ABB BALDOR RELIANCE

Customer information packet

VBM3538-5D

.5HP, 1740RPM, 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	UR
	CE
	CSA
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
Brake Torque	3.0 lb-ft
Current @ Voltage	.700 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Fan Housing Cover For Brake
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.7 a

Part Detail

Revision	G
Type	AC
Mech. spec.	35X145
Base	
Status	INA/A
Elec. spec.	35WGN367
Layout	35LYX145
Eff. date	09-15-2017
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	08-05-2012

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
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	16.29 IN
Power Factor	69
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1740 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.	VBM3538-5D								
SPEC.	35X145N367G1								
HP	.5								
VOLTS	575								
AMP	.7								
FRAME	56C	**HZ**	60	**PH**	3				
SER.F.	1.15	**CODE**	M	**DES**	B	**CL**	F		
NEMA-NOM-EFF	78.5	**PF**	69						
RATING	40C AMB-CONT								
CC									
DE	6205	**ODE**	6205						
ENCL	TEFC	**SN**							
	IP44								

AC Induction Motor Performance Data
Record # 39332
Typical performance - not guaranteed values

Winding: 35WGN367-R004	**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			.7	**Breakdown Torque**	6.65 LB-FT
R.P.M.			1740	**Pull-up Torque**	4.62 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.25 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	5.05 A
Service Factor (S.F.)			1.15	**No-load Current**	0.487 A
NEMA Nom. Eff.	78.5	**Power Factor**	69	**Line-line Res. @ 25ºC**	53.6 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	27°C
S.F. Amps				**Temp. Rise @ S.F. Load**	31°C
				Locked-rotor Power Factor	74
				Rotor inertia	0.0709 LB-FT2

Load Characteristics 575 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	28	45	58	69	75	80	73
Efficiency	59.5	73.1	78.5	79.8	80.1	78.9	80
Speed	1788	1774	1759	1741	1722	1702	1730
Line amperes	0.5	0.536	0.596	0.676	0.766	0.88	0.73

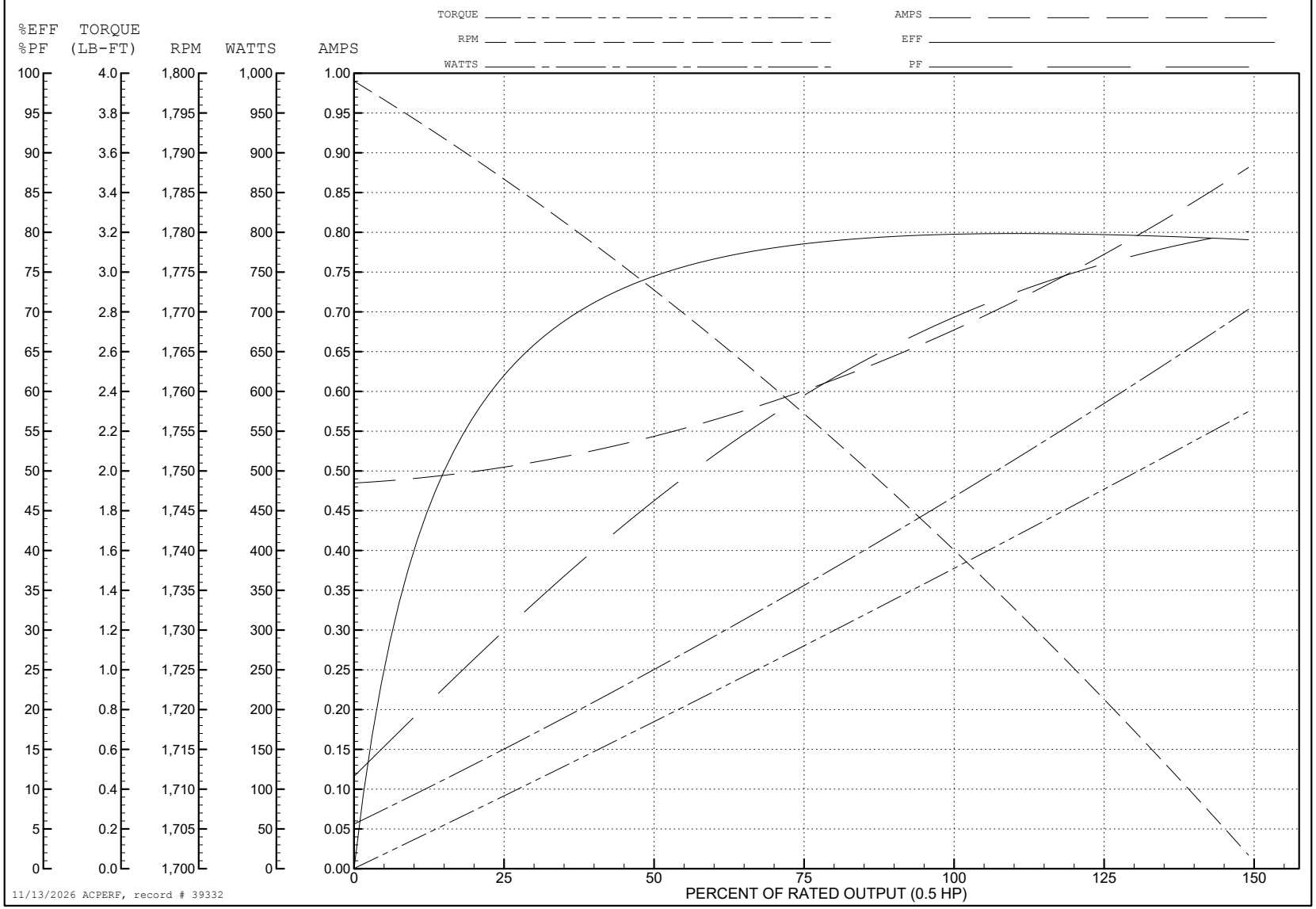
ABB Motors and Mechanical Inc.

WINDING # 35WGN367

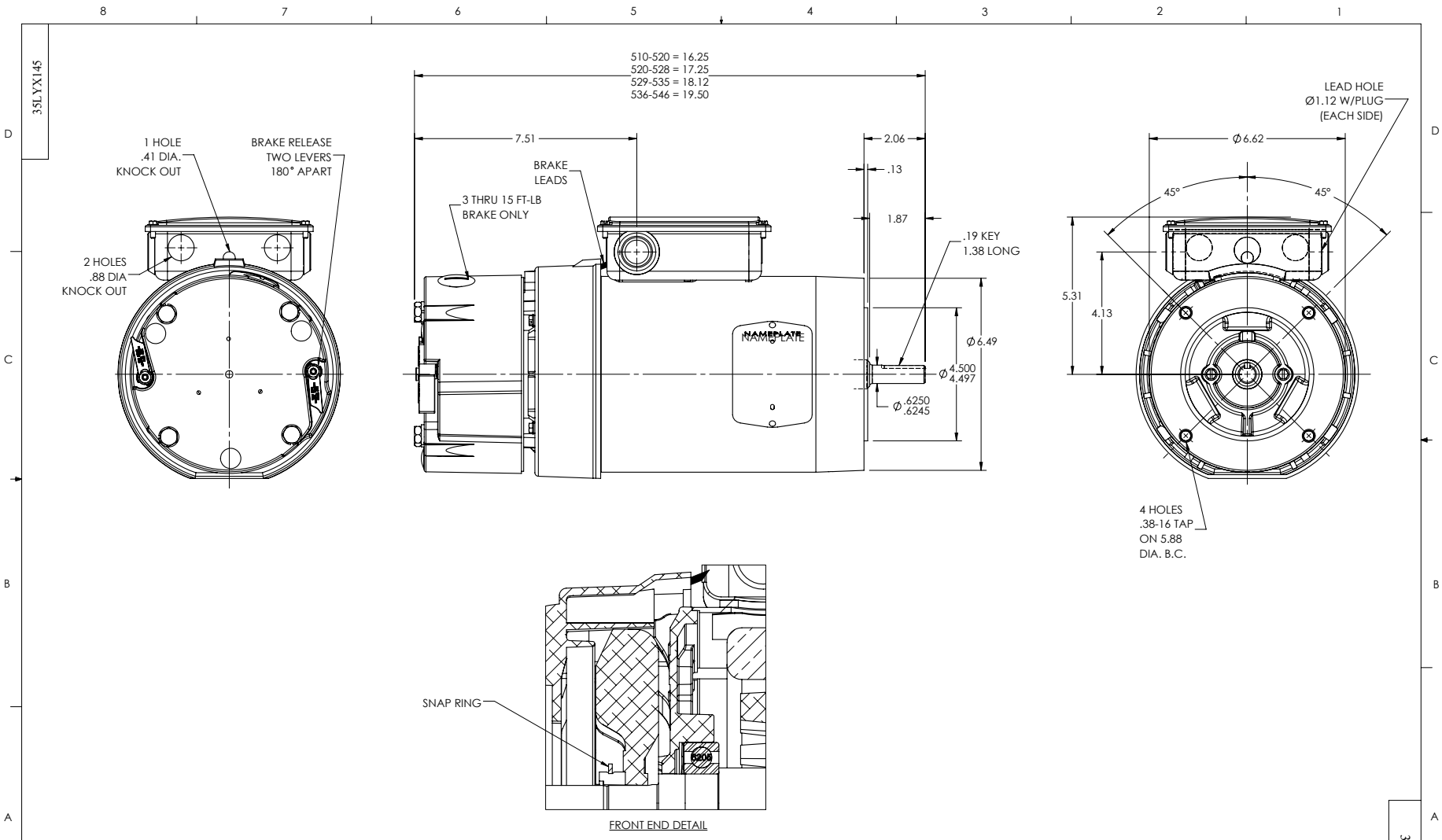
0.5 HP 3 PH 60 HZ 1740 RPM 575 V 3512M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=6.65 PU=4.62 LR=5.25 LRA=5.05

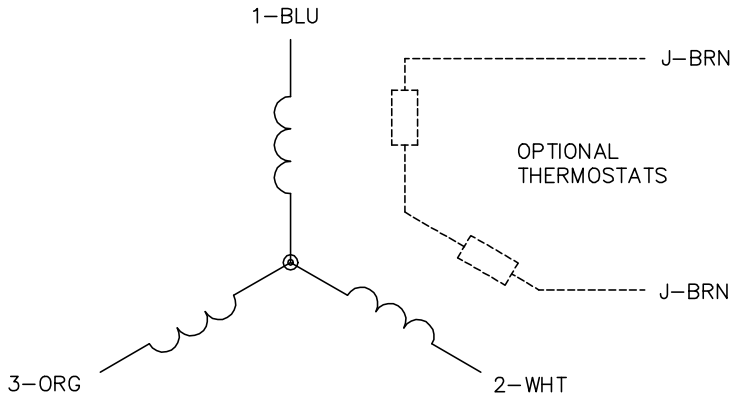


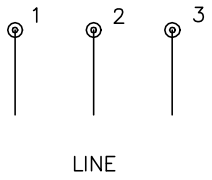
11/13/2026 ACPERF, record # 39332


35LYX145
1 HOLE
.41 DIA.
KNOCK OUT
BRAKE RELEASE
TWO LEVERS
180° APART
2 HOLES
.88 DIA
KNOCK OUT
510-520 = 16.25
520-528 = 17.25
529-535 = 18.12
536-546 = 19.50
7.51
2.06
.13
1.87
BRAKE
LEADS
3 THRU 15 FT-LB
BRAKE ONLY
.19 KEY
1.38 LONG
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.6250
.6245
LEAD HOLE
Ø1.12 W/PLUG
(EACH SIDE)
Ø6.62
45°
45°
5.31
4.13
4 HOLES
.38-16 TAP
ON 5.88
DIA. B.C.
SNAP RING
6209
FRONT END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE 35GS3009 TO 35GS3023, FIX KOBX MOUNT LOC
REV: F
VERSION: 06
REVISED: 10:48:11 10/20/2023
TDR: 000001211789
MODEL NO. 35LYX145
REF: -
BY: ENFRAJ0
B
BALDOR - RELIANCE®
VERT 56C TEFC M F3 W/DODGE 'D' SERIES BRAKE & 35CB4007
SH 1 of 1
35LYX145

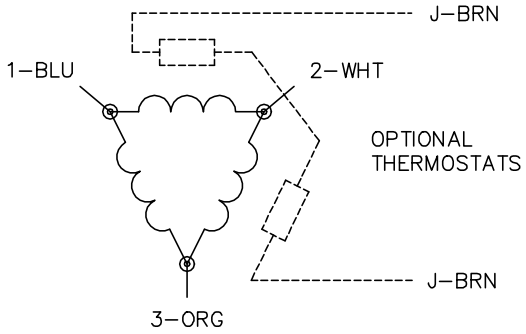
CD0006

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

CD2120

WIRING CONNECTIONS (1 PHASE VAC)

	POWER LINE A	POWER LINE B	CAP TOGETHER	CAP ALONE
AC LOW VOLT.	B1	B2	B3 & B5	B4
AC HIGH VOLT.	B1 & B5	B2	---	B3 CAP ALONE B4 CAP ALONE
DC VOLT.	B1	B2	B3 & B5	B4

B1 WHITE
B2 BLACK
B3 GRAY
B4 BLUE
B5 RED

CD2120

REV. DESC: NEW			BALDOR • DODGE • RELIANCE
REV. LTR: –	VERSION: 00	TDR: 000000741785	
FILE: \CKA\00037\282		REVISED: 12:28:11 04/12/2012	D–SERIES MOTOR BRAKE 5LD AC\DC
MTL: –		BY: CKRONS0	SH 1 of 1