

ABB BALDOR RELIANCE III

Customer information packet

EM4400TS

100HP, 1785RPM, 3PH, 60HZ, 405TS, A40064M, TEF

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	405TS
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	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	No Grease
Current @ Voltage	112.000 A @ 460.0 V 224.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	112.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0692
Layout	617429-002
Eff. date	09-04-2024
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	07-17-2013

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	35.04 IN
Power Factor	87
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2349L												
SPEC NO.	P40G3928			CAT.NO.		EM4400TS				FRAME	405TS	
HP	100	VOLTS	230/460		PHASE	3	DESIGN	B	TYPE	P		
RPM	1785	AMPS	224/112		HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	80BC03J30X			DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	80BC03J30X			ENCL	TEFC	CODE	G					
SER.NO.				POWER FACTOR		87	NEMA-NOM-EFFICIENCY				95.4	
						MAX CORR KVAR		18	GUARANTEED EFFICIENCY		94.5	
						NEMA NOM/CSA QUOTED EFF						
						MOTOR WEIGHT						

Accessories

Part number	Description	Multiplier
K40G71	C-FACE KIT G400 4/6/8 POLES	A8
089412054B	D-FLANGE BRKT 400 089416055WCB	P1

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	100	P	3/60	1785	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
224/112	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)		
596956	418142-33-RE	---	---	.0123/.0492		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	28.6	1800	5.49	0	
1/4	25.0	39.2	1796	64.3	93.0	
2/4	50.0	59.5	1792	82.5	95.4	
3/4	75.0	84.6	1788	86.7	95.7	
4/4	100	112	1783	87.4	95.4	
5/4	125	141	1778	87.3	94.9	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB. - FT.	AMPERES	
LOCKED ROTOR		0	151	445	725	
PULL UP		360	136	400	706	
BREAKDOWN		1721	250	735	382	
FULL LOAD		1783	100	295	112	
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE						
REMARKS: TYPICAL DATA NEMA NOM. EFF. 95.4 PCT GUARANTEED MIN EFF. 94.5 PCT						
		DR. BY R.K. BRIDGES		A-C MOTOR PERFORMANCE DATA A40WG0692-R001 ISSUE DATE 01/04/18		
		CK. BY W. L. SMITH				
		APP. BY W. L. SMITH				
		DATE 05/14/14				
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REL S.O.

 RPM **1785**

 S.F. **1.15**

 ROTOR **418142-33-RE**

 FRAME **405T**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **100**

 AMPS **224/112**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

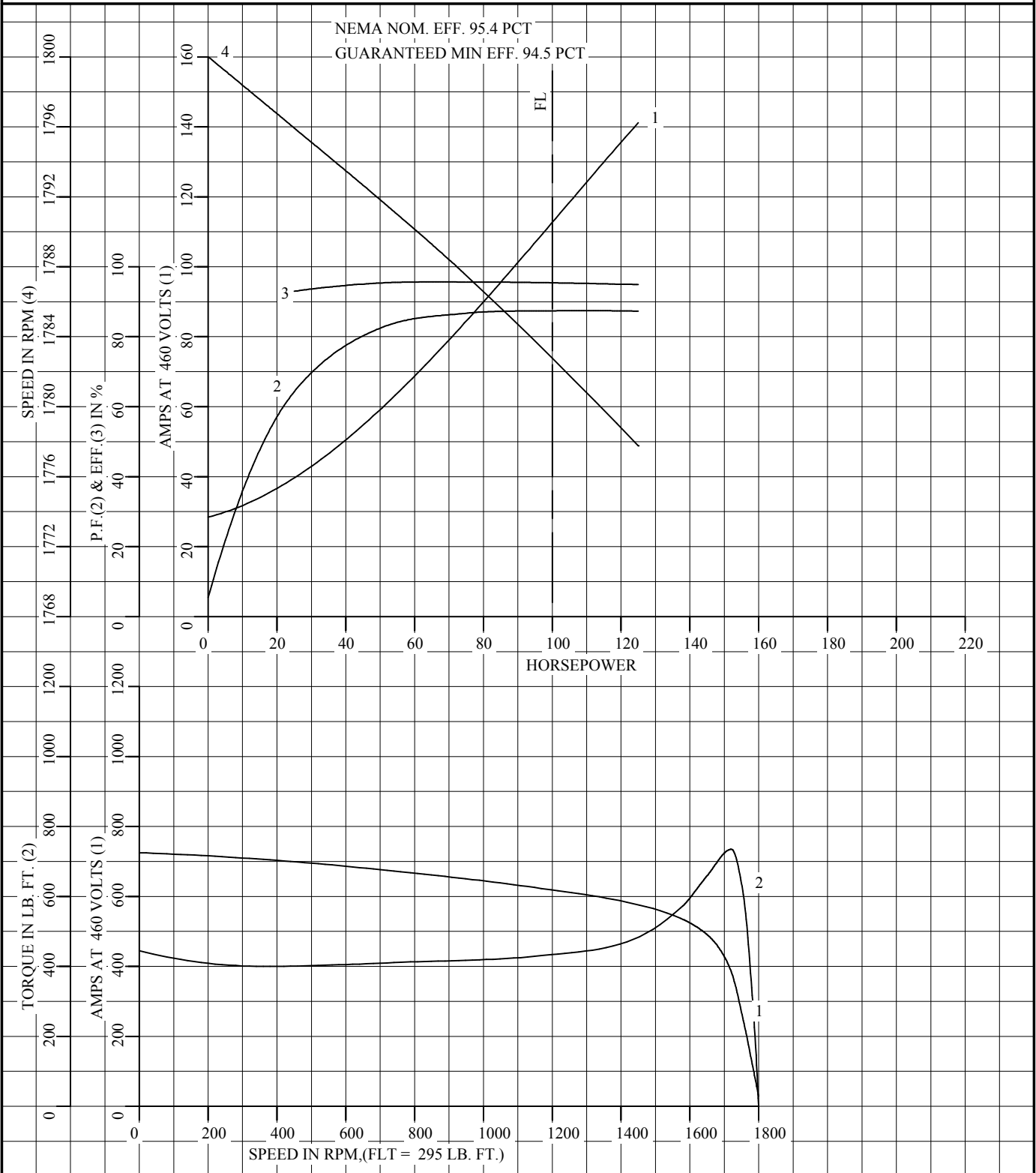
 STATOR RES. @ 25 °C **.0123/.0492**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **596956**

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 R.K. BRIDGES
CK. BY W.L. SMITH
APP. BY W.L. SMITH
DATE 05/14/14

**A-C MOTOR
PERFORMANCE
CURVES**

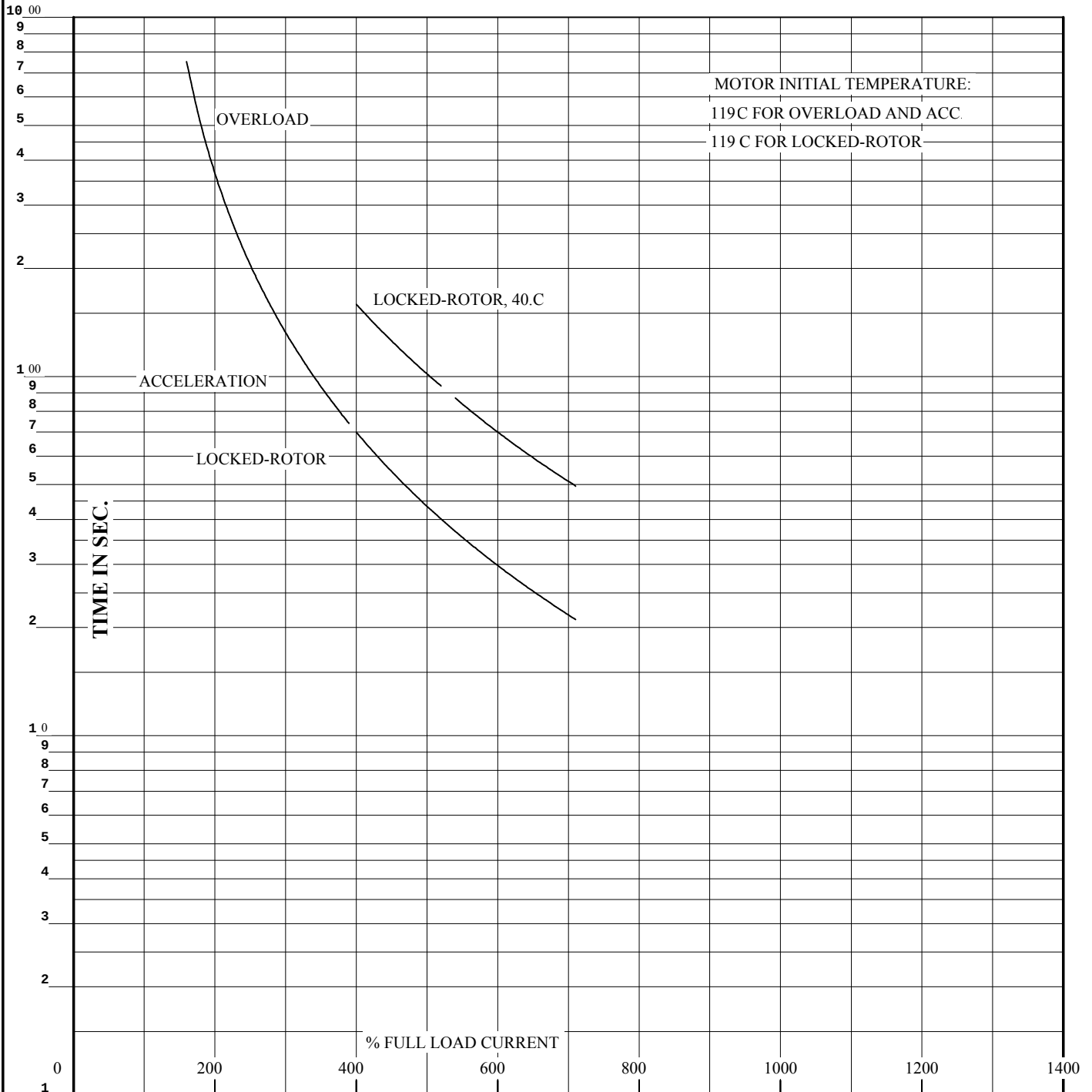
A40WG0692-R001
ISSUE DATE 01/04/18

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REL. S.O.
 FRAME **405T**
 HP **100**
 TYPE **P**
 PHASE/HERTZ **3/60**

 RPM **1785**
 VOLTS **230/460**
 AMPS **224/112**
 DUTY **CONT**
 AMB °C/INSUL **40/F**

 S.F. **1.15**
 NEMA DESIGN **B**
 CODE LETTER **G**
 ENCLOSURE **TEFC**
 E/S **596956**

 ROTOR **418142-33-RE**
 TEST S.O. **TYPICAL DATA**
 TEST DATE **---**
 STATOR RES. @ 25 °C **.0123/.0492**
 OHMS (BETWEEN LINES)


THERMAL LIMIT CURVE

REMARKS:

NEMA NOM. EFF. 95.4 PCT

GUARANTEED MIN EFF. 94.5 PCT

 AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE
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 DR. BY R.K. BRIDGES
 CK. BY W. L. SMITH
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**A-C MOTOR
PERFORMANCE
CURVES**
A40WG0692-R001

 ISSUE DATE 01/04/18 Page 8 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

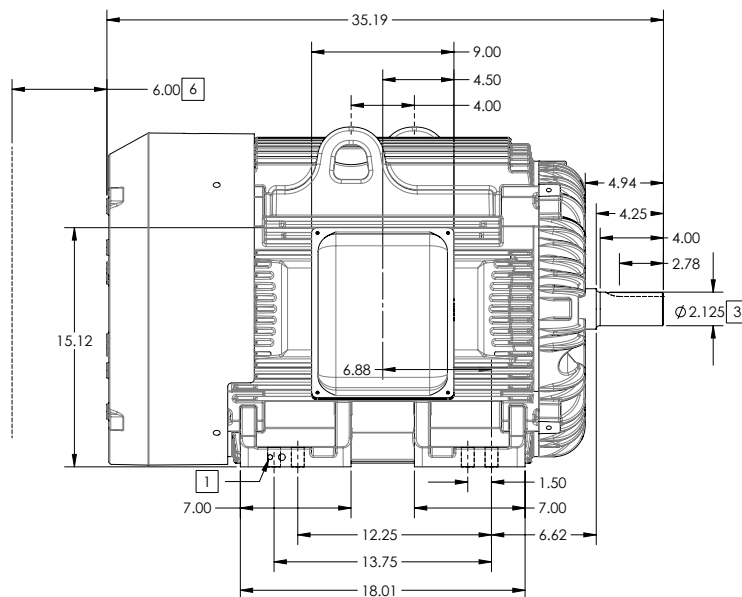
FRAME G405TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404TS FRAME MOUNTING HOLES

STANDARD INDUSTRIAL ENCLOSURE



DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

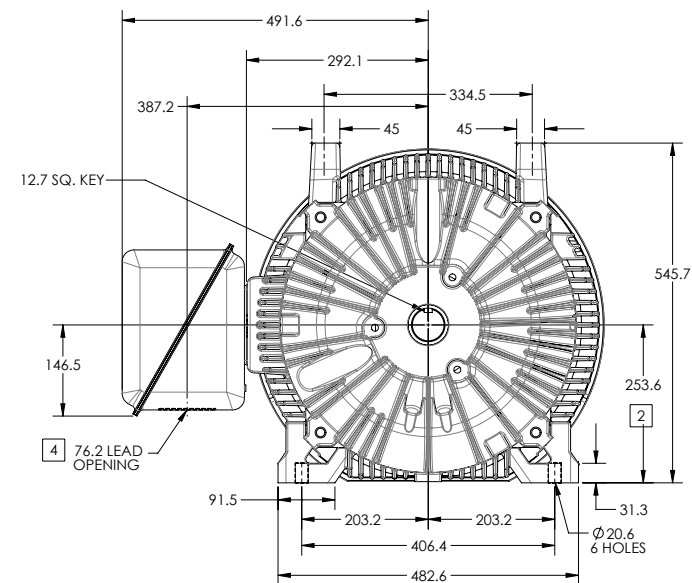
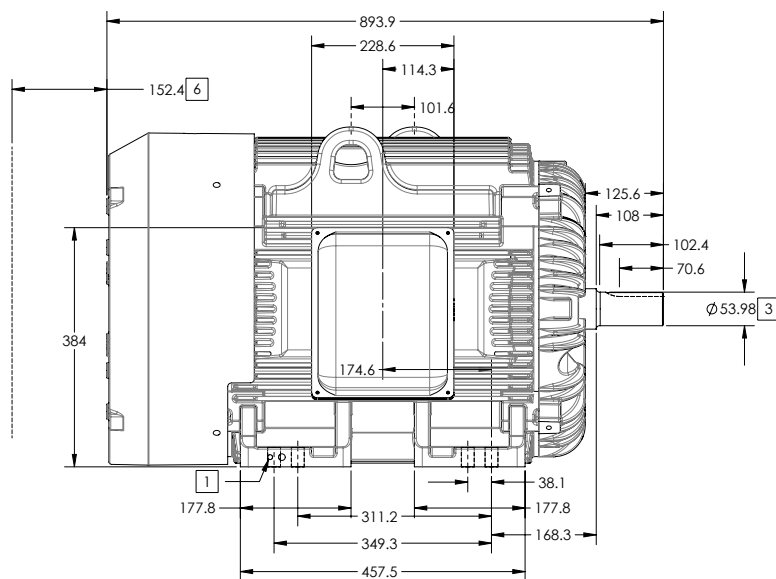
FRAME G405TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404TS FRAME MOUNTING HOLES

STANDARD INDUSTRIAL 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): 530

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

000-624219

REV. DESC: CHANGE BA FROM 6.76 TO 6.62	TDR: 000000848770
REV: B VERSION: 02	REVISED: 04/37/41 04/14/2014
MODEL NO. 617429-002	REF:
BY: MGHUMZ2	Material:

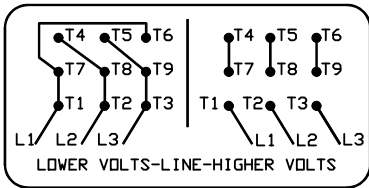
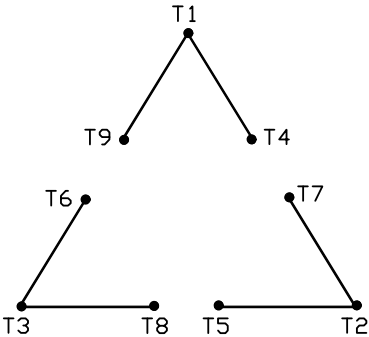
BALDOR

G405TS/404TS STD - FOOTED - STANDARD ENCLOSURE

617429-002

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N. P. 1575-B)

416820-002

REV. DESC: ADJUST TEXT DARKNESS		
REV. LTR: B	VERSION: 02	TDR: 000001285318
FILE: \RAG\00022\453	REVISED: 09:36:26 09/24/2026	BY: USJOSUL
MTL: -	© □	



CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED
SH1 of 1