ABB BALDOR RELIANCE

Customer information packet

EM4400TS

100HP, 1785RPM, 3PH, 60HZ, 405TS, A40064M, TEF
Class - None
Division - Not Applicable

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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

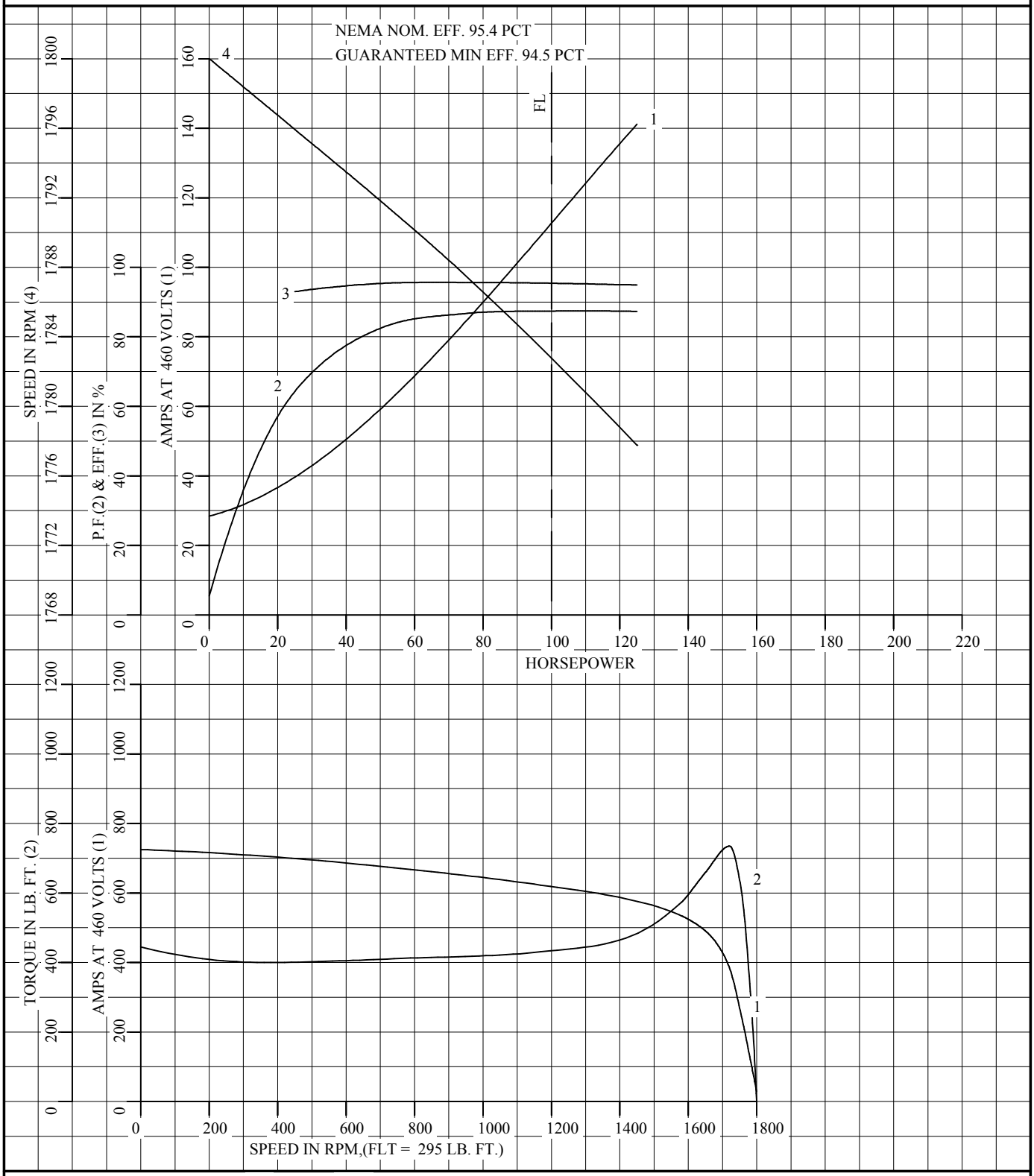
BALDOR
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DR. BY R.K. BRIDGES
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 05/14/14

A-C MOTOR PERFORMANCE DATA

A40WG0692-R001
ISSUE DATE 01/04/18

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 ℃	.0123/.0492
PHASE/HERTZ	3/60	AMB ℃/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.

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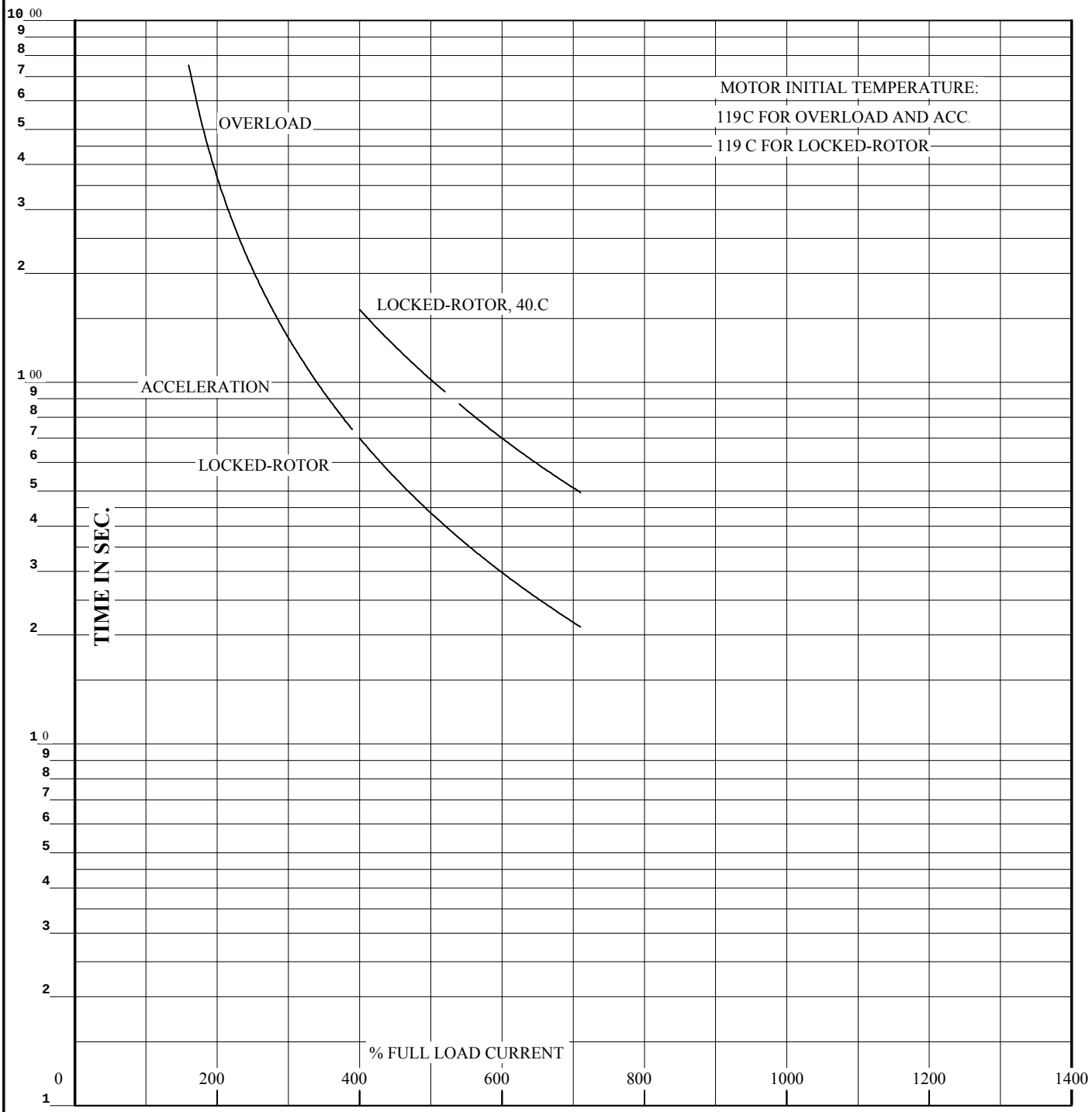
DR. BY	R.K. BRIDGES
CK. BY	W. L. SMITH
APP. BY	W. L. SMITH
DATE	05/14/14

A-C MOTOR PERFORMANCE CURVES

A40WG0692-R001

ISSUE DATE 01/04/18

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 ℃.0123/.0492
PHASE/HERTZ 3/60	AMB ℃/INSUL 40/F	E/S 596956	OHMS (BETWEEN LINES)



REMARKS:

THERMAL LIMIT CURVE

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 AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

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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

617429-002

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

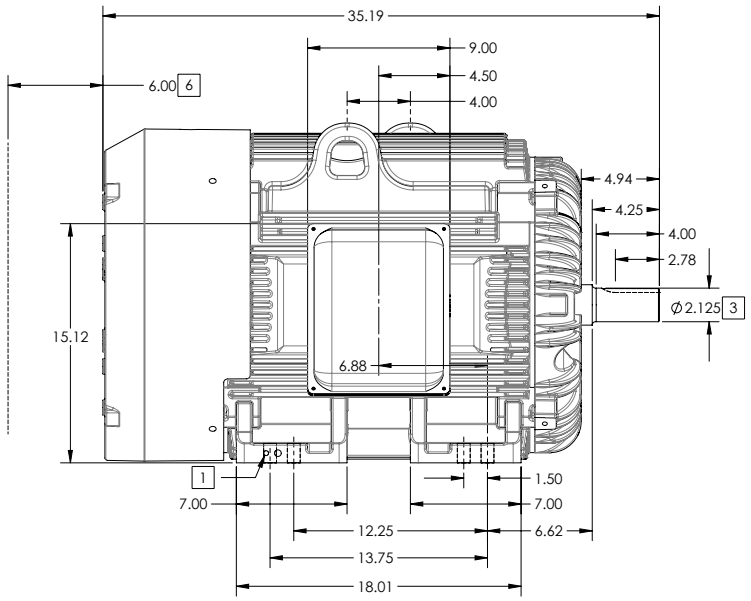
FRAME G405TS ABOVE NEMA RATINGS

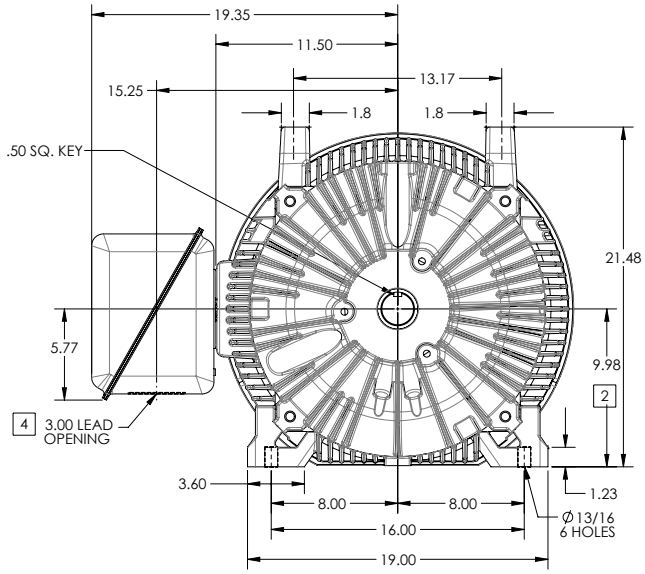
COOLING: FAN COOLED

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 +.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): 1160

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.

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

617429-002

REV. DESC: CHANGE BA FROM 6.76 TO 6.62			
REV: B	VERSION: 02	REVISED: 04:37:41 04/14/2014	TDR: 000000848770
MODEL NO. 617429-002			REF:
BY: MGHJMZ2	Material:		C

BALDOR

G405TS/404TS STD – FOOTED – STANDARD ENCLOSURE

617429-002

617429-002

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

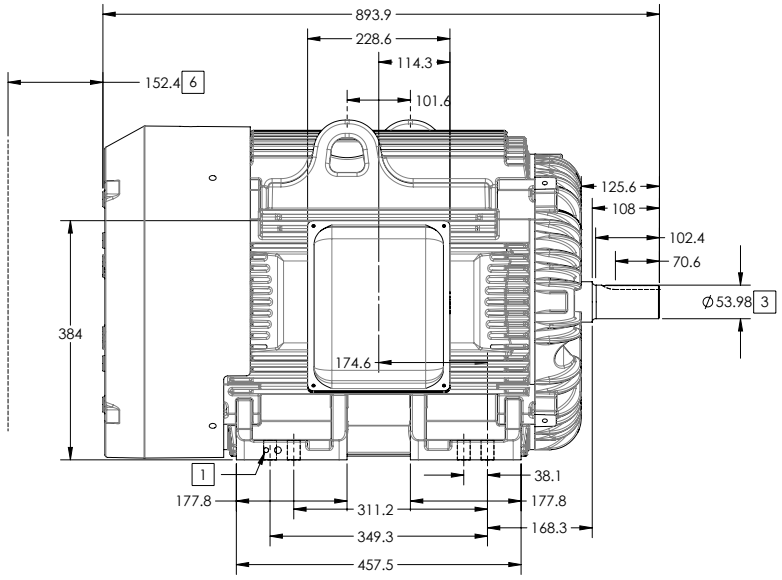
FRAME G405TS ABOVE NEMA RATINGS

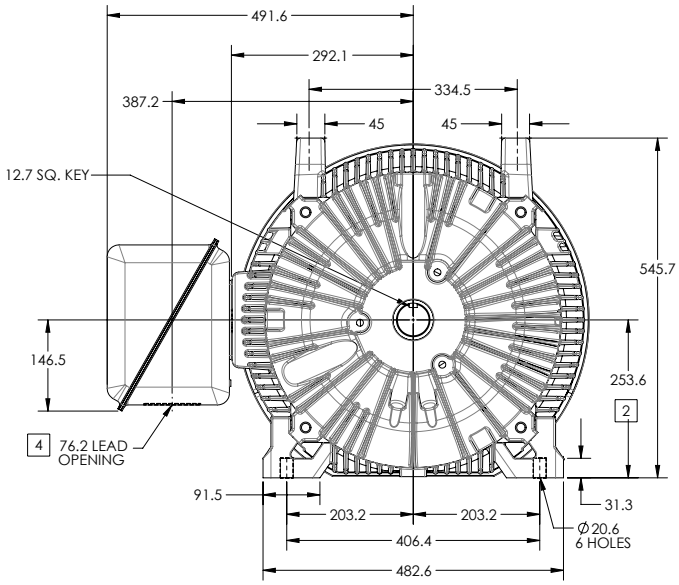
COOLING: FAN COOLED

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

617429-002

REV. DESC: CHANGE BA FROM 6.76 TO 6.62			
REV: B	VERSION: 02	REVISED: 04:37:41 04/14/2014	TDR: 000000848770
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BY: MGHJMZ2	Material:		C

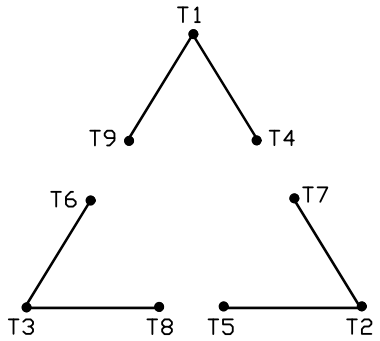
BALDOR

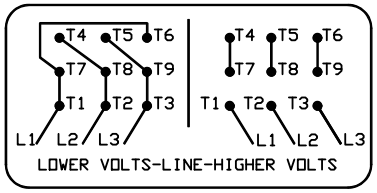
G405TS/404TS STD – FOOTED – STANDARD ENCLOSURE

617429-002

416820-002

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





(N. P. 1575-B)

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: –		

ABB

CONN DIAG – STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1

416820-002