

ABB BALDOR RELIANCE III

Customer information packet

ZDM4110T

54M 4P TEBC HOR 324T VECTOR TSTATS

Class - None

Division - Not Applicable

Specifications

Enclosure	TEBC
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	BLOWER
Current @ Voltage	102.000 A @ 208.0 V 48.000 A @ 460.0 V 96.000 A @ 230.0 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	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 a

Part Detail

Revision	H
Type	AC
Mech. spec.	12T107
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYT107
Eff. date	05-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	03-14-2019

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
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	36.92 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	2.125 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	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1168L									
CAT NO	ZDM4110T								
SPEC.	12T107Y276Z1								
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	H				
SER.F.	1.00	DES	A	SL HZ	0.8				
NEMA-NOM-EFF	94.1	WK2	7.19						
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6312	ODE BRG			6311				
CC	010A	SER.NO							
	1000:1 CT, 1000:1 VT								

AC Induction Motor Performance Data

Record # 79747

Typical performance - not guaranteed values

Winding: 12WGY276-R012				Type: 1254M		Enclosure: TEBC		
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	H	Starting Current		338 A	
Service Factor (S.F.)		1		No-load Current		19.9 A		
NEMA Nom. Eff.		94.1	Power Factor	82	Line-line Res. @ 25°C		0.145 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		54°C
S.F. Amps						Temp. Rise @ S.F. Load		65°C
						Locked-rotor Power Factor		27.3
						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	88.9	92.9	93.9	93.6	93.3	93.1
Speed	1794	1788	1783	1777	1771	1764
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8

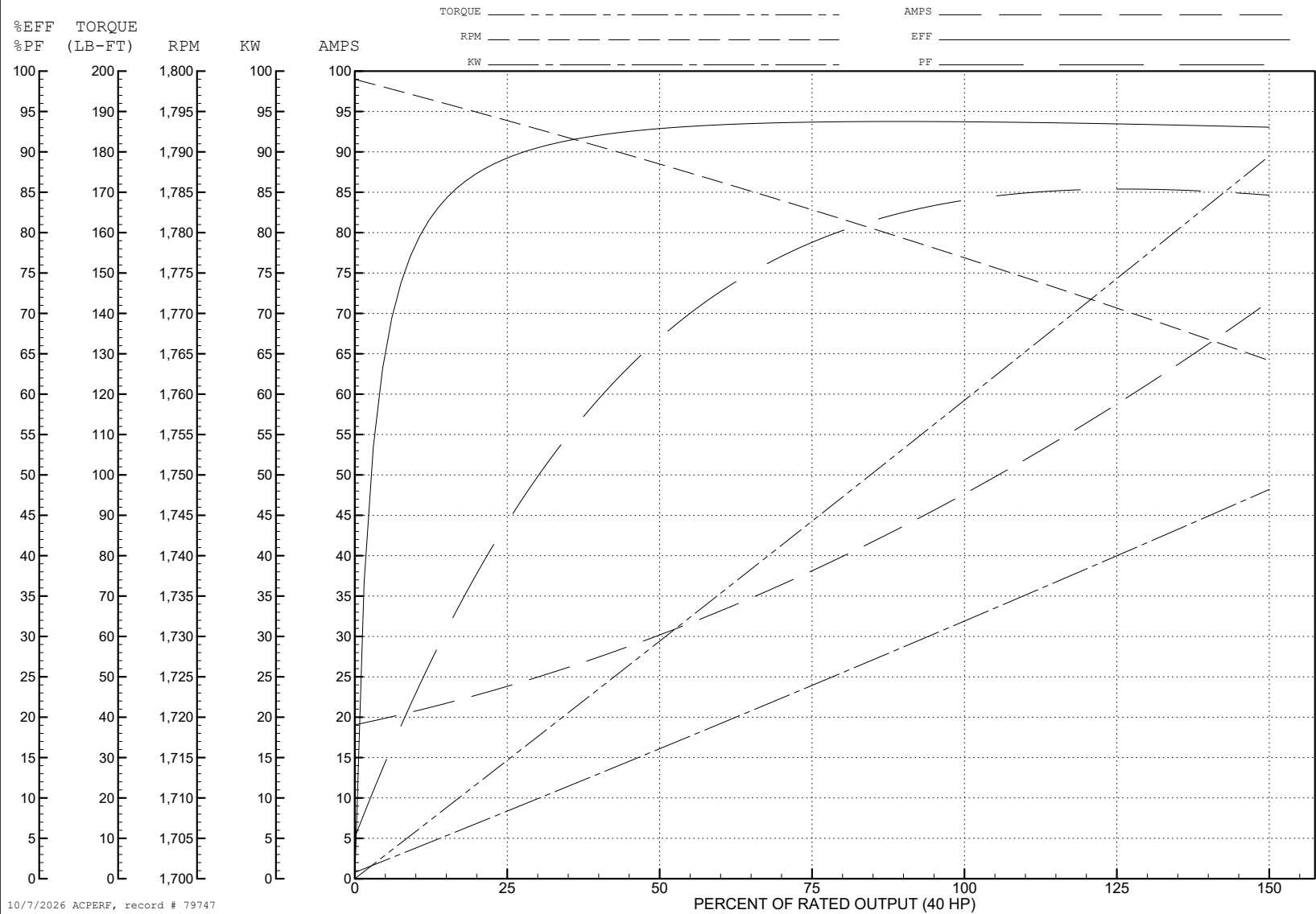
ABB Motors and Mechanical Inc.

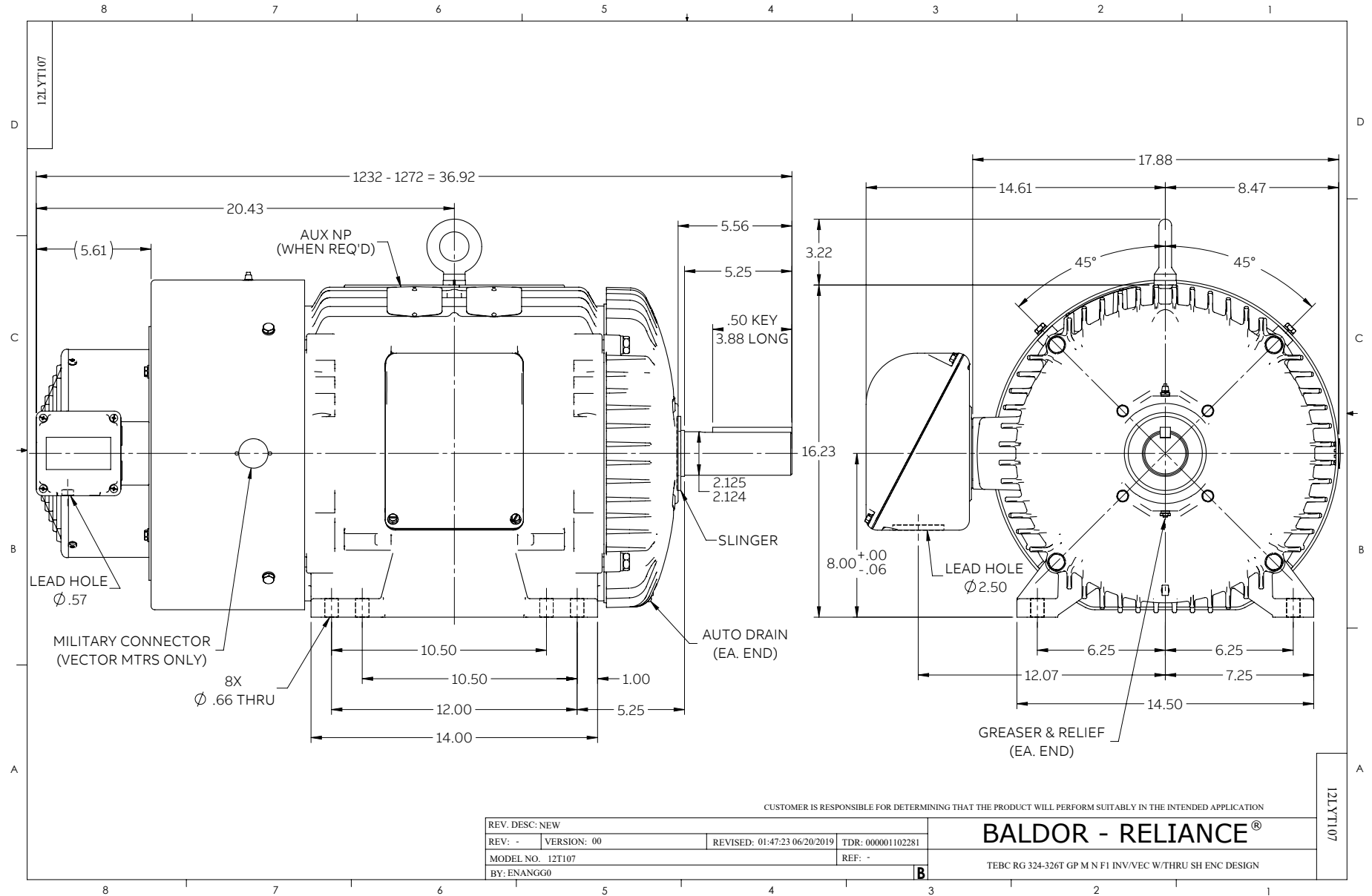
WINDING # 12WGY276

Typical performance - not guaranteed values.

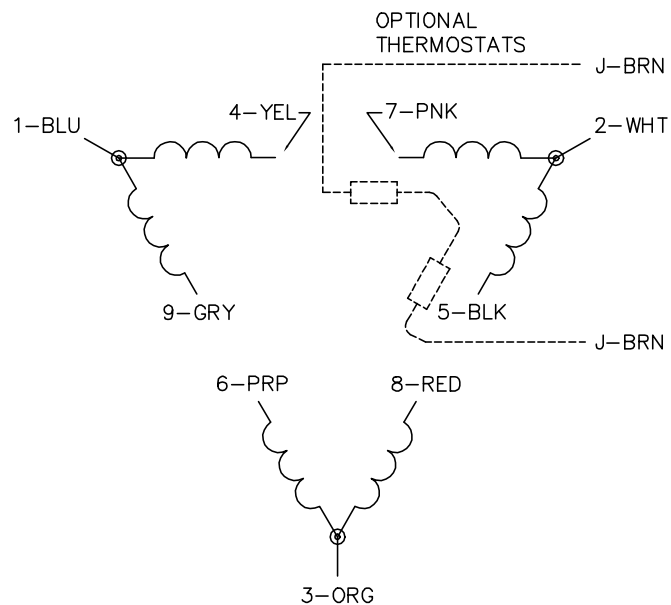
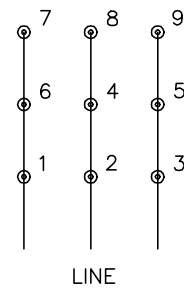
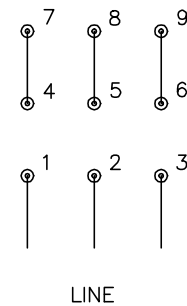
40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

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.

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

SH 1 of 1