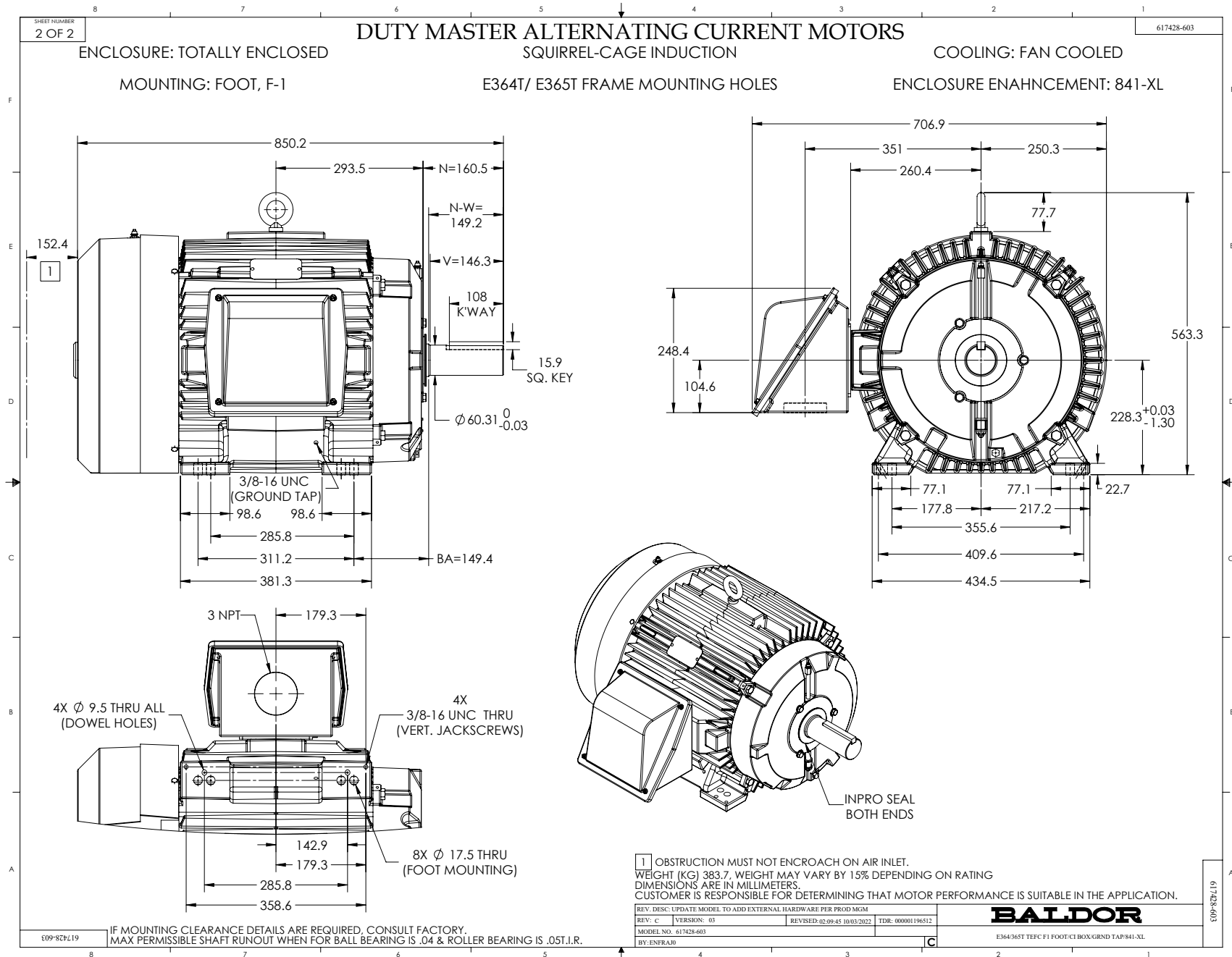
BALDOR • RELIANCE

A36WG4078

75HP 575V 60HZ

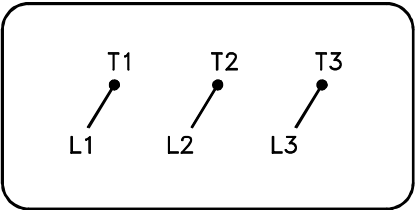






416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1