

ABB BALDOR RELIANCE III

Customer information packet

VESSWDM3546-5

1HP, 1775RPM, 3PH, 60HZ, 56C, 3522M, TENV, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM 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	1.300 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	F

Part Detail

Revision	C
Type	AC
Mech. spec.	35V824
Base	
Status	PRD/A
Elec. spec.	35WGG198
Layout	35LYV824
Eff. date	11-13-2025
CD Diagram	CD0006
Poles	04
Leads	3#18 Y
Proprietary	False
Created date	02-23-2023

Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.09 IN
Power Factor	70
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
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

NP1953A05											
CAT.NO.	VESSWDM3546-5										
SPEC.	35V824G198										
HP	1										
VOLTS	575										
AMP	1.3										
RPM	1775										
FRAME	56C			HZ		60		PH		3	
SER.F.	1.00		CODE		M	DES		B	CLASS		F
NEMA-NOM-EFF	85.5			PF		70					
RATING	40C AMB-CONT										
CC	010A			USABLE AT 208V					N/A		
DE	6205			ODE		6203					
ENCL	TENV		SN								
	10:1CT 20:1VT										

AC Induction Motor Performance Data

Record # 31564

Typical performance - not guaranteed values

Winding: 35WGM813-R001			Type: 3524M		Enclosure: TENV		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		1	Full Load Torque	3.02 LB-FT			
Volts		575	Start Configuration	direct on line			
Full Load Amps		1.2	Breakdown Torque	14.2 LB-FT			
R.P.M.		1745	Pull-up Torque	8.67 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque	10.2 LB-FT		
NEMA Design Code	B	KVA Code	M	Starting Current	10.7 A		
Service Factor (S.F.)		1.15		No-load Current	0.706 A		
NEMA Nom. Eff.	85.5	Power Factor	76	Line-line Res. @ 25°C	25 Ω		
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load	85°C		
S.F. Amps				Temp. Rise @ S.F. Load	100°C		
				Locked-rotor Power Factor	62		
				Rotor inertia	0.142 LB-FT2		

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	53	67	76	81	86	79
Efficiency	76.2	83.6	85.9	85.6	85	82.8	85.2
Speed	1784	1774	1760	1744	1731	1698	1736
Line amperes	0.741	0.832	0.968	1.15	1.35	1.58	1.27

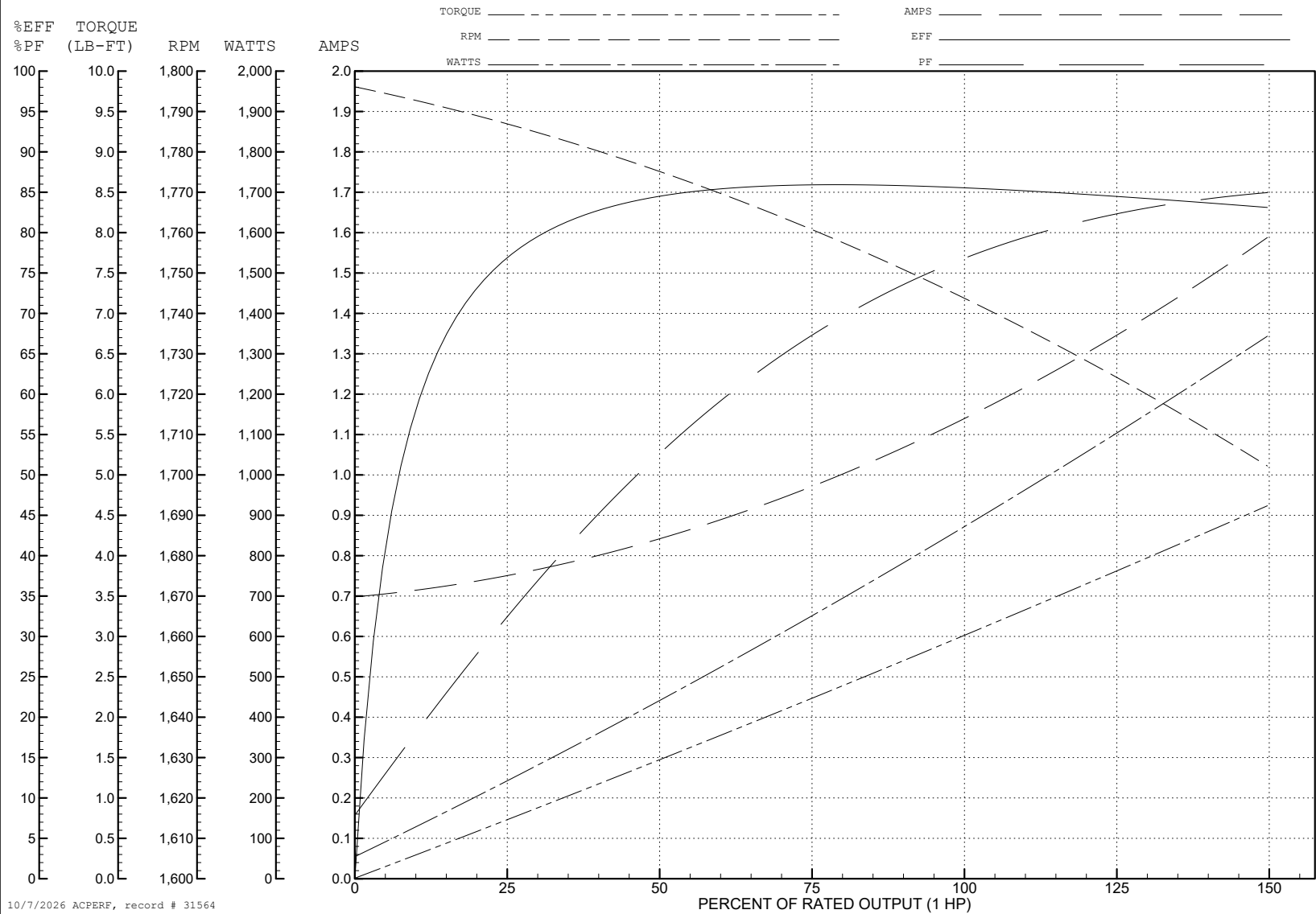
ABB Motors and Mechanical Inc.

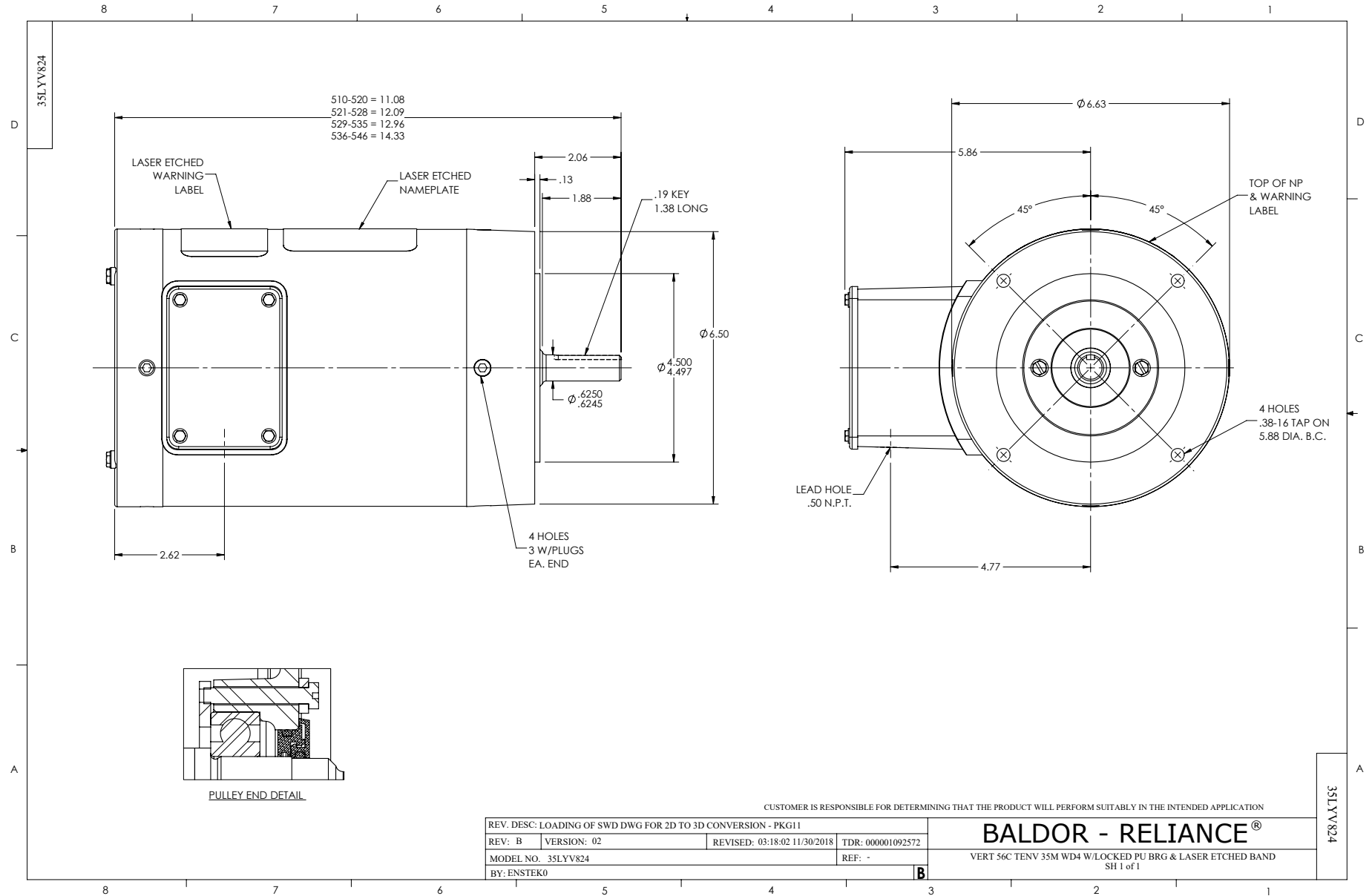
WINDING # 35WGM813

Typical performance - not guaranteed values.

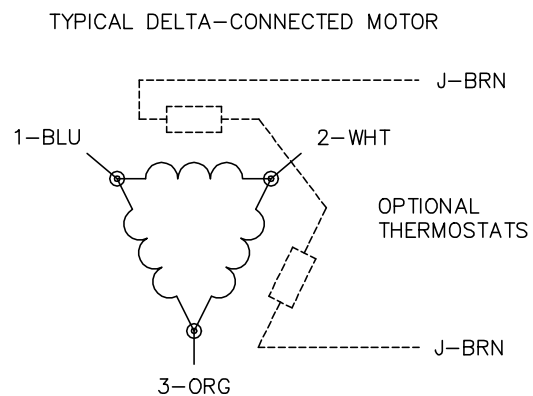
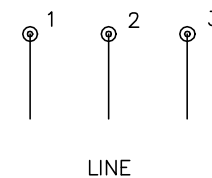
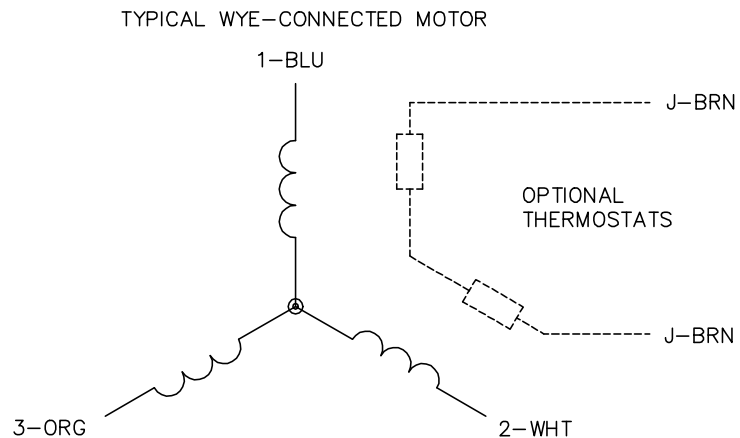
1 HP 3 PH 60 HZ 1745 RPM 575 V 3524M

TORQUES (LB-FT): PO=14.2 PU=8.67 LR=10.2 LRA=10.7





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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