ABB BALDOR RELIANCE

Customer information packet

VBM3542-5

0.75HP, 1765RPM, 3PH, 60HZ, 56C, 3514M, TENV, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA
	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	.930 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K

Part Detail

Revision	D
Type	AC
Mech. spec.	35E050
Base	
Status	PRD/A
Elec. spec.	35WGG123
Layout	35LYE050
Eff. date	11-27-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.26 IN
Power Factor	73
Product Family	General Purpose
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
Shaft Slinger Indicator	No Slinger
Speed	1765 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

NP1256L									
CAT.NO.	VBM3542-5								
SPEC.	35E050G123G1								
HP	0.75								
VOLTS	575								
AMP	0.93								
RPM	1765								
FRAME	56C		**HZ**	60			**PH**	3	
SER.F.	1.00	**CODE**	K	**DES**	B	**CLASS**		F	
NEMA-NOM-EFF	82.5	**PF**	73						
RATING	40C AMB-CONT								
CC									
DE	6205		**ODE**	6203					
ENCL	TENV	**SN**							

AC Induction Motor Performance Data
Record # 87438
Typical performance - not guaranteed values

Winding: 35WGG123-R005	**Type:** 3514M	**Enclosure:** TENV

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			.75	**Full Load Torque**	2.25 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			.91	**Breakdown Torque**	7.36 LB-FT
R.P.M.			1765	**Pull-up Torque**	4.05 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	4.68 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	6.16 A
Service Factor (S.F.)			1	**No-load Current**	0.589 A
NEMA Nom. Eff.	82.5	**Power Factor**	74	**Line-line Res. @ 25ºC**	50.2 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	56°C
				Locked-rotor Power Factor	65.3
				Rotor inertia	0.101 lb-ft²

Load Characteristics 575 V, 60 Hz, 0.75 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	34	52	65	74	80	83
Efficiency	71.1	80.8	83.1	83.6	82.8	81
Speed	1790	1782	1773	1763	1753	1740
Line amperes	0.61	0.682	0.782	0.913	1.07	1.26

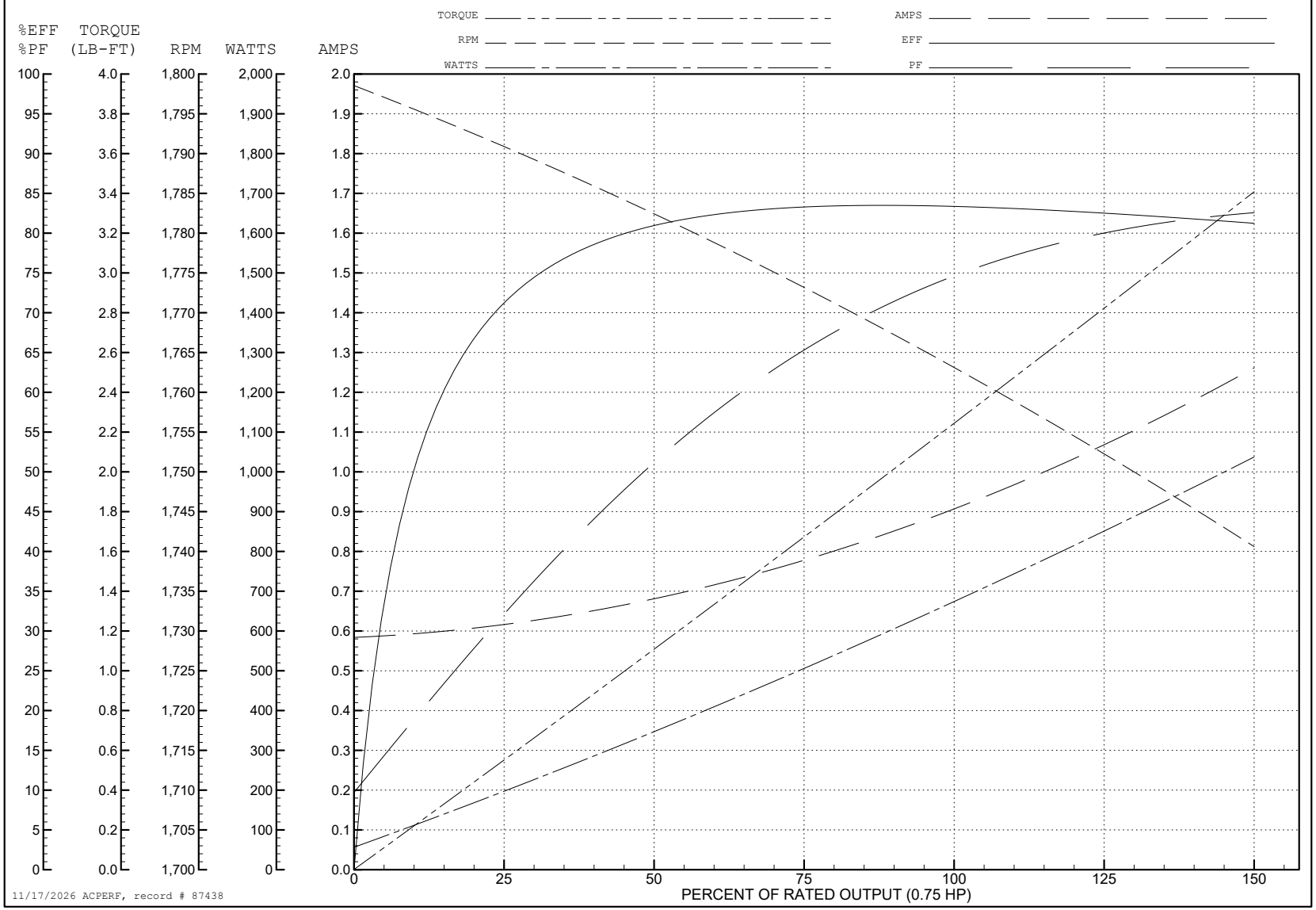
ABB Motors and Mechanical Inc.

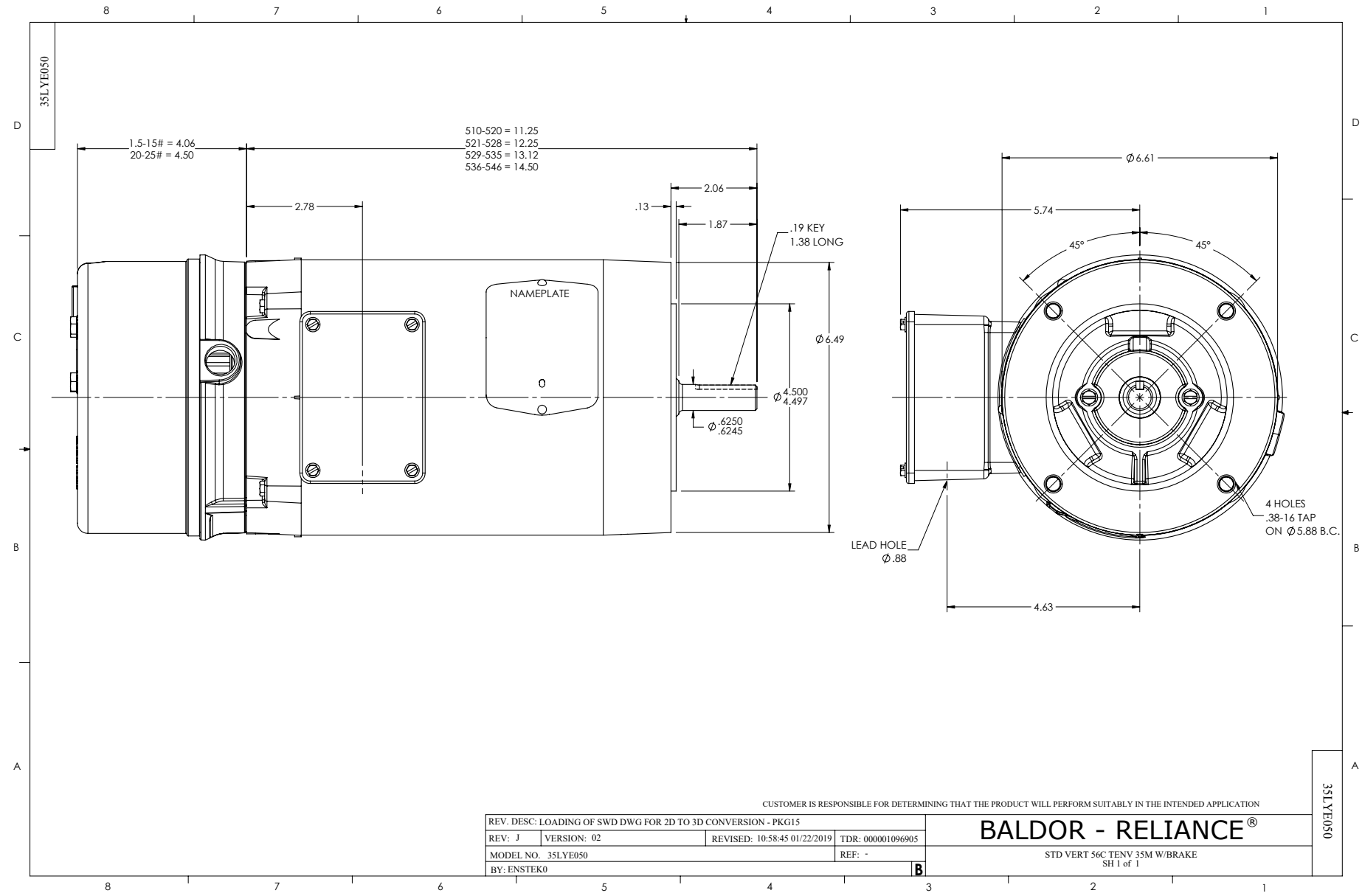
WINDING # 35WGG123

0.75 HP 3 PH 60 HZ 1765 RPM 575 V 3514M

Typical performance - not guaranteed values.

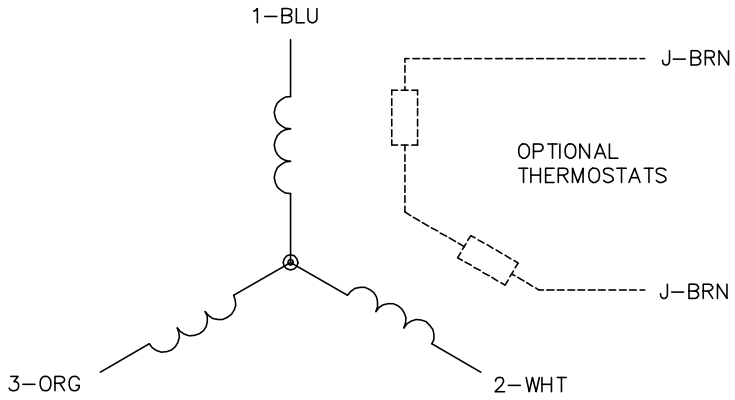
TORQUES(LB-FT): PO=7.36 PU=4.05 LR=4.68 LRA=6.16

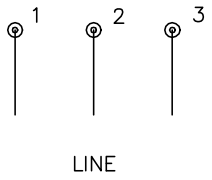



35LYE050
1.5-15# = 4.06
20-25# = 4.50
510-520 = 11.25
521-528 = 12.25
529-535 = 13.12
536-546 = 14.50
2.78
2.06
.13
1.87
.19 KEY
1.38 LONG
NAMEPLATE
Ø6.49
Ø 4.500
4.497
Ø .6250
.6245
Ø6.61
5.74
45°
45°
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
LEAD HOLE
Ø.88
4.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG15
REV: J
VERSION: 02
REVISED: 10:58:45 01/22/2019
TDR: 000001096905
MODEL NO. 35LYE050
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
STD VERT 56C TENV 35M W/BRAKE
SH 1 of 1
35LYE050

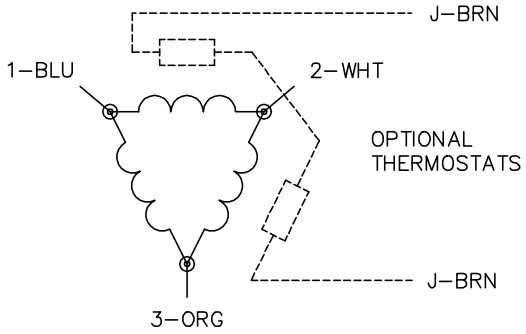
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

SH 1 of 1