

ABB BALDOR RELIANCE III

Customer information packet

SPM4107TS

25HP, 3545RPM, 3PH, 60HZ, 284TS, 1048M, TEFC, F

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

Division - Division II

Specifications

Enclosure	TEFC
Frame	284TS
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	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE
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	56.000 A @ 230.0 V 28.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	E
Type	AC
Mech. spec.	10T011
Base	
Status	PRD/A
Elec. spec.	10WGZ894
Layout	10LYT011
Eff. date	04-17-2026
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	09-26-2023

Haz Area Temp Code	T3B
Heater Indicator	No Heater
High Voltage Full Load Amps	28.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4800 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1048M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.75 IN
Power Factor	88
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3545 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 #	SPM4107TS										SER #						CC	010A	WGT	396	LBS																																	
SPEC	10T011Z894										FRAME	284TS					ENCL	TEFC	IP	55																																		
RATING	40C AMB-CONT															NEMA NOM. EFF	93																																					
HP	25										VOLTS	230/460																																										
AMPS	56/28										RPM	3545					HZ	60																																				
PH	3	CL	F	CODE	J	DES	A	PF	88	%	SER.F.					1.15	SF AMP	64/32																																				
DE BRG	6311					ODE BRG					6311					LUBE	POLYREX EM																																					
INV TYPE:		VPWM			SL HZ		1			CHP		60		TO		80		1.3:1																																				
WK2	2.07			LBFT2			MAX RPM		4800		CT		6		TO		60		10:1																																			
MAG CUR		19/9.5										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					T3A					TEMP=					180					C														
CL I ZONE 2 GRPS										IIA,IIB,IIC					TEMP =					160					C					CL II INV TEMP CODE					T3B					TEMP =					165					C				
CL II DIV 2 GRPS F&G										TEMP CODE					T3B					1.0 SF ON PWM INVERTER										POWER																								
CL II ZONE 22 GRPS IIIB										TEMP=					165					C																																		

YR

AC Induction Motor Performance Data

Record # 101436

Preliminary Data Sheet

Winding: 10WGZ894-R001		Type: 1048M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	25	Full Load Torque	36.52 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	56/28	Breakdown Torque	178 LB-FT
R.P.M.	3545	Pull-up Torque	69.5 LB-FT
Hz	60 Phase	Locked-rotor Torque	88.2 LB-FT
NEMA Design Code	A KVA Code	Starting Current	244 A
Service Factor (S.F.)	1.15	No-load Current	9.39 A
NEMA Nom. Eff.	93 Power Factor	Line-line Res. @ 25°C	0.214 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	57°C
S.F. Amps	64/32	Temp. Rise @ S.F. Load	69°C
		Locked-rotor Power Factor	22.6
		Rotor inertia	2.06 lb-ft ²

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	77	85	88	90	91	89
Efficiency	85.1	91.5	92.7	93.1	92.8	92.1	92.9
Speed	3586	3572	3560	3544	3530	3514	3536
Line amperes	11.73	16.2	21.57	28.06	34.58	41.48	32

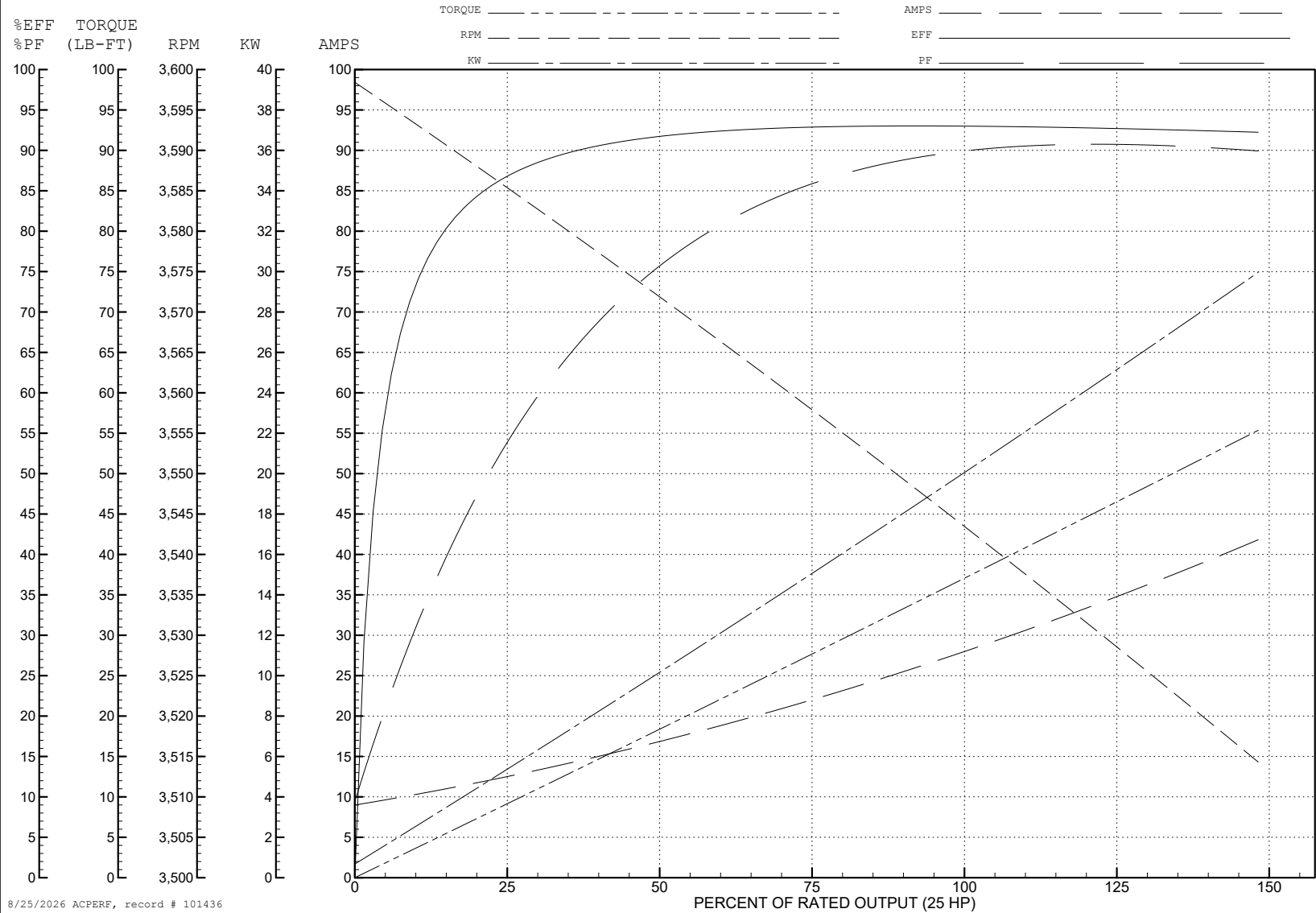
ABB Motors and Mechanical Inc.

WINDING # 10WGZ894

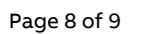
Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 3545 RPM 460 V 1048M

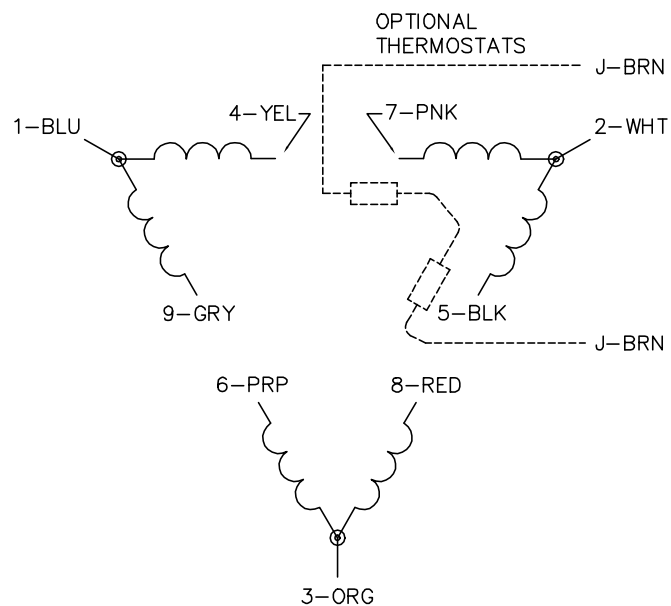
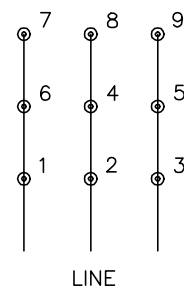
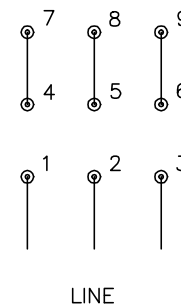
TORQUES (LB-FT): PO=178 PU=69.5 LR=88.2 LRA=244



8/25/2026 ACPERF, record # 101436



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.

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

SH 1 of 1

CD0180