

ABB BALDOR RELIANCE III

Customer information packet

SPM4108TS

30HP, 3530RPM, 3PH, 60HZ, 286TS, 1056M, TEFC, F

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

Division - Division II

Specifications

Enclosure	TEFC
Frame	286TS
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	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	33.000 A @ 460.0 V 66.000 A @ 230.0 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	D
Type	AC
Mech. spec.	10T011
Base	
Status	PRD/A
Elec. spec.	10WGZ895
Layout	10LYT011
Eff. date	04-17-2026
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	10-04-2023

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	33.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
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	1056M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.63 IN
Power Factor	90
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	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3530 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 #	SPM4108TS										SER #						CC	010A	WGT	445	LBS								
SPEC	10T011Z895										FRAME	286TS					ENCL	TEFC	IP	55									
RATING	40C AMB-CONT																				NEMA NOM. EFF	93							
HP	30										VOLTS	230/460																	
AMPS	66/33										RPM	3530					HZ	60											
PH	3	CL	F	CODE	H	DES	A	PF	90	%	SER.F.			1.15	SF AMP														
DE BRG	6311					ODE BRG					6311					LUBE	POLYREX EM												
INV TYPE:	VPWM			SL HZ		1.2		CHP	60	TO	80	1.3:1																	
WK2	2.4		LBFT2			MAX RPM		4800	CT	6	TO	60	10:1																
MAG CUR	17.6/8.8										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,IIIB,IIC					TEMP =	T3C		C	CL II INV TEMP CODE										T3A	TEMP =	180	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 # 101881

Typical performance - not guaranteed values

Winding: 10WGZ895-R001			Type: 1056M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30	Full Load Torque		44.38 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		66/33	Breakdown Torque		183 LB-FT		
R.P.M.		3530	Pull-up Torque		65.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		86.2 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		239 A
Service Factor (S.F.)		1.15		No-load Current		8.82 A	
NEMA Nom. Eff.		93	Power Factor	90	Line-line Res. @ 25°C		0.205 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C	
S.F. Amps				Temp. Rise @ S.F. Load		67°C	
				Locked-rotor Power Factor		22.3	
				Rotor inertia		2.4 lb-ft²	

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	65	83	89	91	92	92	92
Efficiency	89.8	93.1	93.9	93.1	93	92	93
Speed	3581	3564	3548	3531	3511	3490	3519
Line amperes	11.9	18.18	25.13	32.8	40.98	49.63	37.7

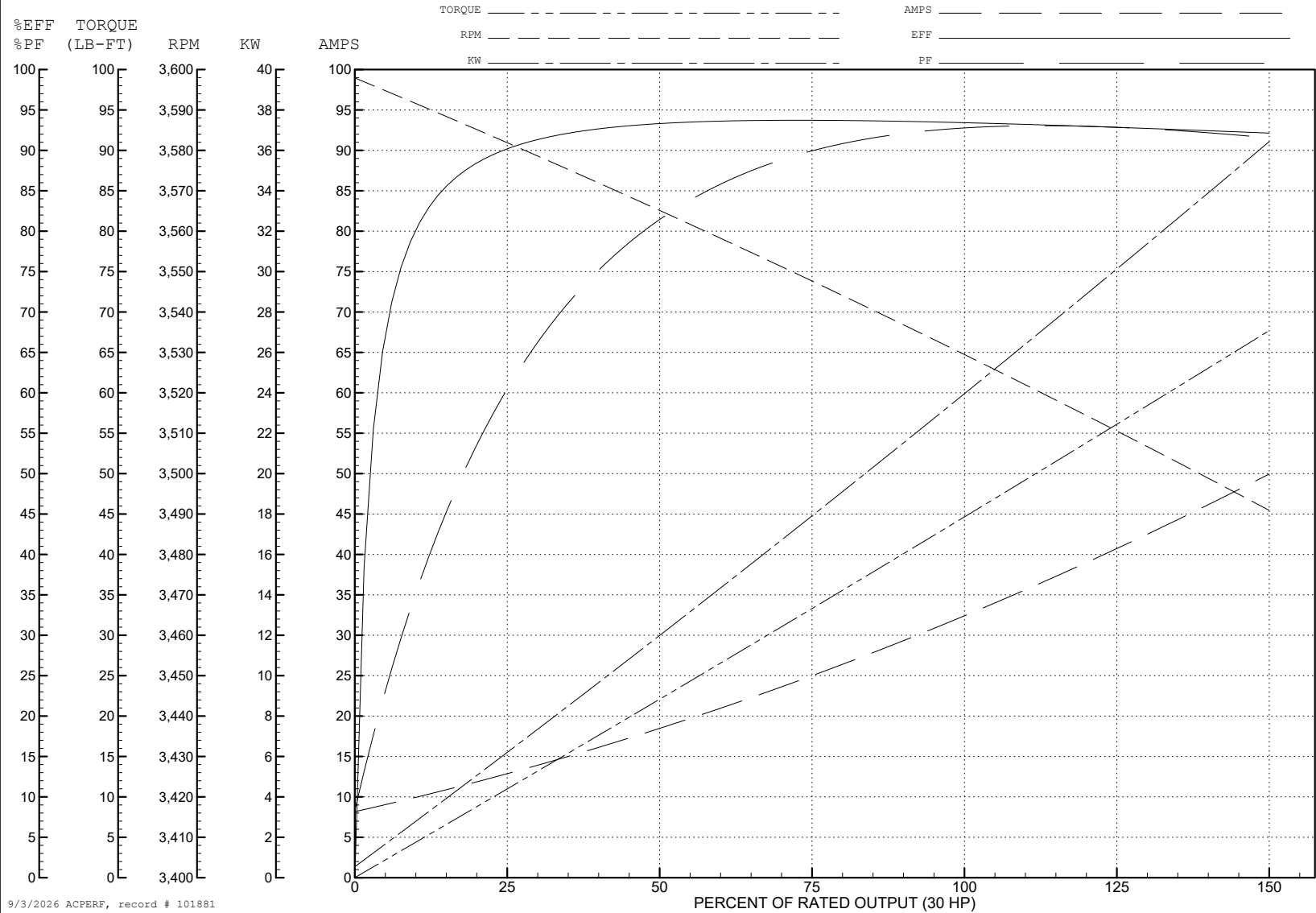
ABB Motors and Mechanical Inc.

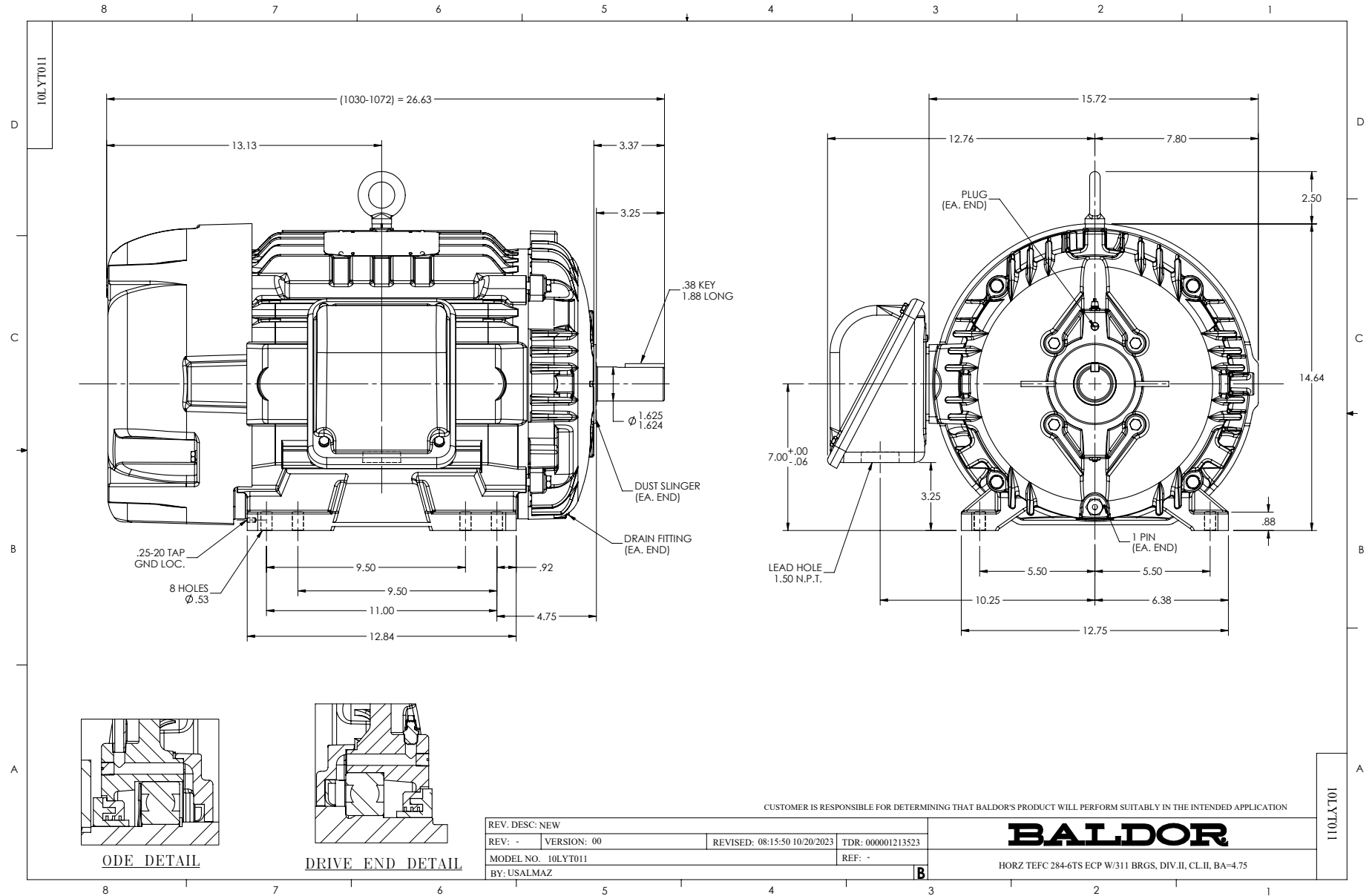
WINDING # 10WGZ895

Typical performance - not guaranteed values.

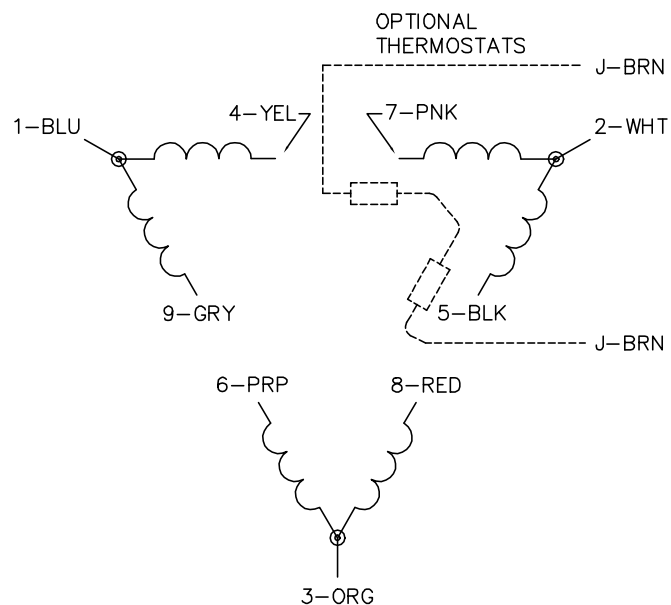
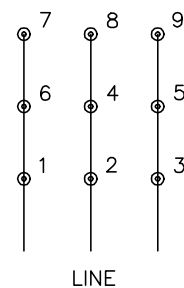
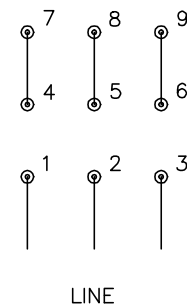
30 HP 3 PH 60 HZ 3530 RPM 460 V 1056M

TORQUES (LB-FT): PO=183 PU=65.6 LR=86.2 LRA=239





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