

ABB BALDOR RELIANCE III

Customer information packet OF4312T

50HP, 1130RPM, 3PH, 60HZ, 404T, A40062M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	404T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
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 796.0 V @ 60 HZ
Agency Approvals	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	58.800 A @ 460.0 V 33.900 A @ 796.0 V
Design Code	D
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	33.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 6 AWG

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A40WG0515
Layout	617429-521
Eff. date	02-05-2019
CD Diagram	416820-004
Poles	06
Leads	6#6
Proprietary	False
Created date	07-19-2013

Motor Standards	NEMA
Motor Type	A40062M
Mounting Arrangement	F2
Number of Poles	6
Overall Length	38.20 IN
Product Family	Oil Well Pump Jack
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1130 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

NP2294L									
CAT.NO.				SPEC NO.	P40G3939				FRAME 404T
HP	50	PHASE	3	DESIGN	D	TYPE	P		
RPM	1130	HZ	60	AMB	40	SF	1.15		
VOLTS	460/796			DUTY	CONT		INSUL.CLASS	F	
AMPS	58.8/33.9			ENCL	TEFC	CODE	G		
DRIVE END BEARING	80BC03J30X			NEMA-NOM-EFFICIENCY		89.5			
OPP D.E. BEARING	80BC03J30X								
SER.NO.				OVER TEMP PROT 2					
						MOTOR WEIGHT			

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	404T	50	P	3/60	1130	460/796
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
58.8/33.9	CONT	40/F	1.15	D	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
595999	418142075AA	---	---	.138/.413		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	9.1	1200	7.13	0	
1/4	12.5	12.1	1184	62.6	89.6	
2/4	25.0	18.0	1167	81.8	91.8	
3/4	37.5	25.4	1149	87.6	91.2	
4/4	50.0	33.9	1130	89.0	89.7	
5/4	62.5	42.8	1108	90.0	87.8	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	287	668	220	
PULL UP		0	287	668	220	
BREAKDOWN		758	317	736	152	
FULL LOAD		1130	100	232	33.9	
AMPERES SHOWN FOR 796. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA						
		DR. BY	B. R. PENDEY	A-C MOTOR PERFORMANCE DATA		
		CK. BY	C. E. JAMISON			
		APP. BY	W. L. SMITH			
		DATE	02/02/2012			
				A40WG0515-R001 ISSUE DATE 04/13/20		

REL S.O.

RPM 1130

S.F. 1.15

ROTOR 418142075AA

FRAME 404T

VOLTS 460/796

NEMA DESIGN D

TEST S.O. TYPICAL DATA

HP 50

AMPS 58.8/33.9

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

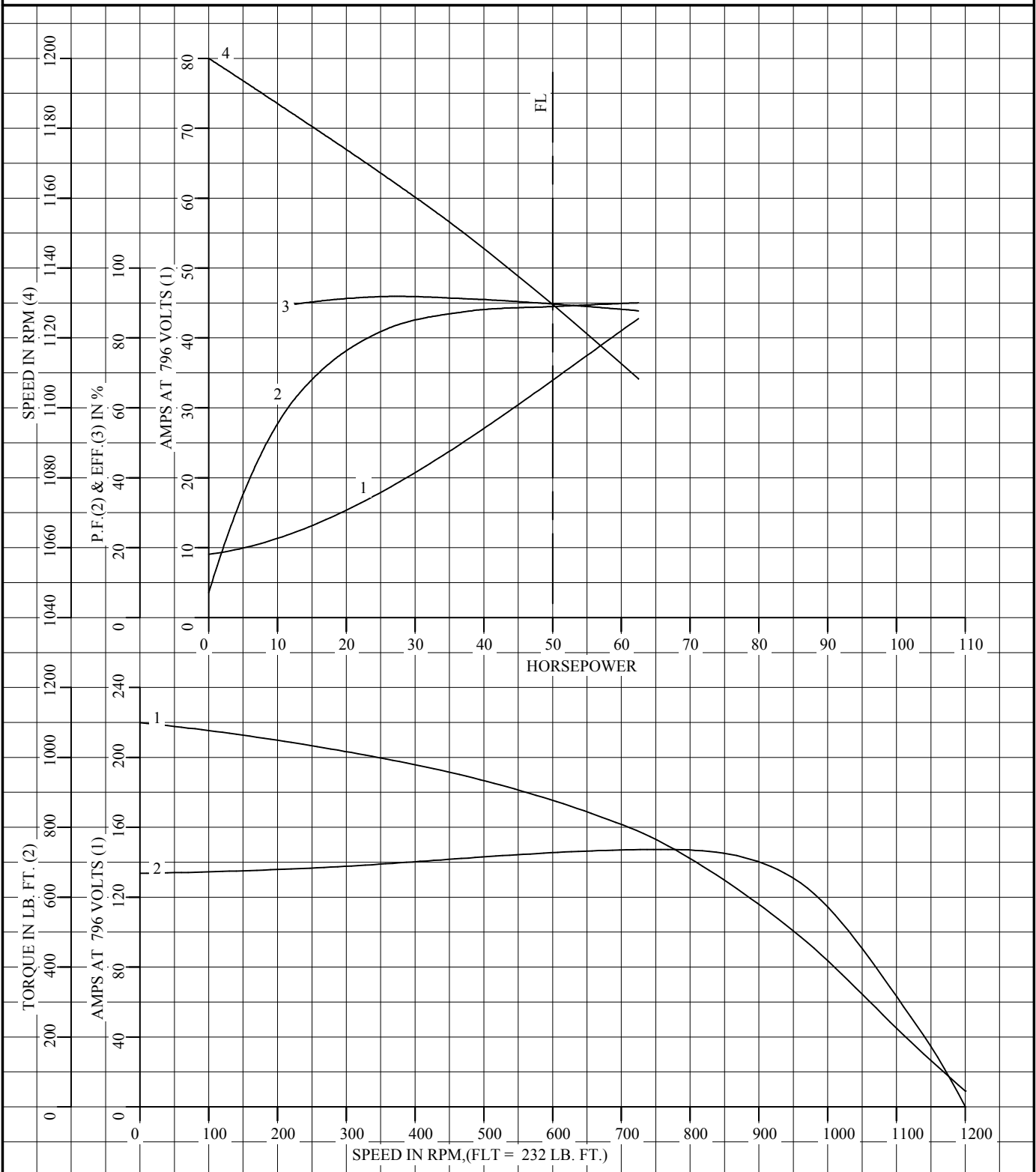
STATOR RES. @ 25 °C .138/.413

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 595999

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 796 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. PENDEY
CK. BY C.E. JAMISON
APP. BY W.L. SMITH
DATE 02/02/2012

**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0515-R001

ISSUE DATE 04/13/20

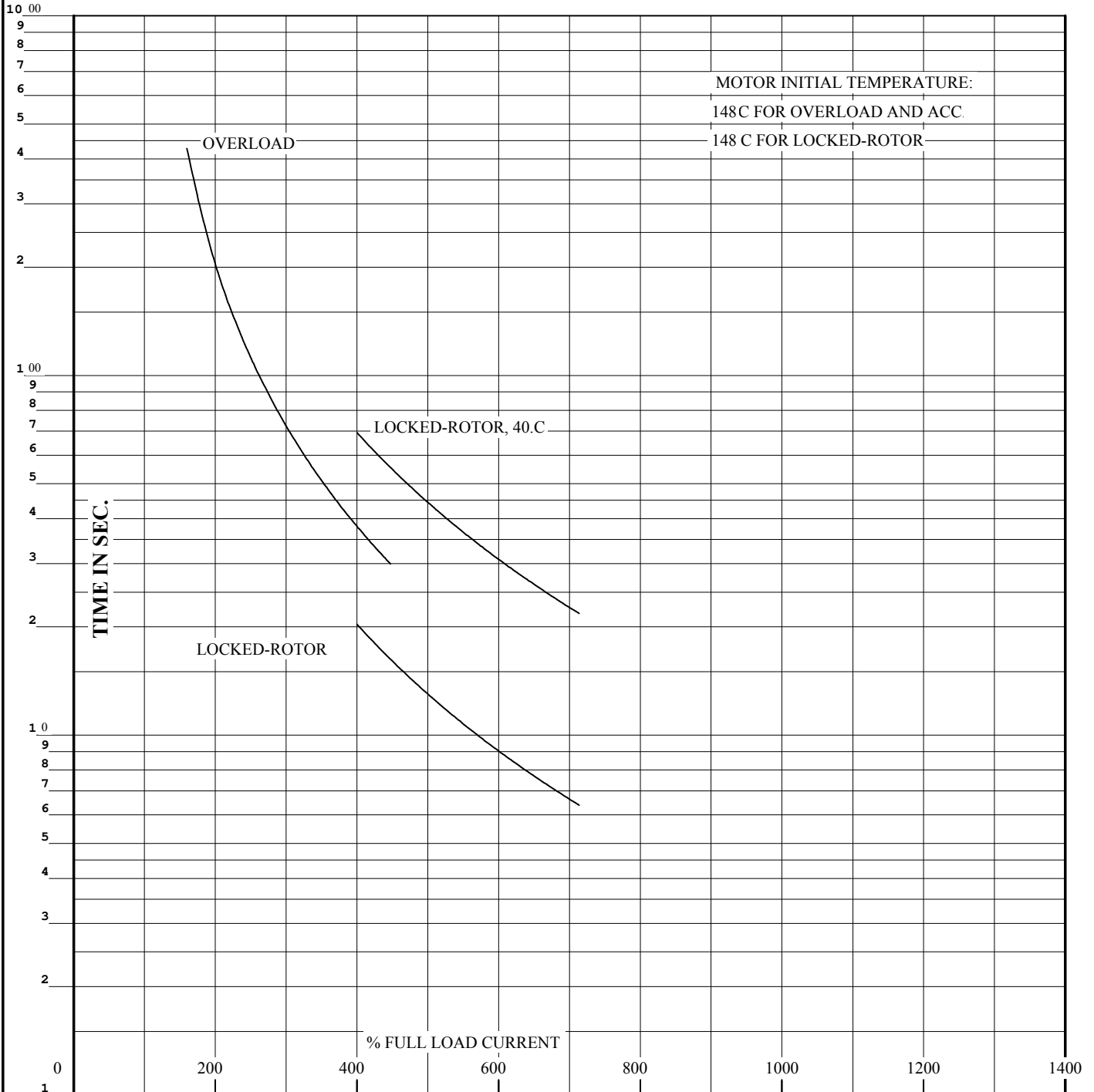
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REL. S.O.
FRAME **404T**
HP **50**
TYPE **P**
PHASE/HERTZ **3/60**

RPM **1130**
VOLTS **460/796**
AMPS **58.8/33.9**
DUTY **CONT**
AMB °C/INSUL **40/F**

S.F. **1.15**
NEMA DESIGN **D**
CODE LETTER **G**
ENCLOSURE **TEFC**
E/S **595999**

ROTOR **418142075AA**
TEST S.O. **TYPICAL DATA**
TEST DATE **---**
STATOR RES. @ 25 °C **.138/.413**
OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

AMPERES SHOWN FOR 796 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY B.R.PENDEY
CK. BY C.E.JAMISON
APP. BY W.L.SMITH
DATE 02/02/2012

**A-C MOTOR
PERFORMANCE
CURVES**

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ISSUE DATE 04/13/20 Page 7 of 10

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

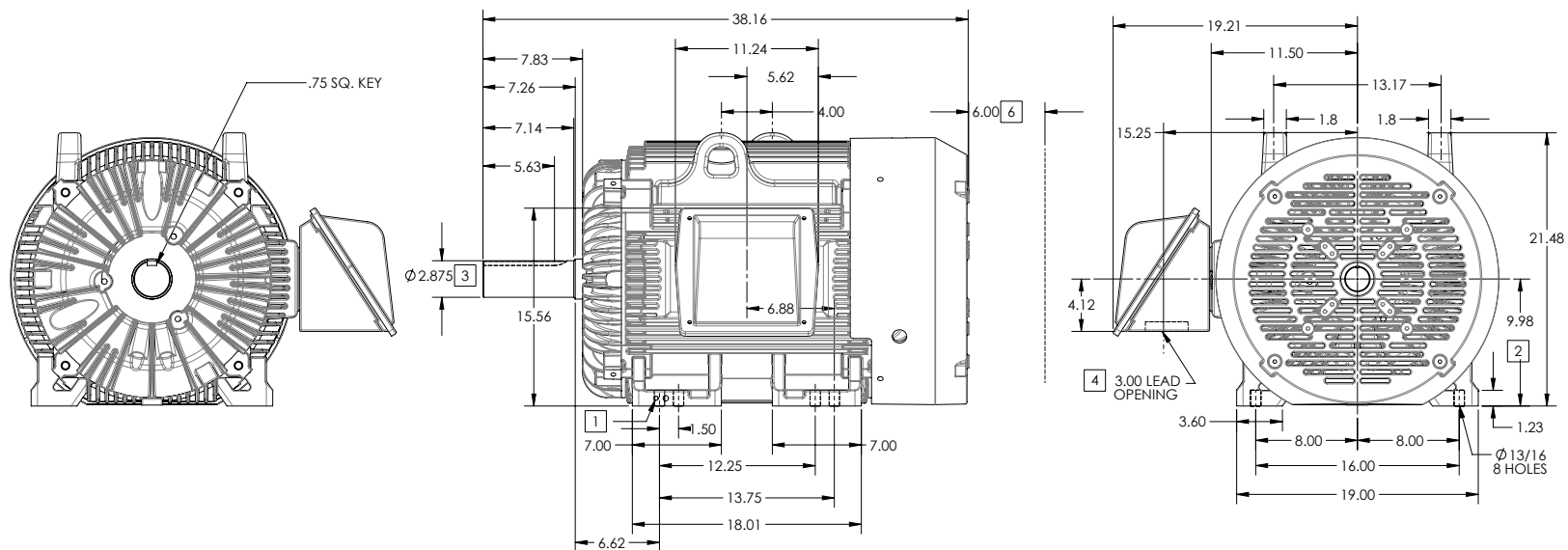
FRAME G405T ABOVE NEMA RATINGS

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

[5] WEIGHT (LBS): 1370

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-1.
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.

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

1C5-6C2L19

REV. DESC: CHANGE BA FROM 6.76 TO 6.62	
REV: A	VERSION: 01
MODEL NO. 617429-521	REVISED: 02-55-42 04/14/2014
BY: MGH/MZ2	TDR: 000000848770
Material:	REF:

BALDOR

G405T/404T STD - FOOTED - XT/ECP SEVERE DUTY ENCLOSURE F2

617429-521

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

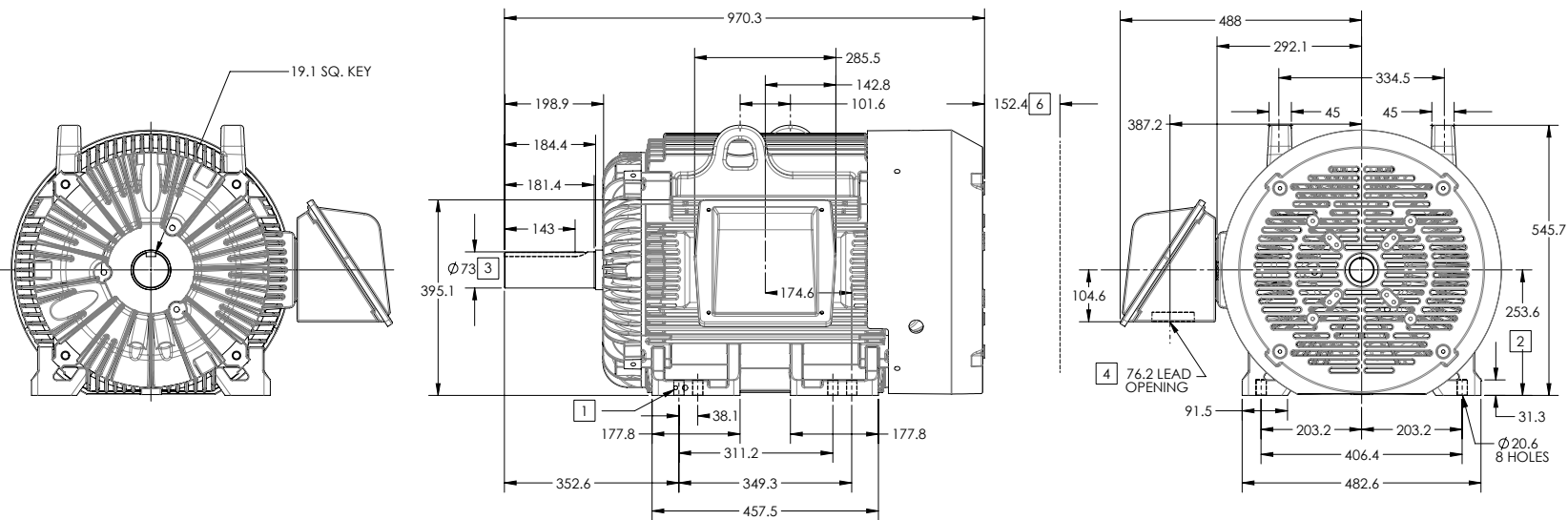
FRAME G405T ABOVE NEMA RATINGS

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

[5] WEIGHT (KGS): 630

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-1.
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.

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

1C5-6C2L19

REV. DESC: CHANGE BA FROM 6.76 TO 6.62	TDR: 000000848770
REV: A VERSION: 01	REVISED: 02-55-42 04/14/2014
MODEL NO. 617429-521	REF:
BY: MGHUMZ2	Material:

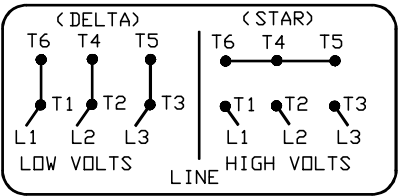
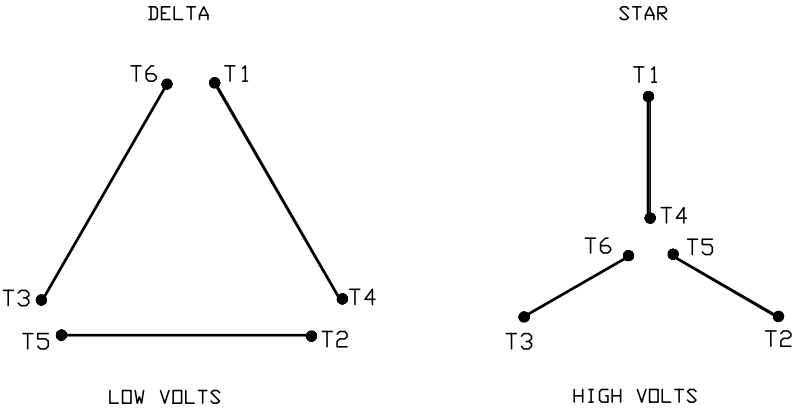
BALDOR

G405T/404T STD - FOOTED - XT/ECP SEVERE DUTY ENCLOSURE F2

617429-521

416820-004

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 6 LEAD < DELTA/STAR CONNECTED >
DUAL VOLTAGE < LOW VOLTS/HIGH VOLTS >



< N. P. 1767-CC >

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: C	VERSION: 03	TDR: 000001009406
FILE: \RSN\00017\950	REVISED: 10:55:03 12/21/2016	BY: MGHMTT
MTL: -	© □	

BALDOR

A-C MOTOR CONNECTION DIAGRAM
SH 1 of 1

416820-004