

ABB BALDOR RELIANCE III

Customer information packet

ECP4404T-4

75HP, 1185RPM, 3PH, 60HZ, 405T, A4072M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405T
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	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 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	87.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	87.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA

Part Detail

Revision	R
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0769
Layout	617429-501
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	06
Leads	3#2
Proprietary	False
Created date	07-15-2013

Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	38.20 IN
Power Factor	85
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

NP3238																
CAT NO	ECP4404T-4				SPEC NO.		P40G3910									
HP	75	AMPS		87	VOLTS		460		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.	94.9		MAX CORR KVAR				16.00		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											

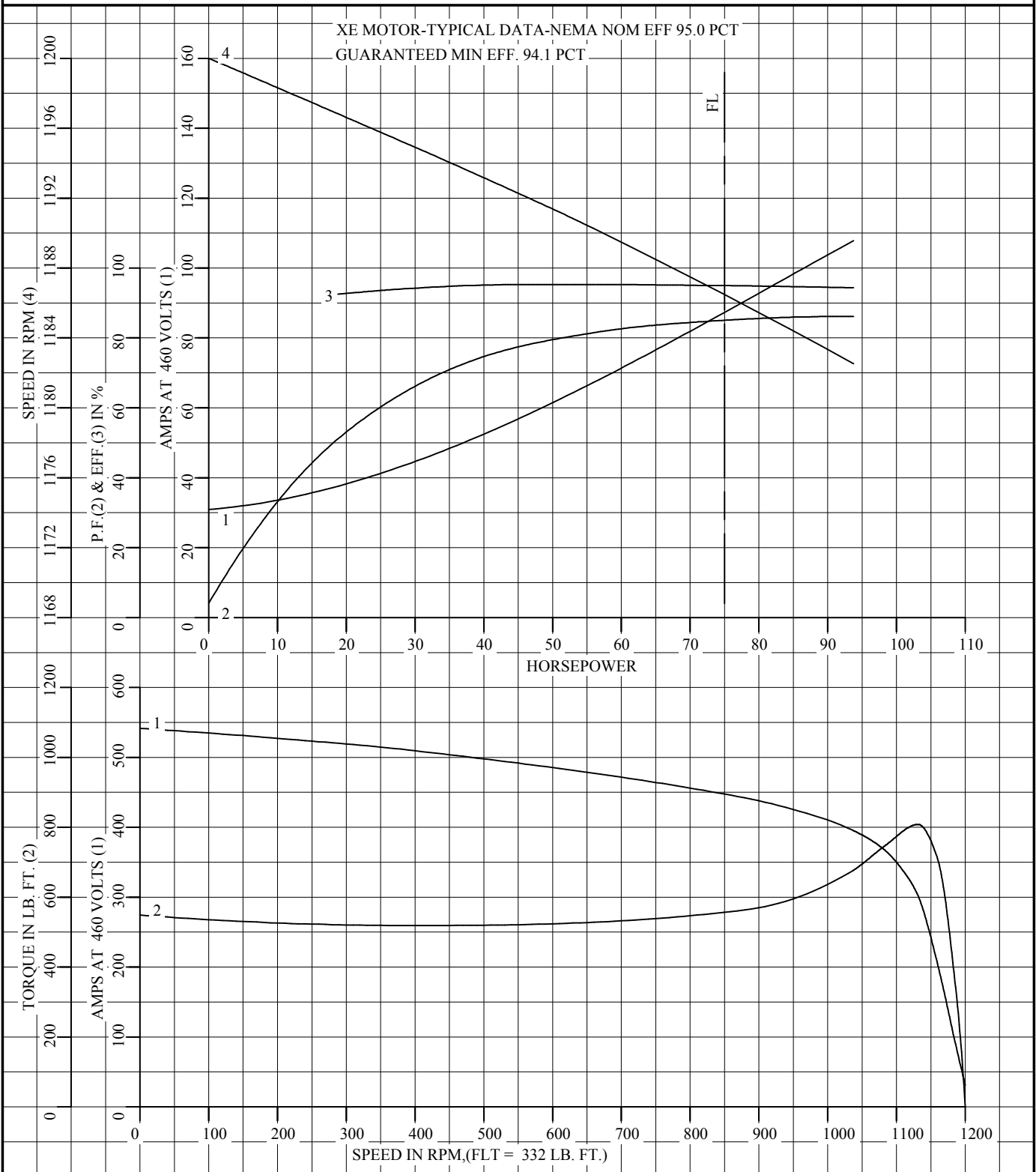
Parts List

Part number	Description	Quantity
SA267701	SA P40G3910	1.000 ea
RA254371	RA P40G3910	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP3238	SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV	1.000 ea
000692000FF	N/P	1.000 ea
004824015A	GREASE POLYREX EM	0.884 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
034180008DA	KEY 1/4X1/4X1 L (shipping)	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
078550001H	FAN KB 120/60 360	1.000 ea
083198101A	G400 STD FAN COVER MACHINING	1.000 ea
034692005AA	P PLUG 3/4"BLK.	1.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
410700000DA	WAVY SPRING WASHER	1.000 ea
415045002B	SLGR	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 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
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
415045002B	SLGR	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 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
065776000C	GASKET,MAIN CBOX, 320-400	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
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
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.063 ga
421948051	LABEL, MYLAR	1.000 ea
PK5004A02	WOOD BASE 40X32 WITH STACKED 2X4 RUNNER	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
412118006A	DRAIN	2.000 ea

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	75	P	3/60	1185	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
86.9	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
496233	418142-71-EE	---	---	.0860		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	31.0	1200	4.11	0	
1/4	18.8	37.2	1197	51.1	92.5	
2/4	37.5	50.7	1194	72.9	95.0	
3/4	56.2	67.7	1190	81.6	95.3	
4/4	75.0	86.9	1187	85.0	95.0	
5/4	93.8	108	1183	86.2	94.4	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	165	549	541	
PULL UP		400	156	519	509	
BREAKDOWN		1132	243	808	302	
FULL LOAD		1187	100	332	86.9	
AMPERES SHOWN FOR 460. 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 95.0 PCT GUARANTEED MIN EFF. 94.1 PCT						
		DR. BY	B.R. PENDLEY	A-C MOTOR PERFORMANCE DATA		
		CK. BY	W.L. SMITH			
		APP. BY	W.L. SMITH			
		DATE	08/16/11			
			A40WG0769-R001 ISSUE DATE 07/13/17			

REL S.O.	RPM 1185	S.F. 1.15	ROTOR 418142-71-EE
FRAME 405T	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 75	AMPS 86.9	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0860
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 496233	OHMS (BETWEEN LINES)



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

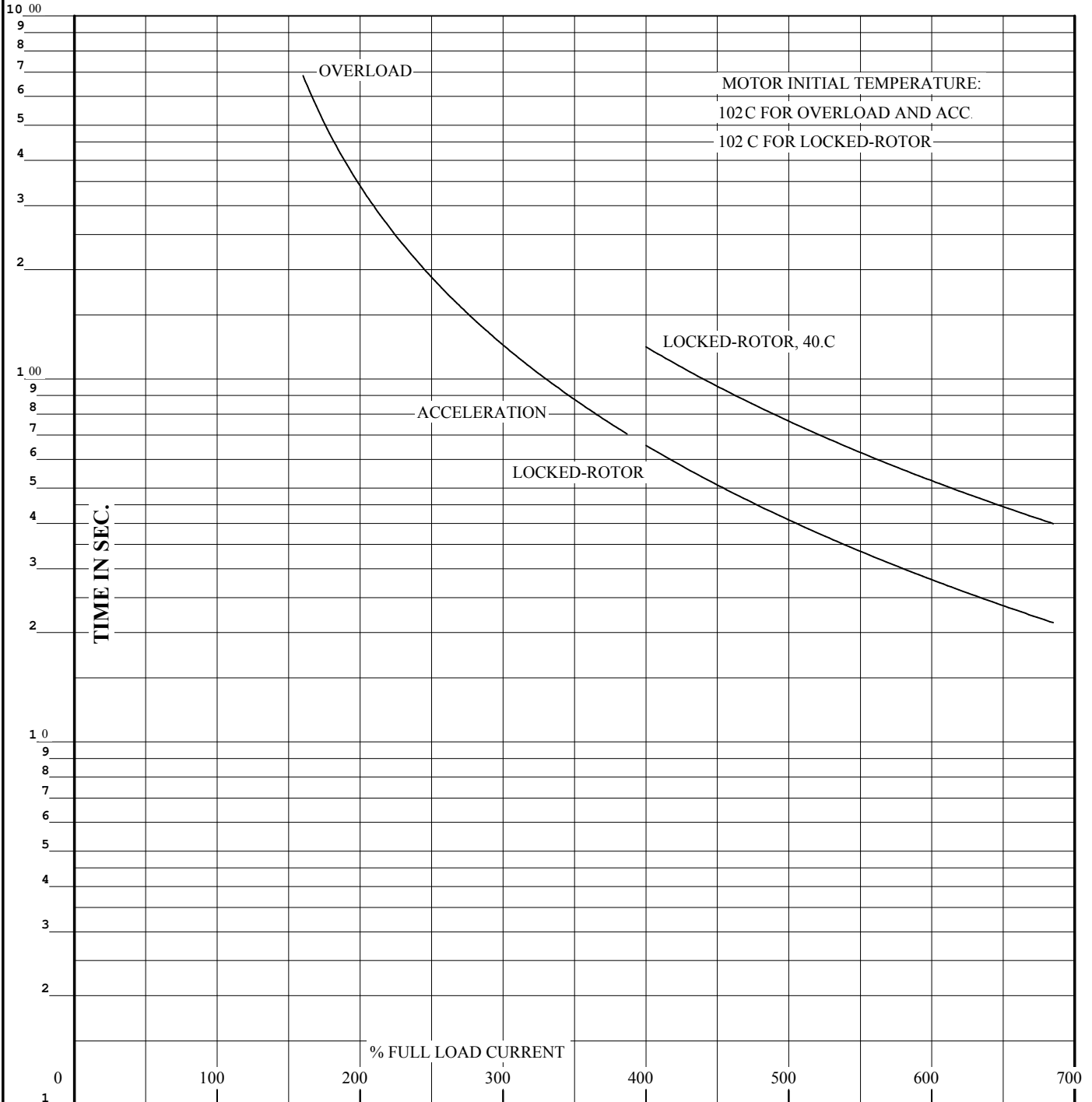
BALDOR
A MEMBER OF THE ABB GROUP

DR. BY B.R.PENDLEY
CK. BY W.L.SMITH
APP. BY W.L.SMITH
DATE 08/16/11

**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0769-R001
ISSUE DATE 07/13/17

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REL. S.O.
FRAME 405T
HP 75
TYPE P
PHASE/HERTZ 3/60
RPM 1185
VOLTS 460
AMPS 86.9
DUTY CONT
AMB °C/INSUL 40/F
S.F. 1.15
NEMA DESIGN B
CODE LETTER G
ENCLOSURE TEFC
E/S 496233
ROTOR 418142-71-EE
TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25 °C .0860
OHMS (BETWEEN LINES)

THERMAL LIMIT CURVE
REMARKS:
XE MOTOR-TYPICAL DATA-NEMA NOM EFF 95.0 PCT
GUARANTEED MIN 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.
BALDOR
A MEMBER OF THE ABB GROUP

DR. BY B.R.PENDLEY
CK. BY W.L.SMITH
APP. BY W.L.SMITH
DATE 08/16/11

**A-C MOTOR
PERFORMANCE
CURVES**
A40WG0769-R001
ISSUE DATE 07/13/17 **Page 9 of 12**

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

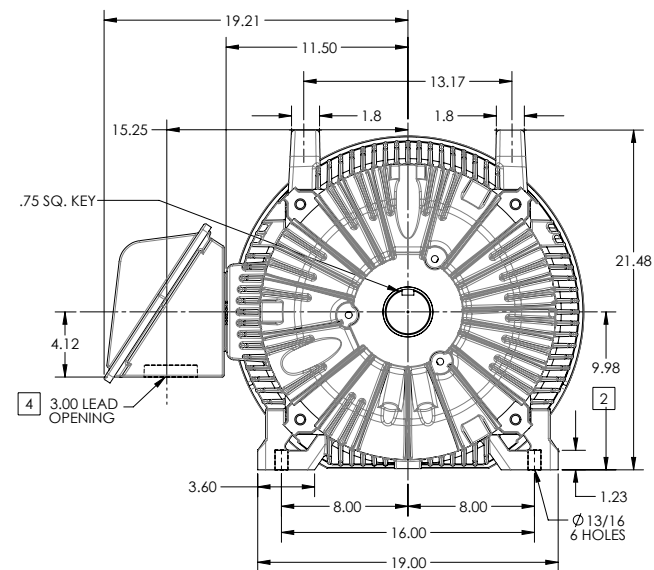
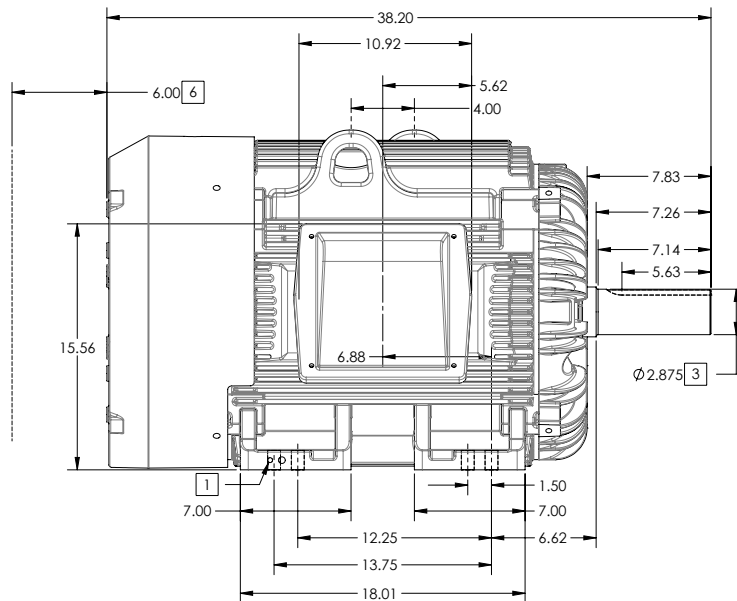
FRAME G405T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404T FRAME MOUNTING HOLES

XT/ECP SEVERE DUTY ENCLOSURE



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

[5] WEIGHT (LBS): 1370

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
1 OF 2

105-627219

REV. DESC: CHANGE BA FROM 6.76 TO 6.62	TDR: 000000848770
REV: B VERSION: 02	REVISED: 01-11-16 04/14/2014
MODEL NO. 617429-501	REF:
BY: MGHUMZ2	Material:

BALDOR

G405T/404T STD - FOOTED - XT/ECP SEVERE DUTY ENCLOSURE

617429-501

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

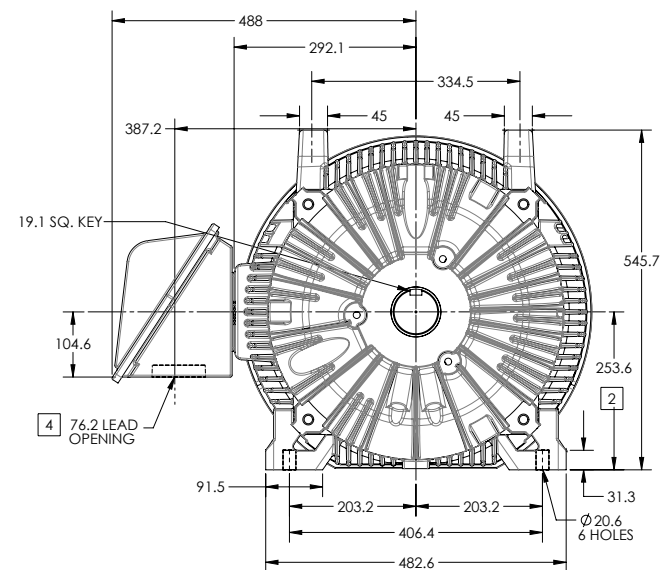
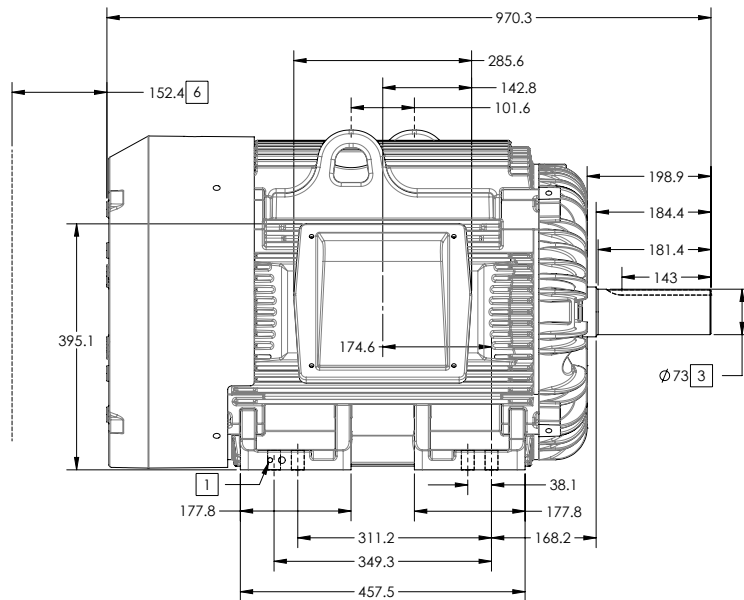
FRAME G405T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404T FRAME MOUNTING HOLES

XT/ECP SEVERE DUTY ENCLOSURE



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0,-1.5
3. VARIES +00,-.03
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

[5] WEIGHT (KGS): 630

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
2 OF 2

105-627219

REV. DESC: CHANGE BA FROM 6.76 TO 6.62	TDR: 000000848770
REV: B VERSION: 02	REVISED: 01-11-16 04/14/2014
MODEL NO. 617429-501	REF:
BY: MGHUMZ2	Material:

BALDOR

G405T/404T STD - FOOTED - XT/ECP SEVERE DUTY ENCLOSURE

617429-501

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