

BALDOR® • RELIANCE 

Product Information Packet

VBNM3538-D

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

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGP863	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35X058	Layout:	35LYX058	Poles:	04	Created Date:	04-21-2011
Base:	N	Eff. Date:	01-03-2020	Leads:	9#18		

Specs			
Catalog Number:	VBNM3538-D	Front Shaft Indicator:	None
Enclosure:	TENV	Heater Indicator:	No Heater
Frame:	56C	Insulation Class:	F
Frame Material:	Steel	Inverter Code:	Not Inverter
Output @ Frequency:	.500 HP @ 60 HZ	KVA Code:	M
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Voltage @ Frequency:	460.0 V @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
	230.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	208.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	480.0 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:	69
	WEEE	Product Family:	General Purpose
	CSA	Product Type:	D-SERIES BRAKE MOTORS
	CE	Pulley End Bearing Type:	Ball
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:	1.800 A @ 208.0 V	Shaft Rotation:	Reversible
	1.600 A @ 230.0 V	Shaft Slinger Indicator:	No Slinger
	.850 A @ 480.0 V	Speed Code:	Single Speed
	.800 A @ 460.0 V	Motor Standards:	NEMA
Design Code:	B	Starting Method:	Direct on line
Drip Cover:	No Drip Cover	Thermal Device - Bearing:	None
Duty Rating:	CONT	Thermal Device - Winding:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Vibration Sensor Indicator:	No Vibration Sensor
Feedback Device:	NO FEEDBACK	Winding Thermal 1:	None
Front Face Code:	Brake Mounting	Winding Thermal 2:	None

Nameplate NP1372L											
CAT.NO.	VBNM3538-D										
SPEC.	35X058P863G1										
HP	.5										
VOLTS	208-230/460-480										
AMP	1.8-1.6/.8-.85										
RPM	1740										
FRAME	56C					HZ	60		PH	3	
SER.F.	1.15					CODE	M	DES	B	CL	F
NEMA-NOM-EFF	80					PF	69				
RATING	40C AMB-CONT										
CC									USABLE AT 208V		
DE	6205					ODE	6203				
ENCL	TENV					SN					
	IP44										

Parts List		
Part Number	Description	Quantity
SA222081	SA 35X058P863G1	1.000 EA
RA209217	RA 35X058P863G1	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
WD4101A13	STEEL CAPLUG,BP-1 1/8, PLUG D3561S	1.000 EA
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 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
35EP3900T25	FR EP FACE MNT ENCL FOR BRAKE	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	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
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
35GS3020	NEOPRENE GASKET, KOBX LID (602018-31)	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

Parts List (continued)		
Part Number	Description	Quantity
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
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
46BK0104B01	DBSC-VP-3-MA-230/460 VAC	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP1372L	ALUM UL CSA CE CC	1.000 EA
G7PA1000	PKG GRP, PRINT PK1034A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 36573 - Typical performance - not guaranteed values

Winding: 35WGP863-R014	Type: 3512M	Enclosure: TENV
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	1.49 LB-FT
Volts	208-230/460-480			Start Configuration	direct on line
Full Load Amps	1.8-1.6/.8-.85			Breakdown Torque	6.71 LB-FT
R.P.M.	1740			Pull-up Torque	4.67 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	5.31 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	6.34 A
Service Factor (S.F.)	1.15			No-load Current	0.608 A
NEMA Nom. Eff.	80	Power Factor	69	Line-line Res. @ 25°C	34 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	54°C
S.F. Amps				Temp. Rise @ S.F. Load	65°C
				Locked-rotor Power Factor	74
				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	28	45	59	69	75	80	73
Efficiency	59.5	73.1	78.5	80	80.1	78.9	80.1
Speed	1788	1774	1759	1741	1722	1702	1730
Line amperes	0.624	0.669	0.744	0.844	0.957	1.1	0.912

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

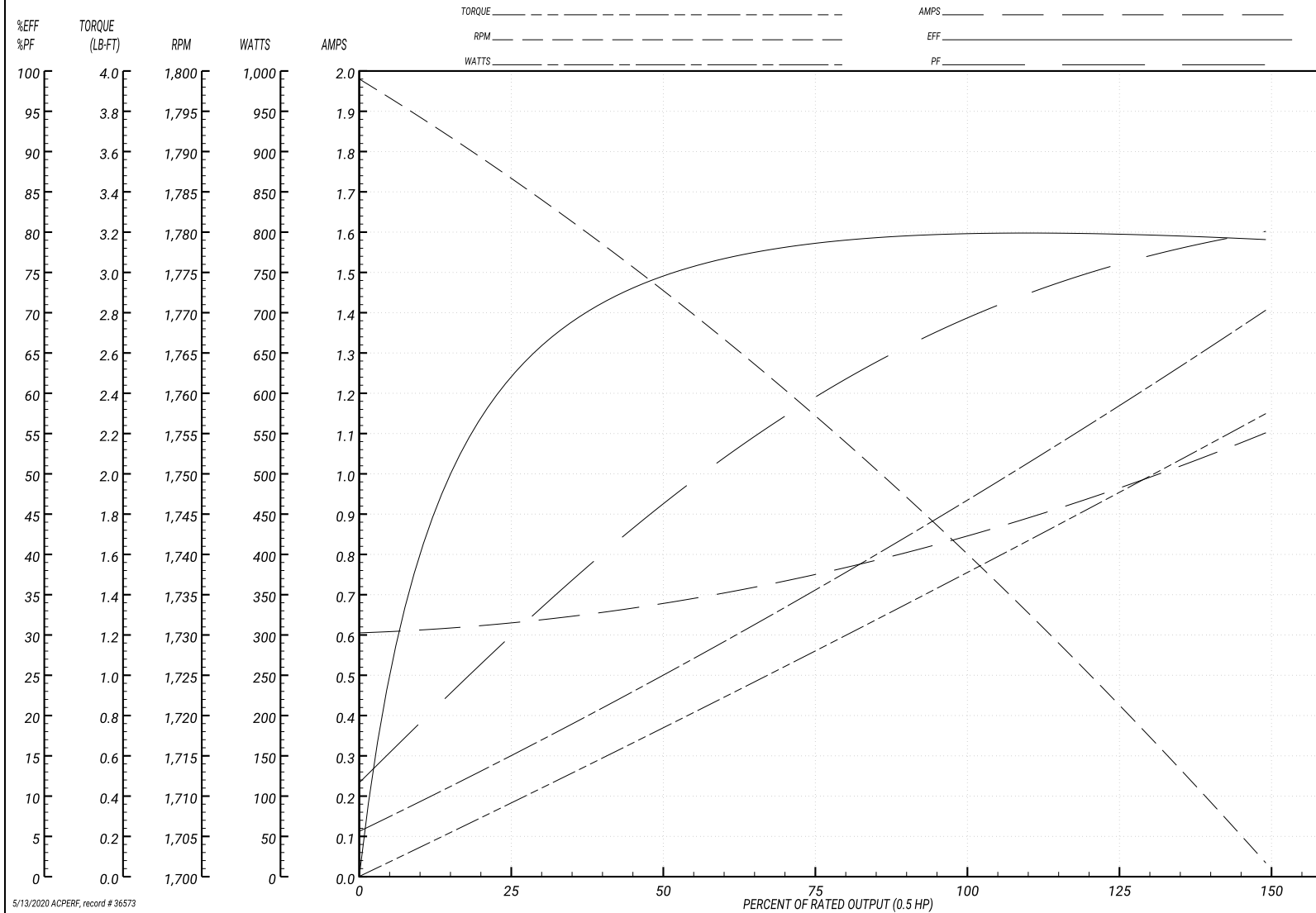
ABB Motors and Mechanical Inc.

WINDING # 35WGP863

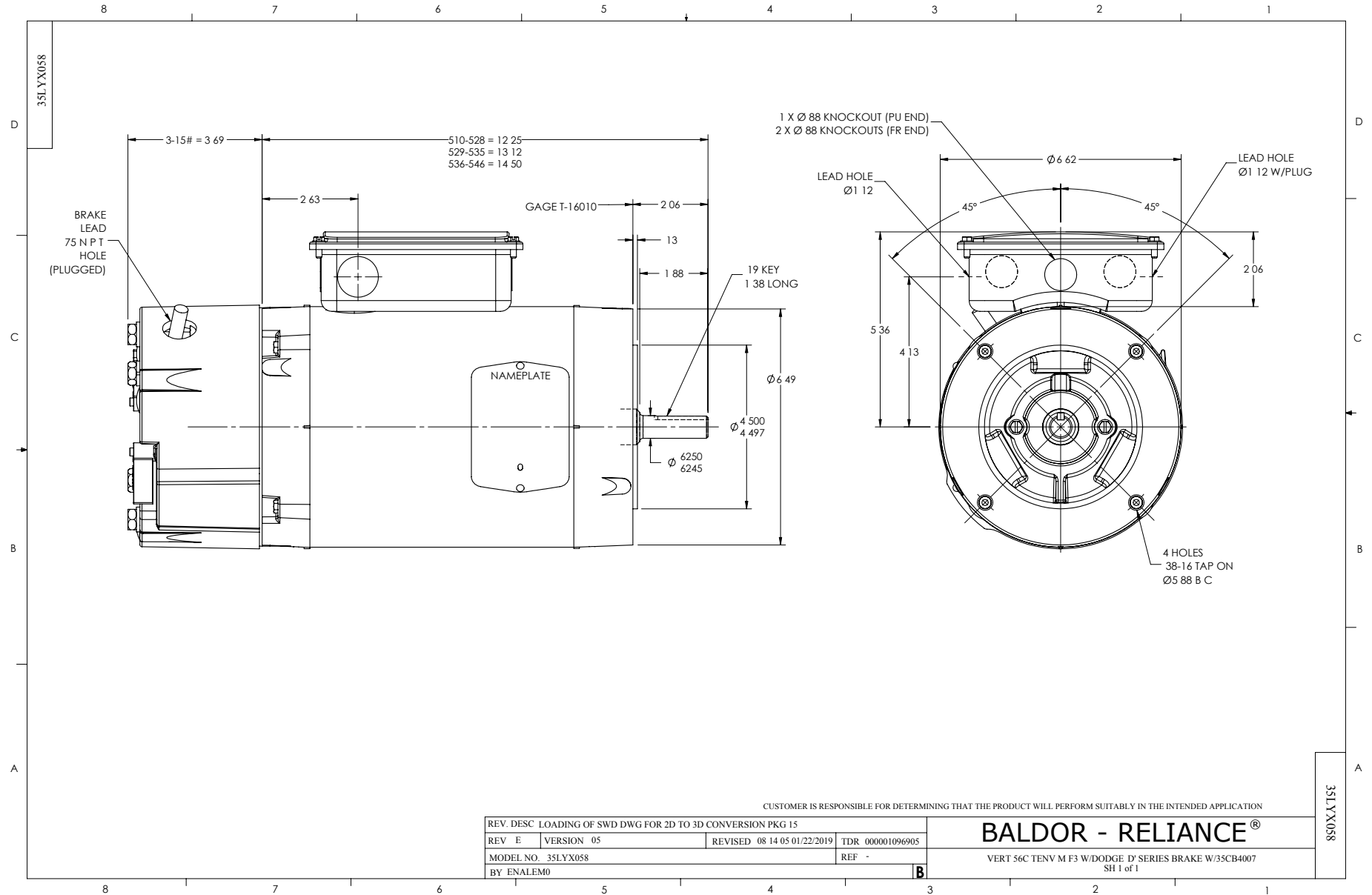
Typical performance - not guaranteed values.

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

TORQUES(LB-FT): PO=6.71 PU=4.67 LR=5.31 LRA=6.34



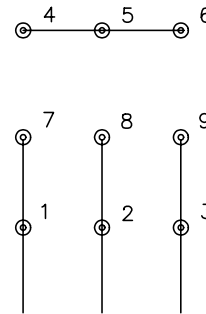
5/13/2020 ACPERF, record # 36573



CD0005

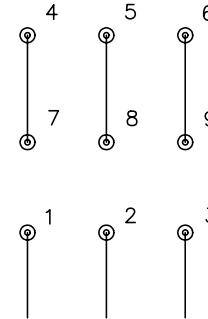


LOW VOLTAGE
(2Y)



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

90000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005