

ABB BALDOR RELIANCE III

Customer information packet

VBM3538-5S

0.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TEFC, F3

Class - None

Division - Not Applicable

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								

Parts List

Part number	Description	Quantity
SA409132	SA 35X055G200G1	1.000 ea
RA400678	RA 35X055G200G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
S/P111-000-002	CORONA TEST, SUPER E MOTORS - FT. SMITH	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB4007	KOBX,W/PRIMER (WAS REL# 79097-49-C)	1.000 ea
35GS3023	GASKET FOR KOBX 35CB4007, CLSD CELL NEOP	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
WD4101A13	STEEL CAPLUG,BP-1 1/8, PLUG D3561S	1.000 ea
11XT1032G04	10-32 X 1/4" GRD SCREW	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HW1001A10	WASHER, #10 SPLT LK, ZN X	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
BR2003D01	SPLINED HUB 7/8 W/O KEY, W/SET SCREWS	1.000 ea
35FN3003A02	EXFN, PLASTIC, 5.88 OD, .876 ID (REL)	1.000 ea
35FH4007A01	FAN COVER FOR SHORT SERIES BRAKE, PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 ea
35CB4519	CB LID W/BLACK PRIMER	1.000 ea
35GS3019A01	LEXIDE GASKET, FOR KOBX LID 35CB4519	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
WD4006A01	WIRE JOINT,T&B RB-4 OR RB-44	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1418	INTEGRAL BRK ADJ LABEL (REL# 41171617A)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1000N49	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.017 ga
LB1419	CONNECTION LABEL	1.000 ea

HA3100A13	THRUBOLT 10-32 X 7.750	4.000 ea
43BK0100B03	SSB-3-287/575 (205) L HUB	1.000 ea
LB1424A03	BRAKE VOLT LABEL 287/575V SSB	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP1372L	ALUM UL CE UKCA WEEE CC, A60	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

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. @ 25°C	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

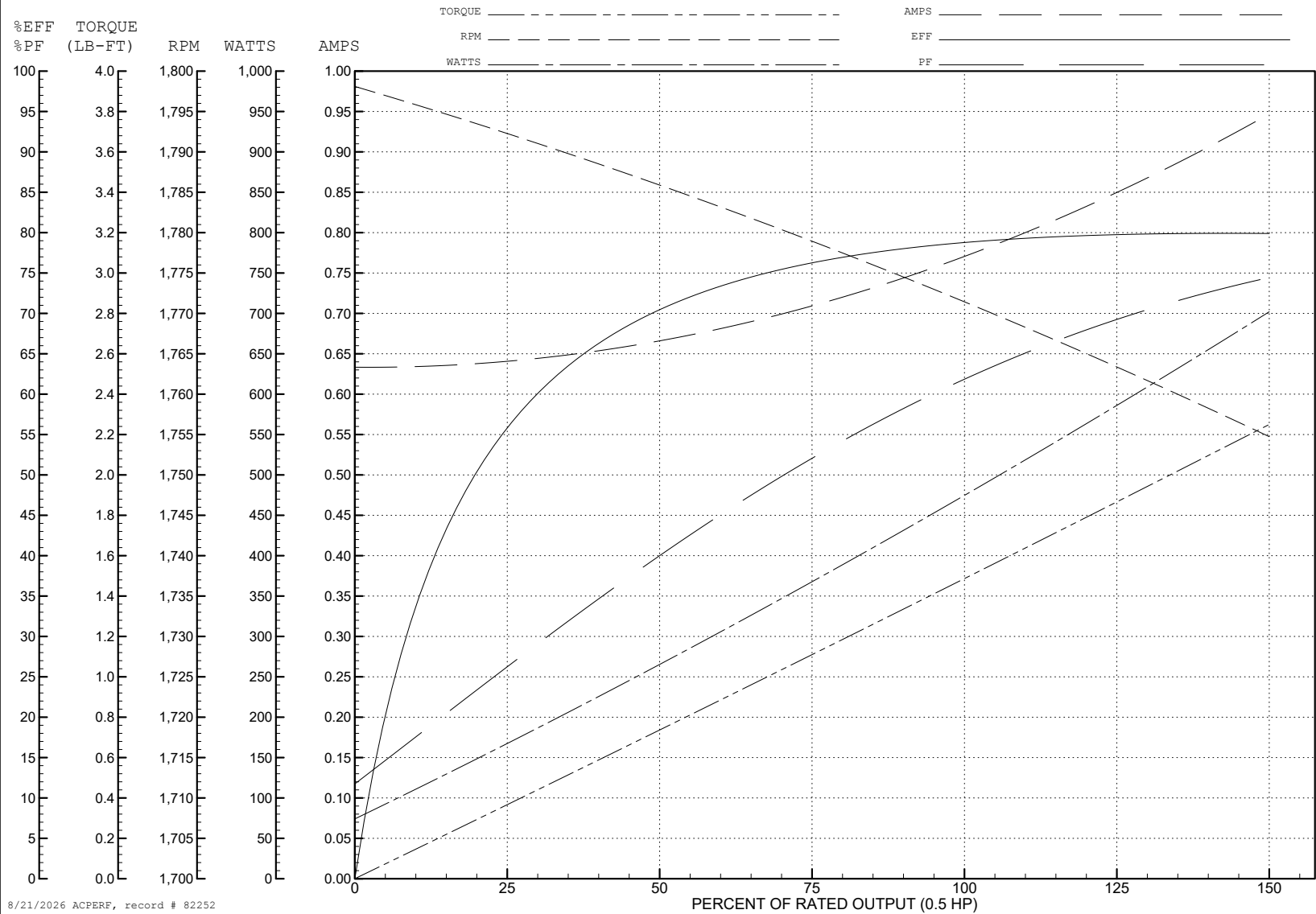
ABB Motors and Mechanical Inc.

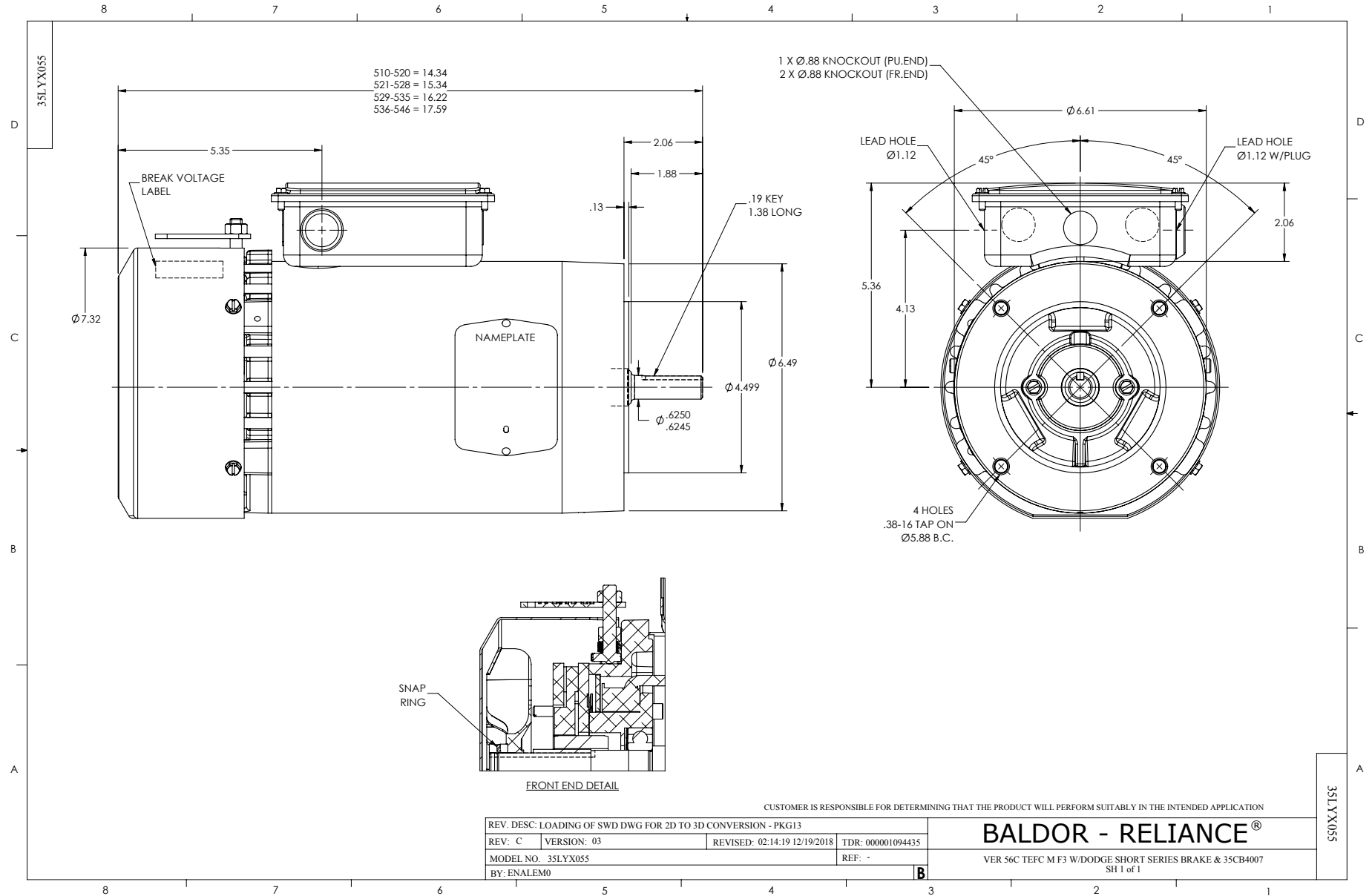
WINDING # 35WGG200

Typical performance - not guaranteed values.

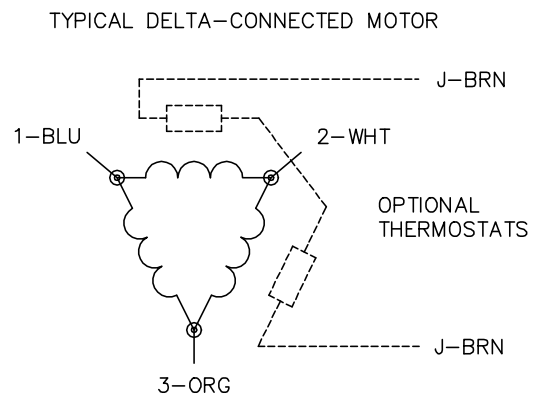
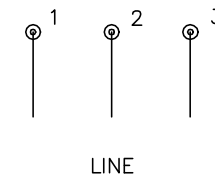
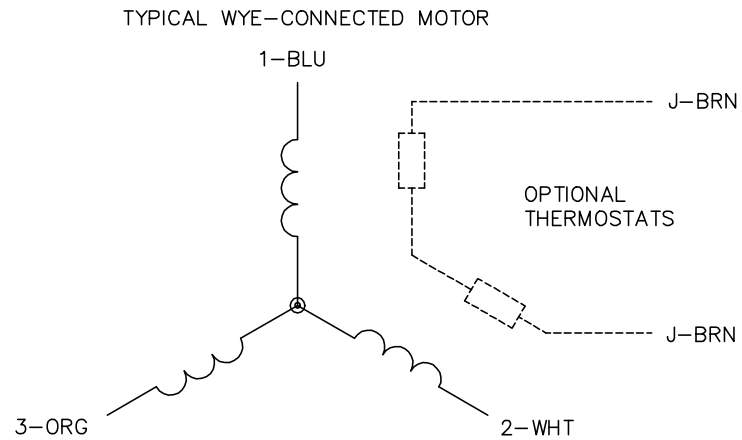
0.5 HP 3 PH 60 HZ 1770 RPM 575 V 3512M

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





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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