

BALDOR® • RELIANCE 

Product Information Packet

VNDM3538

.5HP,1740RPM,3PH,60HZ,56C,3512M,TENV,F1

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGP863	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35E4329	Layout:	35LYE4329	Poles:	04	Created Date:	04-21-2016
Base:	N	Eff. Date:	10-23-2017	Leads:	9#18		

Specs			
Catalog Number:	VNDM3538	Heater Indicator:	No Heater
Enclosure:	TENV	Insulation Class:	F
Frame:	56C	Inverter Code:	Inverter Duty
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:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Ring Terminals
XP Division:	Not Applicable	Motor Type:	3512M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	69
	CCSA US	Product Family:	Dirty Duty Plus
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Sealed Bearing
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	No Mounting	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

Constant Torque Speed Range:	6	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	.800 A @ 460.0 V	Shaft Rotation:	Reversible
	1.600 A @ 230.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3505E												
CAT NO	VNDM3538											
SPEC.	35E4329P863G1							ENCL	TENV			
FRAME	56C			HP	.5							
VOLTS	230/460											
FLA	1.6/.8				I.P.	56						
RPM	1740			RPM MAX	2700							
HZ	60			PH	3		CLASS	F				
SER.F.	1.15			DES	B		CC					
NEMA-NOM-EFF	80											
RATING	40C AMB-CONT											
DE BRG	6205			ODE BRG	6203							
GREASE	POLYREX EM											
C HP FR	60			C HP TO	90							
CT HZ FROM	6			CT HZ TO	60							
SER.NO												
	50C AT 1.0 SF											
							VT HZ FROM	6		VT HZ TO	60	

Parts List		
Part Number	Description	Quantity
SA319772	SA 35E4329P863G1	1.000 EA
RA307481	RA 35E4329P863G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB1001A01E	SPL CONDUIT BOX, MACHINED (E-COAT)	1.000 EA
35GS1022A02	GASKET BOX .06 THK NEOP BLK HDN 30-40 DU	1.000 EA
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
35EP1100B94E	FREP TENV (4).125 NPT DRAINS	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HW4500A33	1/8 NPT STAINLESS,HOLO-KROME #13002,PRES	3.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP1300A113E	PUEP ENCL 205 BRG F/SEAL, (4).125 NPT	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HW4606A02	JM CLIPPER/SEAL (LWE-0938-1624-AL23)	1.000 EA
HW4500A33	1/8 NPT STAINLESS,HOLO-KROME #13002,PRES	3.000 EA
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 EA
35CB4516E	CONDUIT BOX LID, E-COAT	1.000 EA
36GS1002	GASKET, 1/16" NEOPRENE CONDUIT BOX LID	1.000 EA
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 EA
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
LB1164	LABEL,WARNING AND DRAIN	1.000 EA
MJ5001A23	P.D. GEORGE B-276 AIR DRY VARNISH	0.001 GA
LB1000	LABEL, DIRTY DUTY	1.000 EA
WD1000D21	TRM,T&B #B71M,RING,18-14,.25,NON-INSL	9.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1500Y02	WILKOPON PRIMER YELLOW	0.010 GA
MG1025L01	WILKOFASST FD, 786.04, BLACK	0.010 GA
HA3100S08	THRUBOLT 7.375LG SS	4.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP3505E	SS DIRTY DUTY PLUS INV UL CSA-C US EEV C	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 55778 - Typical performance - not guaranteed values

Winding: 35WGP863-R069	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	230/460			Start Configuration	direct on line
Full Load Amps	1.6/.8			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	67°C
				Locked-rotor Power Factor	73.8

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	76	81	76
Efficiency	59.5	73.8	78.4	80	79.9	78.9	79.9
Speed	1788	1774	1759	1741	1722	1702	1722
Line amperes	0.624	0.669	0.744	0.844	0.957	1.1	0.957

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

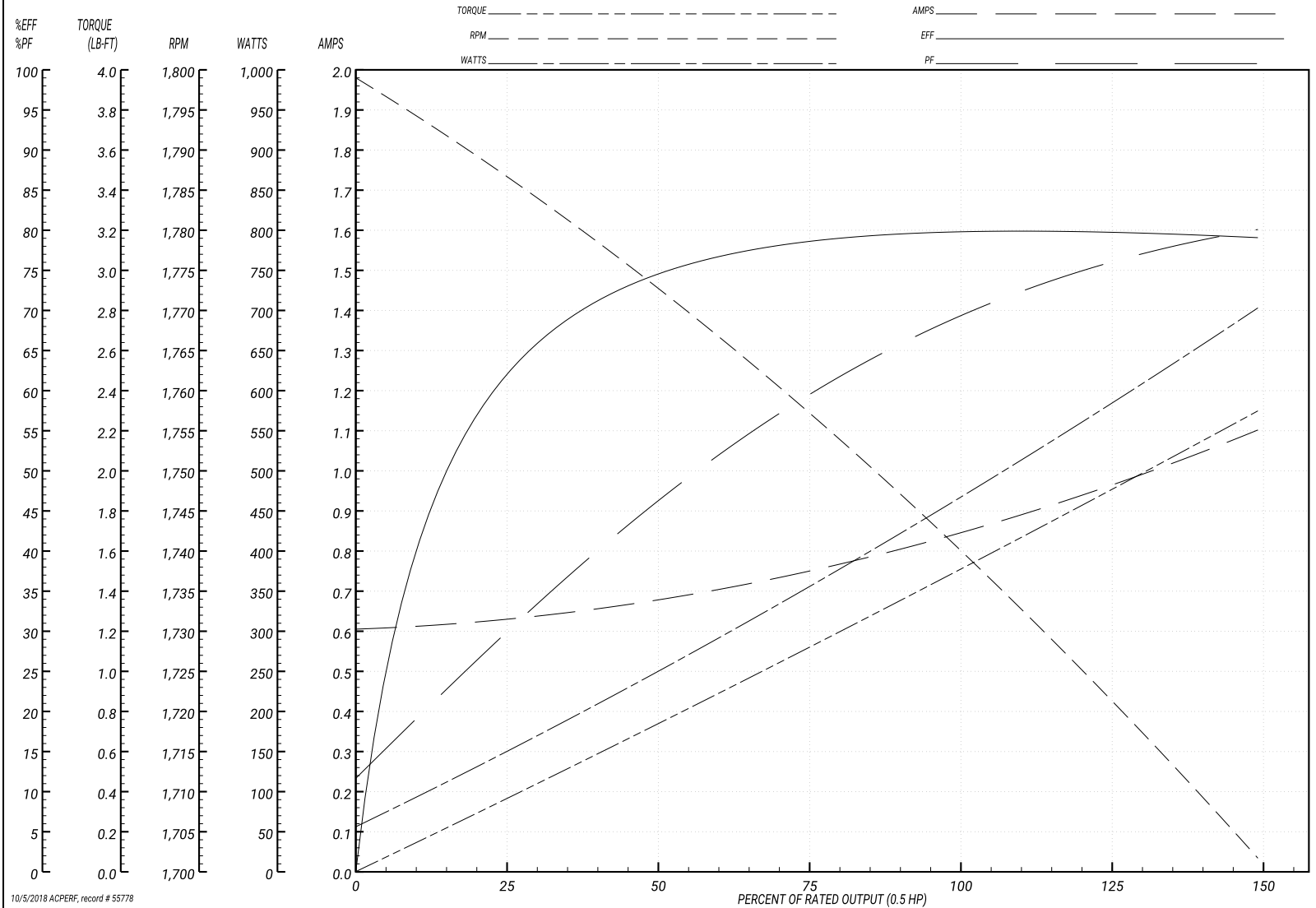
BALDOR ELECTRIC COMPANY

WINDING # 35WGP863

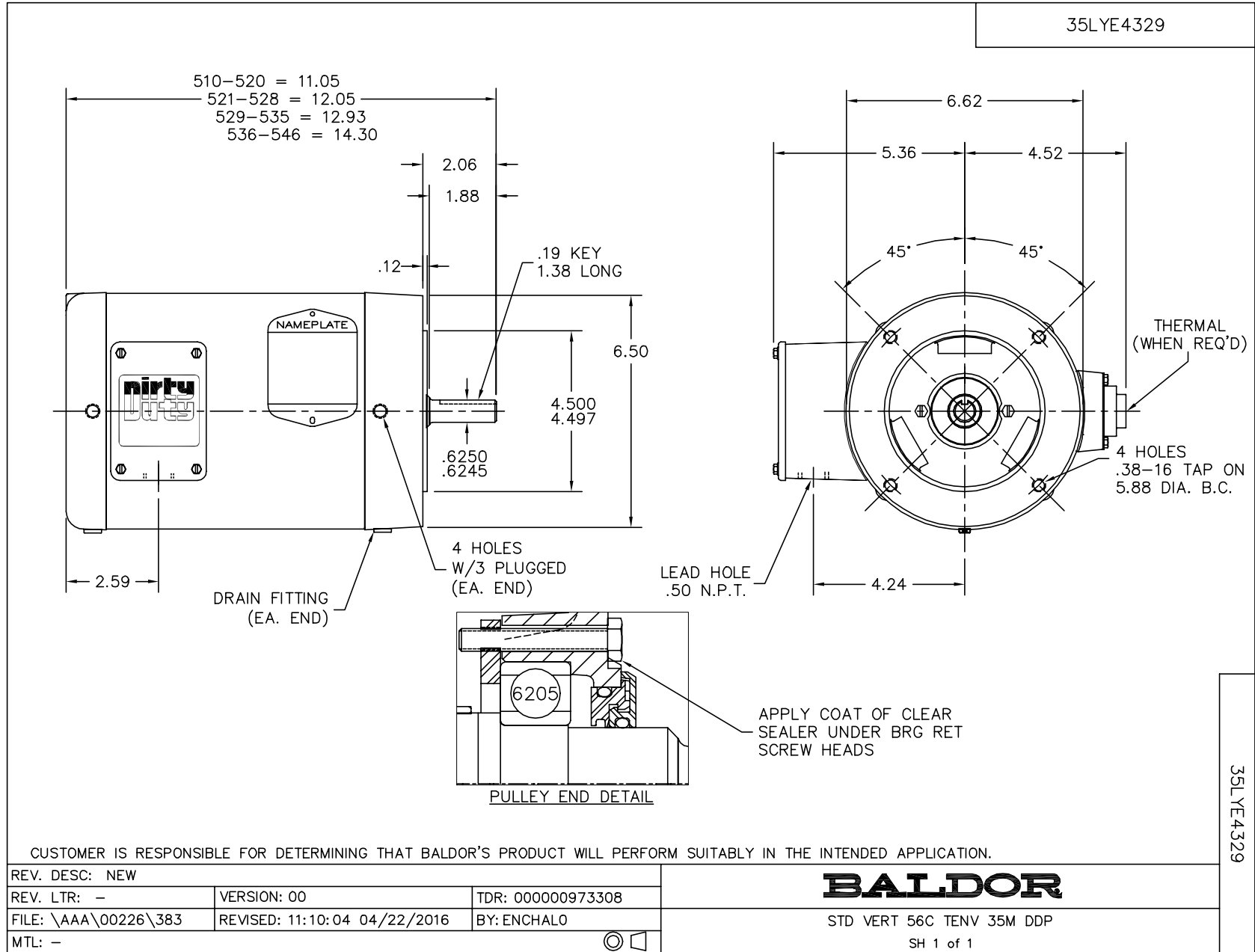
Typical performance - not guaranteed values.

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



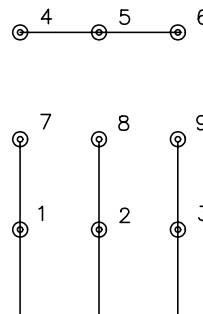
10/5/2018 ACPERF, record # 55778



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