

ABB BALDOR RELIANCE III

Customer information packet

ECP4404T-5

75HP, 1185RPM, 3PH, 60HZ, 405T, TEFC, F1

Class - None

Division - Division II

Specifications

Enclosure	TEFC
Frame	405T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	10-60
Current @ Voltage	70.200 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	70.2 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0771
Layout	617429-240
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	06
Leads	3#4
Proprietary	False
Created date	10-01-2019

Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	38.19 IN
Power Factor	85
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1185 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

000901002AAA	
IP55 CONSTRUCTION	

NP3238

CAT NO	ECP4404T-5			SPEC NO.		A40-7188-0771							
HP	75	AMPS	70.2		VOLTS		575		DESIGN	B			
FRAME	405T	RPM	1185	HZ	60	AMB	40	SF	1.15				
D.E. BRG.DATA	6316		O.D.E. BRG.DATA			6316		PH	3	DUTY	CONT	INSUL.CLASS	F
D.E. BRG.	80BC03J30X			TYPE	P	ENCL	TEFC	CODE	G				
O.D.E. BRG.	80BC03J30X			POWER FACTOR			85	NEMA NOM EFFICIENCY				94.5	
3/4 LOAD EFF.	94.7		MAX CORR KVAR			15.0		GUARANTEED EFFICIENCY				93.6	
TEMP CODE	T3	TEMP =		200									
CHP HZ	60-90		CT HZ	10-60		VT HZ	0-60						
INVERTER-TEMP-CODE	T3												
SER.NO.					MOTOR WEIGHT								

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405LP	75	P	3/60	1185	575
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
70.2	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
496235	418142-71-EE	---	---	.128		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	26.0	1200	4.71	0	
1/4	18.8	30.8	1197	50.0	91.3	
2/4	37.5	41.5	1193	71.9	94.3	
3/4	56.2	54.9	1190	80.9	94.7	
4/4	75.0	70.2	1186	84.7	94.5	
5/4	93.8	86.9	1182	86.0	94.0	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	172	571	444	
PULL UP		400	164	544	418	
BREAKDOWN		1128	251	833	250	
FULL LOAD		1186	100	332	70.2	
AMPERES SHOWN FOR 575. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.5 PCT. GUARANTEED MIN. EFF. 93.6 PCT.						
		DR. BY	B.R. PENDLEY	A-C MOTOR PERFORMANCE DATA		
		CK. BY	D.M. BYRD			
		APP. BY	E.J. CHRISTIAN			
		DATE	04/08/11			
				A40WG0771-R012 ISSUE DATE 05/11/20		

REL S.O.

 RPM **1185**

 S.F. **1.15**

 ROTOR **418142-71-EE**

 FRAME **405LP**

 VOLTS **575**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **75**

 AMPS **70.2**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

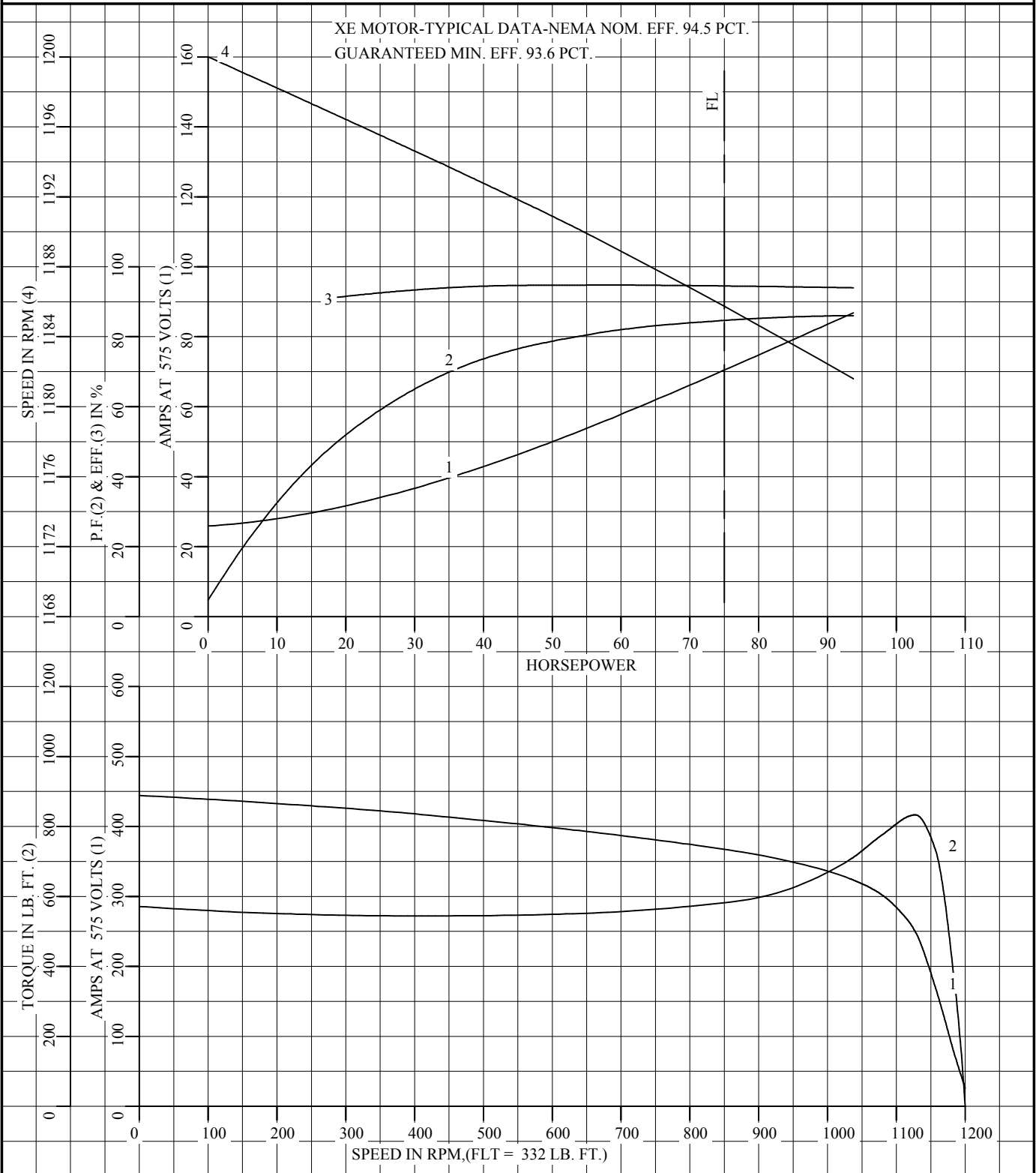
 STATOR RES. @ 25 °C **.128**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **496235**

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 575 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE
 AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
 A MEMBER OF THE ABB GROUP

DR. BY B.R.PENDLEY
 CK. BY D.M.BYRD
 APP. BY E.J.CHRISTIAN
 DATE 04/08/11

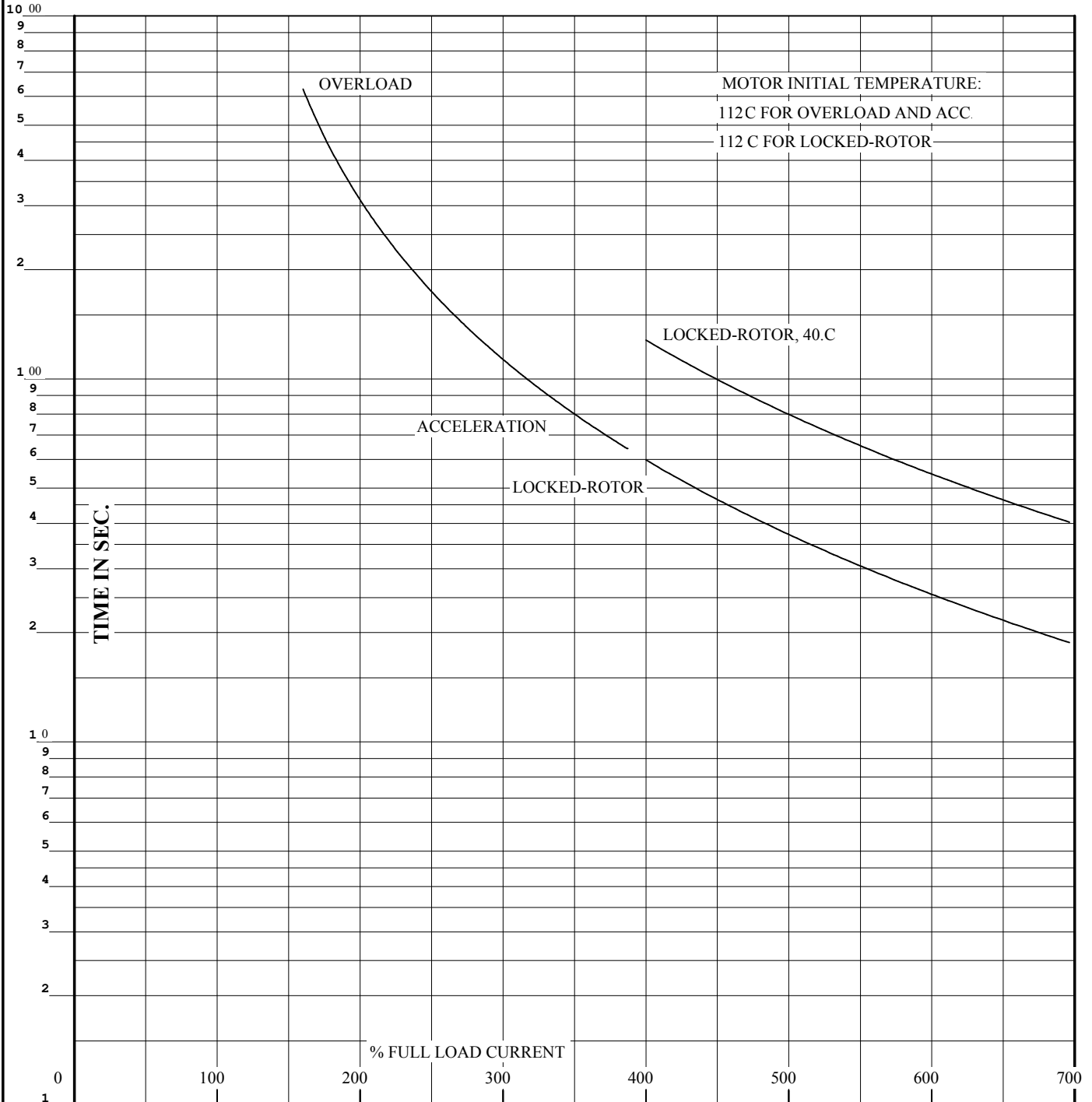
**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0771-R012

ISSUE DATE **05/11/20**

Page 8 of 11

REL. S.O.	RPM 1185	S.F. 1.15	ROTOR 418142-71-EE
FRAME 405LP	VOLTS 575	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 75	AMPS 70.2	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .128
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 496235	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 94.5 PCT.
GUARANTEED MIN. EFF. 93.6 PCT.

AMPERES SHOWN FOR 575 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE
AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY	B.R.PENDLEY
CK. BY	D.M. BYRD
APP. BY	E.J. CHRISTIAN
DATE	04/08/11

**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0771-R012
ISSUE DATE 05/11/20 Page 9 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTION

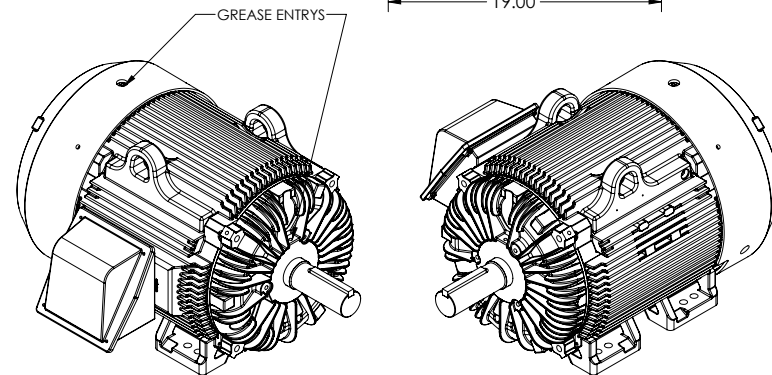
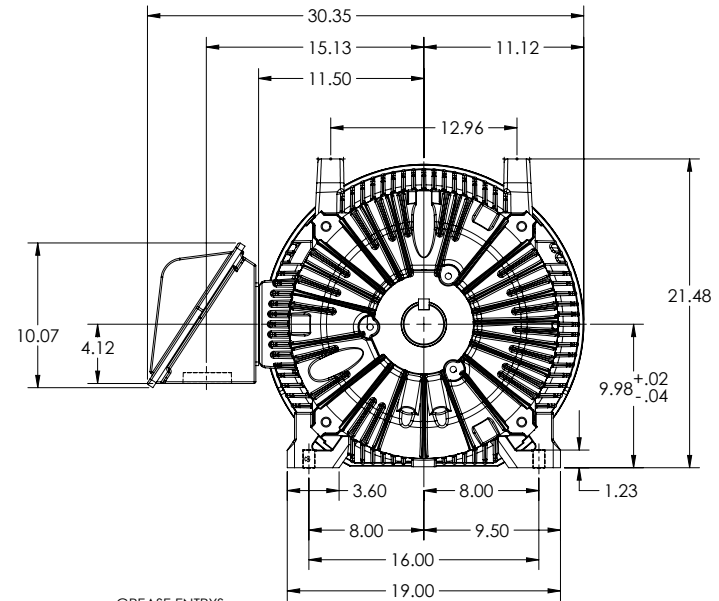
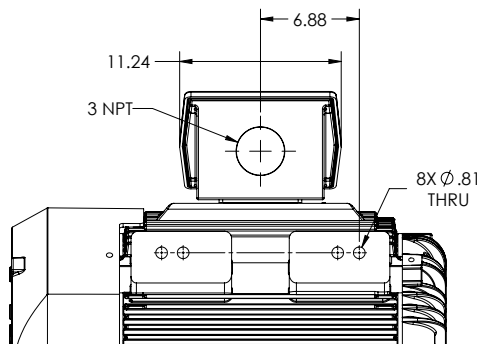
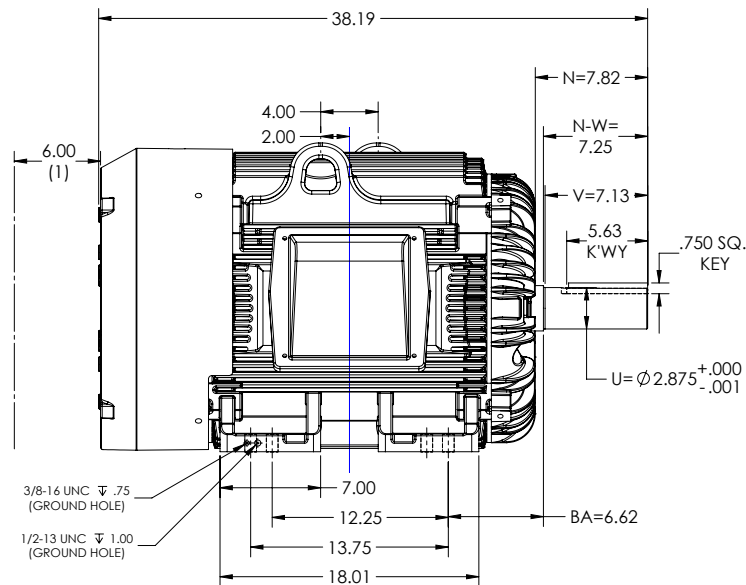
617429-240

ENCLOSURE: TOTALLY ENCLOSED

MOUNTING: FOOT, F1

FRAME G405T
INCLUDES G404T FRAME MOUNTING HOLES

COOLING: FAN COOLED



(1) OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R.

DIMENSIONS ARE IN INCHES
MOTOR WEIGHT: 1350 LBS - MAY VARY BY 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: NEW DRAWING

REV: - VERSION: 00 REVISED: 09-58-52 02/10/2016 TDR: 000000964494
MODEL NO. 617429-240 REF:
BY: RAGRA Material:

BALDOR

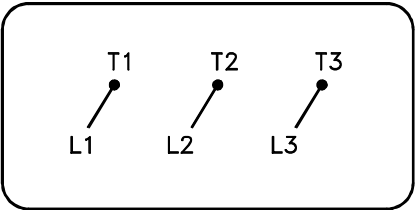
G405/4T TEFC F1 - FT - STD C.I. C/BOX

SHEET NUMBER
1 OF 1
09C-62P119

617429-240

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