

ABB BALDOR RELIANCE III

Customer information packet

IDVSM4110T

40HP, 1775RPM, 3PH, 60HZ, 324T, 1254M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324T
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
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	96.000 A @ 230.0 V 48.000 A @ 460.0 V 102.000 A @ 208.0 V
Design Code	A
Drip Cover	No 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
Heater Indicator	No Heater

Part Detail

Revision	J
Type	AC
Mech. spec.	12G534
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYG534
Eff. date	05-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	03-14-2017

High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
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	33.14 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	2.125 IN
Shaft Extension Location	Double Shaft
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 (OLD)
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3302L									
CAT NO	IDVSM4110T								
SPEC.	12G534Y276G1								
FRAME	324T			HP	40 TE				
VOLTS	230/460								
MAG CUR	39/19.5			FLA			96/48		
RPM	1775			RPM MAX			2700		
HZ	60		PH	3		CLASS		F	
SER.F.	1.00			SL HZ			0.85		
NEMA-NOM-EFF	94.1		WK2		7.19				
RATING	40C AMB-CONT								
DE BRG	6312		ODE BRG				6311		
CC	010A	SN							
	1.5:1 CHP PWM								
	1000:1 CT, 1000:1 VT								

AC Induction Motor Performance Data

Record # 51423

Typical performance - not guaranteed values

Winding: 12WGY276-R027			Type: 1254M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		40		Full Load Torque		118 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		96/48		Breakdown Torque		386 LB-FT
R.P.M.		1775		Pull-up Torque		193 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		216 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		338 A
Service Factor (S.F.)		1		No-load Current		19.9 A
NEMA Nom. Eff.		94.1	Power Factor	Line-line Res. @ 25°C		0.14898 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C
				Locked-rotor Power Factor		27
				Rotor inertia		7.19 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	47	69	78	83	85	85
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8

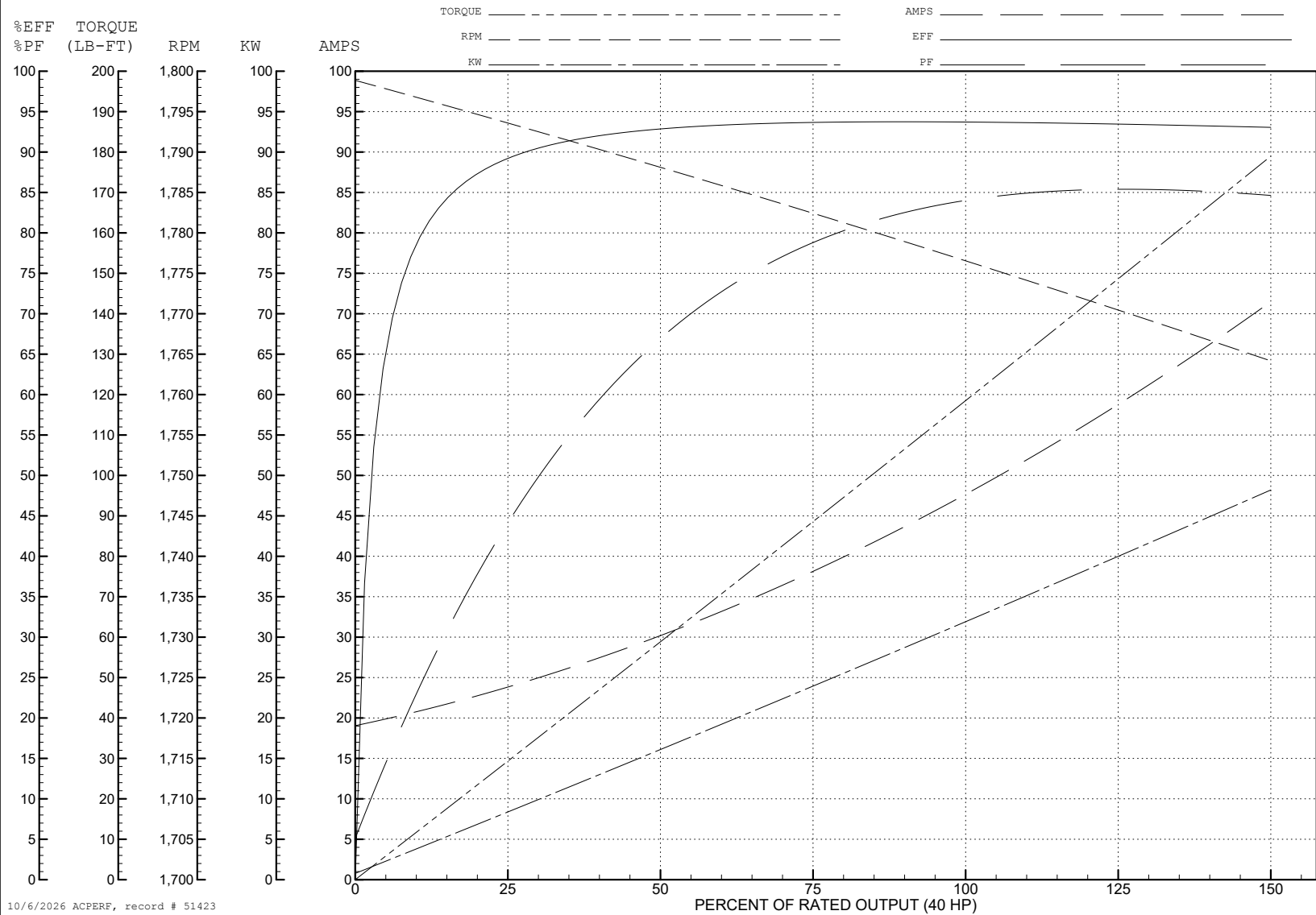
ABB Motors and Mechanical Inc.

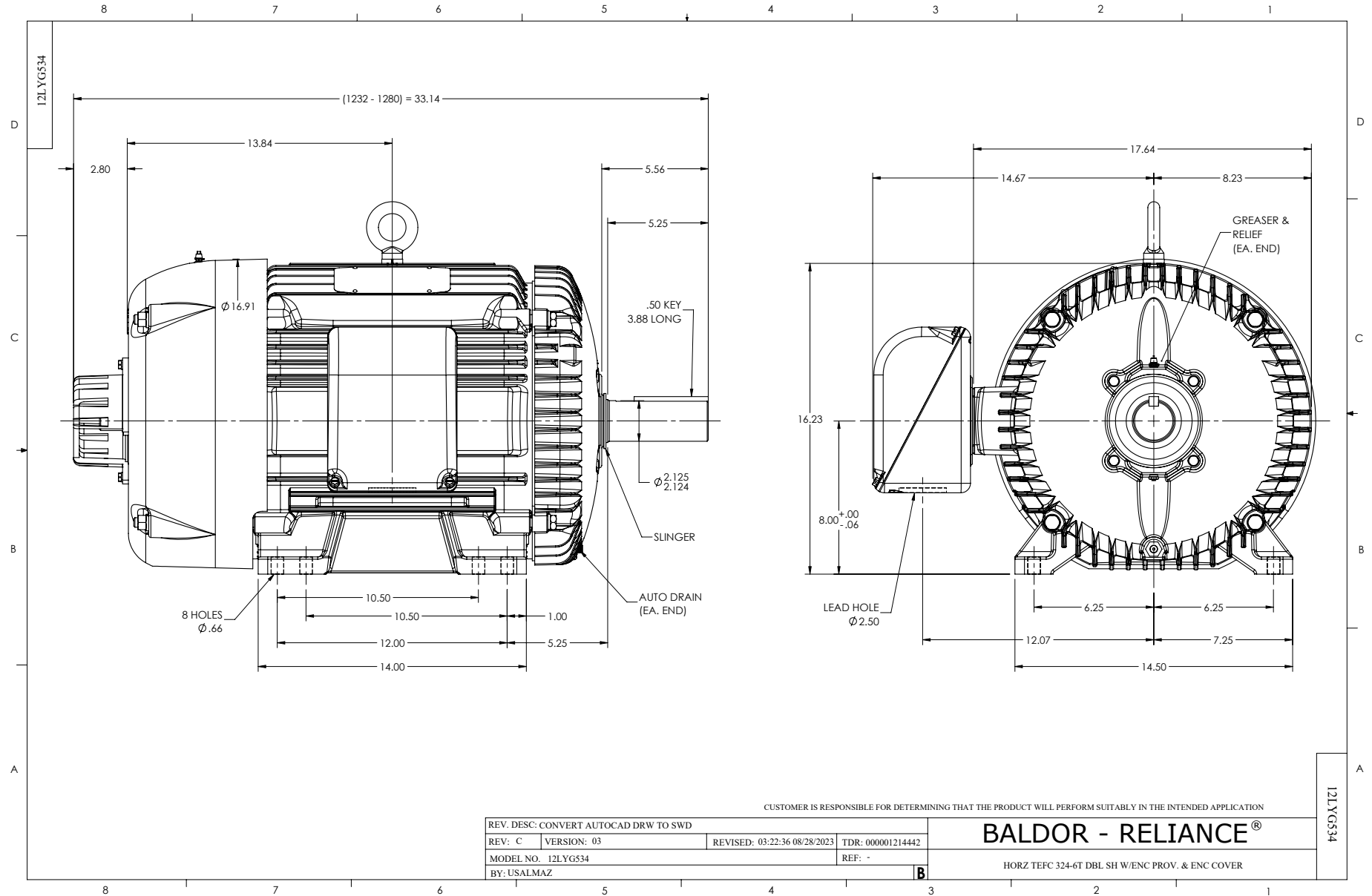
WINDING # 12WGY276

Typical performance - not guaranteed values.

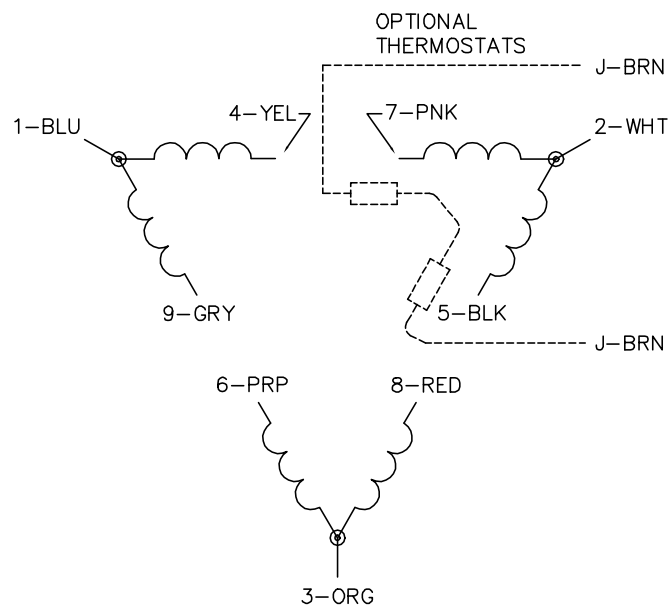
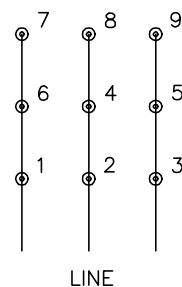
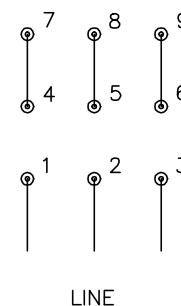
40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

TORQUES (LB-FT): PO=386 PU=193 LR=216 LRA=338





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