

ABB BALDOR RELIANCE III

Customer information packet

CSPM4109TS

40HP, 3530RPM, 3PH, 60HZ, 324TSC, 1064M, TEFC

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

Division - Division II

Specifications

Enclosure	TEFC
Frame	324TSC
Frame Material	Cast 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	40.000 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	CSA CURUSEEV 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	45.000 A @ 460.0 V 90.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C

Part Detail

Revision	B
Type	AC
Mech. spec.	10T016
Base	
Status	PRD/A
Elec. spec.	10WGX658
Layout	10LYT016
Eff. date	04-17-2026
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	10-10-2024

Heater Indicator	No Heater
High Voltage Full Load Amps	45.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4500 rpm
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1064M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.13 IN
Power Factor	91
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 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 #	CSPM4109TS										SER #											CC	010A	WGT	451	LBS													
SPEC	10T016X658										FRAME	324TSC										ENCL	TEFC	IP	55														
RATING	40C AMB-CONT																					NEMA NOM. EFF	93.6																
HP	40										VOLTS	230/460																											
AMPS	90/45										RPM	3530										HZ	60																
PH	3	CL	F	CODE	G	DES	A	PF	91	%	SER.F.					1.15	SF AMP																						
DE BRG	6312										ODE BRG	6311										LUBE	POLYREX EM																
INV TYPE:	VPWM					SL HZ	1.2	CHP	60	TO	75	1.3:1																											
WK2	2.75					LBFT2	MAX RPM	4500	CT	6	TO	60	10:1																										
MAG CUR	24/12										VT	3	TO	60	20:1																								
																				MEETS INTENT OF IEEE-45										FOR WEATHER PROTECTION									

YR

AC Induction Motor Performance Data

Record # 2771

Typical performance - not guaranteed values

Winding: 10WGX658-R001			Type: 1064M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		40	Full Load Torque		59.9 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		90/45	Breakdown Torque		343 LB-FT		
R.P.M.		3530	Pull-up Torque		98 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		129 LB-FT	
NEMA Design Code		A	KVA Code	G	Starting Current		292 A
Service Factor (S.F.)		1.15	No-load Current		11.9 A		
NEMA Nom. Eff.		93.6	Power Factor	91	Line-line Res. @ 25°C		0.139 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		79°C
S.F. Amps					Temp. Rise @ S.F. Load		96°C
					Locked-rotor Power Factor		22
					Rotor inertia		2.75 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	83	89	91	91	92	91
Efficiency	90.4	93.5	93.9	93.6	92.9	92.1	93.2
Speed	3585	3569	3551	3533	3515	3495	3522
Line amperes	16	24.6	34.3	45	55.8	67	51.48

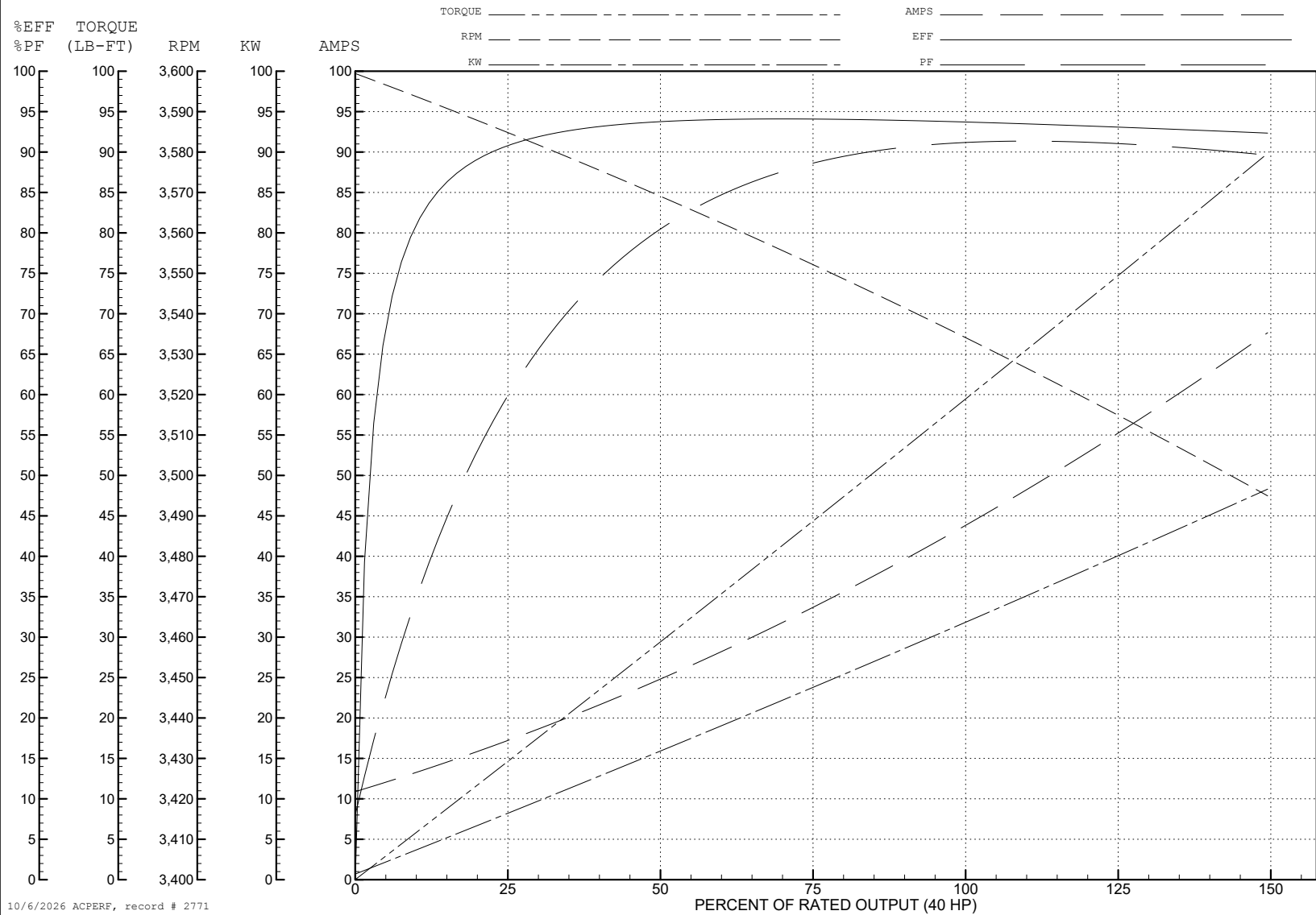
ABB Motors and Mechanical Inc.

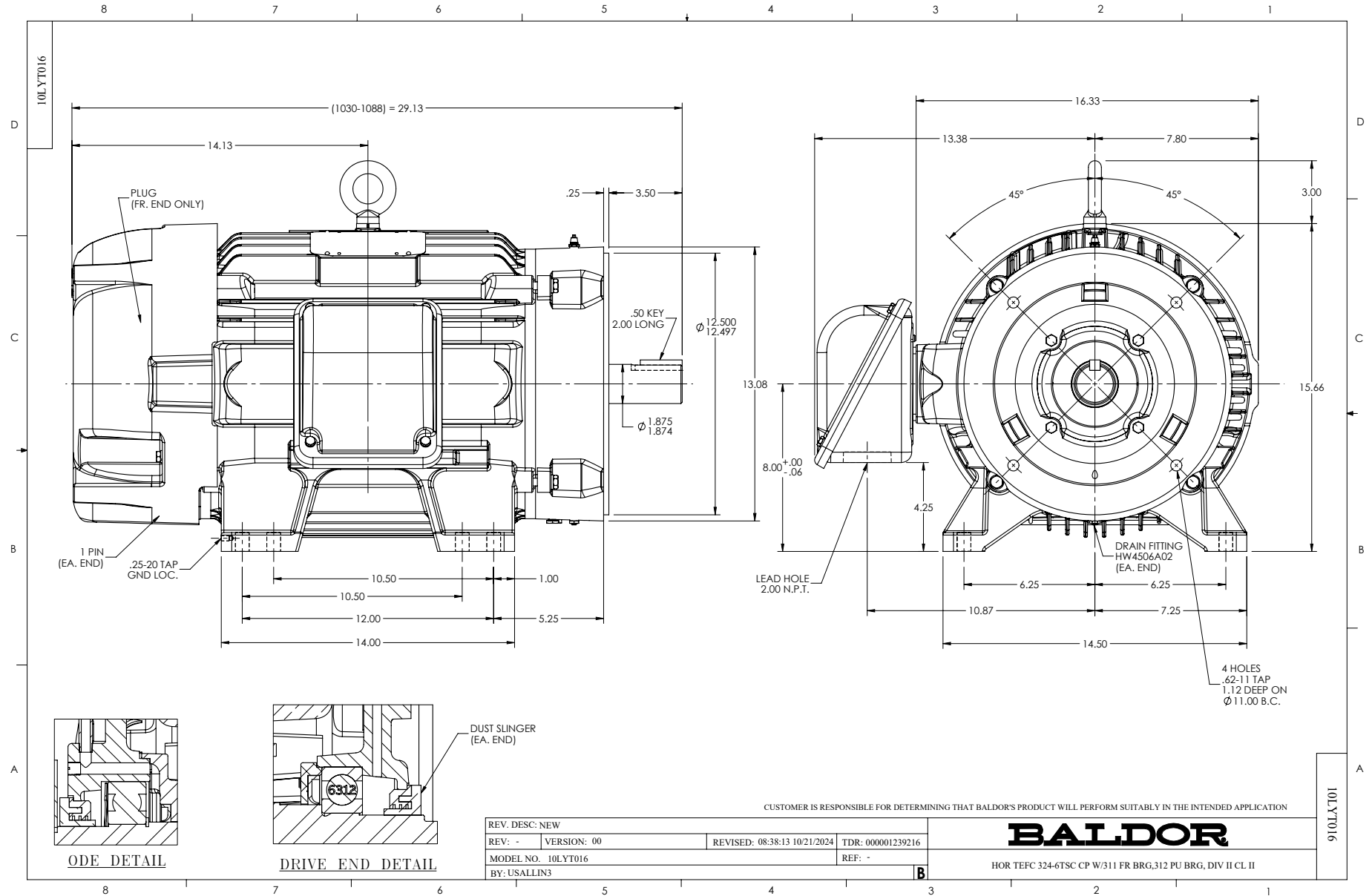
WINDING # 10WGX658

Typical performance - not guaranteed values.

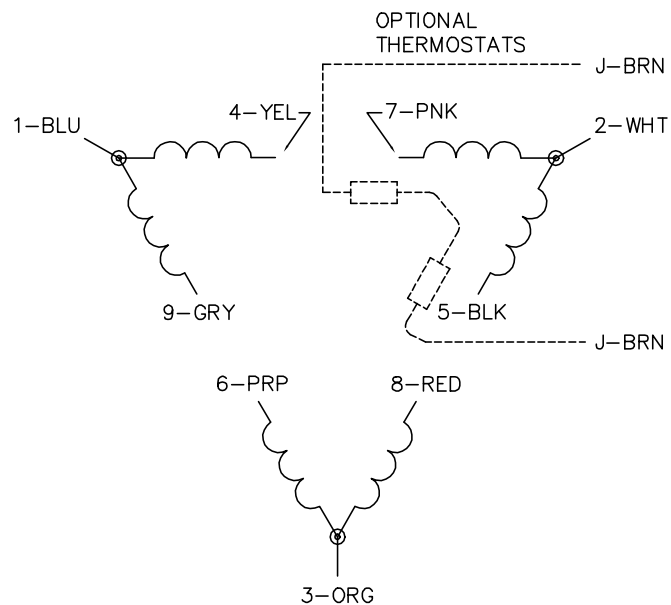
40 HP 3 PH 60 HZ 3530 RPM 460 V 1064M

TORQUES (LB-FT) : PO=343 PU=98 LR=129 LRA=292

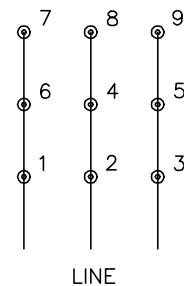




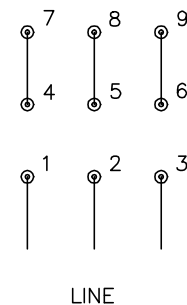
CD0180



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

SH 1 of 1