

ABB BALDOR RELIANCE III

Customer information packet

EM4402T-4

100HP, 3565RPM, 3PH, 60HZ, 405TS, A40060M, 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	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	110.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	110.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 4 AWG
Motor Standards	NEMA

Part Detail

Revision	R
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG1270
Layout	617429-002
Eff. date	09-04-2024
CD Diagram	416820-008
Poles	02
Leads	6#4
Proprietary	False
Created date	07-17-2013

Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	35.04 IN
Power Factor	90
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	3565 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2349L												
SPEC NO.	P40G3929			CAT.NO.		EM4402T-4				FRAME	405TS	
HP	100	VOLTS	460	PHASE		3	DESIGN	B	TYPE	P		
RPM	3565	AMPS	110	HZ		60	AMB	40	SF	1.15		
DRIVE END BEARING	65BC03J30X			DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	65BC03J30X			ENCL	TEFC	CODE	F					
SER.NO.				POWER FACTOR		90	NEMA-NOM-EFFICIENCY				95	
						MAX CORR KVAR		10	GUARANTEED EFFICIENCY		94.1	
						NEMA NOM/CSA QUOTED EFF						
						MOTOR WEIGHT						

Accessories

Part number	Description	Multiplier
089413502A	G400 STD C-FACE BRKT 6313 089416511WCA	P1
089412075B	D-FLANGE BRKT 400 089416085WCA	P1

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							EM4402T-4 - 100HP, 3565RPM, 3PH, 60HZ, 405TS, A40060M, TEF						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			405TS			100			P			3/60			3565			460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
110			CONT			40/F			1.15			B			F			TEFC		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
596954			418142005PE			---			---			.0526								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			25.6			3600			7.58			0					
1/4			25.0			36.7			3591			69.7			91.7					
2/4			50.0			57.7			3582			85.8			94.6					
3/4			75.1			82.7			3572			89.3			95.1					
4/4			100			110			3563			89.9			95.0					
5/4			125			137			3552			90.2			94.5					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			203			299			695					
PULL UP						1545			182			269			632					
BREAKDOWN						3408			256			377			387					
FULL LOAD						3563			100			147			110					
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																				
TYPICAL DATA XE MOTOR-NEMA NOM. EFF. 95.0 % GUARANTEED MIN. EFF. 94.1%																				
						DRAWN BY: <u>J.J.HARRISON</u> CHECKED BY: <u>W.L.SMITH</u> APPROVED BY: <u>W.L.SMITH</u> DATE: <u>06/13/07</u>						AC MOTOR PERFORMANCE DATA			A40WG1270-R001 DATE ISSUED 08/01/18					

FRAME 405TS

RPM 3565

S.F. 1.15

ROTOR 418142005PE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 110

CODE LETTER F

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

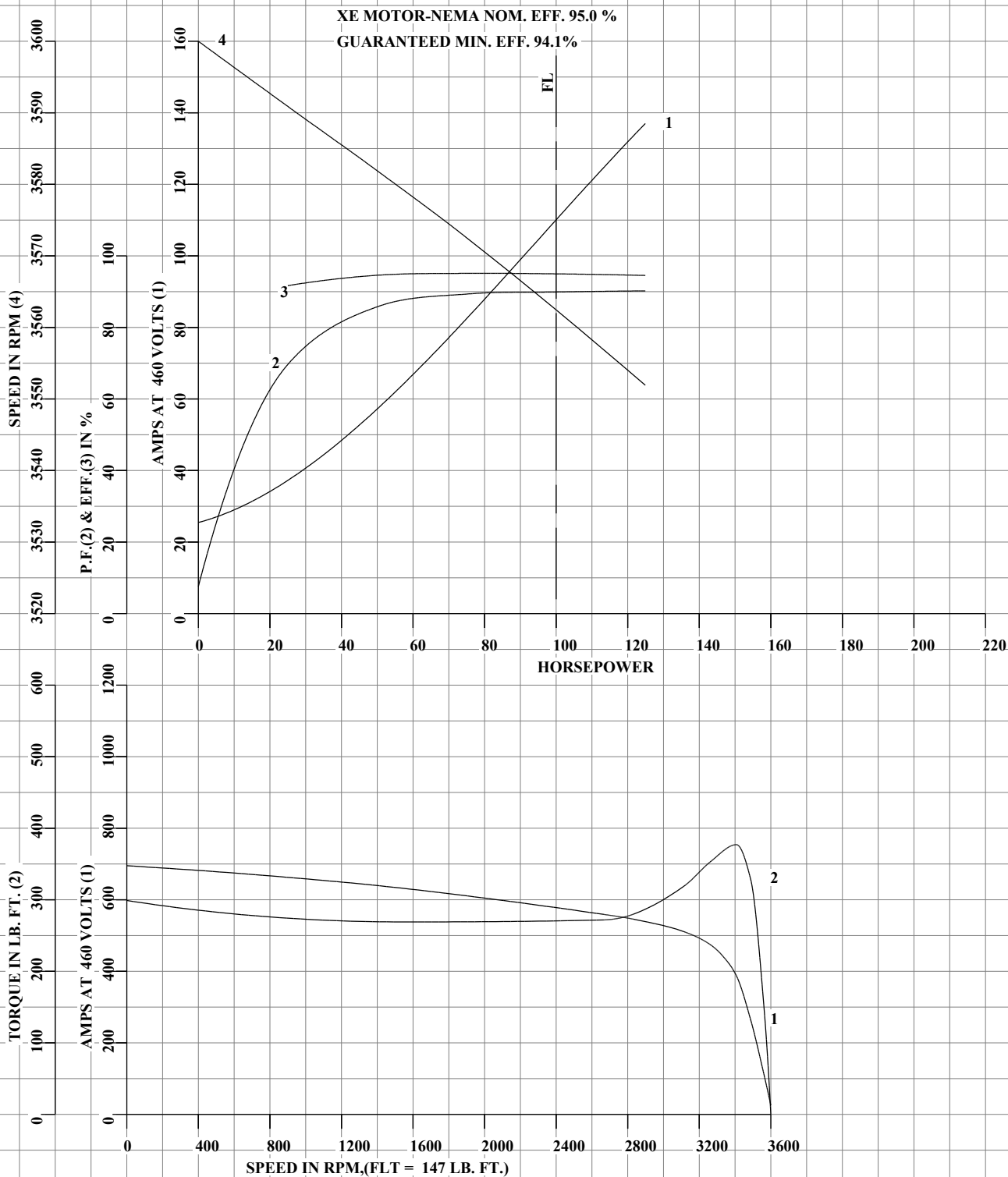
ENCLOSURE TEFC

STATOR RES. @ 25°C .0526

AMB °C / INSUL 40/F

E/S 596954

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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CHECKED BY: W.L.SMITH
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DATE: 06/13/07

AC MOTOR
PERFORMANCE
DATA

A40WG1270-R001

ISSUE DATE 08/01/18

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

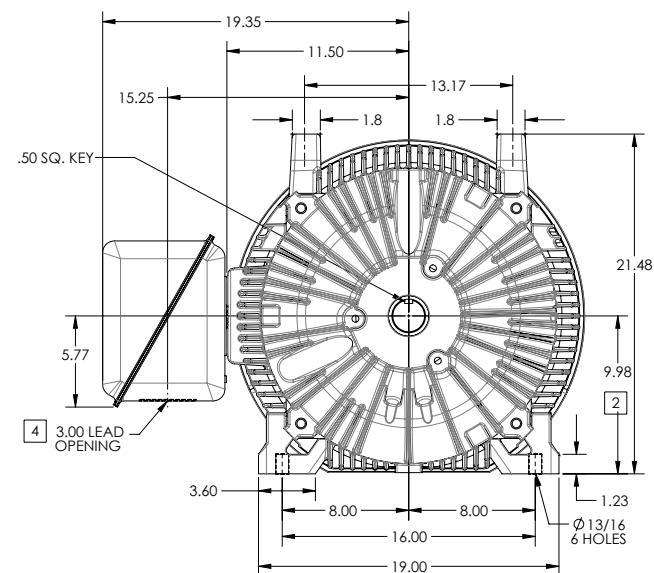
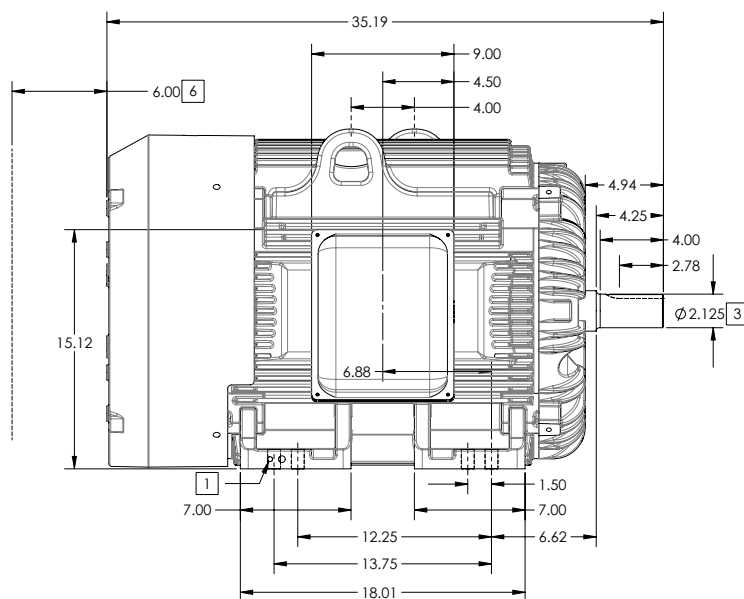
FRAME G405TS ABOVE NEMA RATINGS

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

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): 1160

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

000-6242119

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

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

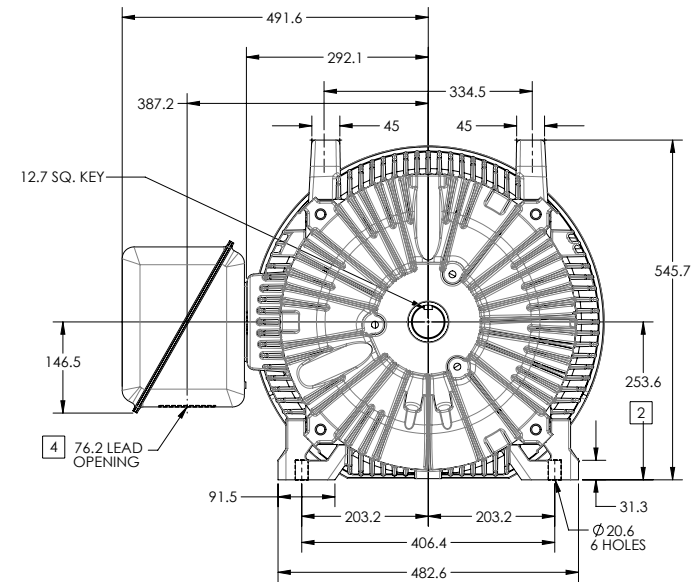
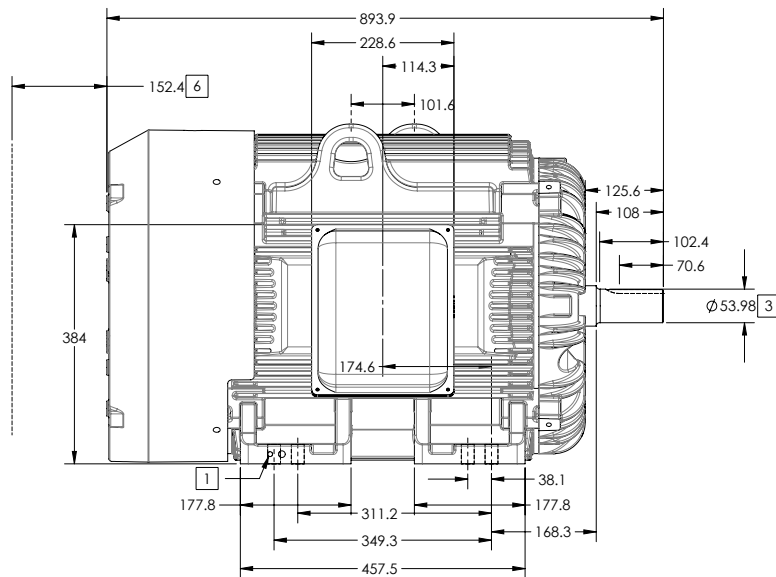
FRAME G405TS ABOVE NEMA RATINGS

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 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): 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

000-6272119

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

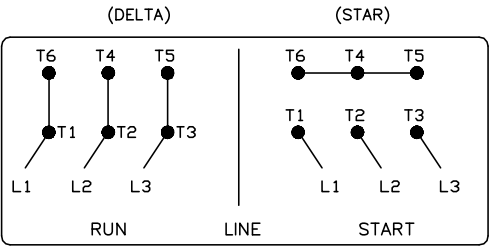
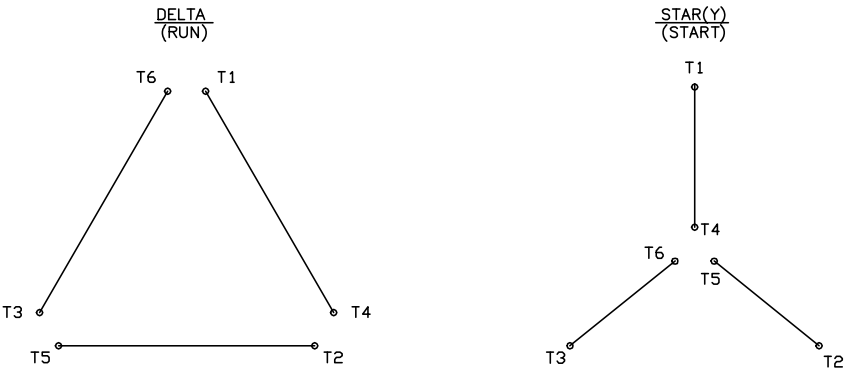
G405TS/404TS STD - FOOTED - STANDARD ENCLOSURE

617429-002

416820-008

A-C MOTOR
CONNECTION DIAGRAM

STANDARD 6 LEAD Y START – DELTA RUN



(N. P. 1767-DC)

REV. DESC: ADDED T4 TO Y CONNECT DIAGRAM

REV. LTR: D

VERSION: 04

TDR: 000000847713

FILE: \RAG\00001\808

REVISED: 10: 41: 26 04/08/2014

BY: RAGJSS1

MTL: -

BALDOR

CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN

SH 1 of 1

416820-008