

ABB BALDOR RELIANCE III

Customer information packet

CSPM4114TS

50HP, 3540RPM, 3PH, 60HZ, 326TSC, 1256M, TEFC

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

Division - Division II

Specifications

Enclosure	TEFC
Frame	326TSC
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	50.000 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 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	124.000 A @ 208.0 V 56.000 A @ 460.0 V 112.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	B
Type	AC
Mech. spec.	12T119
Base	
Status	PRD/A
Elec. spec.	12WGZ343
Layout	12LYT119
Eff. date	04-17-2026
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	09-23-2024

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
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	1256M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.21 IN
Power Factor	89
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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	3540 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 #	CSPM4114TS										SER #						CC	010A	WGT	587	LBS			
SPEC	12T119Z343										FRAME	326TSC					ENCL	TEFC	IP	55				
RATING	40C AMB-CONT															NEMA NOM. EFF	94.1							
HP	50										VOLTS	230/460												
AMPS	112/56										RPM	3540					HZ	60						
PH	3	CL	F	CODE	H	DES	B	PF	89	%	SER.F.		1.15	SF AMP	128/64									
DE BRG	6312					ODE BRG	6312					LUBE	POLYREX EM											
INV TYPE:	VPWM		SL HZ	1		CHP	60		TO	75		1.3:1												
WK2	4.38		LBFT2	MAX RPM	4500		CT	6		TO	60		10:1											
MAG CUR	33.2/16.6										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 # 101346

Typical performance - not guaranteed values

Winding: 12WGZ343-R001				Type: 1256M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50		Full Load Torque		74.1 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		112/56		Breakdown Torque		292 LB-FT		
R.P.M.		3540		Pull-up Torque		97.3 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		134 LB-FT		
NEMA Design Code		B	KVA Code	Starting Current		403 A		
Service Factor (S.F.)		1.15		No-load Current		16.6 A		
NEMA Nom. Eff.		94.1	Power Factor	89		Line-line Res. @ 25°C		0.11 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		78°C		
S.F. Amps		128/64		Temp. Rise @ S.F. Load		96°C		
				Locked-rotor Power Factor		20.2		
				Rotor inertia		4.38 lb-ft²		

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	60	80	87	89	90	91	90
Efficiency	90.3	93.6	94.3	94.2	93.5	92.8	93.8
Speed	3585	3574	3562	3550	3539	3527	3543
Line amperes	21.6	31.3	42.9	55.7	69.3	82.9	63.9

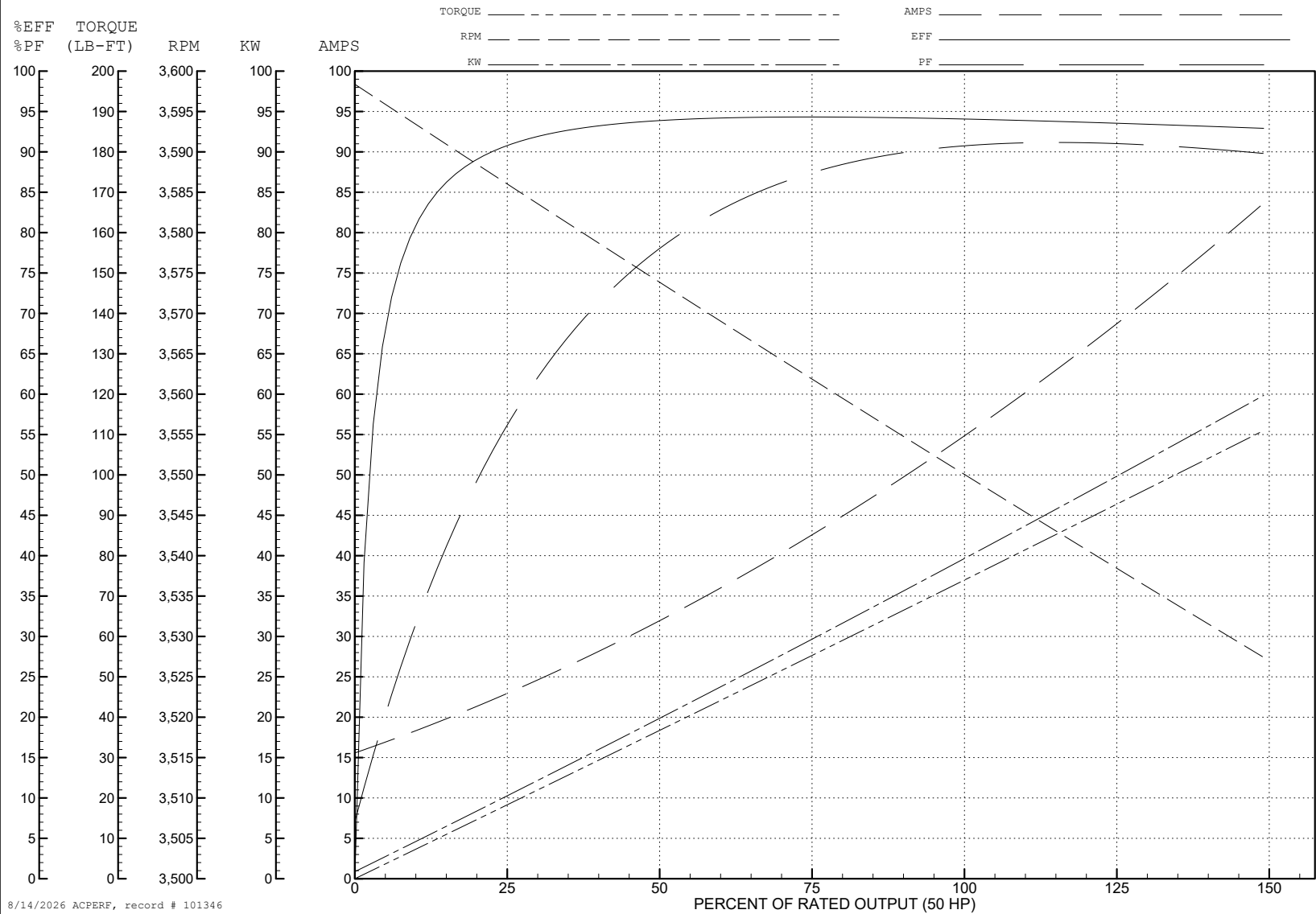
ABB Motors and Mechanical Inc.

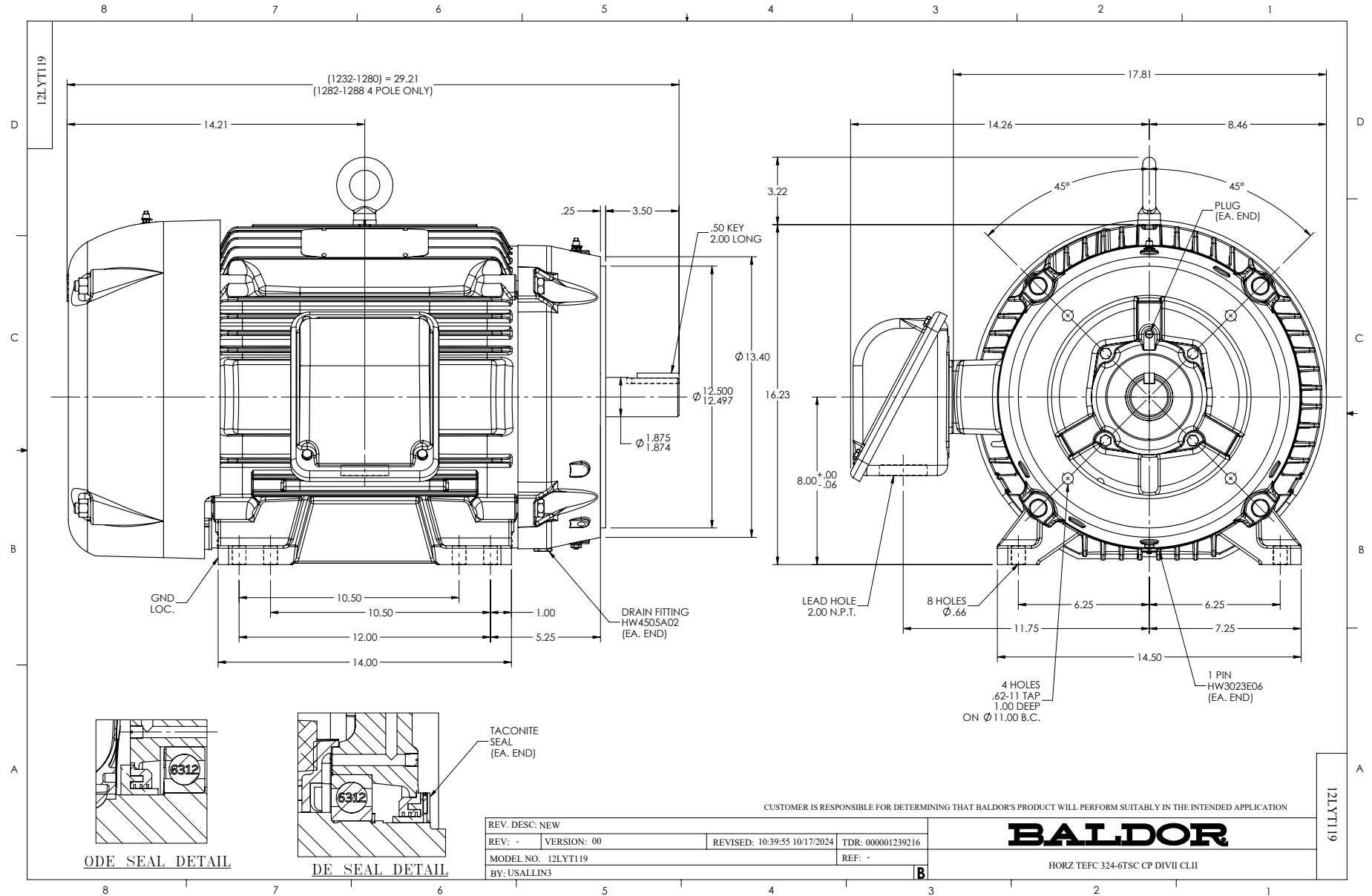
WINDING # 12WGZ343

Typical performance - not guaranteed values.

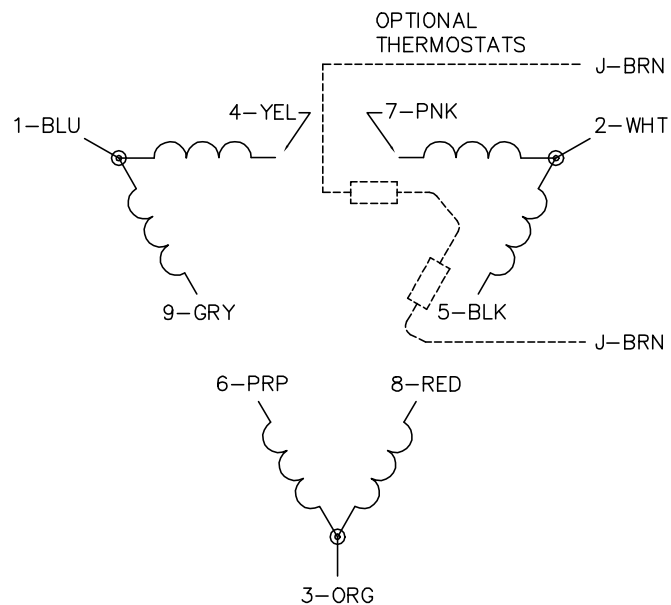
50 HP 3 PH 60 HZ 3540 RPM 460 V 1256M

TORQUES (LB-FT): PO=292 PU=97.3 LR=134 LRA=403

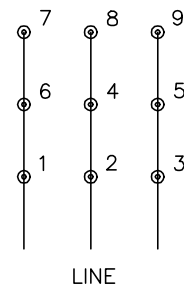




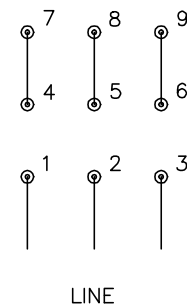
CD0180



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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