

ABB BALDOR RELIANCE III

Customer information packet

VPEC4115T

50HP, 1775RPM, 3PH, 60HZ, 326VP, 1272M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	326VP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
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
Constant Torque Speed Range	8
Current @ Voltage	58.000 A @ 460.0 V 116.000 A @ 230.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	D
Type	AC
Mech. spec.	12K25
Base	
Status	PRD/A
Elec. spec.	12WGZ279
Layout	12LYK025
Eff. date	12-09-2025
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	02-03-2021

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	58.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	34.71 IN
Power Factor	85
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Thrust
Pulley Face Code	P-Base
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	Shaft Slinger
Speed	1775 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
NP3241

CAT.NO.	VPECP4115T		P/N					ENCLOSURE	TEFC				
SPEC.	12K025Z279G1		CC	010A	FRAME	326VP		S/N					
HP	50		CLASS		F	HZ	60	DES	A				
RPM	1775		RPM MAX		2700		PH	3	KVA-CODE	H			
VOLT	230/460		MOTOR WEIGHT			715							
AMP	116/58		SER.F.	1.15	PF	85	ODE BRG		6311	DE BRG	QJ312/7312		
RATING	40C AMB-CONT			NEMA-NOM-EFF		94.5		GREASE	POLYREX EM				
					INV.TYPE		PWM						
TEMP CODE	T3	INVERTER-TEMP-CODE			200								
TEMP =	200	C HP FR	60	C HP TO	90								
CT HZ FROM	8	CT HZ TO		60									
HTR-VOLTS		HTR-AMPS		HTR-WATTS		MAX. SPACE HEATER TEMP.				VT HZ FROM	O	VT HZ TO	60

AC Induction Motor Performance Data

Record # 86839

Preliminary Data Sheet

Winding: 12WGZ279-R006			Type: 1272M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50	Full Load Torque		147.8 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		116/58	Breakdown Torque		475 LB-FT		
R.P.M.		1775	Pull-up Torque		210 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		240 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		413 A
Service Factor (S.F.)		1.15	No-load Current		20.8 A		
NEMA Nom. Eff.		94.5	Power Factor	85	Line-line Res. @ 25°C		0.114 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		68°C
S.F. Amps		132/68	Temp. Rise @ S.F. Load		88°C		
			Locked-rotor Power Factor		29.7		
			Rotor inertia		9.59 lb-ft²		

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	73	82	86	87	87	87
Efficiency	91.5	94.4	94.8	94.6	94	93.2	94.1
Speed	1794	1788	1782	1776	1769	1761	1770
Line amperes	24.8	33.9	45.3	57.9	71.6	87.5	66.1

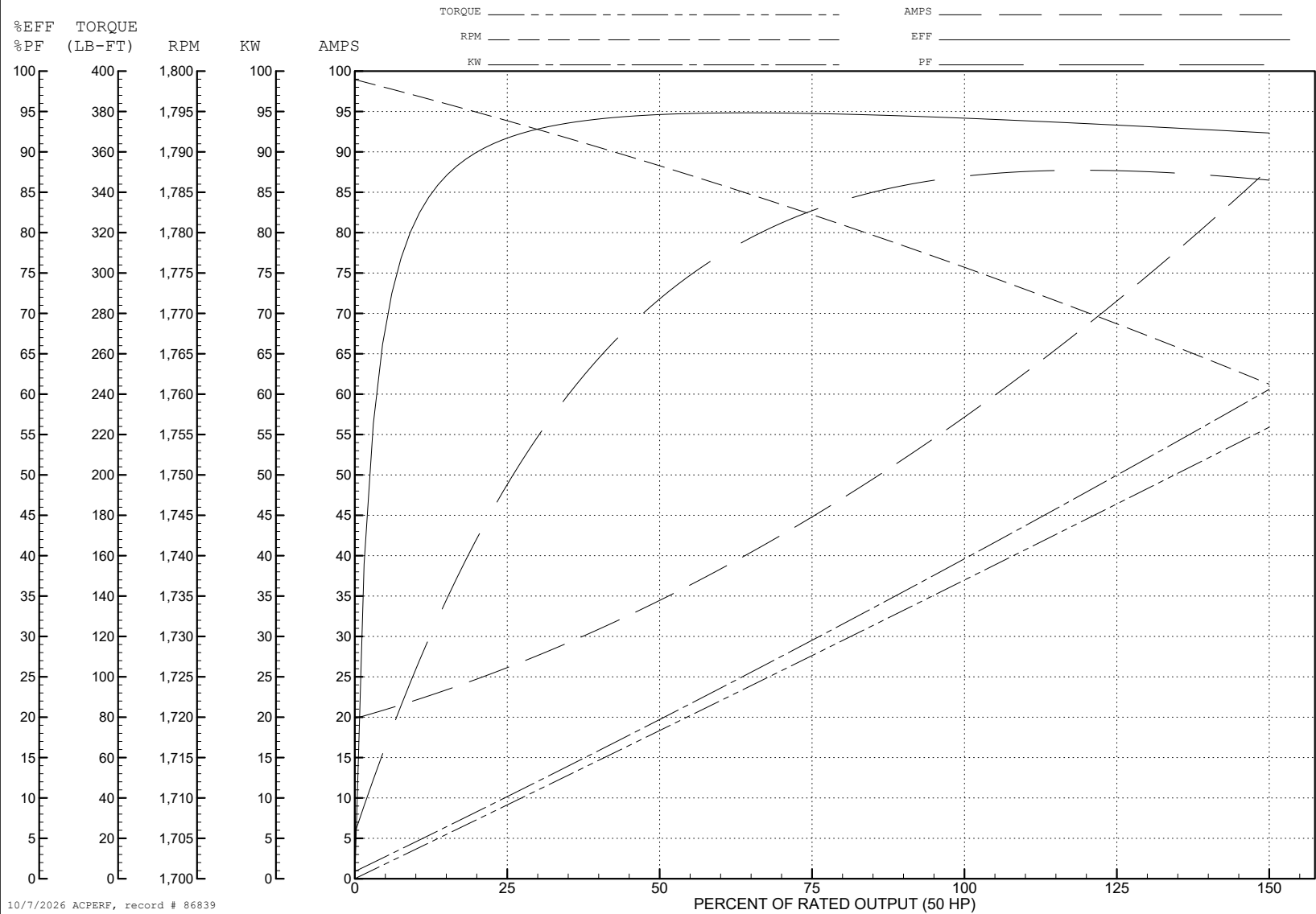
ABB Motors and Mechanical Inc.

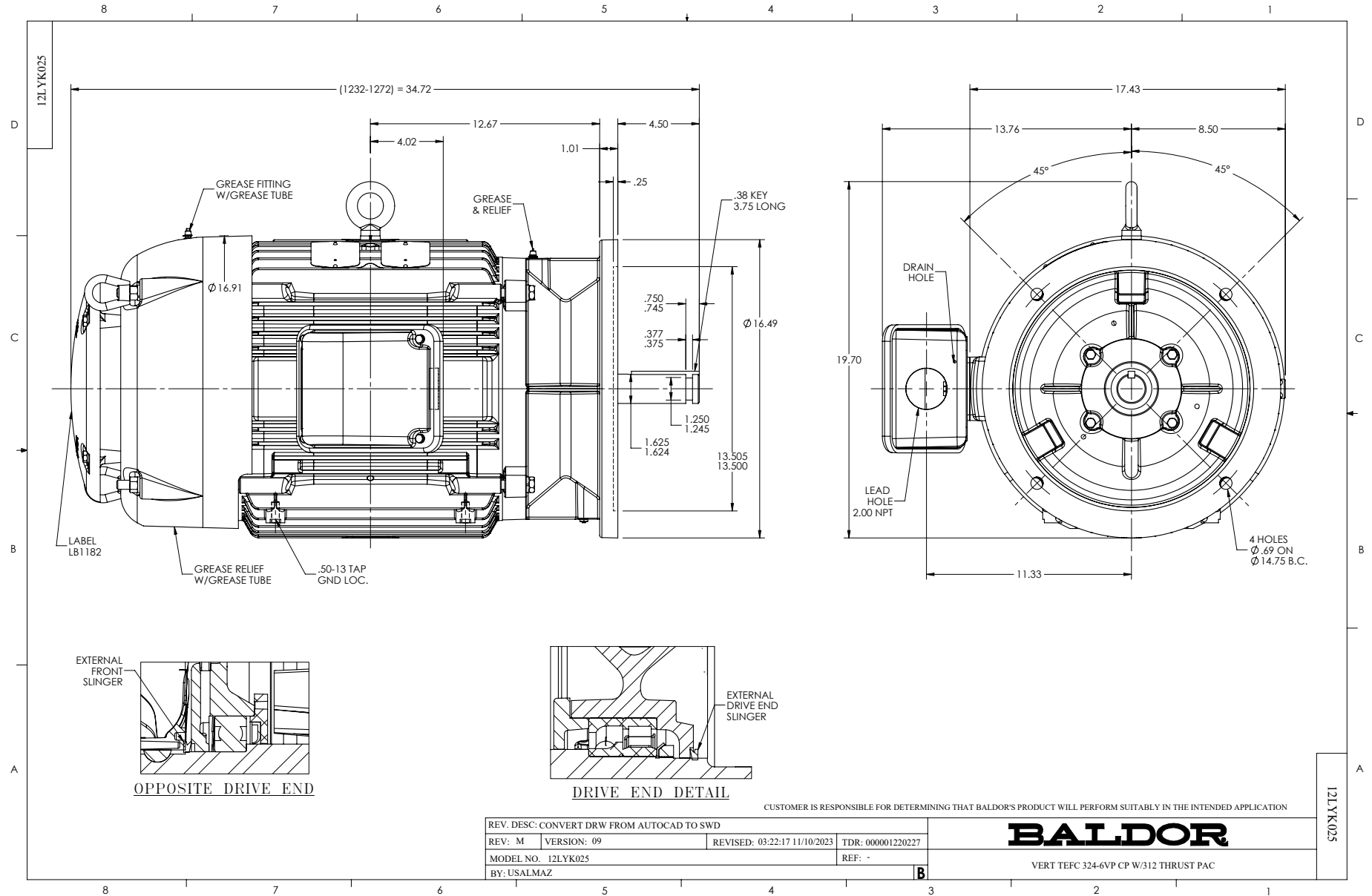
WINDING # 12WGZ279

Typical performance - not guaranteed values.

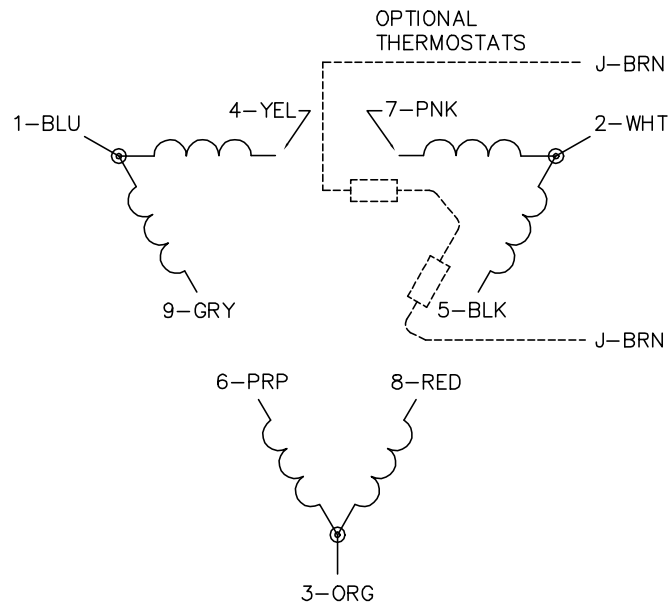
50 HP 3 PH 60 HZ 1775 RPM 460 V 1272M

TORQUES (LB-FT): PO=475 PU=210 LR=240 LRA=413

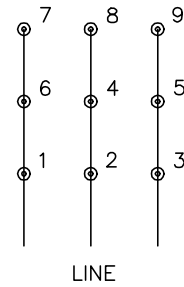




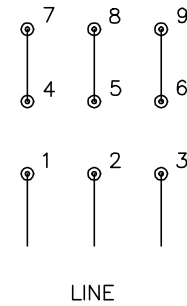
CD0180



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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