

BALDOR® • RELIANCE 

Product Information Packet

VBM3538-D

.5HP, 1740RPM, 3PH, 60HZ, 56C, 3512M, TEFC, F3

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGP864	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35X145	Layout:	35LYX145	Poles:	04	Created Date:	06-01-2011
Base:	N	Eff. Date:	04-09-2019	Leads:	9#18		

Specs			
Catalog Number:	VBM3538-D	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	56C	Inverter Code:	Not Inverter
Frame Material:	Steel	KVA Code:	M
Output @ Frequency:	.500 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	208.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3512M
XP Division:	Not Applicable	Mounting Arrangement:	F3
Agency Approvals:	UR	Power Factor:	58
	WEEE	Product Family:	General Purpose
	CSA	Product Type:	D-SERIES BRAKE MOTORS
	CE	Pulley End Bearing Type:	Sealed Bearing
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None

Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	2.240 A @ 230.0 V	Shaft Rotation:	Reversible
	2.420 A @ 208.0 V	Shaft Slinger Indicator:	No Slinger
	1.120 A @ 460.0 V	Speed Code:	Single Speed
Design Code:	B	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Winding:	None
Feedback Device:	NO FEEDBACK	Vibration Sensor Indicator:	No Vibration Sensor
Front Face Code:	Fan Housing Cover For Brake	Winding Thermal 1:	None
Front Shaft Indicator:	None	Winding Thermal 2:	None

Nameplate NP1372L											
CAT.NO.	VBM3538-D										
SPEC.	35X145P864G2										
HP	.5										
VOLTS	208-230/460										
AMP	2.42-2.24/1.12										
RPM	1740										
FRAME	56C					HZ	60		PH	3	
SER.F.	1.15					CODE	M	DES	B	CL	F
NEMA-NOM-EFF	72					PF	58				
RATING	40C AMB-CONT										
CC									USABLE AT 208V		
DE	6205					ODE	6205				
ENCL	TEFC					SN					
	IP44										

Parts List		
Part Number	Description	Quantity
SA224449	SA 35X145P864G2	1.000 EA
RA211560	RA 35X145P864G2	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 (REL# 79097-49-C)	1.000 EA
35GS3009	GASKET, KOBX 35CB4006 (411881-15A)	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
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 EA
35EP3119A01	SPL FREP TEFC 205 BRG	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
35FH3004A01	FAN COVER ASSY, BRAKE MTG	1.000 EA
51XN1032A32	10-32 X 2 HX WS SL SR	4.000 EA
HW1001A10	WASHER, #10 SPLT LK, ZN X	4.000 EA
35FN3003A01	EXFN, PLASTIC, 5.88 OD, .626 ID	1.000 EA
10XN3816K64	3/8-16X4 HX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
BR2006B01	DBSC SPLINED HUB 5/8 BOR	1.000 EA
35CB4519	CB LID W/BLACK PRIMER	1.000 EA
35GS3019	GASKET, FOR KOBX LID 35CB4519	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
LB1419	CONNECTION LABEL	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1025N19	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.017 GA
HA3100A11	THRUBOLT 10-32 X 6.750	4.000 EA
46BK0104B01	DBSC-VP-3-MA-230/460 VAC	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
NP1372L	ALUM UL CSA CE CC	1.000 EA
G7PA1000	PKG GRP, PRINT PK1034A06	1.000 EA
PK3082	STYROFOAM CRADLE	3.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 36576 - Typical performance - not guaranteed values

Winding: 35WGP864-R003	Type: 3512M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	1.52 LB-FT
Volts	208-230/460			Start Configuration	direct on line
Full Load Amps	2.42-2.24/1.12			Breakdown Torque	7.46 LB-FT
R.P.M.	1740			Pull-up Torque	4.83 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	5.45 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	6.6 A
Service Factor (S.F.)	1.15			No-load Current	0.938 A
NEMA Nom. Eff.	72	Power Factor	58	Line-line Res. @ 25°C	36.2 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	45°C
				Locked-rotor Power Factor	80.2
				Rotor inertia	0.0709 LB-FT ²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	39	50	61	69	75	63
Efficiency	47.1	62.6	70.3	73.8	75.6	75.6	73.2
Speed	1786	1773	1759	1745	1729	1708	1732
Line amperes	0.926	0.953	1	1.06	1.14	1.28	1.17

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values

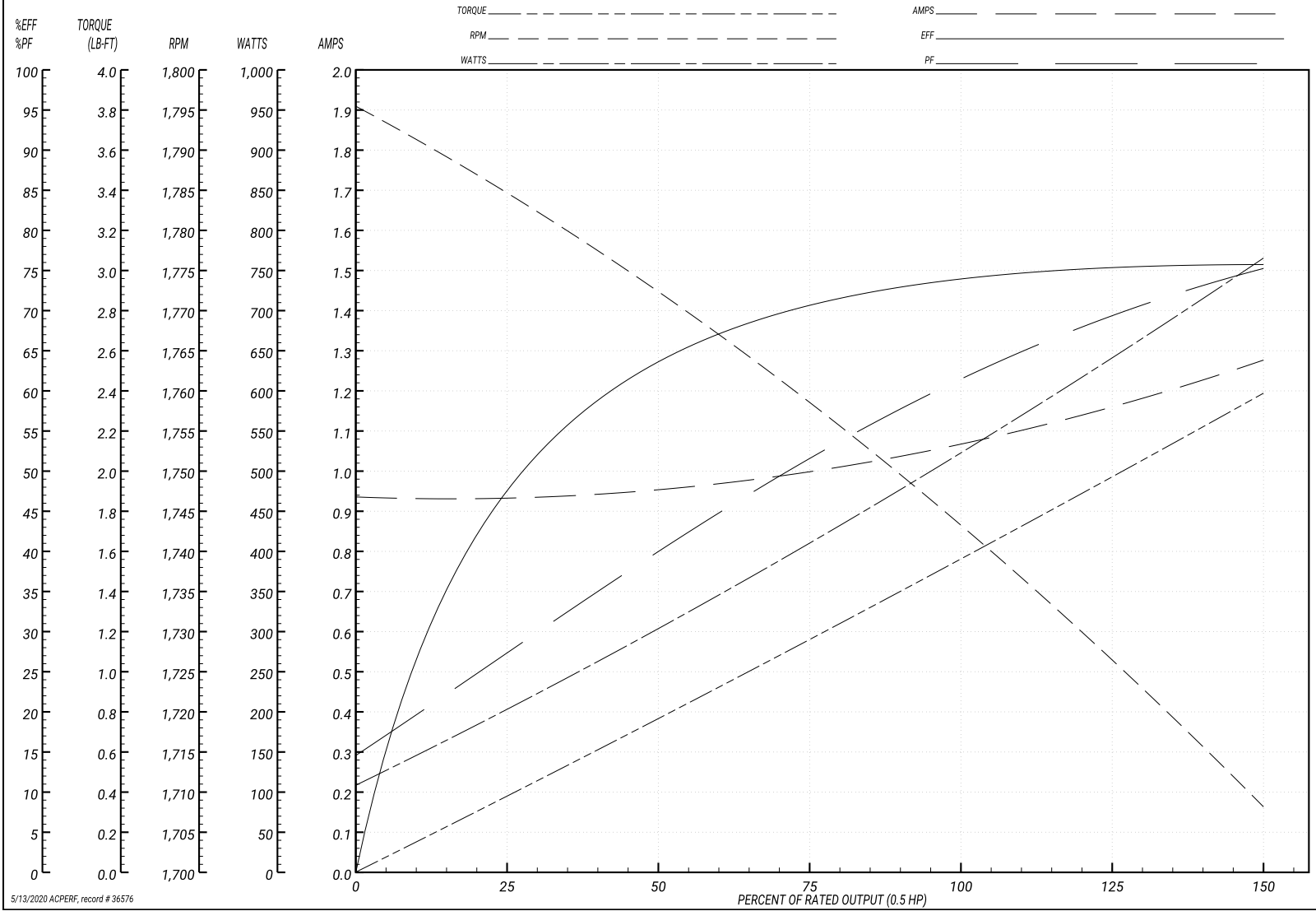
ABB Motors and Mechanical Inc.

WINDING # 35WGP864

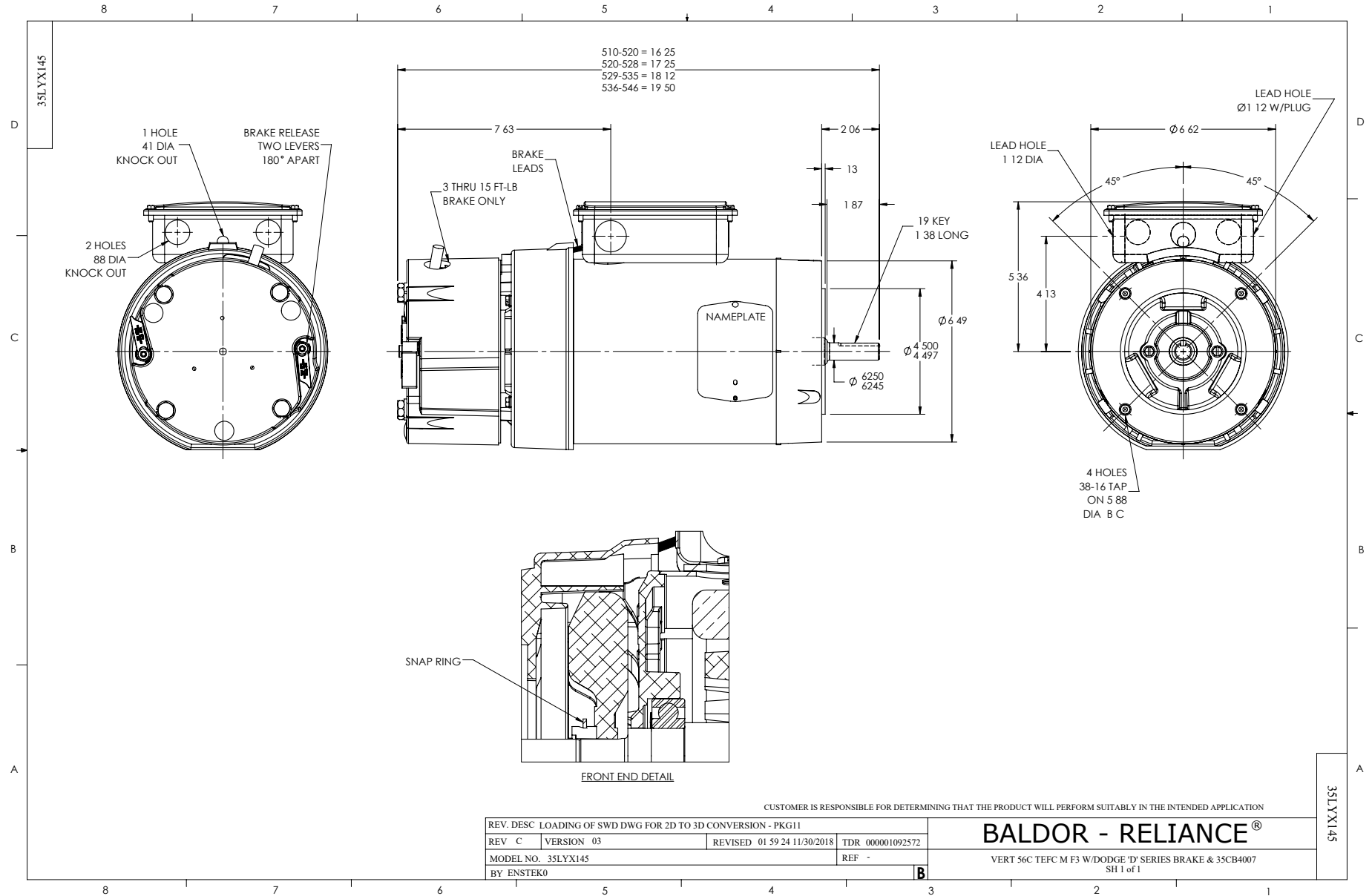
Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1740 RPM 460 V 3512M

TORQUES(LB-FT): PO=7.46 PU=4.83 LR=5.45 LRA=6.6



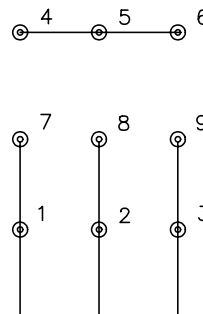
5/13/2020 ACPERF, record # 36576



CD0005

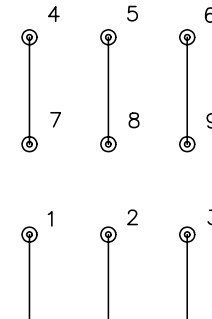


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900003

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005