

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

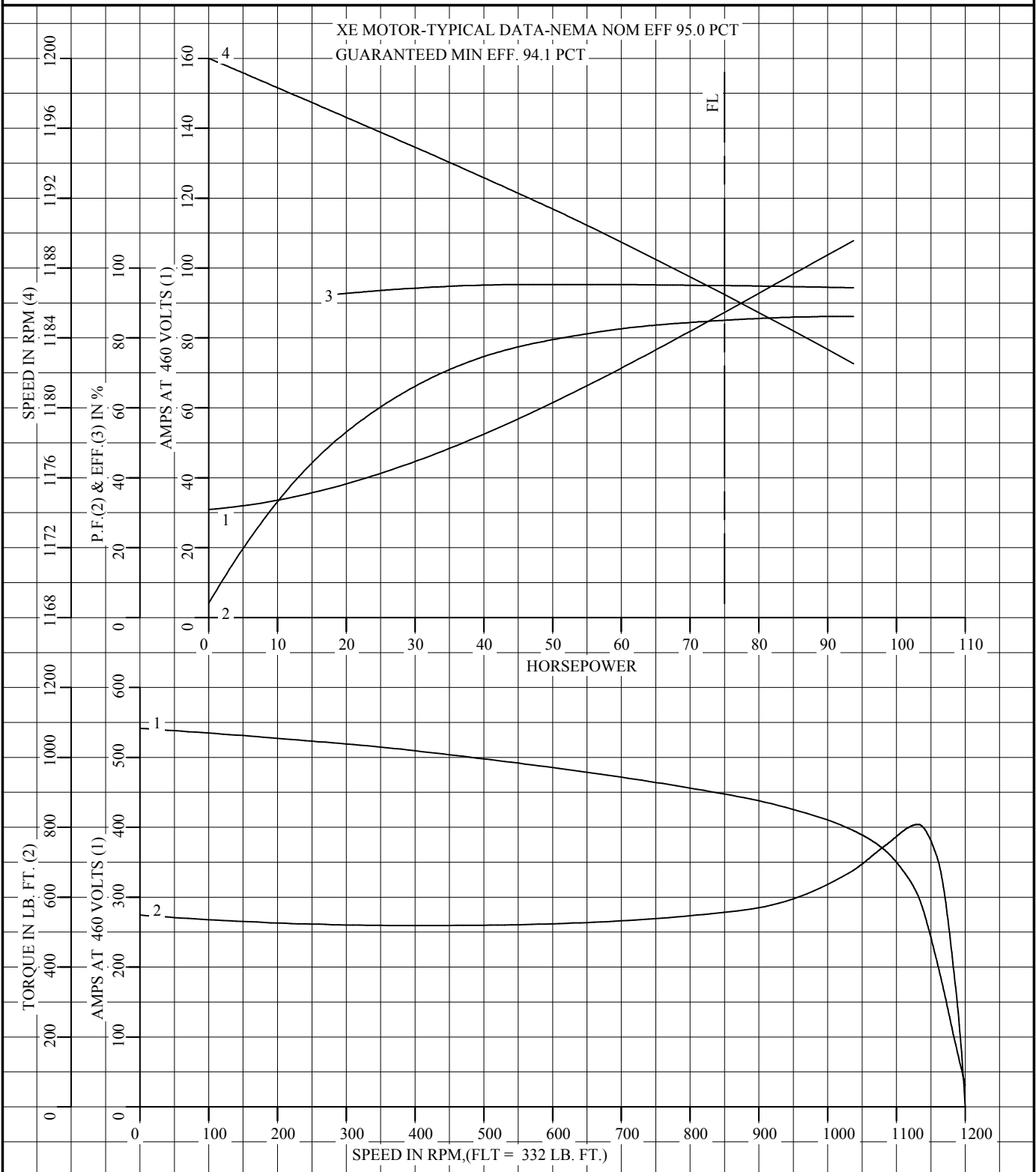
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	38.20 IN
Power Factor	85
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
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												

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 CK. BY W.L.SMITH APP. BY W.L.SMITH DATE 08/16/11		A-C MOTOR PERFORMANCE DATA 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

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

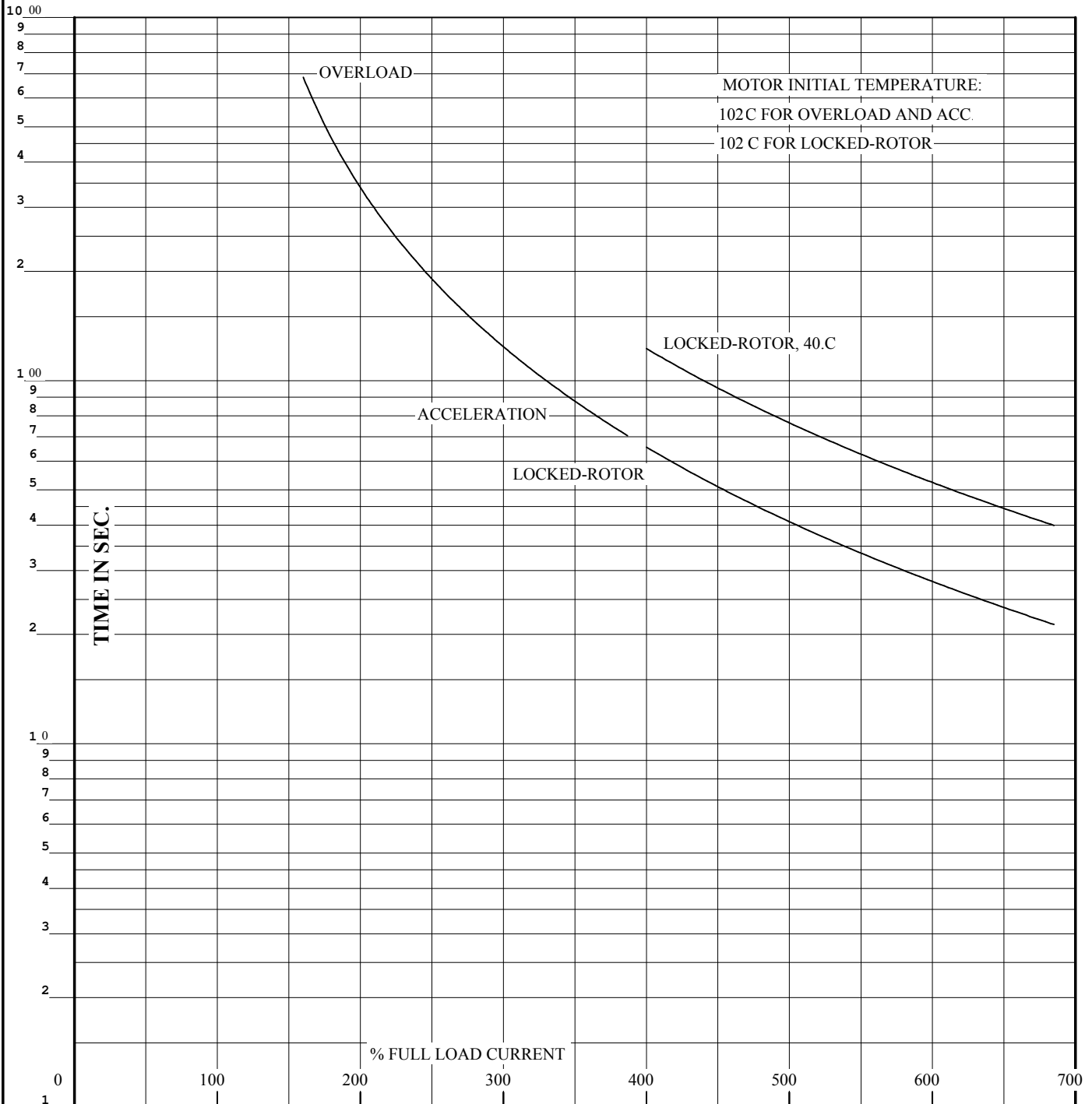
STATOR RES. @ 25 °C. 0860

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 496233

OHMS (BETWEEN LINES)



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.

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**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0769-R001

ISSUE DATE 07/13/17 Page 7 of 10

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

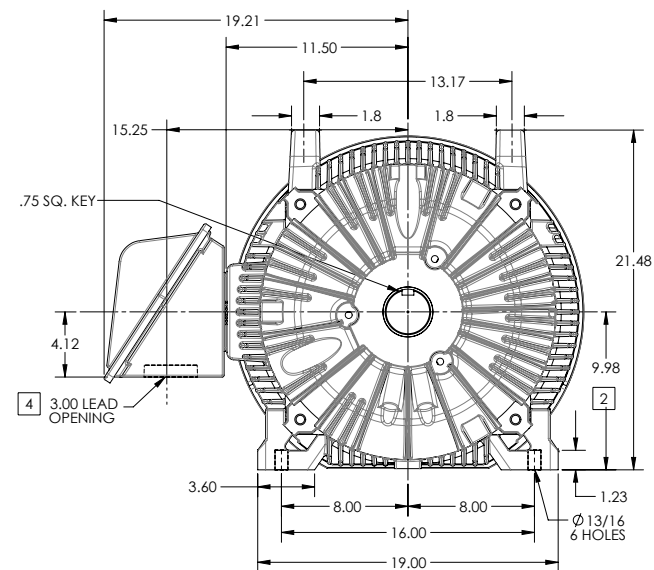
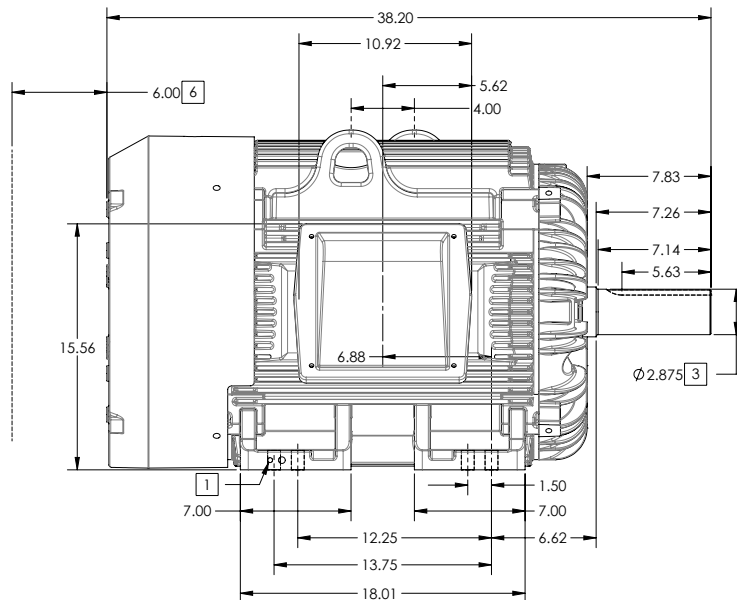
FRAME G405T ABOVE NEMA RATINGS

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 +.000,-.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 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 .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

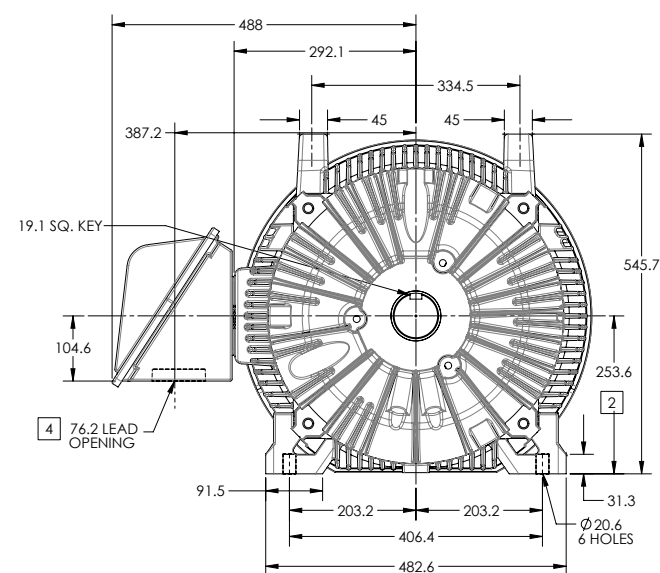
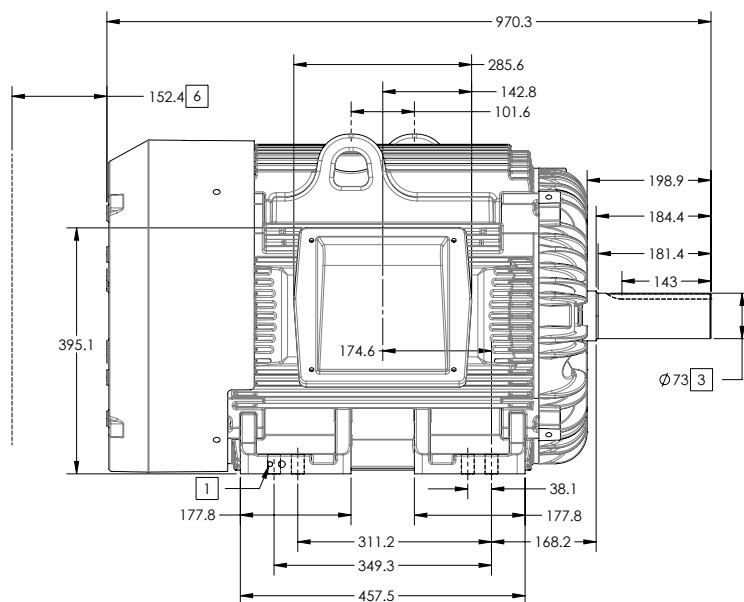
FRAME G405T ABOVE NEMA RATINGS

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 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 .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:

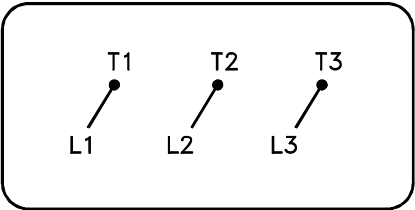
BALDOR

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