ABB BALDOR RELIANCE

Customer information packet

AEM4314-4

60HP, 1785RPM, 3PH, 60HZ, 405U, TEFC, FOOT,
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/18/2026 2:44:34 AM

Specifications

Enclosure	TEFC
Frame	405U
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	60.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	CCSA US
Ambient Temperature	65 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	66.600 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	66.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	Other
Motor Type	A40064M

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5174
Layout	617429-100
Eff. date	05-07-2024
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	07-21-2016

Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.08 IN
Power Factor	89
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2492L												
SPEC NO.	P40G3946		**CAT.NO.**	AEM4314-4						**FRAME**	405U	
HP	60	**VOLTS**	460	**PHASE**	3	**DESIGN**	B	**TYPE**	P			
RPM	1780	**AMPS**	66.6	**HZ**	60	**AMB**	65	**SF**	1.00			
DRIVE END BEARING	80BC03JPP30A		**LUBRICATION**		**DUTY**	CONT		**INSUL.CLASS**	F			
OPP D.E. BEARING	80BC03JPP30A		**MOBIL POLYREX EM**		**ENCL**	TEFC	**CODE**	F				
AMB	**ALERNATE RATING-S.F.**		**ALTITUDE**				**NEMA-NOM-EFF**	95				
65	**1.00**	**3300**	**GUARANTEED EFFICIENCY**		94.1							
SER.NO.												
	MOTOR WEIGHT											

S/O	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	60	P	3/60	1780	460

AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
66.6	CONT	65/F	1.00	B	F	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)
-	418142031WE	---	---	.0919

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	11.4	1800	9.40	0
1/4	15.0	20.8	1796	73.5	92.2
2/4	30.0	34.1	1791	86.8	94.8
3/4	45.0	49.7	1787	89.0	95.3
4/4	60.0	66.6	1781	88.7	95.0
5/4	75.0	84.6	1775	87.9	94.5

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	170	300	410
PULL UP	1280	141	250	349
BREAKDOWN	1724	210	371	190
FULL LOAD	1781	100	177	66.6

AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

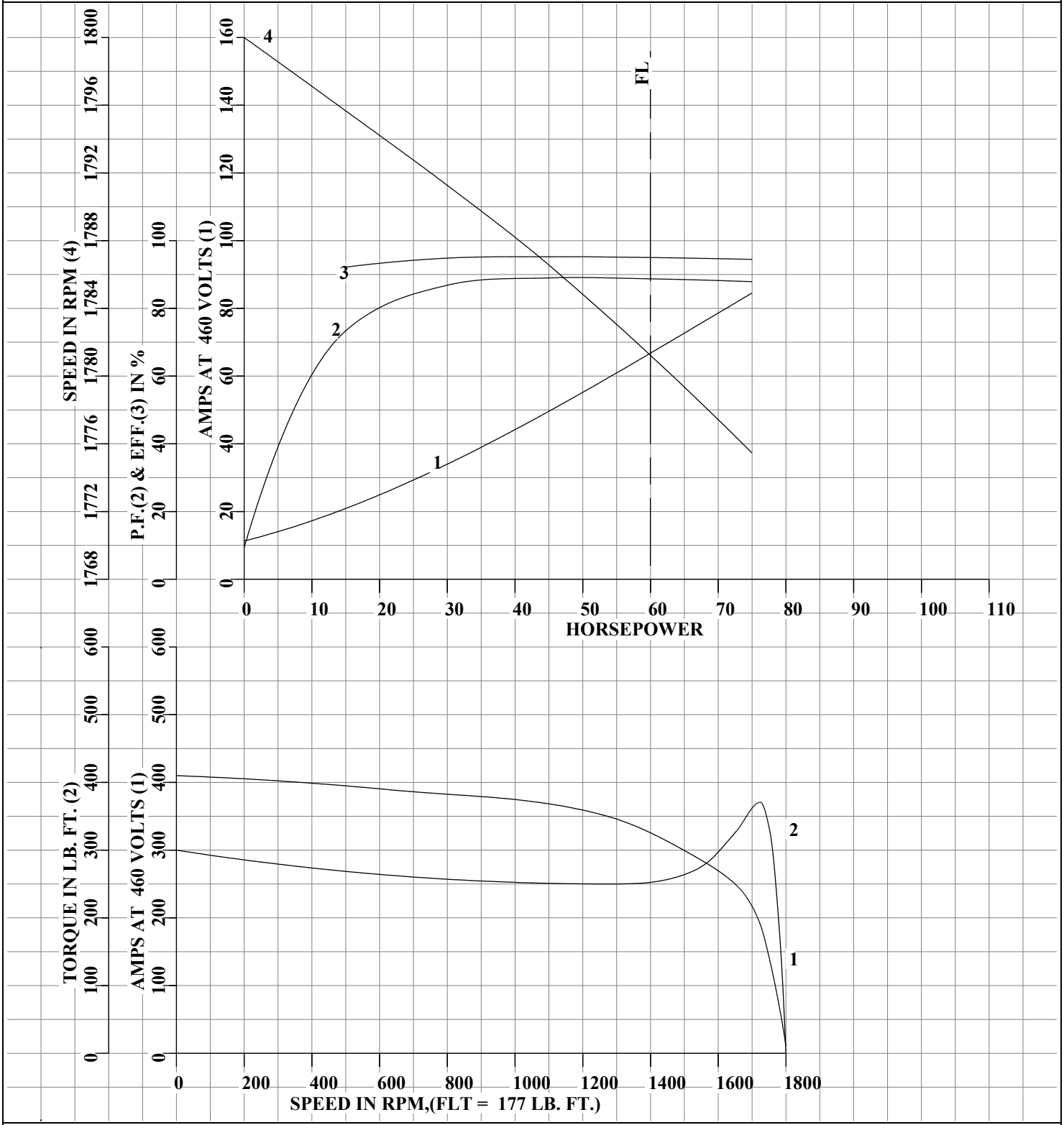
TYPICAL DATA

ABB	DRAWN BY: W. L. SMITH CHECKED BY: C.E.JAMISON APPROVED BY: W. L. SMITH DATE: 01/03/25	AC MOTOR PERFORMANCE DATA	A40WG5174-R004 DATE ISSUED 01/03/25

ABB BALDOR RELIANCE

CUSTOMER INFORMATION PACKET

FRAME 405T	RPM 1780	S.F. 1.00	ROTOR 418142031WE
HP 60	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
TYPE P	AMPS 66.6	CODE LETTER F	TEST DATE ---
PHASE / HERTZ 3/60	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25°C .0919
	AMB °C / INSUL 65/F	E/S -	OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

ABB	DRAWN BY: W. L. SMITH CHECKED BY: C.E.JAMISON APPROVED BY: W. L. SMITH DATE: 01/03/25	AC MOTOR PERFORMANCE DATA	A40WG5174-R004 ISSUE DATE 01/03/25

617429-100

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

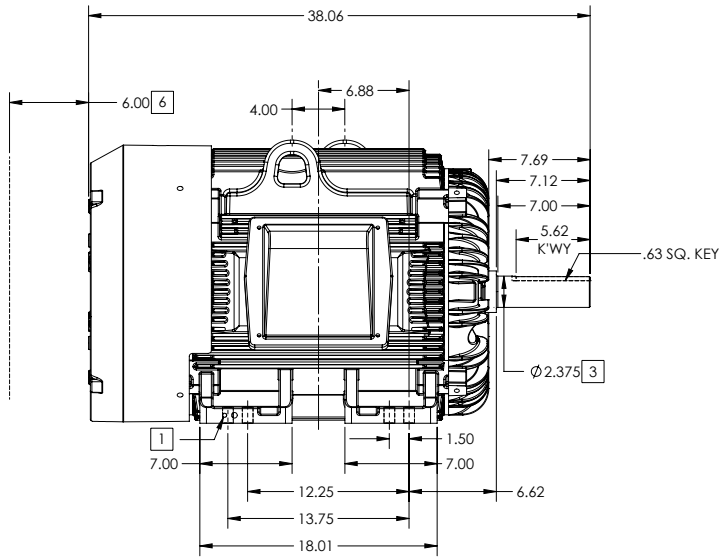
FRAME G405U ABOVE NEMA RATINGS

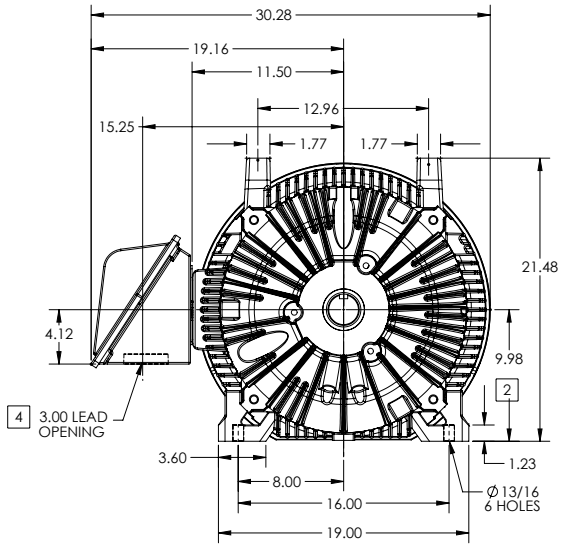
COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404U FRAME MOUNTING HOLES

U-FRAME/ AUTOMOTIVE 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

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): 1370

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

617429-100

REV. DESC: CHG SHAFT TO MEET "BA' REQUIREMENT OF 6.62			
REV: B	VERSION: 02	REVISED: 08:54:51 05/31/2017	TDR: 000000983755
MODEL NO. 617429-100			REF:
BY: RAGGDM	Material:	C	G405U/404U STD – FOOTED – U-FRAME AUTOMOTIVE DUTY ENCLOSURE

BALDOR

617429-100

617429-100

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

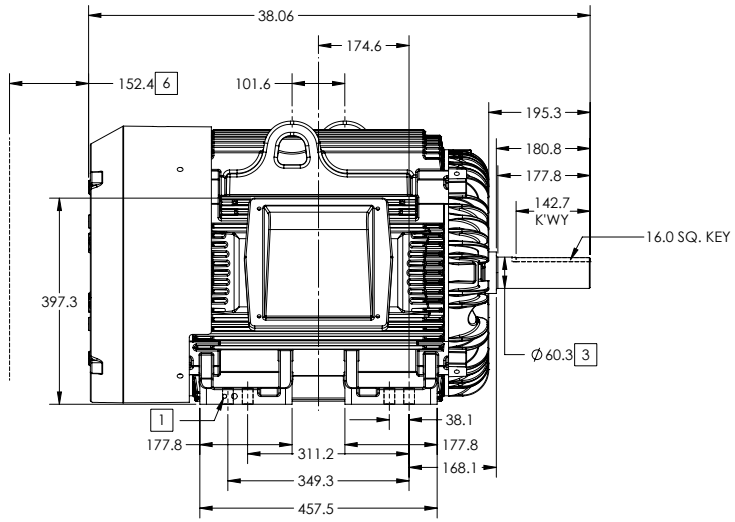
FRAME G405T ABOVE NEMA RATINGS

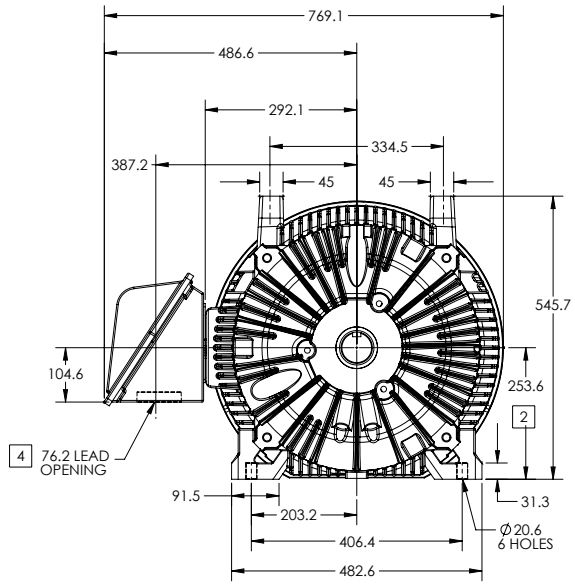
COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404T FRAME MOUNTING HOLES

U-FRAME/ AUTOMOTIVE 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-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.

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

617429-100

REV. DESC: CHG SHAFT TO MEET "BA' REQUIREMENT OF 6.62			
REV: B	VERSION: 02	REVISED: 08:54:51 05/31/2017	TDR: 000000983755
MODEL NO. 617429-100			REF:
BY: RAGGDM	Material:	C	

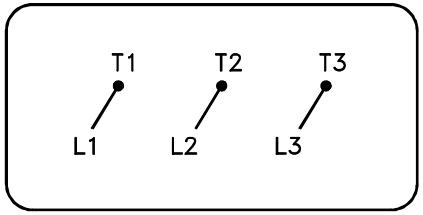
BALDOR

G405U/404U STD – FOOTED – U-FRAME AUTOMOTIVE DUTY ENCLOSURE

617429-100

416820–036

A–C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575–BA)

416820–036

REV. DESC: LOADED TO BUS, C/R 335225			BALDOR
REV. LTR: –	VERSION: 00	TDR: 000000538207	
FILE: \MGA\00000\682		REVISED: 11:54:06 04/30/2010	CONN DIAG – STANDARD 3 LEAD
MTL: –		BY: RAGRA	SH 1 of 1