

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								

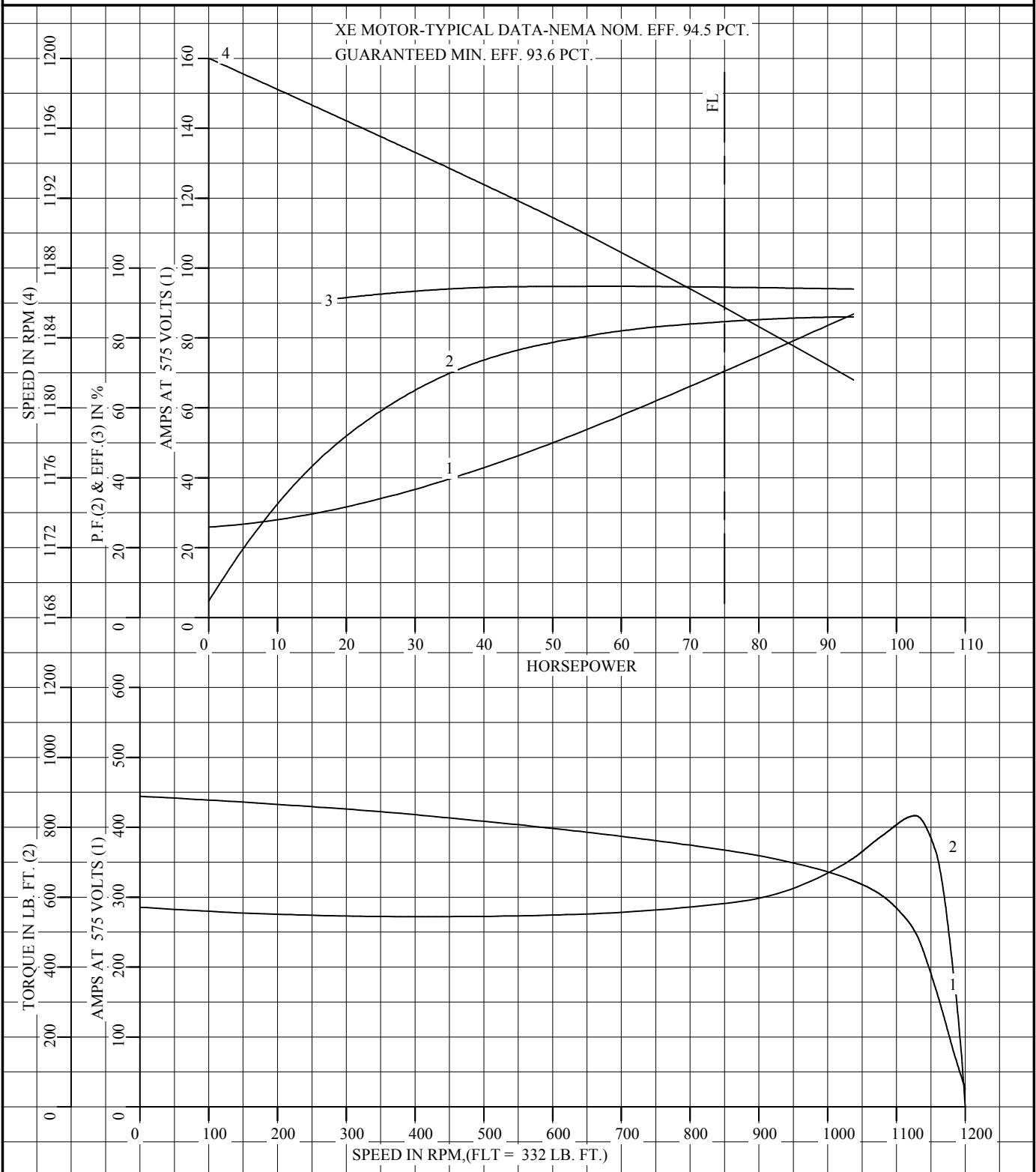
Parts List

Part number	Description	Quantity
SA377107	SA A40-7188-0771	1.000 ea
RA367034	RA A40-7188-0771	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
000901002AAA	N/P BLANK (RELEASE QTY 1,500)	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP3238	SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV	1.000 ea
412118006A	DRAIN	2.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
415072001B	CLAMP	1.000 ea
083198101A	G400 STD FAN COVER MACHINING	1.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
078550001H	FAN KB 120/60 360	1.000 ea
004824015A	GREASE POLYREX EM	0.880 lb
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018026CK	HHCS 3/8-16X3-1/4 PLTD.	3.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
415045002B	SLGR	1.000 ea
410700000DA	WAVY SPRING WASHER	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	4.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea

032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018026CK	HHCS 3/8-16X3-1/4 PLTD.	3.000 ea
415045002B	SLGR	1.000 ea
034530040AB	P/NIP 1/8X5 GALV.	1.000 ea
034530040BB	P/NIP 1/4X5	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
076708000BB	CONDUIT BOX-360	1.000 ea
065776000C	GASKET,MAIN CBOX, 320-400	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
067053000B	GASK 320-400	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
032018010CK	HHCS 3/8-16X1-1/4 PLTD. 032018010CR	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.380 ga
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
032510024D	CARRIAGE BOLT - 444	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
033300014AC	HEX NUT, SHIPPING - 400	2.000 ea
604799003C	PLASTIC BAG 42X32X46	1.000 ea

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

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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**

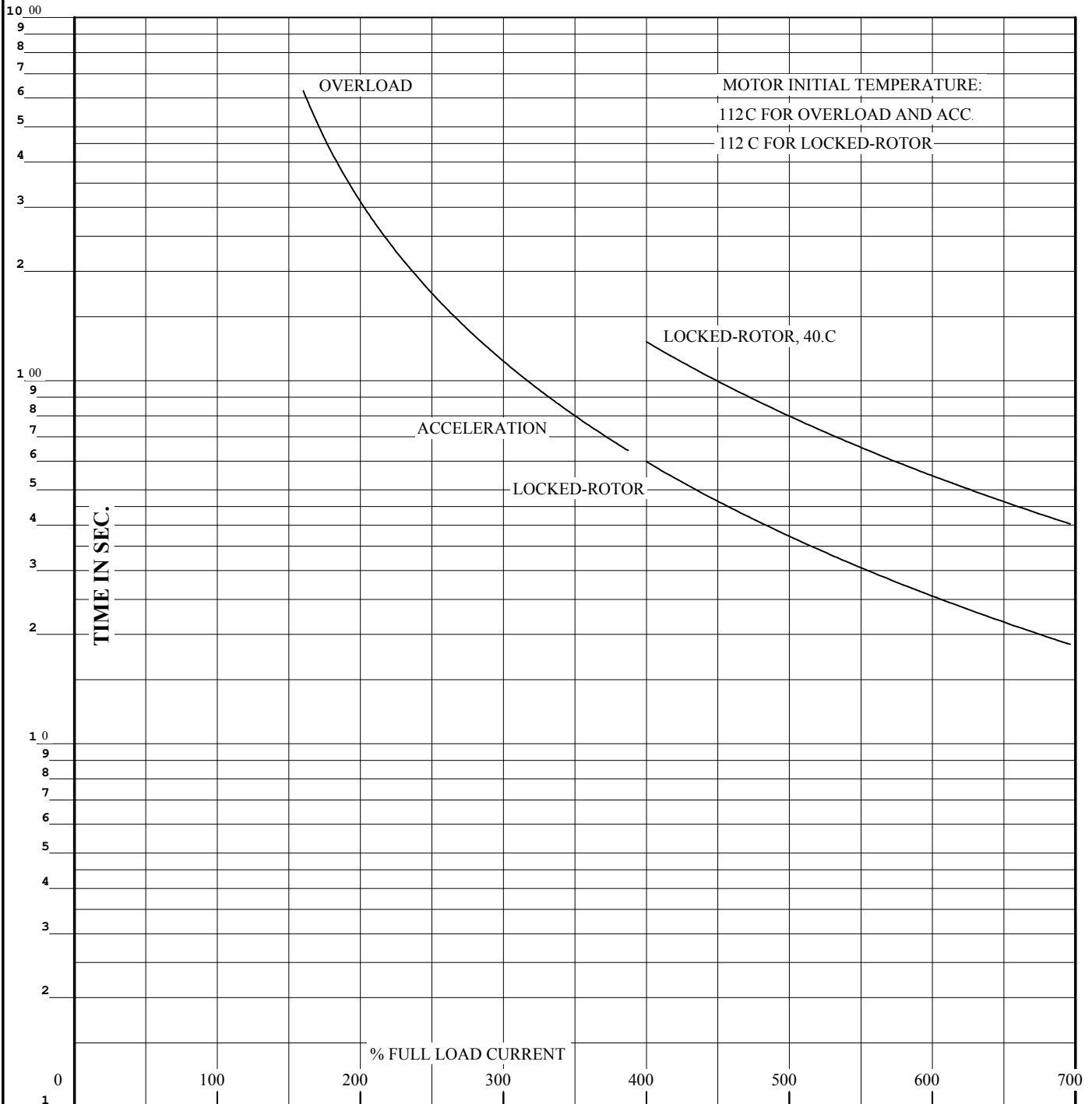
STATOR RES. @ 25 °C **.128**

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.

BALDOR
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DR. BY B.R.PENDLEY
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**A-C MOTOR
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A40WG0771-R012

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DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTION

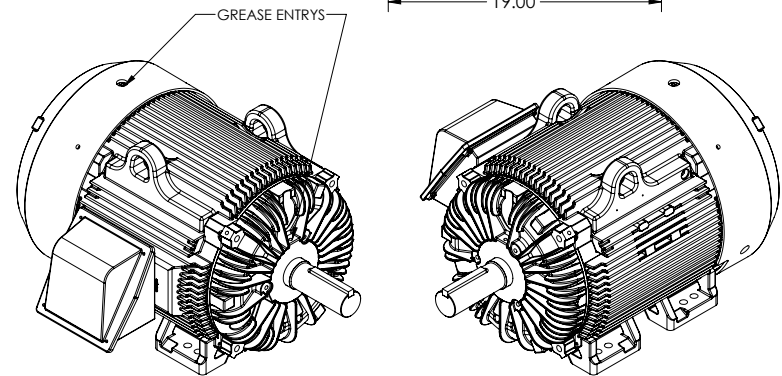
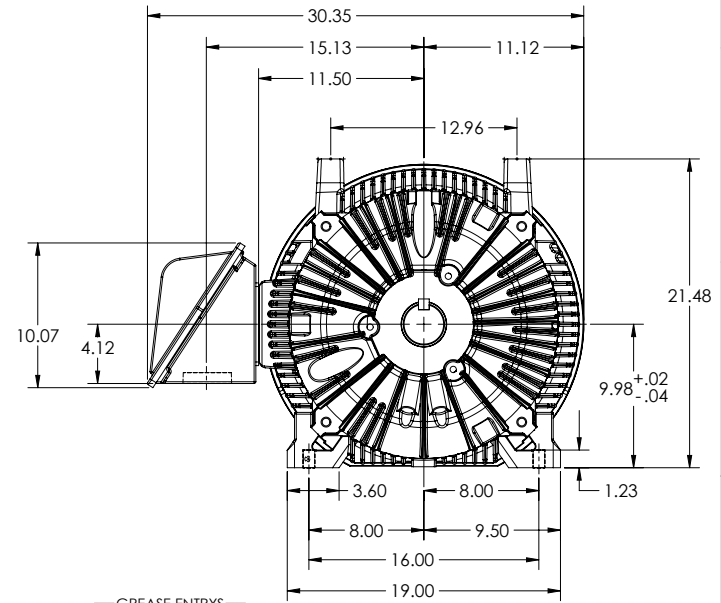
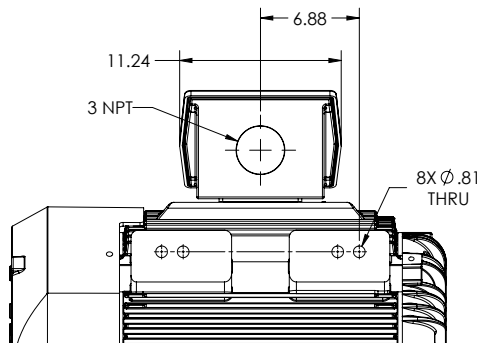
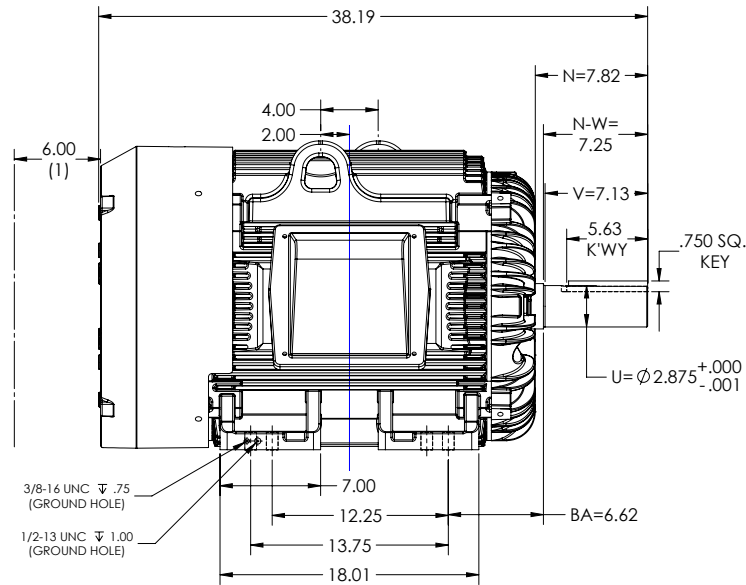
617429-240

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

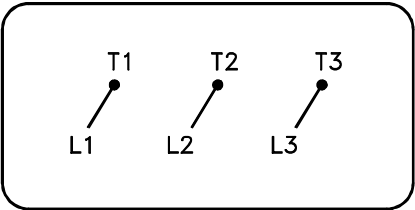
SHEET NUMBER
1 OF 1

09C-62P119

617429-240

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

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

416820-036