ABB BALDOR RELIANCE

Customer information packet

ECP4417T-4

50HP, 890RPM, 3PH, 60HZ, 405T, TEFC, FOOT,
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	405T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	6-60
Current @ Voltage	63.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	63.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA

Part Detail

Revision	Q
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0783
Layout	617429-501
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	08
Leads	3#4
Proprietary	False
Created date	02-04-2014

Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	38.20 IN
Power Factor	80
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	890 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

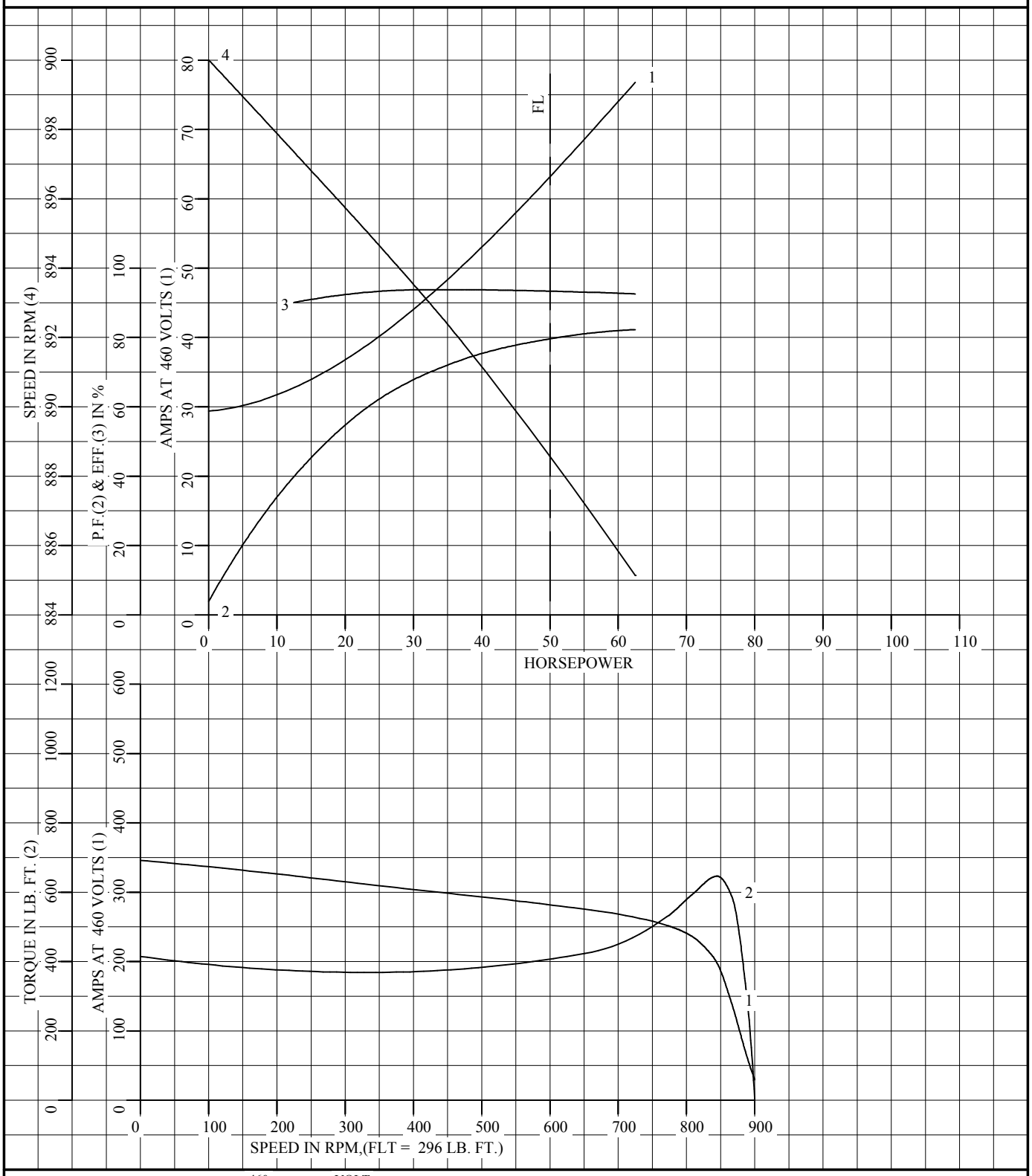
NP3238											
CAT NO	ECP4417T-4		**SPEC NO.**	A40-4922-0783							
HP	50	**AMPS**	63	**VOLTS**	460		**DESIGN**	B			
FRAME	405T	**RPM**	890	**HZ**	60	**AMB**	40	**SF**	1.15		
D.E. BRG.DATA	6316	**O.D.E. BRG.DATA**	6316		**PH**	3	**DUTY**	CONT	**INSUL.CLASS**	F	
D.E. BRG.	80BC03J30X	**TYPE**	P	**ENCL**	TEFC	**CODE**	F				
O.D.E. BRG.	80BC03J30X	**POWER FACTOR**	80		**NEMA NOM EFFICIENCY**		93				
3/4 LOAD EFF.	93.7	**MAX CORR KVAR**	20		**GUARANTEED EFFICIENCY**		91.7				
TEMP CODE	T3C	**TEMP =**	160								
CHP HZ	60-90	**CT HZ**	6-60	**VT HZ**	3-60						
INVERTER-TEMP-CODE	T3										
SER.NO.		**MOTOR WEIGHT**									

NP2496L
EXXON POLYREX EM

ABB BALDOR RELIANCE

CUSTOMER INFORMATION PACKET ECP4417T-4 - 50HP, 890RPM, 3PH, 60HZ, 405T, TEFC, FOOT,

FRAME 404T	RPM 890	S.F. 1.15	ROTOR 418142-73-BE
HP 50	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
TYPE P	AMPS 63.0	CODE LETTER F	TEST DATE ---
PHASE/HERTZ 3/60	DUTY CONT	ENCLOSURE TEFC	STATOR RES.@ 25 ℃ .139
	AMB ℃/INSUL 40/F	E/S 595677	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	G. R. WEBB
CK. BY	W.L. SMITH
APP. BY	W.L. SMITH
DATE	07/20/11

A-C MOTOR PERFORMANCE CURVES A40WG0783-R007 ISSUE DATE 07/20/11

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	404T	50	P	3/60	890	460

AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
63.0	CONT	40/F	1.15	B	F	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)
595677	418142-73-BE	---	---	.139

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	29.4	900	3.93	0
1/4	12.5	32.6	897	40.0	90.1
2/4	25.0	40.3	895	62.3	93.3
3/4	37.5	50.7	892	73.8	93.7
4/4	50.0	63.0	889	79.6	93.4
5/4	62.5	76.8	885	82.3	92.6

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	140	415	346
PULL UP	335	125	369	311
BREAKDOWN	845	219	646	197
FULL LOAD	889	100	296	63.0

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

REMARKS: TYPICAL DATA

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DATE 07/20/11

A-C MOTOR PERFORMANCE DATA

A40WG0783-R007
ISSUE DATE 07/20/11

617429-501

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

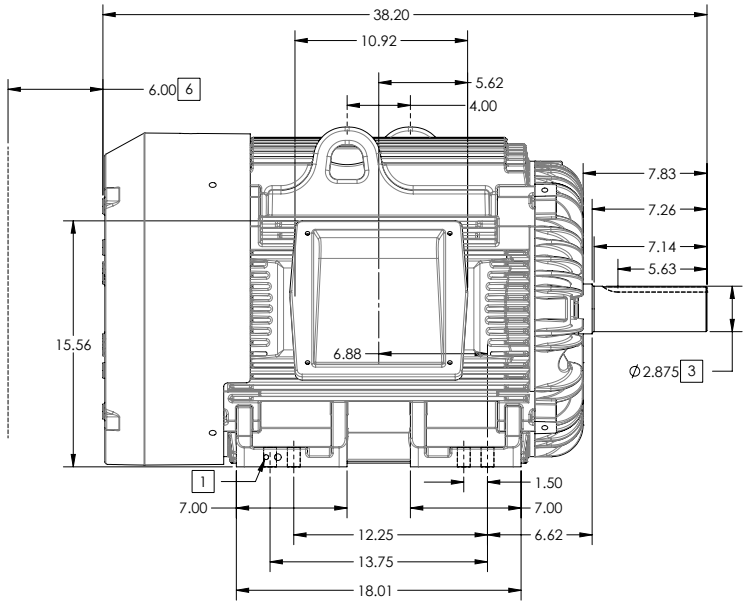
MOUNTING: FOOT

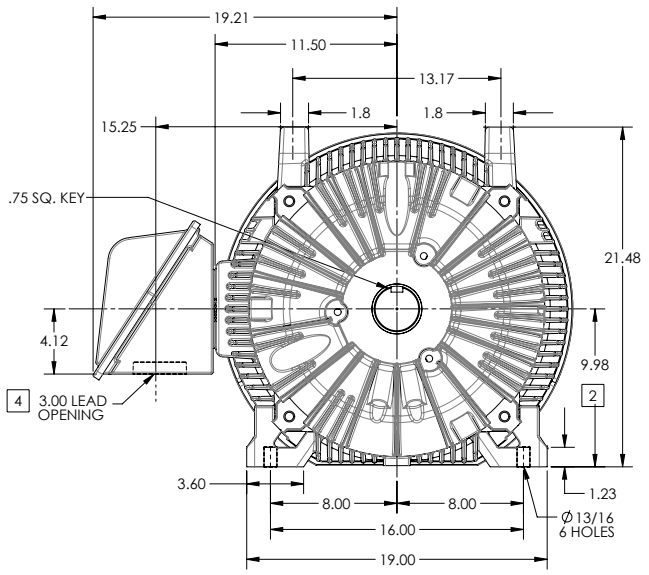
FRAME G405T ABOVE NEMA RATINGS

INCLUDES 404T FRAME MOUNTING HOLES

COOLING: FAN COOLED

XT/ECP SEVERE 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

617429-501

REV. DESC: CHANGE BA FROM 6.76 TO 6.62			
REV: B	VERSION: 02	REVISED: 01:11:16 04/14/2014	TDR: 000000848770
MODEL NO. 617429-501			REF:
BY: MGHJMZ2	Material:		C

BALDOR

G405T/404T STD – FOOTED – XT/ECP SEVERE DUTY ENCLOSURE

617429-501

617429-501

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

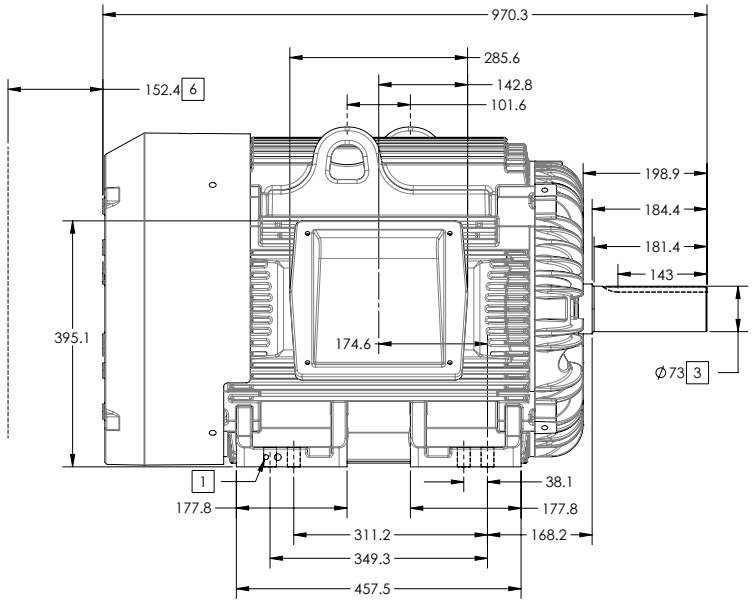
MOUNTING: FOOT

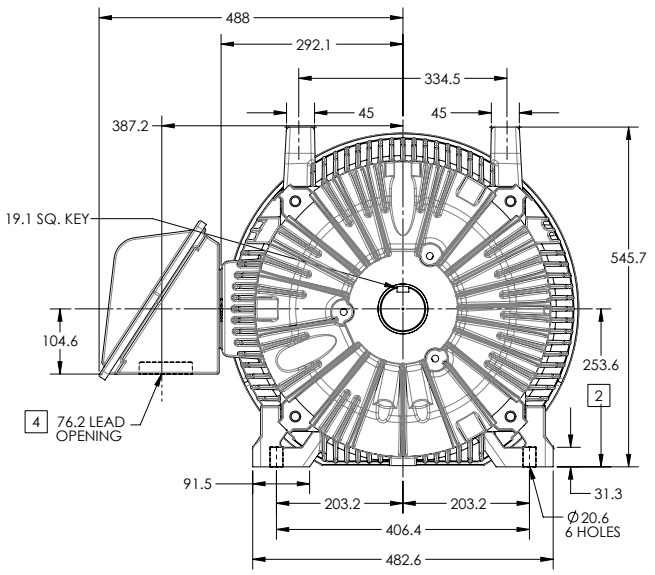
FRAME G405T ABOVE NEMA RATINGS

INCLUDES 404T FRAME MOUNTING HOLES

COOLING: FAN COOLED

XT/ECP SEVERE 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

617429-501

REV. DESC: CHANGE BA FROM 6.76 TO 6.62			
REV: B	VERSION: 02	REVISED: 01:11:16 04/14/2014	TDR: 000000848770
MODEL NO. 617429-501			REF:
BY: MGHJMZ2	Material:		C

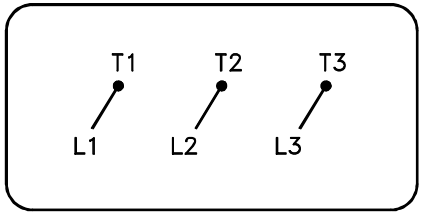
BALDOR

G405T/404T STD – FOOTED – XT/ECP SEVERE DUTY ENCLOSURE

617429-501

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