

ABB BALDOR RELIANCE III

Customer information packet

VHECP4110T

40HP, 1775RPM, 3PH, 60HZ, 324HP, 1254M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324HP
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	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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
Current @ Voltage	48.000 A @ 460.0 V 96.000 A @ 230.0 V 102.000 A @ 208.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	N
Type	AC
Mech. spec.	12S033
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYS033
Eff. date	05-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	12-14-2017

Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	34.72 IN
Power Factor	82
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
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 Extension Location	Pulley End
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

NP1260											
CAT.NO.	VHECP4110T										
SPEC.	12S033Y276										
HP	40										
VOLTS	230/460										
AMP	96/48										
RPM	1775										
FRAME	324HP		HZ	60			PH		3		
SER.F.	1.15		CODE	H	DES	A		CL		F	
NEMA-NOM-EFF	94.1		PF	82							
RATING	40C AMB-CONT										
CC	010A										
DE	6312		ODE	6311							
ENCL	TEFC		SN								
	SFA 109/54.5										

AC Induction Motor Performance Data

Record # 31673

Typical performance - not guaranteed values

Winding: 12WGY276-R001			Type: 1254M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		40	Full Load Torque		119 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		96/48	Breakdown Torque		396 LB-FT		
R.P.M.		1775	Pull-up Torque		198 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		222 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		347 A
Service Factor (S.F.)		1.15	No-load Current		21.03 A		
NEMA Nom. Eff.		94.1	Power Factor	82	Line-line Res. @ 25°C		0.15 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		54°C
S.F. Amps					Temp. Rise @ S.F. Load		66°C
					Locked-rotor Power Factor		27.1
					Rotor inertia		7.19 lb-ft²

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	77	82	84	85	83
Efficiency	89.8	93.4	94.1	94.4	93.9	93.1	94.1
Speed	1794	1788	1783	1777	1771	1765	1773
Line amperes	23.93	30.4	39.12	48.68	59.71	71.22	55.3

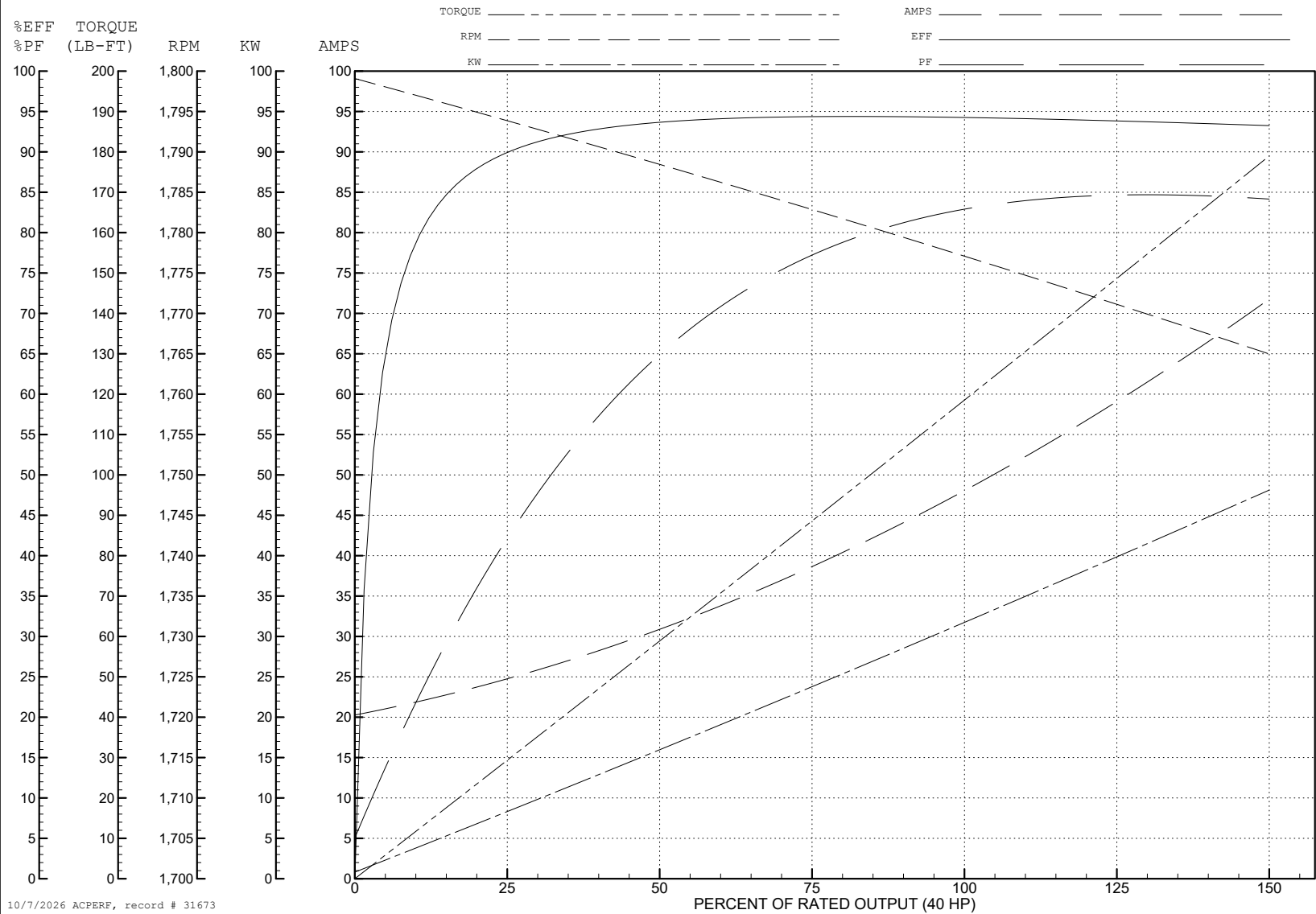
ABB Motors and Mechanical Inc.

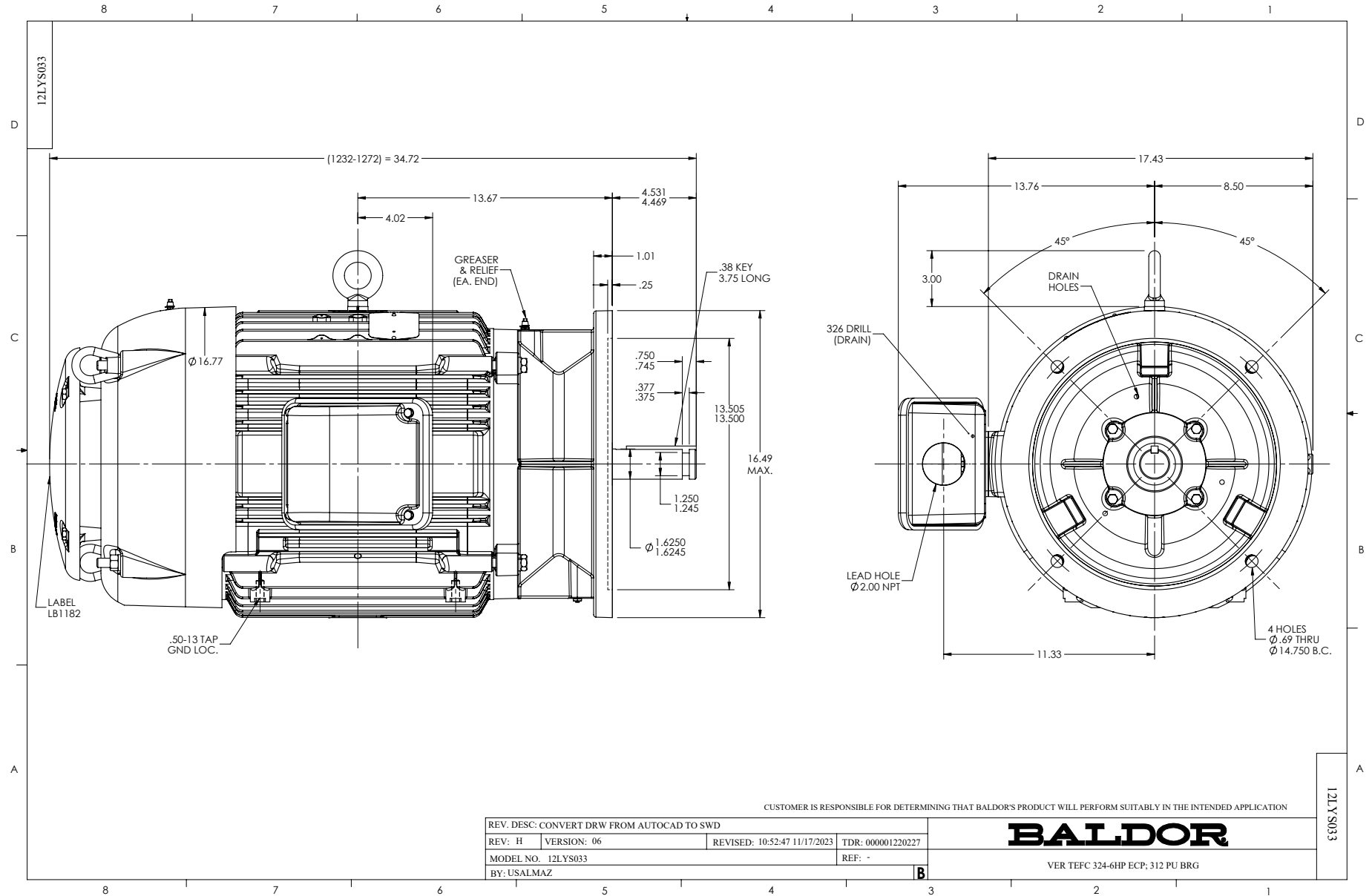
WINDING # 12WGY276

Typical performance - not guaranteed values.

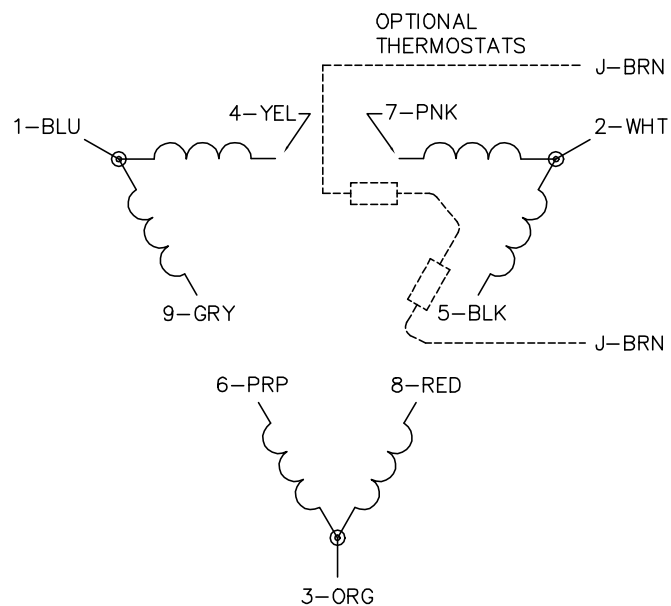
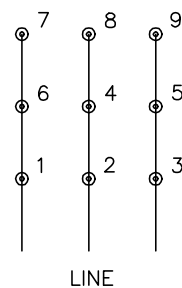
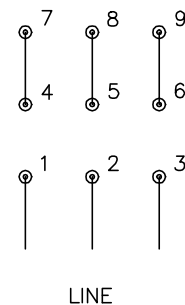
40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

TORQUES (LB-FT): PO=396 PU=198 LR=222 LRA=347





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