

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						

Parts List

Part number	Description	Quantity
SA267718	SA P40G3929	1.000 ea
RA254388	RA P40G3929	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
NP2349L	SUPER-E ,SS, CURUS EEV, CC, LASER	1.000 ea
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
421948044	LABEL, MYLAR	1.000 ea
412118006A	DRAIN	2.000 ea
004824015A	GREASE POLYREX EM	0.540 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
034530060AB	P/NIP 1/8X7-1/2 GALV.	1.000 ea
034530060BB	1/4 X 7 1/2 PP NIPPLE	1.000 ea
083198127A	G400 MOLDED FAN COVER	1.000 ea
034692005AA	P PLUG 3/4"BLK.	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
089413501A	G400 FIN/MACH FT MTD BRKT 089413500WCA	1.000 ea
410700004F	WSHR	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
702675001D	FAN 250-440	1.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
089413501A	G400 FIN/MACH FT MTD BRKT 089413500WCA	1.000 ea
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea

035000001A	ALFTG 1/8" 1610-BL	1.000 ea
043292000AJ	GASK 320-400	1.000 ea
077176000L	C/BOX, PAINTED 440	1.000 ea
077176001A	CBOX Cover 360-400	1.000 ea
402731001A	GASK 360-440	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/OAWG	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.375 ga
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180022GA	KEY 1/2X1/2X2-3/4 L	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea

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

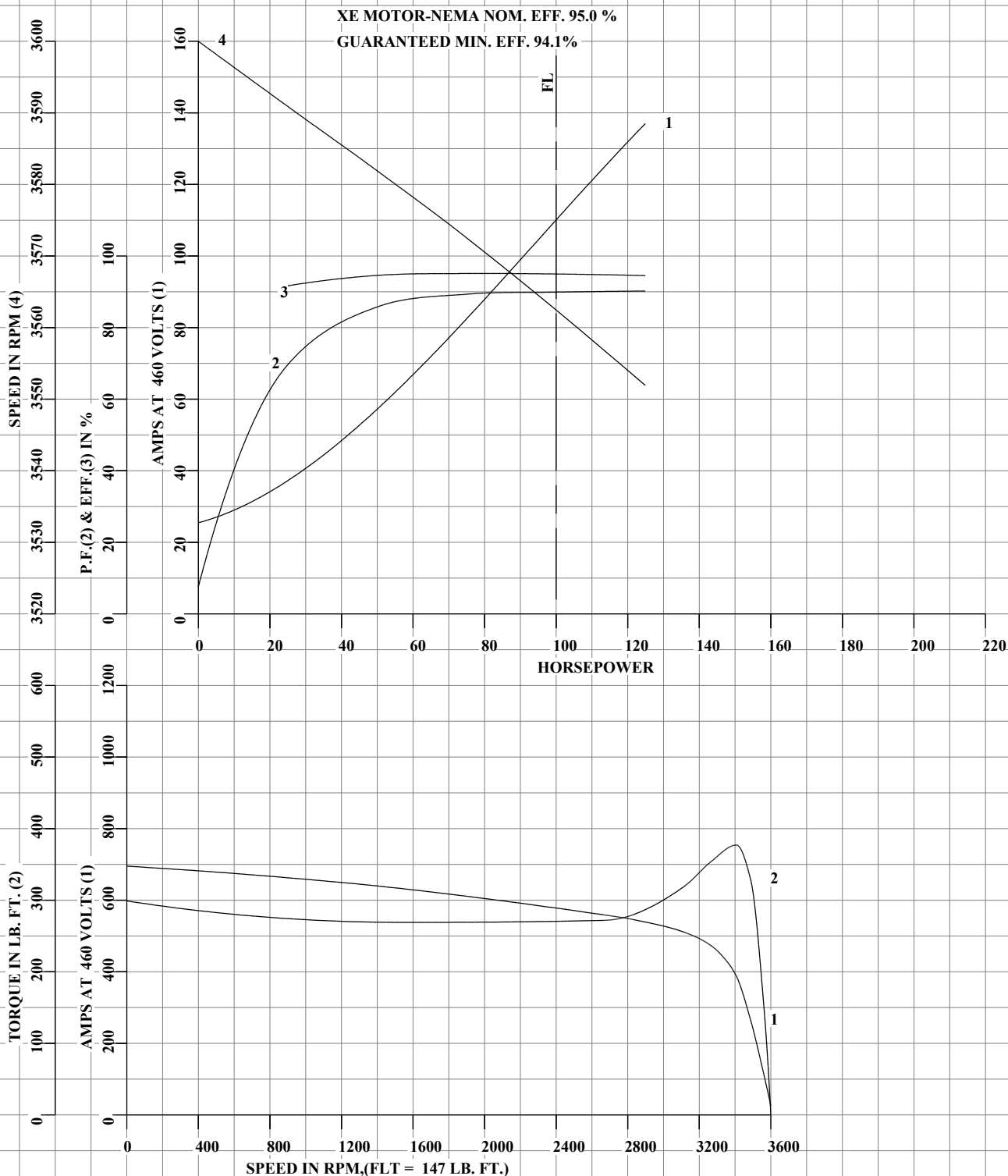
ENCLOSURE TEFC

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.



DRAWN BY: J.J.HARRISON
CHECKED BY: W.L.SMITH
APPROVED BY: W.L.SMITH
DATE: 06/13/07

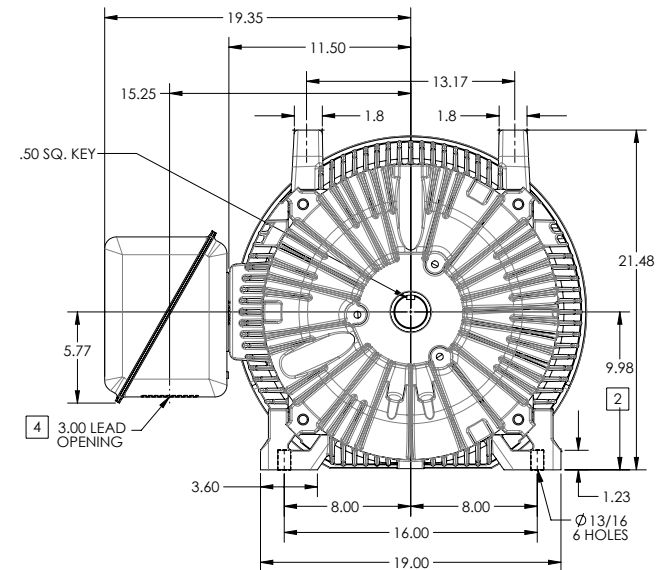
AC MOTOR
PERFORMANCE
DATA

A40WG1270-R001

ISSUE DATE 08/01/18

SQUIRREL-CAGE INDUCTION

STANDARD INDUSTRIAL ENCLOSURE



- 5 WEIGHT (LBS): 1160

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

G405TS/404TS STD – FOOTED – STANDARD ENCLOSURE

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

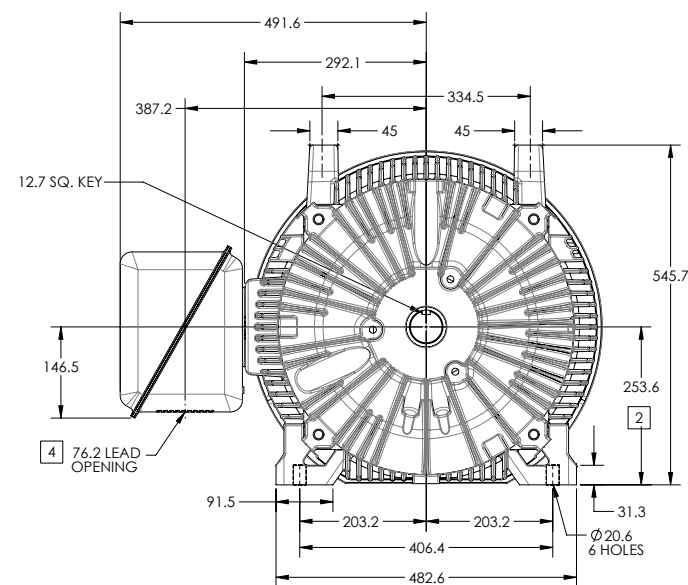
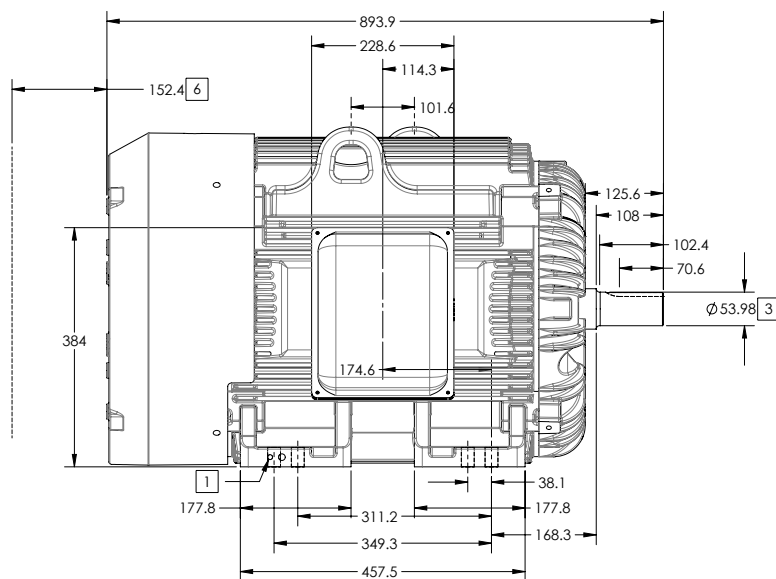
FRAME G405TS ABOVE NEMA RATINGS

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 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

000-624219

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

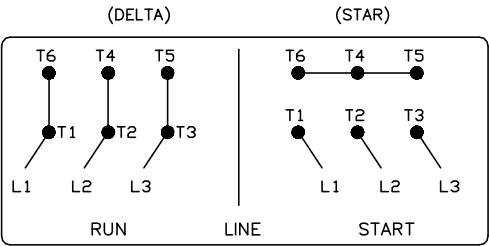
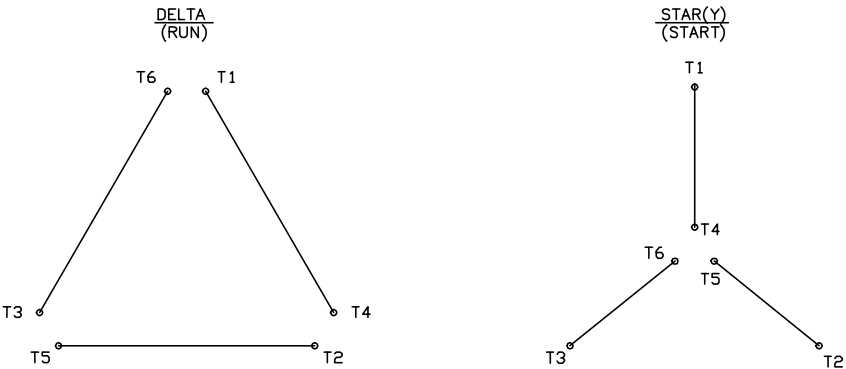
G405TS/404TS STD - FOOTED - STANDARD ENCLOSURE

617429-002

416820-008

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