

ABB BALDOR RELIANCE III

Customer information packet

SPM4115TS

50HP, 1775RPM, 3PH, 60HZ, 326TS, 1288M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326TS
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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE CSA
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	120.000 A @ 230.0 V 60.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	E
Type	AC
Mech. spec.	12T115
Base	
Status	PRD/A
Elec. spec.	12WGZ340
Layout	12LYT115
Eff. date	04-17-2026
CD Diagram	CD0180
Poles	04
Leads	9#6
Proprietary	False
Created date	10-02-2023

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	60.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1288M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	29.21 IN
Power Factor	84
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4439B05C23L

CAT #	SPM4115TS							SER #							CC	010A	WGT	720	LBS								
SPEC	12T115Z340								FRAME	326TS				ENCL	TEFC		IP	55									
RATING	40C AMB-CONT										NEMA NOM.	EFF		95.4													
HP	50								VOLTS	230/460																	
AMPS	116/58								RPM	1775						HZ	60										
PH	3	CL	F	CODE	J	DES	A	PF	84	%	SER.F.	1.15	SF AMP														
DE BRG	6312					ODE BRG	6312					LUBE	POLYREX EM														
INV TYPE:	VPWM			SL HZ	0.8	CHP	60	TO	90	1.5:1																	
WK2	11.7		LBFT2	MAX RPM	2700	CT	6	TO	60	10:1																	
MAG CUR	42/21					VT	3	TO	60	20:1																	
										MEETS INTENT OF IEEE-45					FOR WEATHER PROTECTION												
CL I DIV 2 GRPS A,B,C,D										TEMP CODE	T3C	CL I INV TEMP CODE										T3	TEMP=	200	C		
CL I ZONE 2 GRPS										IIA,IIB,IIC	TEMP =	160	C	CL II INV TEMP CODE										T3	TEMP =	200	C
CL II DIV 2 GRPS F&G										TEMP CODE	T3C	1.0 SF ON PWM INVERTER										POWER					
CL II ZONE 22 GRPS IIIB										TEMP=	160	C															

YR

AC Induction Motor Performance Data

Record # 107565

Typical performance - not guaranteed values

Winding: 12WGZ340-R001			Type: 1288M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		50		Full Load Torque		147.7 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		120/60		Breakdown Torque		506 LB-FT
R.P.M.		1775		Pull-up Torque		272 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		269 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		436 A
Service Factor (S.F.)		1.15		No-load Current		21.8 A
NEMA Nom. Eff.		95.4	Power Factor	Line-line Res. @ 25°C		0.094907 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		57°C
S.F. Amps				Temp. Rise @ S.F. Load		70°C
				Locked-rotor Power Factor		25.3

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	71	81	85	86	87	86
Efficiency	93.3	95.5	95.9	95.7	95.2	94.6	95.4
Speed	1794.8	1790	1784.7	1779.7	1772.9	1766.3	1776
Line amperes	25.7	34.4	45.4	57.7	71.2	85.5	65.8

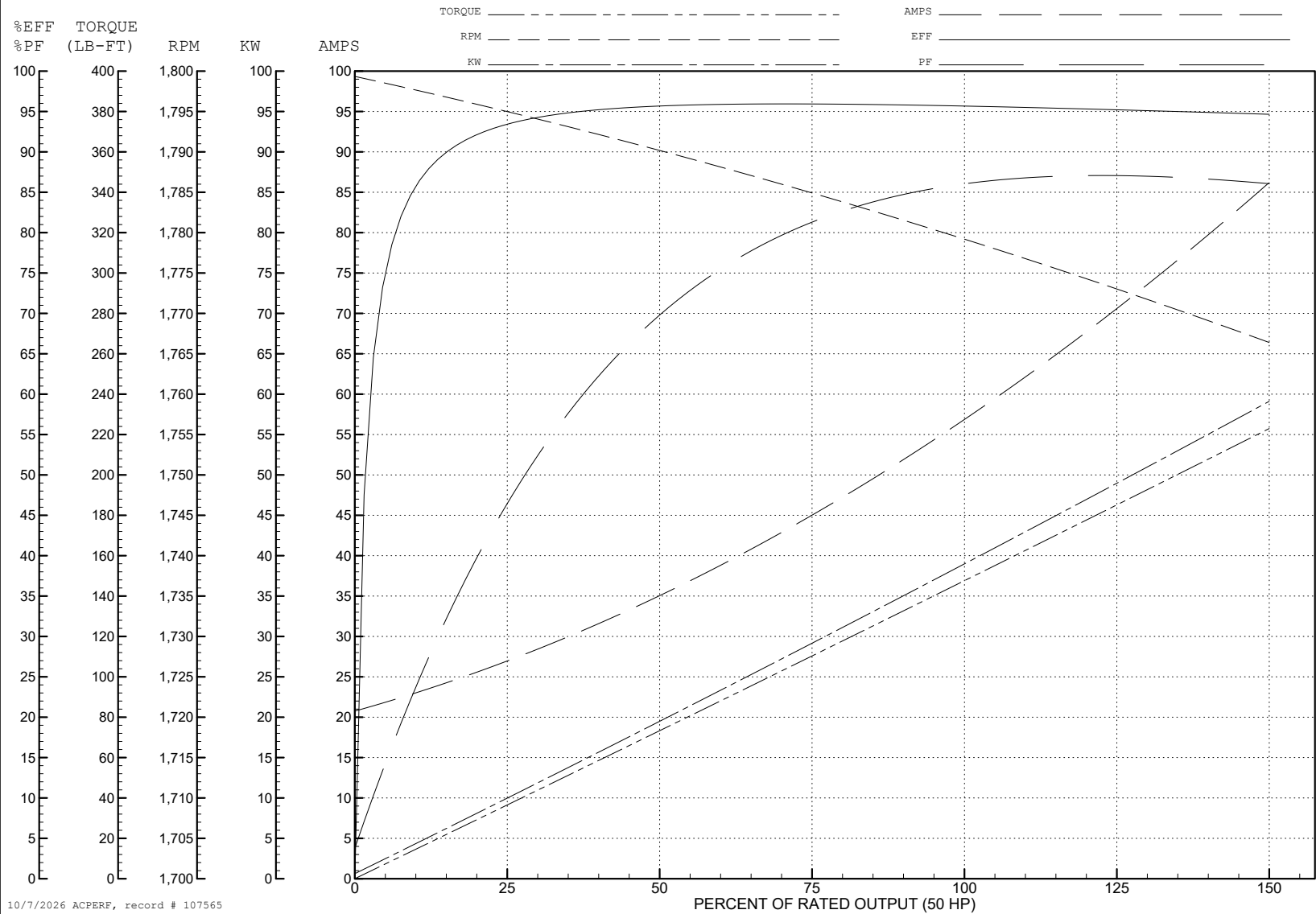
ABB Motors and Mechanical Inc.

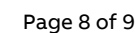
WINDING # 12WGZ340

Typical performance - not guaranteed values.

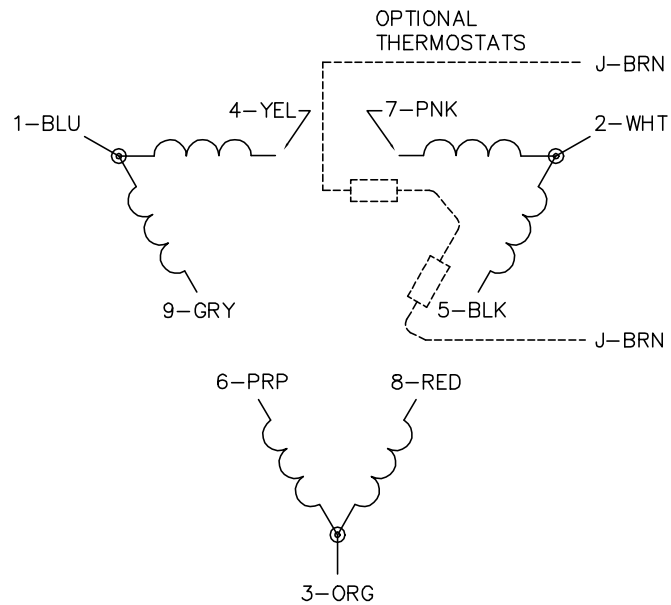
50 HP 3 PH 60 HZ 1775 RPM 460 V 1288M

TORQUES (LB-FT): PO=506 PU=272 LR=269 LRA=436

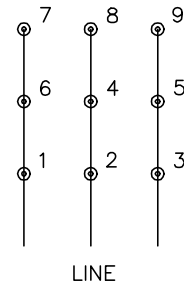




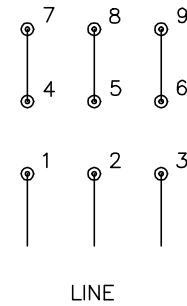
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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