

ABB BALDOR RELIANCE III

Customer information packet

VHECP4114T

52M 2P TEFC VER 326HP 32-6 SE DRIPCOVER

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326HP
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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	56.000 A @ 460.0 V 122.000 A @ 208.0 V 112.000 A @ 230.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	J
Type	AC
Mech. spec.	12S033
Base	
Status	PRD/A
Elec. spec.	12WGY291
Layout	12LYS033
Eff. date	12-09-2025
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	05-29-2018

High Voltage Full Load Amps	56.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	34.72 IN
Power Factor	90
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Shaft Indicator	P-Base Groove & Key
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	3540 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1260									
CAT.NO.	VHECP4114T								
SPEC.	12S033Y291G1								
HP	50								
VOLTS	230/460								
AMP	112/56								
RPM	3540								
FRAME	326HP	HZ	60		PH	3			
SER.F.	1.15	CODE	H	DES	A	CL	F		
NEMA-NOM-EFF	93	PF	90						
RATING	40C AMB-CONT								
CC	010A								
DE	6312	ODE	6311						
ENCL	TEFC	SN							

AC Induction Motor Performance Data

Record # 31649

Typical performance - not guaranteed values

Winding: 12WGY291-R001			Type: 1252M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50	Full Load Torque		74.4 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		112 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		139 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		408 A
Service Factor (S.F.)		1.15		No-load Current		14.9 A	
NEMA Nom. Eff.		93	Power Factor	90	Line-line Res. @ 25°C		0.11257 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		77°C	
S.F. Amps				Temp. Rise @ S.F. Load		95°C	
				Locked-rotor Power Factor		20.9	
				Rotor inertia		4.07 LB-FT2	

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	66	82	88	90	91	90	91
Efficiency	91.1	93.8	94.2	93.9	93.2	92.3	93.5
Speed	3584.1	3571.8	3558.2	3544.1	3528.2	3511.2	3535
Line amperes	20.4	30.8	42.9	55.8	69.5	84.6	64

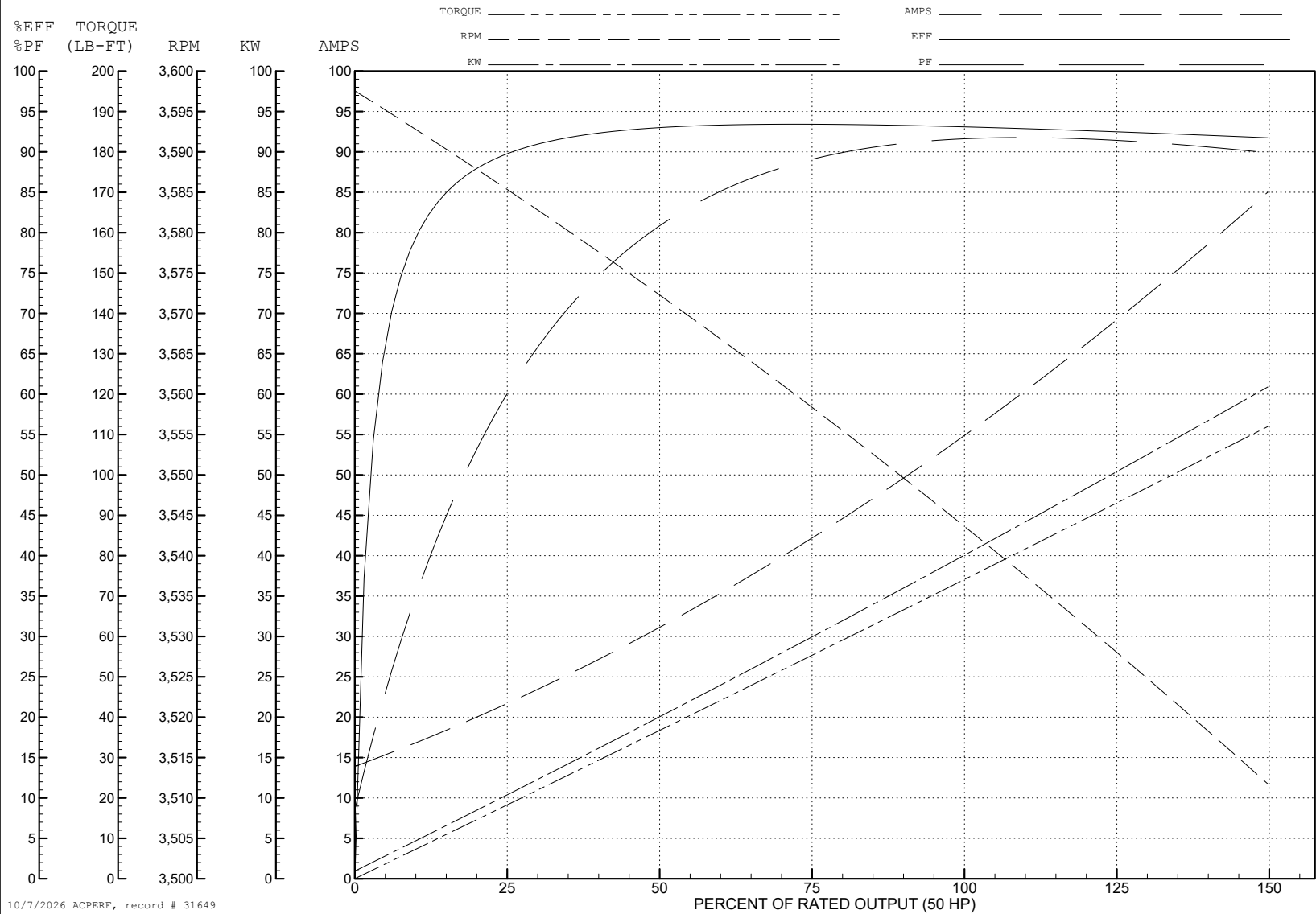
ABB Motors and Mechanical Inc.

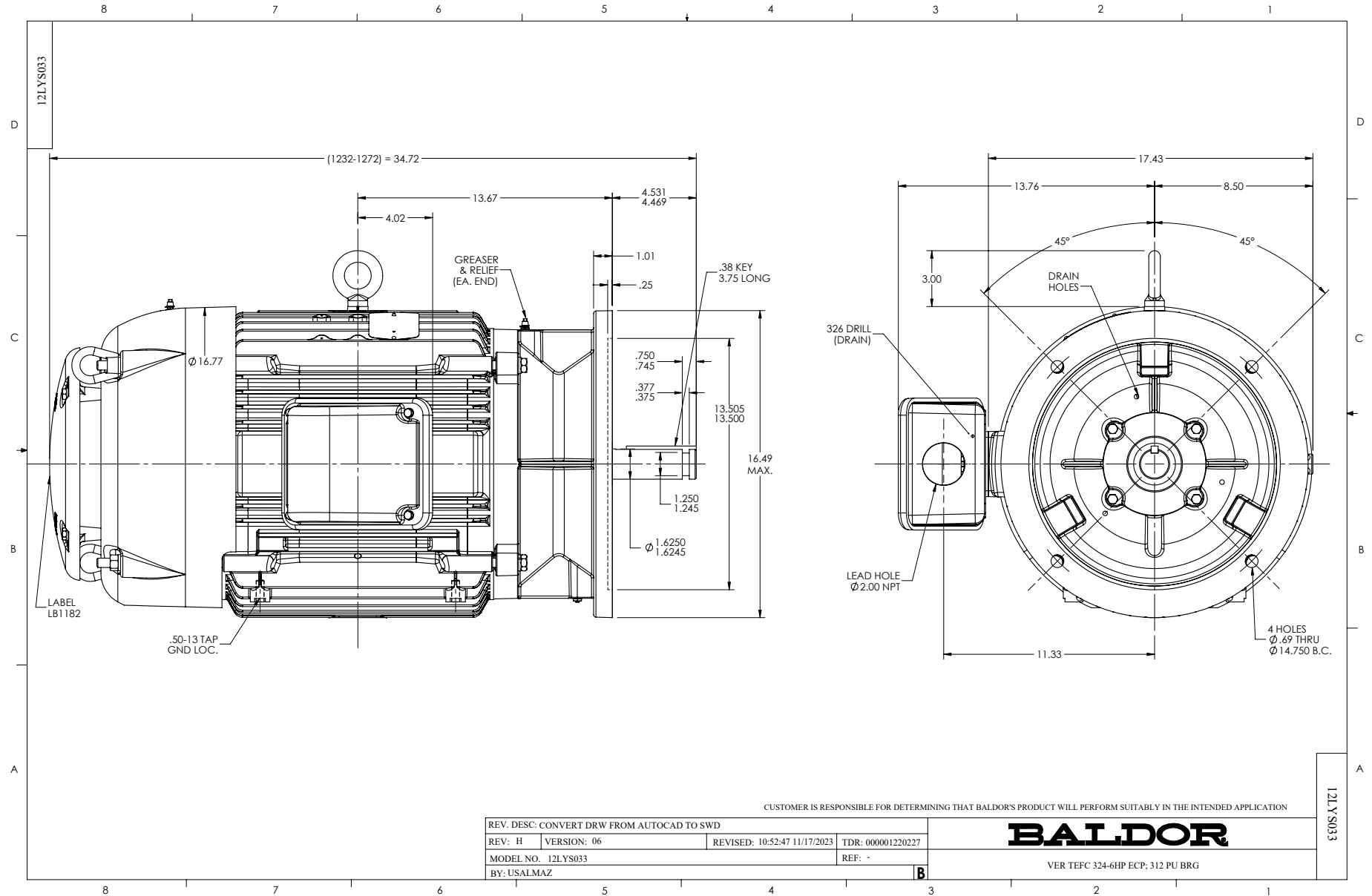
WINDING # 12WGY291

Typical performance - not guaranteed values.

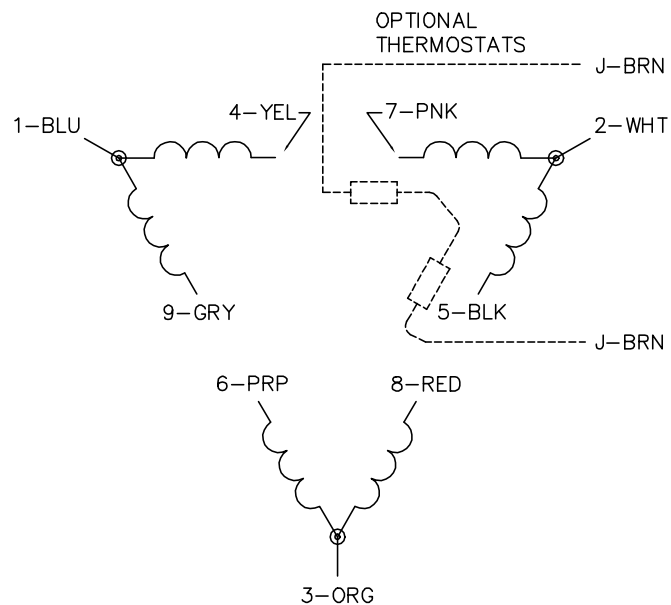
50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

TORQUES (LB-FT): PO=292 PU=112 LR=139 LRA=408

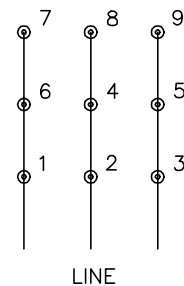




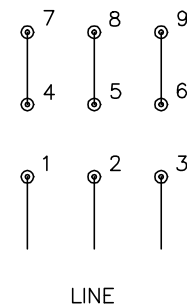
CD0180



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