

ABB BALDOR RELIANCE III

Customer information packet

ECP84312T-5

50HP, 1185RPM, 3PH, 60HZ, 365T, A3668M, TEFC, F

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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM UR CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	6-60
Current @ Voltage	48.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4276
Layout	617428-603
Eff. date	08-26-2024
CD Diagram	416820-036
Poles	06
Leads	3#4
Proprietary	False
Created date	05-30-2023

Lifting Lugs	Standard Lifting Lugs
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	None
Motor Type	A3668M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	33.49 IN
Power Factor	81
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	1185 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4388																	
CAT #	ECP84312T-5						FR	365T			IP56						
SPEC	A36-9123-4276						ENCL		TEFC		DES	B					
HZ	60	PH	3	CL	F	HP	50	SF	1.15	PF	81	%	CODE	G			
VOLTS	575					AMPS		48									
RPM	1185		MAX RPM			1800	SER										
NEMA NOM. EFF	94.1	%	RATING				40C AMB-CONT										
GUAR MIN. EFF	93	%	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	6-60		VT HZ			0-60											
CHP HZ	60-90		INV TEMP CL					200	C								
	SFA 55						MTR WT			973	LBS						

NP4333									
CAT #		ECP84312T-5			ROTOR BARS		55		
SPEC		A36-9123-4276			STATOR SLOTS		72		
SER					MAX CORR KVAR		12.7		
GREASE		POLYREX EM							
ABMA DE BRG		65BC03J30X		ODE	65BC03J30X				
		SFA 55							
SPACE HEATER LEADS H1-H2:		TIE LIKE NUMBERS				TOGETHER			
MAX. SPACE HEATER TEMP.		C	V			A			W

AC Induction motor performance data

Record #95960 - Typical performance - not guaranteed values

Winding	A36WG4276
Type	A3668M
Enclosure	TEFC

Nameplate data

Rated Output			50
Volts			575
Full Load Amps			48
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			

575 V, 60 Hz:

Single Voltage Motor

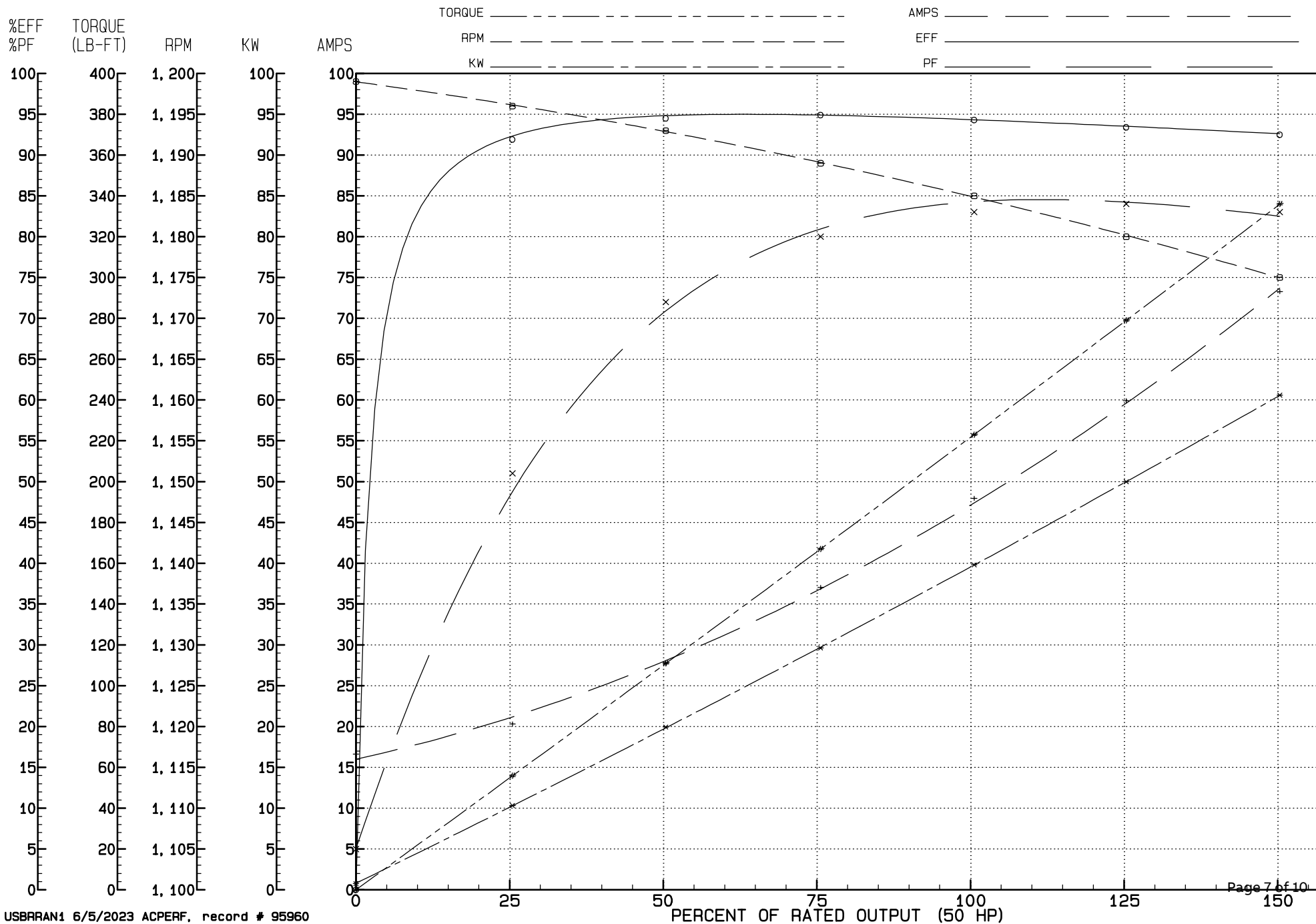
Full Load Torque	223 LB-FT
Start Configuration	direct on line
Breakdown Torque	531 LB-FT
Pull-up Torque	314 LB-FT
Locked-rotor Torque	387 LB-FT
Starting Current	286 A
No-load Current	16.64
Line-line Res. @ 25°C	0.168 Ω
Temp. Rise @ Rated Load	62°C
Temp. Rise @ S.F. Load	71°C
Locked-rotor Power Factor	27.8
Rotor inertia	22 lb-ft ²

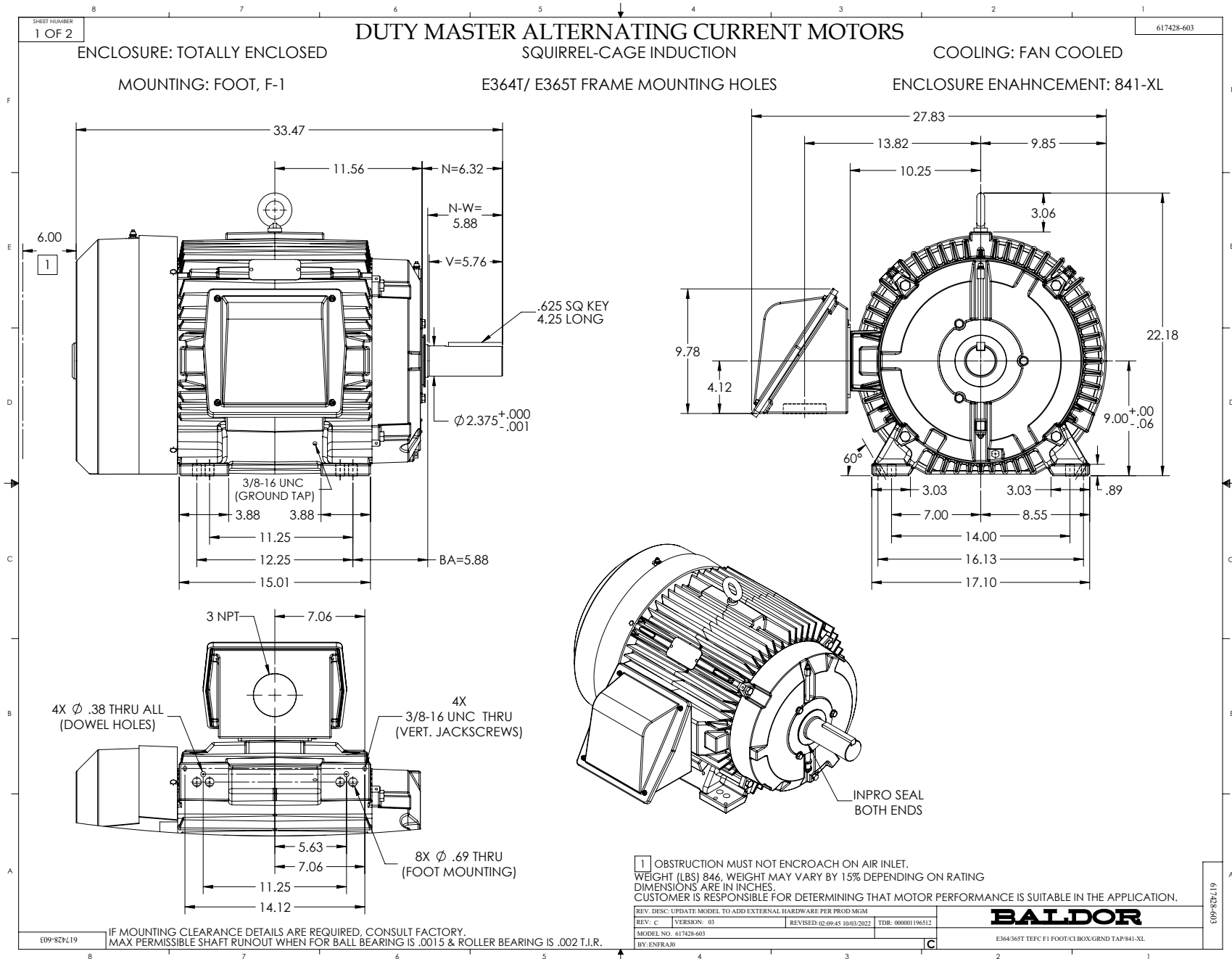
Load Characteristics 575 V, 60 Hz, 50 HP

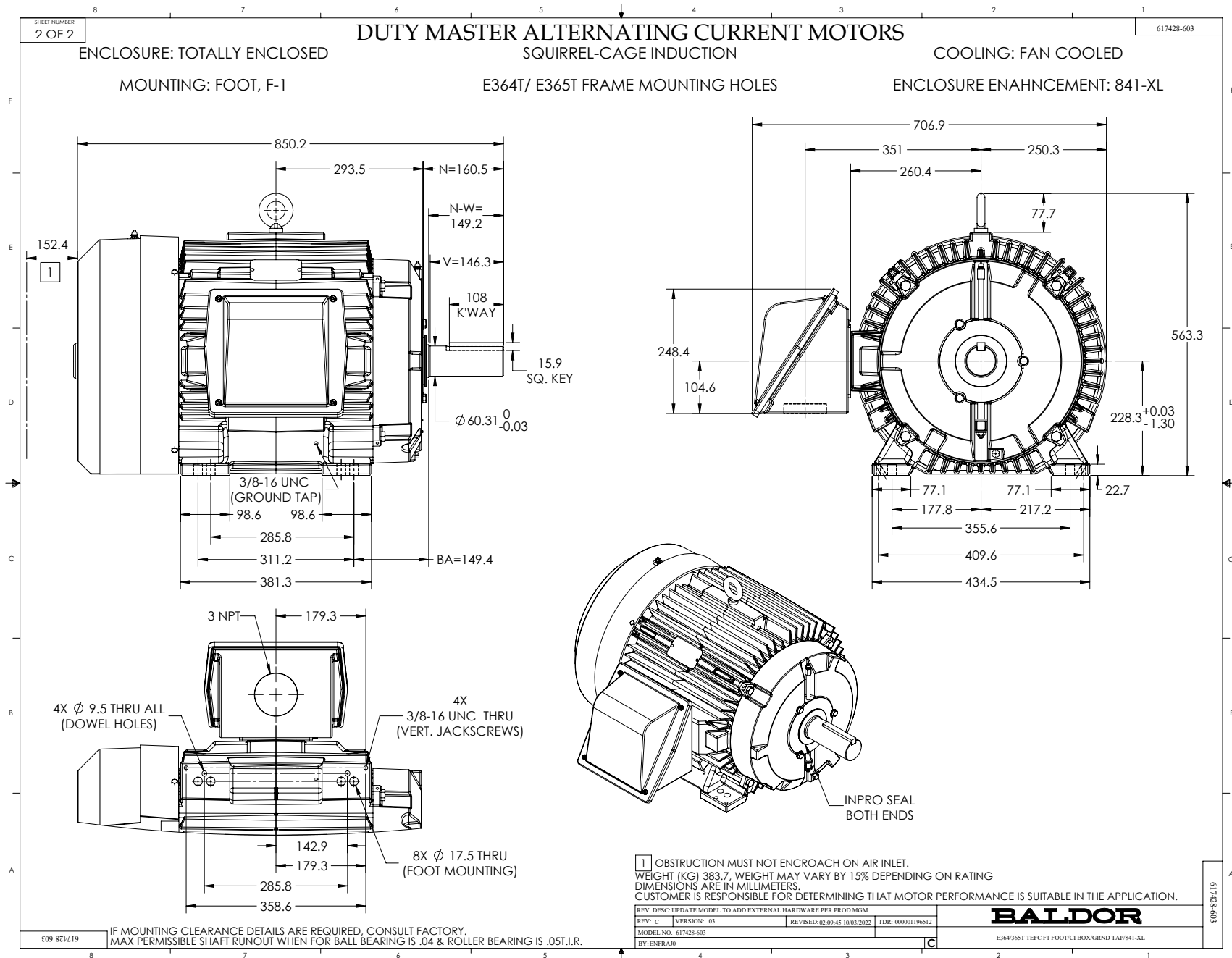
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	51	72	80	83	84	83	84
Efficiency	0	91.9	94.5	94.9	94.3	93.4	92.5	93.8
Speed	1199	1196	1193	1189	1185	1180	1175	1182
Line amperes	16.64	20.33	27.71	37.04	47.95	59.9	73.28	55.1

50 HP 3 PH 60 HZ 1185 RPM 575 V A3668M

TORQUES (LB-FT): PO=531.00 PU=314.00 LR=387.00 LRA=286.00

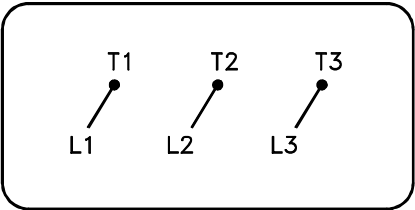






416820-036

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