ABB BALDOR RELIANCE

Customer information packet

VBM3538-5S

0.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TEFC, F3
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	C UR US
	WEEE
	UKCA
	CURUS
	CE
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	.770 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a

Part Detail

Revision	C
Type	AC
Mech. spec.	35X055
Base	
Status	PRD/A
Elec. spec.	35WGG200
Layout	35LYX055
Eff. date	04-16-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
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	3512M
Mounting Arrangement	F3
Number of Poles	4
Overall Length	14.37 IN
Power Factor	62
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP1372L											
CAT.NO.	VBM3538-5S										
SPEC.	35X055G200G1										
HP	0.5										
VOLTS	575										
AMP	0.77										
R.P.M. (1/MIN)	1770										
FRAME	56C		**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	M	**DES**	B	**CL**	F				
NEMA-NOM-EFF	80	**PF**	62								
RATING	40C AMB-CONT										
CC			IP44 IC411 KG								
DE	6205		**ODE**	6205							
ENCL	TEFC	**SN**									
	SFA .83										

AC Induction Motor Performance Data
Record # 82252
Typical performance - not guaranteed values

Winding: 35WGG200-R002	**Type:** 3512M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			.5	**Full Load Torque**	1.49 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			.77	**Breakdown Torque**	6.26 LB-FT
R.P.M.			1770	**Pull-up Torque**	3.25 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	4.02 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	5.36 A
Service Factor (S.F.)			1.25	**No-load Current**	0.636 A
NEMA Nom. Eff.	80	**Power Factor**	62	**Line-line Res. @ 25ºC**	68 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	22°C
S.F. Amps			.87	**Temp. Rise @ S.F. Load**	27°C
				Locked-rotor Power Factor	71
				Rotor inertia	0.0866 lb-ft²

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	27	41	52	62	69	75	69
Efficiency	56.2	70.6	76.3	78.9	79.9	79.8	79.9
Speed	1792	1786	1779	1771	1763	1755	1763
Line amperes	0.638	0.664	0.713	0.774	0.85	0.946	0.85

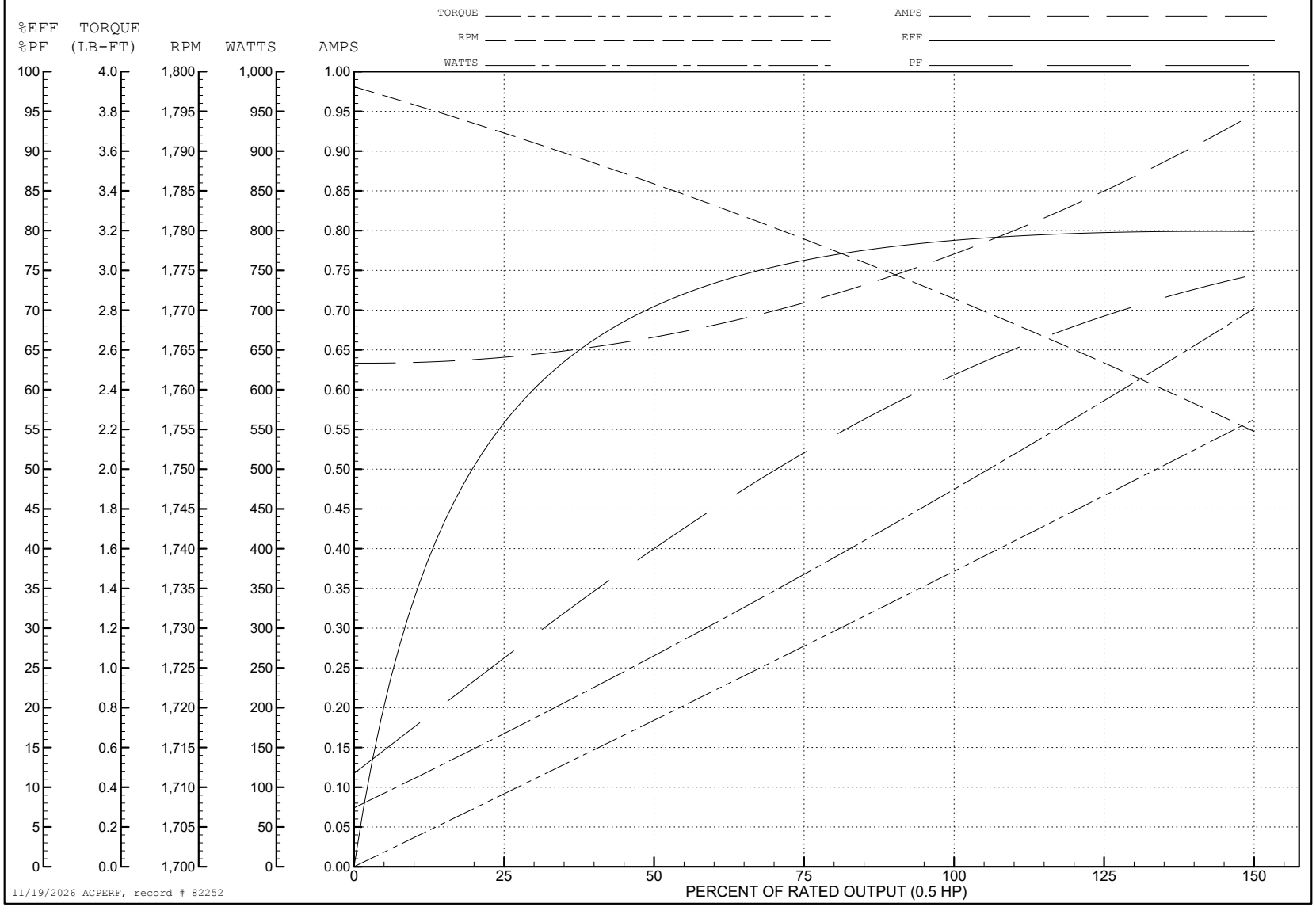
ABB Motors and Mechanical Inc.

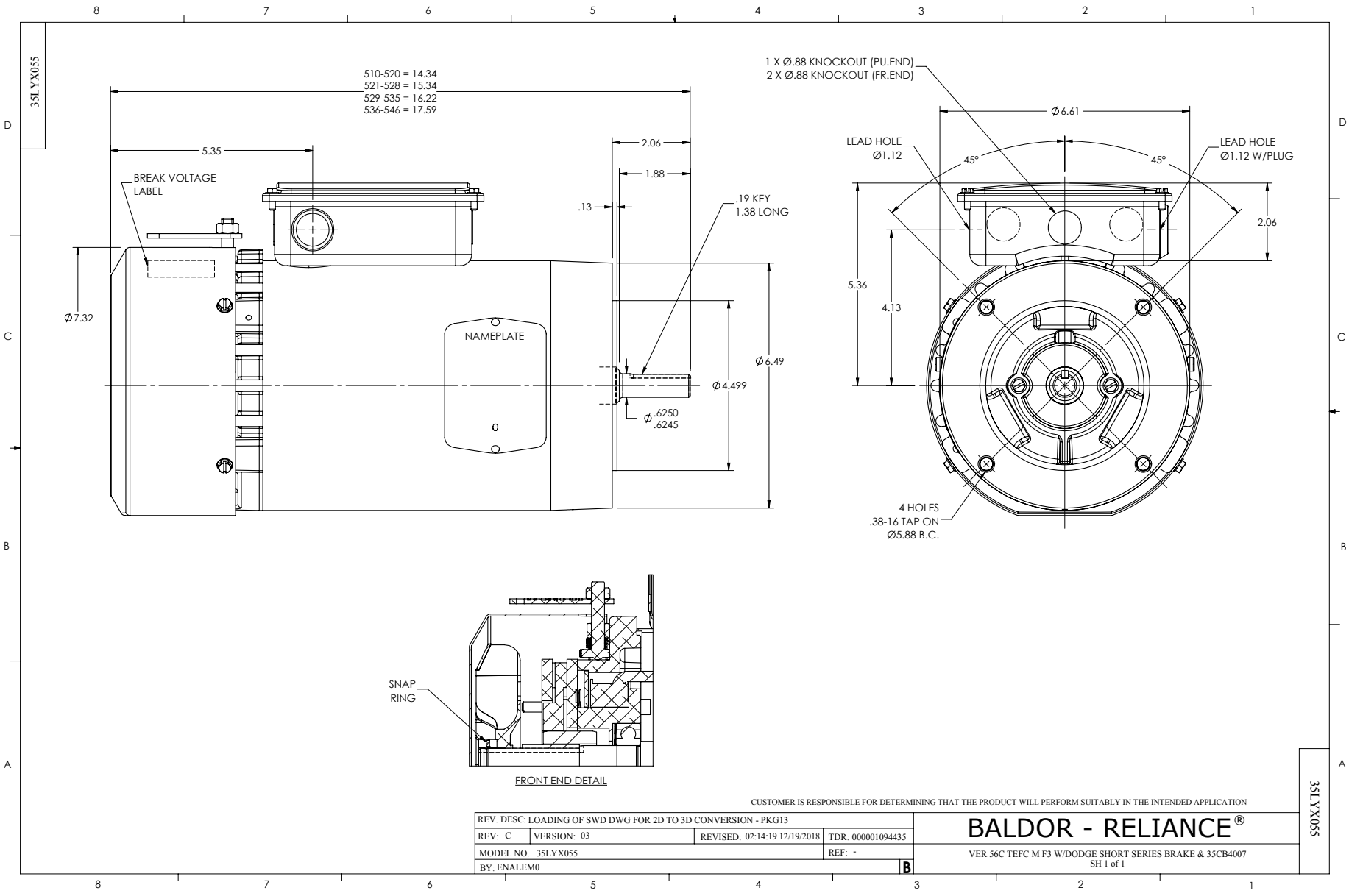
WINDING # 35WGG200

0.5 HP 3 PH 60 HZ 1770 RPM 575 V 3512M

Typical performance - not guaranteed values.

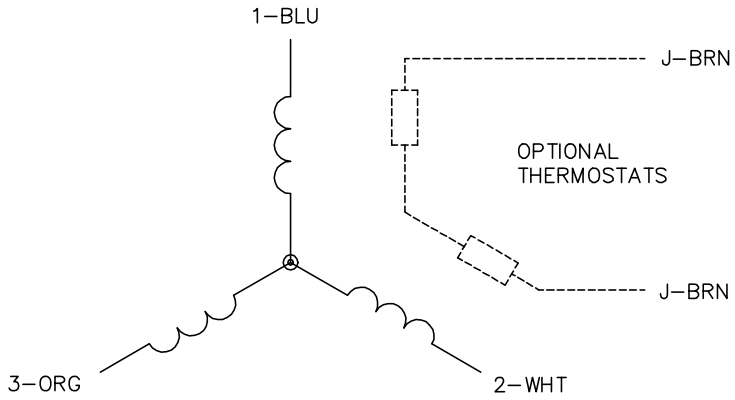
TORQUES(LB-FT): PO=6.26 PU=3.25 LR=4.02 LRA=5.36

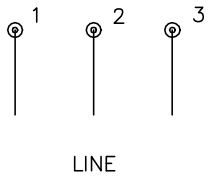



35LYX055
510-520 = 14.34
521-528 = 15.34
529-535 = 16.22
536-546 = 17.59
5.35
2.06
1.88
.13
.19 KEY
1.38 LONG
BREAK VOLTAGE
LABEL
Ø7.32
NAMEPLATE
Ø6.49
Ø4.499
Ø.6250
.6245
1 X Ø.88 KNOCKOUT (PU.END)
2 X Ø.88 KNOCKOUT (FR.END)
Ø6.61
LEAD HOLE
Ø1.12
45°
45°
LEAD HOLE
Ø1.12 W/PLUG
2.06
5.36
4.13
4 HOLES
.38-16 TAP ON
Ø5.88 B.C.
SNAP
RING
FRONT END DETAIL
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 - PKG13
REV: C
VERSION: 03
REVISED: 02:14:19 12/19/2018
TDR: 000001094435
MODEL NO. 35LYX055
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VER 56C TEFC M F3 W/DODGE SHORT SERIES BRAKE & 35CB4007
SH 1 of 1
35LYX055

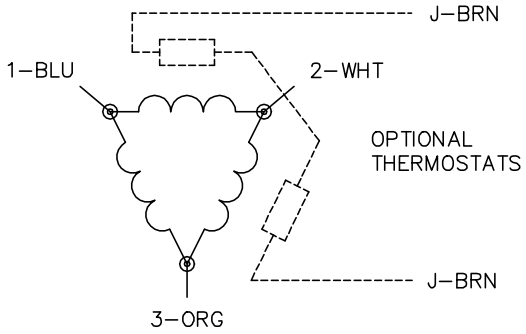
CD0006

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			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1