

ABB BALDOR RELIANCE III

Customer information packet

ECP84312T-4

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	460.0 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	62.000 A @ 460.0 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	62.0 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.	A36WG4275
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	No Lifting Lugs
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
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-4							FR	365T			IP56					
SPEC	A36-9121-4275							ENCL		TEFC		DES	B				
HZ	60	PH	3	CL	F	HP	50	SF	1.15	PF	81	%	CODE	G			
VOLTS	460					AMPS		62									
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 71							MTR WT			973	LBS					

NP4333									
CAT #		ECP84312T-4		ROTOR BARS		55			
SPEC		A36-9121-4275		STATOR SLOTS		72			
SER				MAX CORR KVAR		15.8			
GREASE		POLYREX EM							
ABMA DE BRG		65BC03J30X		ODE		65BC03J30X			
		SFA 71							
SPACE HEATER LEADS H1-H2:		TIE LIKE NUMBERS		TOGETHER					
MAX. SPACE HEATER TEMP.		C		V		A		W	

Parts List

Part number	Description	Quantity
SA414670	SA A36-9121-4275	1.000 ea
RA406431	RA A36-9121-4275	1.000 ea
NP4388	SS SUPER E INVERTER DUTY IEEE 841 MAIN N	1.000 ea
NP4333	SS SUPER-E SD IEEE 841 CLI DIV2 UR CSA C	1.000 ea
004824015A	GREASE POLYREX EM	0.544 lb
032018008AK	HHCS 1/4-20X1 PLATED	4.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
034530032BB	P/NIP 1/4X4" SCHED 40	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
702676001C	FAN 360	1.000 ea
078559034A	+F/C A 078559001A - 360	1.000 ea
085922083BH	BRKT 360 085922072WCC KB	1.000 ea
410700004F	WSHR	1.000 ea
412118006A	DRAIN	1.000 ea
415028079E	INPRO SEAL,.625 WIDE,313 BRG	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034530020BB	P/NIP 1/4X2-1/2 PLATED	1.000 ea
034530032AB	P/NIP 1/8X4 PLATED	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
085922083BH	BRKT 360 085922072WCC KB	1.000 ea

412118006A	DRAIN	1.000 ea
415028079E	INPRO SEAL,.625 WIDE,313 BRG	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
032018010CK	HHCS 3/8-16X1-1/4 PLTD. 032018010CR	4.000 ea
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
067053000B	GASK 320-400	1.000 ea
076708000BB	CONDUIT BOX-360	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
415039016A	TERBD, 360-400	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
034180034HA	KEY 5/8X5/8X4-1/4 L	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.250 ga
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.063 ga
482403003BEF	RUST VETO 342	0.013 ga
MG1500G03-5	LACQUER PRIMER, GRAY	0.063 ga
421948051	LABEL, MYLAR	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
032509020C	CARRIAGE BOLT - 360	3.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea
HW1000A32	5/16 FL WASHER WIDE,ID=.344,OD=1.125	3.000 ea
000692000VD	LABEL WARNING	1.000 ea
000692000JP	N/P	1.000 ea
000692000VH	N/P (RELEASE 1000 PCS)	1.000 ea

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ABB BALDOR RELIANCE III S/O	CUSTOMER INFORMATION PACKET	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	365T	50	P	3/60	1185	460	
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE	
62.0	CONT	40/F	1.15	B	G	TEFC	
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)			
-	418141089AE	---	---	.111			
PERFORMANCE							
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY		
NO LOAD	0	24.0	1200	5.62	0		
1/4	12.5	28.5	1197	46.2	89.0		
2/4	25.0	37.2	1194	67.5	93.1		
3/4	37.5	48.7	1191	76.6	94.1		
4/4	50.0	62.0	1188	80.3	94.1		
5/4	62.5	76.5	1184	81.7	93.7		
SPEED TORQUE							
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR		0	174	385	387		
PULL UP		650	150	333	337		
BREAKDOWN		1135	258	570	213		
FULL LOAD		1188	100	221	62.0		
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.							
TYPICAL DATA XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.1 PCT.							
		DRAWN BY: <u>C.B. ATANGANE</u> CHECKED BY: <u>W.L. SMITH</u> APPROVED BY: <u>C.E. JAMISON</u> DATE: <u>04/15/25</u>		AC MOTOR PERFORMANCE DATA	A36WG4275-R001 DATE ISSUED 04/05/25		

FRAME 365T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 50

AMPS 62.0

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

STATOR RES. @ 25°C .111

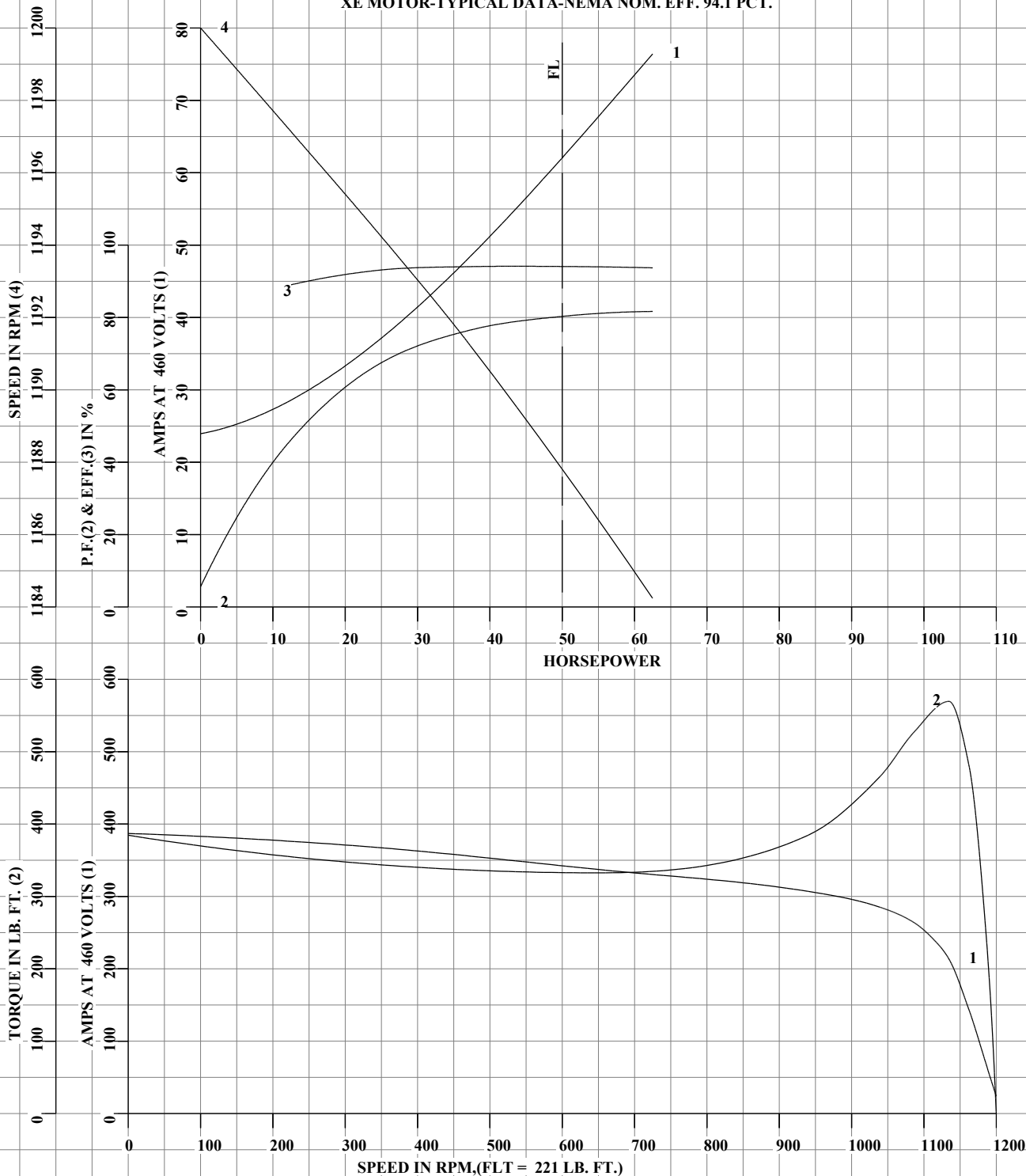
PHASE / HERTZ 3/60

AMB °C / INSUL 40/F

E/S -

OHMS (BETWEEN LINES)

XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.1 PCT.



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DRAWN BY: C.B. ATANGANE
 CHECKED BY: W.L. SMITH
 APPROVED BY: C.E. JAMISON
 DATE: 04/15/25

AC MOTOR
 PERFORMANCE
 DATA

A36WG4275-R001

ISSUE DATE 04/05/25

FRAME 365T

RPM 1185

S.F. 1.15

ROTOR 418141085AE

HP 50

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 62.0

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

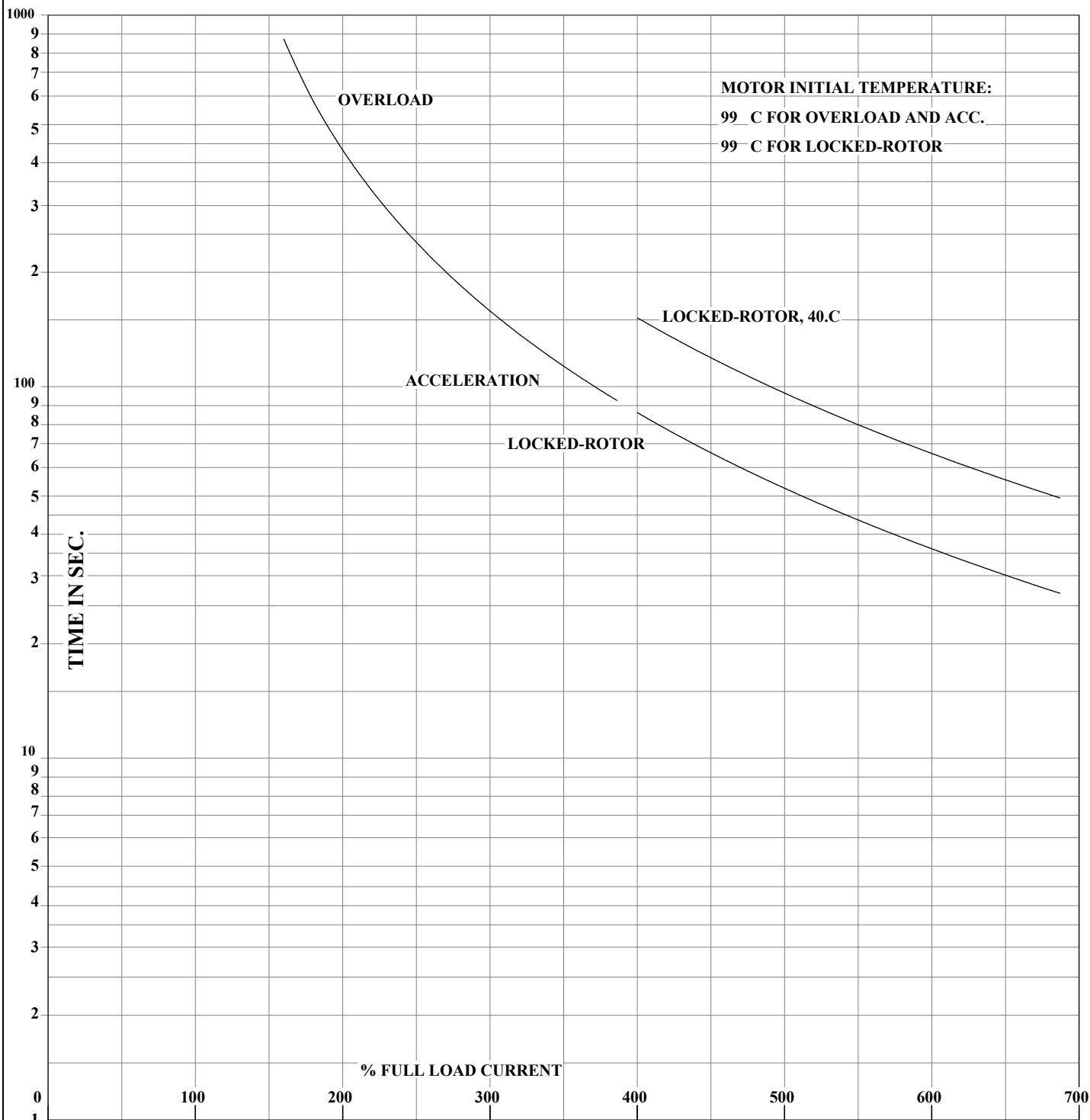
ENCLOSURE TEFC

STATOR RES. @ 25°C .111

AMB °C / INSUL 40/F

E/S -

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
 XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.1 PCT.

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

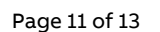


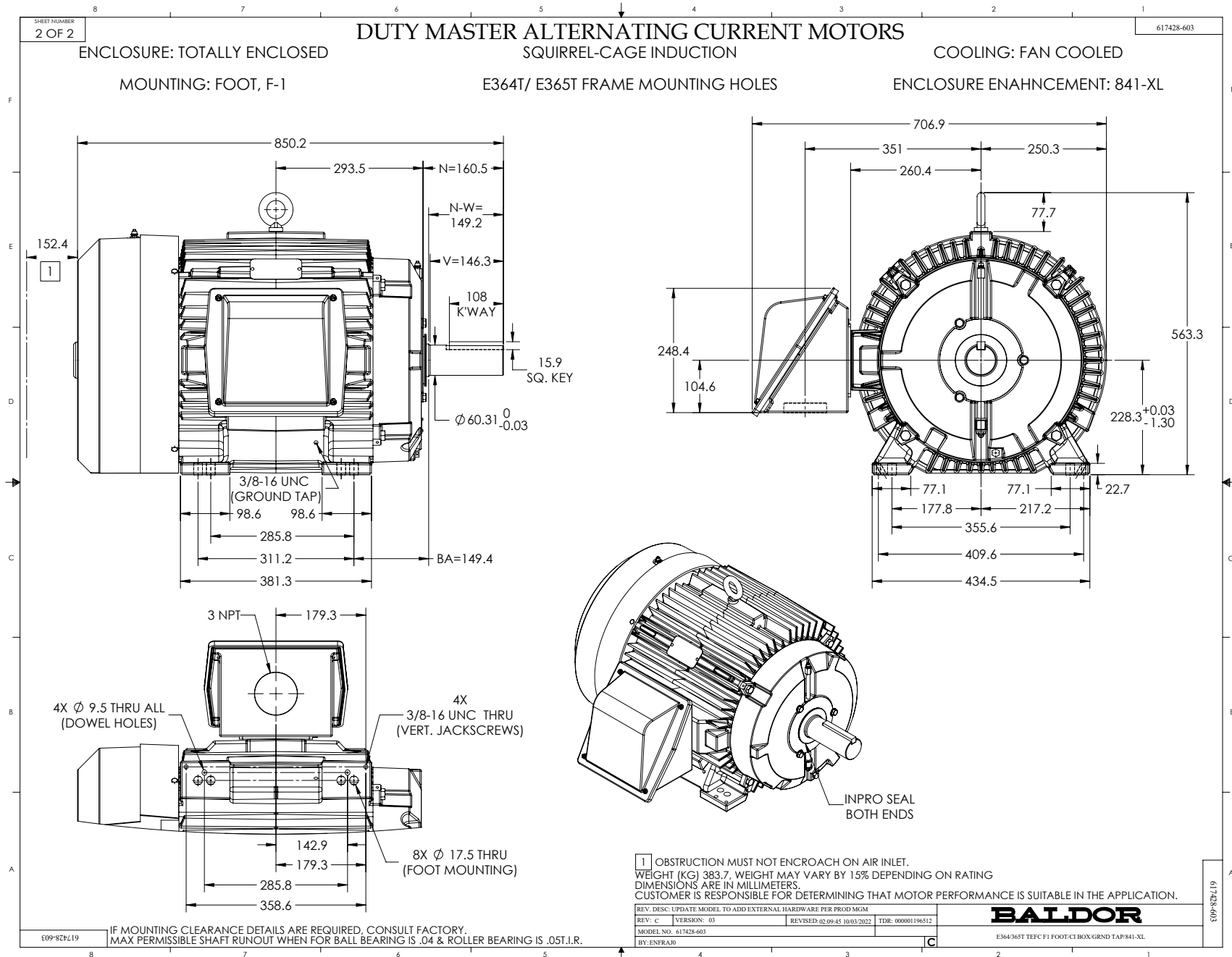
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AC MOTOR
 PERFORMANCE
 DATA

A36WG4275-R001

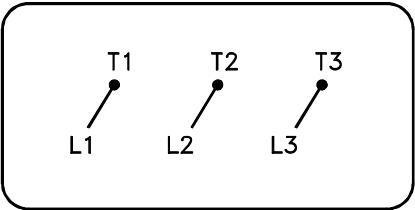
ISSUE DATE 04/05/25





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