

ABB BALDOR RELIANCE III

Customer information packet

SPM4402TS-4

100HP, 3575RPM, 3PH, 60HZ, 405TS, A4072M, TEFC

Class - CLI GP A,B,C,D; CLII GP F,G

Division - Division II

Specifications

Enclosure	TEFC
Frame	405TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D; CLII GP F,G
Haz Area Division	Division II
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	CCSA US CCSAUSEEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	114.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	114.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K

Part Detail

Revision	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5798
Layout	617437-218
Eff. date	09-08-2026
CD Diagram	416820-036
Poles	02
Leads	3#4
Proprietary	False
Created date	09-29-2023

Lifting Lugs	Standard Lifting Lugs
Max Speed	4200 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A4072M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	35.19 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	Shaft Slinger
Speed	3575 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

NP4562L

CAT NO	SPM4402TS-4		SPEC NO.	A40-5001-5798		I.P.	55	
HP	100	AMPS	116	VOLTS	460	DESIGN	A	
FRAME SIZE	405TS	RPM	3575	MAX RPM	4200	HZ	60	AMB 40 C
D.E. BRG.	80BC03J30X		PH.3	3	DUTY	CONT		INSUL.CLASS F
O.D.E. BRG.	80BC03J30X		TYPE P	P	ENCL	TEFC	SF	1.15 CODE L
POWER FACTOR	84	MAX CORR KVAR	22.3		NEMA NOM EFFICIENCY	95		MOTOR WEIGHT 1342 LBS
CL.I,DIV 2,GRP:	A,B,C,D	T.CODE	T3		CL.1,ZONE 2,GRP:	IIA,IIB,IIC		T= 200 C INVERTER T.CODE T3
CL.II,DIV 2,GRP:	F,G	T.CODE	T3C		CL II ZONE 22 GRPS IIB	T= 160		C INVERTER T.CODE T3
ID LOGO	INV TYPE:	VPWM	CT	15	TO	60	VT	3 TO 60 CHP 60 TO 70
ID LOGO	1.0 SF VPWM		WK2	16	LBFT2	SL HZ 0.43		MAG CUR 43.6
SER.NO.			MEETS INTENT OF IEEE-45				FOR WEATHER PROTECTION	

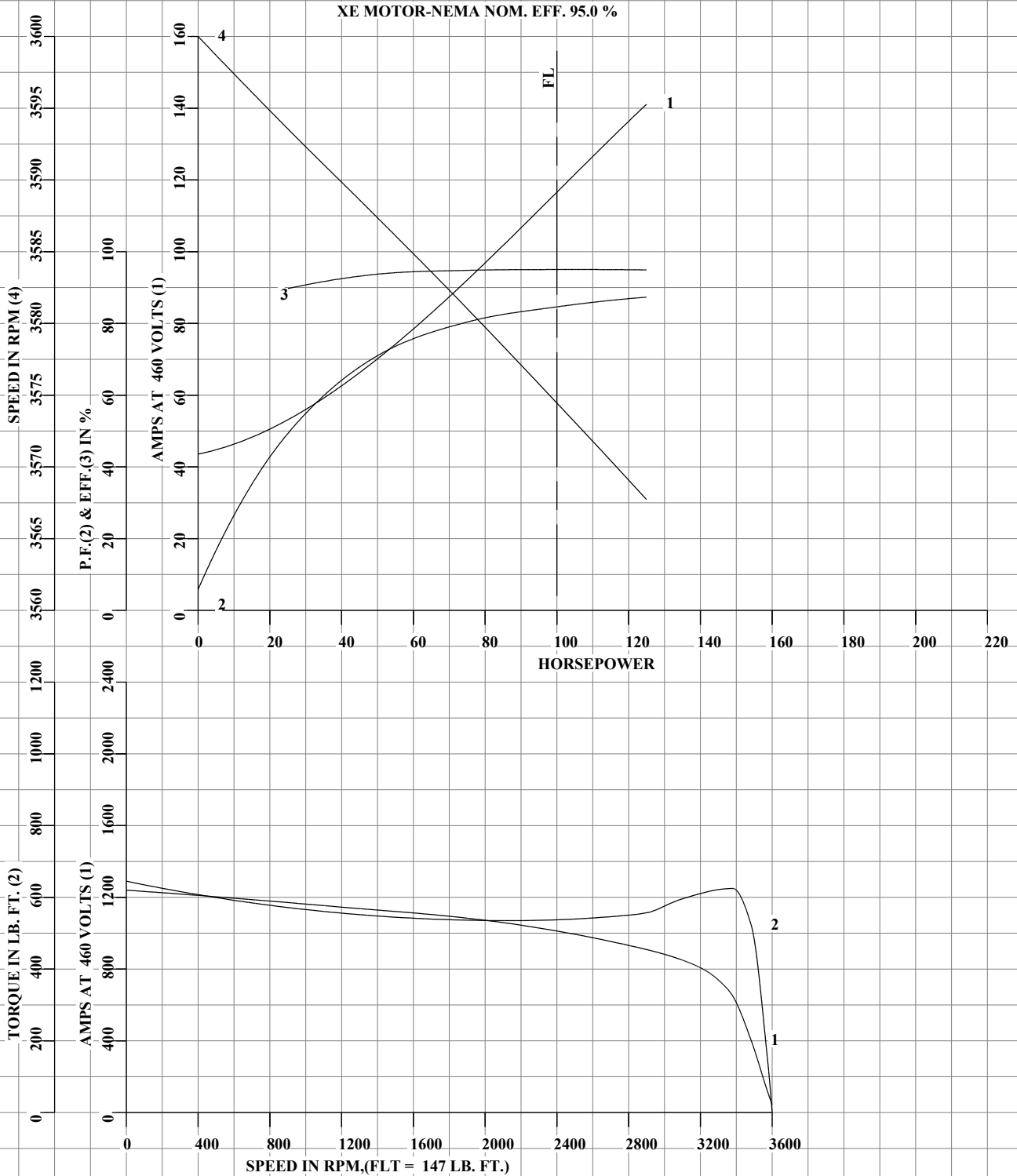
ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							SPM4402TS-4 - 100HP, 3575RPM, 3PH, 60HZ, 405TS, A4072M, TEFC						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			405			100			P			3/60			3575			460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
116			CONT			40/F			1.15			A			L			TEFC		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
---			A40RC2072A00			---			---			.0362								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			43.6			3600			5.82			0					
1/4			25.0			52.9			3594			49.3			89.7					
2/4			50.0			70.4			3587			71.0			93.7					
3/4			75.0			92.1			3581			80.4			94.8					
4/4			100			116			3574			84.6			95.0					
5/4			125			141			3568			87.3			94.9					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			439			645			1240					
PULL UP						2130			364			535			1055					
BREAKDOWN						3380			425			625			650					
FULL LOAD						3574			100			147			116					
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 %																				
						DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>G. R. WEBB</u> APPROVED BY: <u>E.J. CHRISTIAN</u> DATE: <u>01/23/02</u>						AC MOTOR PERFORMANCE DATA			A40WG5798-R002 DATE ISSUED 01/30/26					

FRAME 405
HP 100
TYPE P
PHASE / HERTZ 3/60

RPM 3575
VOLTS 460
AMPS 116
DUTY CONT
AMB °C / INSUL 40/F

S.F. 1.15
NEMA DESIGN A
CODE LETTER L
ENCLOSURE TEFC
E/S ---

ROTOR A40RC2072A00
TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .0362
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: W. L. SMITH
CHECKED BY: G. R. WEBB
APPROVED BY: E.J. CHRISTIAN
DATE: 01/23/02

AC MOTOR
PERFORMANCE
DATA

A40WG5798-R002

ISSUE DATE 01/30/26

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

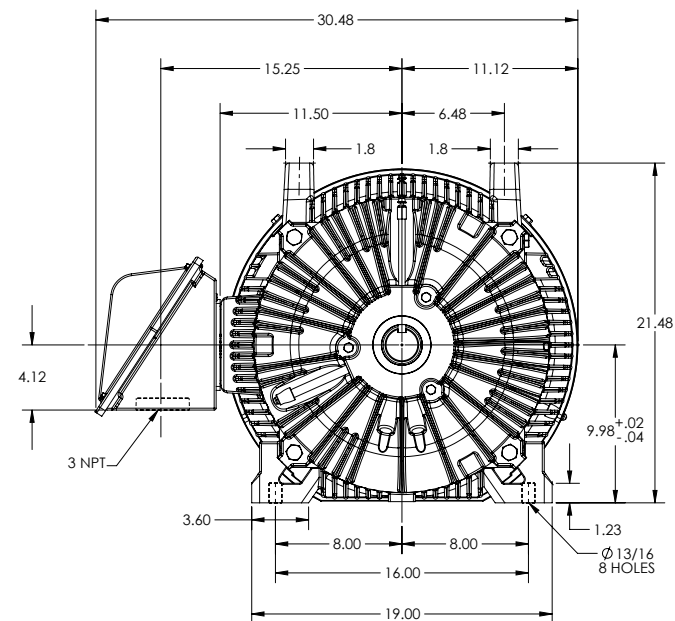
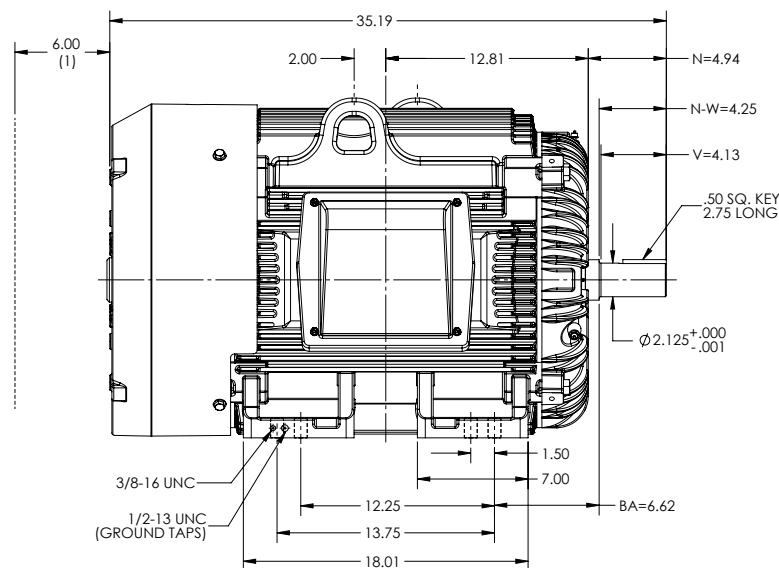
ENCLOSURE: TOTALLY ENCLOSED

MOUNTING: FOOT, F1

FRAME G405TS/G404TS FRAME MOUNTING HOLES
STD CAST IRON C/BOX
TACONITE SLINGERS

COOLING: FAN COOLED

ECP SEVERE DUTY



1. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

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.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS
MOTOR WEIGHT 1375 LBS. MAY VARY BY 15% DEPENDING ON RATING
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
1 OF 2

812-137219

REV. DESC: REMOVE XP BREATHER DRAIN FROM BLOCK	TDR: 000001248110
REV: B VERSION: 02	REVISED: 08-22-44 01/14/2025
MODEL NO. 617437-218	REF:
BY: USALMAZ	Material:

BALDOR

HORZ G405TS/404TS TEFC ECP DRV 2, CL.2

617437-218

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

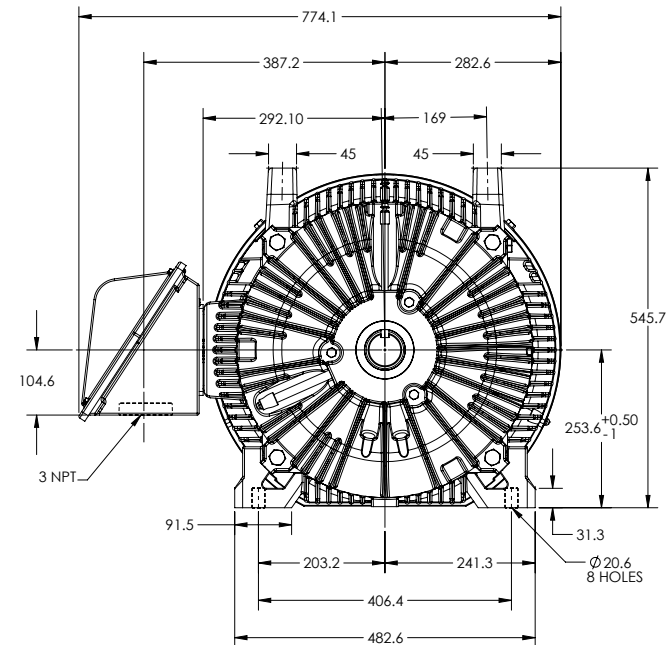
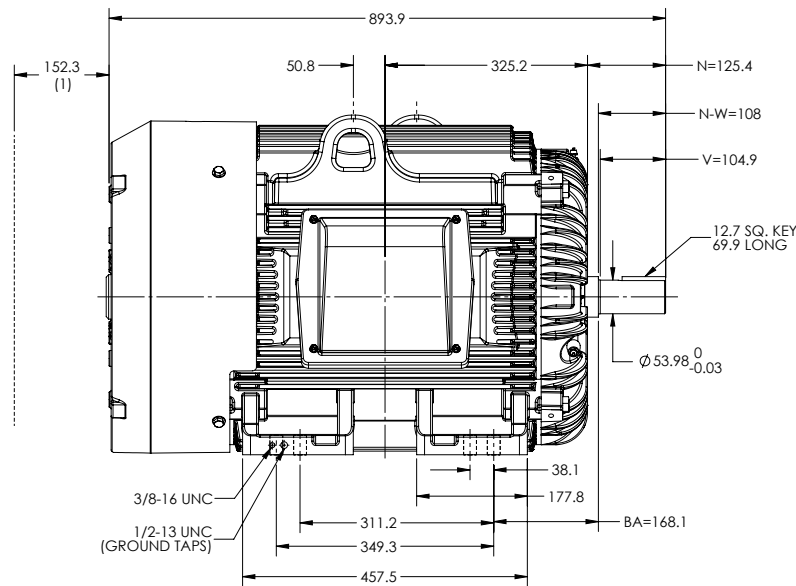
 FRAME G405TS/G404TS FRAME MOUNTING HOLES
STD CAST IRON C/BOX
TACONITE SLINGERS

ENCLOSURE: TOTALLY ENCLOSED

MOUNTING: FOOT, F1

COOLING: FAN COOLED

ECP SEVERE DUTY



1. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

 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.

 DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES
MOTOR WEIGHT 624 KGS, MAY VARY BY 15% DEPENDING ON RATING

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

 SHEET NUMBER
2 OF 2

81C-137219

REV. DESC: REMOVE XP BREATHER DRAIN FROM BLOCK	TDR: 000001248110
REV: B	VERSION: 02
MODEL NO. 617437-218	REVISED: 08-22-44 01/14/2025
BY: USALMAZ	Material:

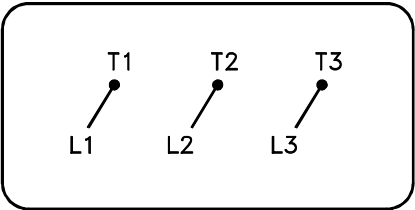
BALDOR

HORZ G405TS/404TS TEFC ECP DRV 2, CL 2

617437-218

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		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1