

ABB BALDOR RELIANCE III

Customer information packet

ECP84316T-4

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	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO) 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	86.000 A @ 460.0 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	86.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG3963
Layout	617428-603
Eff. date	08-26-2024
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	04-26-2021

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	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-4						FR	365T			IP56						
SPEC	A36-6000-3963						ENCL		TEFC		DES	B					
HZ	60	PH	3	CL	F	HP	75	SF	1.15	PF	86	%	CODE	G			
VOLTS	460					AMPS		86									
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							
								MTR WT		971		LBS					

NP4333									
CAT #		ECP84316T-4		ROTOR BARS		47			
SPEC		A36-6000-3963		STATOR SLOTS		60			
SER				MAX CORR KVAR		15.8			
GREASE		POLYREX EM							
ABMA DE BRG		65BC03J30X		ODE		65BC03J30X			
SPACE HEATER LEADS H1-H2:		TIE LIKE NUMBERS		TOGETHER					
MAX. SPACE HEATER TEMP.			C	V		A		W	

AC Induction motor performance data

Record #71698 - Typical performance - not guaranteed values

Winding	A36WG3963
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output			75
Volts			460
Full Load Amps			86
R.P.M.			1780
Hz	60	Phase	3
KVA Code			F
S.F.			1.15
NEMA Nom. Eff.	95	Power Factor	86
Duty			CONT
S.F. Amps			

460 V. 60 Hz:

Single Voltage Motor

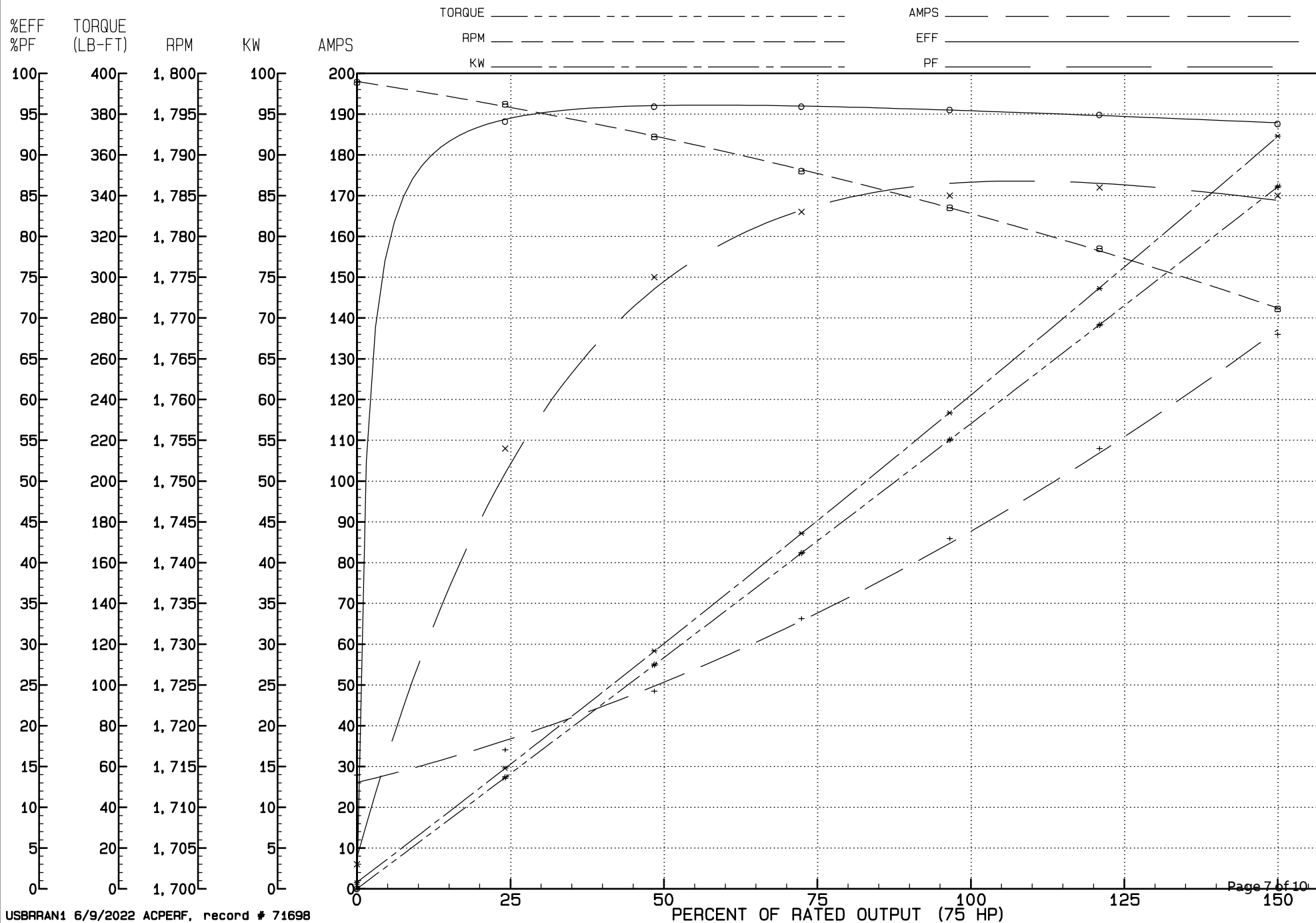
Full Load Torque	220.2 LB-FT
Start Configuration	direct on line
Breakdown Torque	542 LB-FT
Pull-up Torque	372 LB-FT
Locked-rotor Torque	445 LB-FT
Starting Current	541 A
No-load Current	27.9
Line-line Res. @ 25°C	0.082276 Ω
Temp. Rise @ Rated Load	55°C
Temp. Rise @ S.F. Load	69°C
Locked-rotor Power Factor	31.8
Rotor inertia	16.2 lb-ft ²

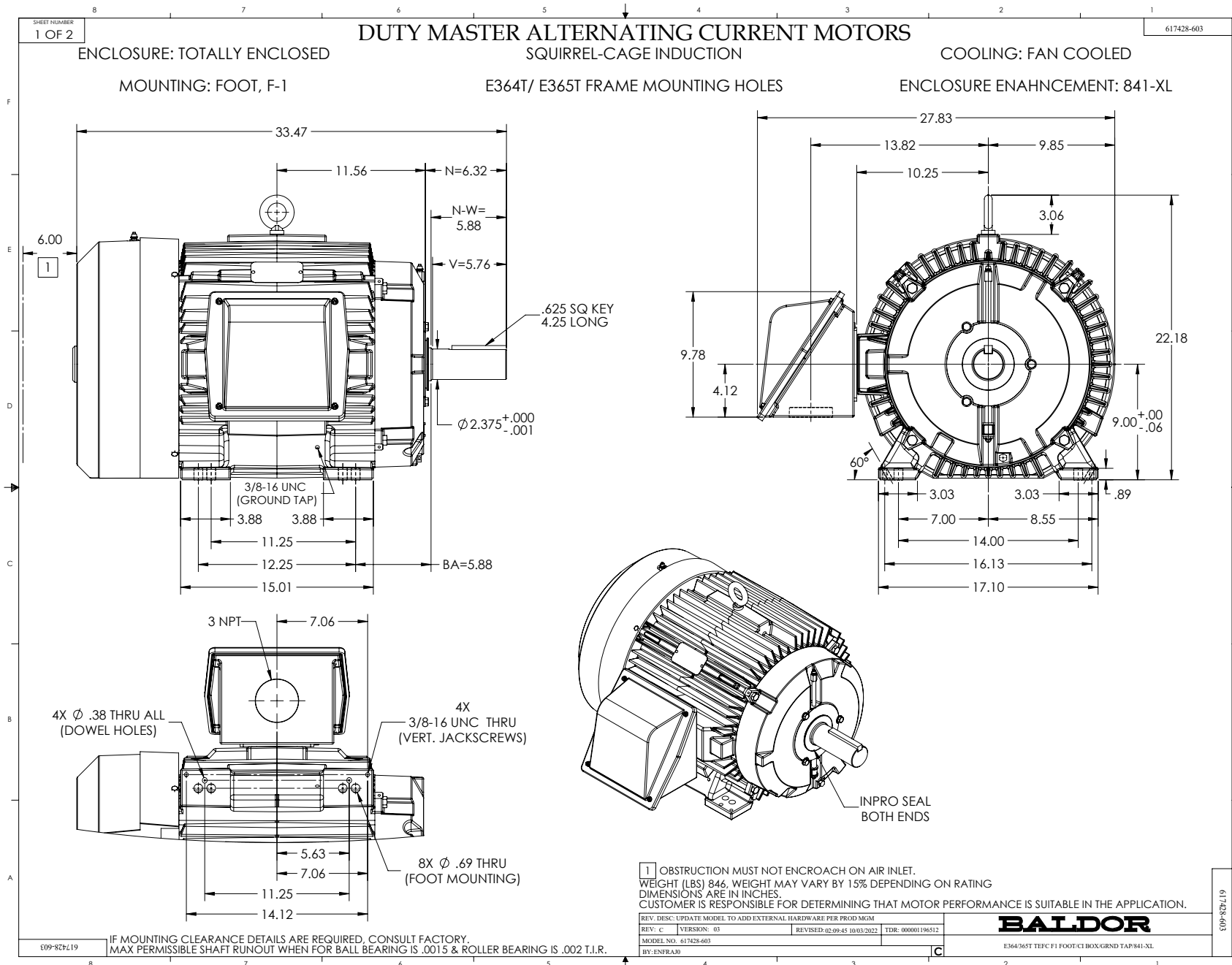
Load Characteristics 460 V, 60 Hz, 75 HP

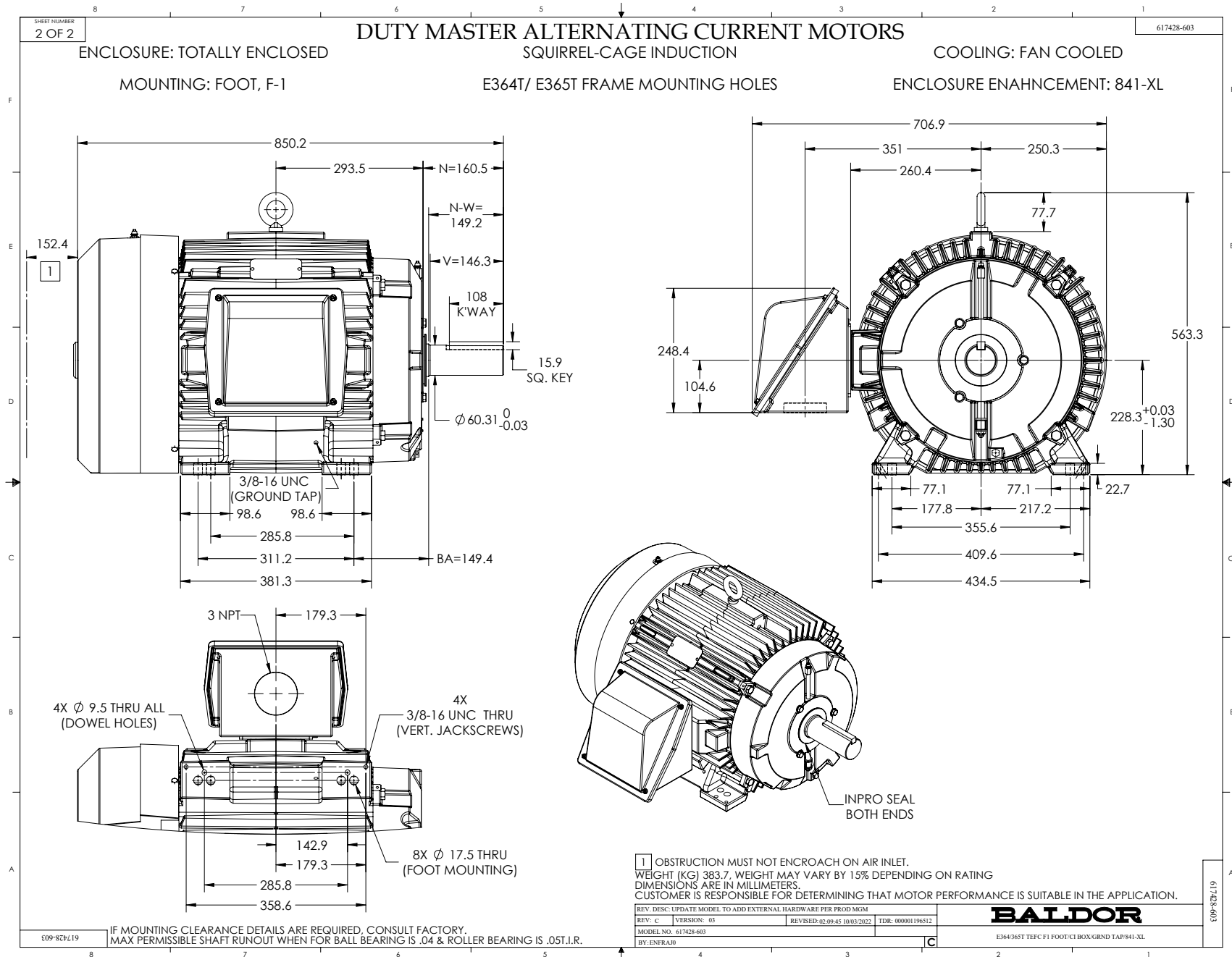
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	3	54	75	83	85	86	85	86
Efficiency	0	94.1	95.9	95.9	95.5	94.9	93.8	95.1
Speed	1798.9	1796.2	1792.2	1788	1783.5	1778.5	1771.1	1780
Line amperes	27.9	34.1	48.5	66.3	85.9	108	136	99.2

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

TORQUES (LB-FT): PO=542.00 PU=372.00 LR=445.00 LRA=541.00

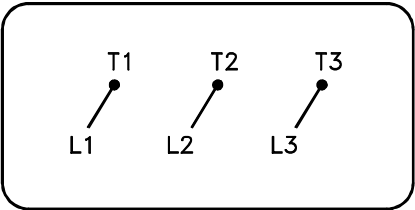






416820-036

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