

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VWDL3504**

**.5HP, 1725RPM, 1PH, 60HZ, 56C, 3520L, TEFC, F1**

Part Detail							
Revision:	N	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGN406	CD Diagram:	CD0001	Mfg Plant:	
Mech. Spec:	35S583	Layout:	35LYS583	Poles:	04	Created Date:	09-17-2012
Base:	N	Eff. Date:	03-09-2020	Leads:	6#18		

Specs			
Catalog Number:	VWDL3504	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	56C	KVA Code:	M
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 18 AWG
Voltage @ Frequency:	115.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3520L
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	65
	CSA	Product Family:	Wash Down
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
Current @ Voltage:	3.700 A @ 230.0 V	Shaft Extension Location:	Pulley End
	4.100 A @ 208.0 V	Shaft Ground Indicator:	No Shaft Grounding

	7.400 A @ 115.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	N	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP1496L										
CAT.NO.	VWDL3504									
SPEC.	35S583N406G1									
HP	.5									
VOLTS	115/230									
AMP	7.4/3.7									
RPM	1725									
FRAME	56C				HZ	60			PH	1
SER.F.	1.25		CODE	M	DES	N		CLASS	F	
NEMA-NOM-EFF	68		PF	65						
RATING	40C AMB-CONT									
CC								USABLE AT 208V	4.1	
DE	6205			ODE	6203					
ENCL	TEFC		SN							
	SFA 8.2/4.1									

Parts List		
Part Number	Description	Quantity
SA251234	SA 35S583N406G1	1.000 EA
RA238076	RA 35S583N406G1	1.000 EA
EC1400A03	ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3008A01G	SPL CONDUIT BOX, MACHINED GRAY	1.000 EA
35GS1039	05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,	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
35EP3122B00W	MASTER ODE,203 BRG,.683SH,.125NPT DRNS,F	1.000 EA
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 EA
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 EA
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	4.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307E00W	MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C	1.000 EA
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 EA
HW4600B49	SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB	1.000 EA
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
MG1025W01	WILKOFAS, 781.01, SIGNAL WHITE #9003	0.017 GA
MG1025Z02	ACTIVATOR WILKOFAS 060.02HF	0.010 GA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
11XW1032S06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	3.000 EA
35CB4522	35 LIPPED CB LID PRIMED	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
35GS1030A02	35 GS FOR CB LID - WHITE NEOPRENE	1.000 EA
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 EA
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 EA
HW4600B46	V-RING SLINGER 0.875 X 1.420 X .24 VITON	1.000 EA
HW2502D13	SS 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
LB1164	LABEL,WARNING AND DRAIN	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 EA
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35GS1016A03	GASKET, CAPAC BOX FOR 35CB4802 WD MOTORS	1.000 EA
HA3100S08	THRUBOLT 7.375LG SS	4.000 EA
SP5051A24	MODEL 35 TORQ STATIONARY SWITCH FOR "L"	1.000 EA
LC0001	CONN LABEL TYPE L, 6 LEAD, DUAL VOLTS, R	1.000 EA
NP1496L	SS WD UL CSA CC	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) 3/19	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000002	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 37353 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGN406-R001	<b>Type:</b> 3520L	<b>Enclosure:</b> TEFC
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Nameplate Data				230 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	1.51 LB-FT
Volts	115/230			Start Configuration	direct on line
Full Load Amps	7.4/3.7			Breakdown Torque	4.62 LB-FT
R.P.M.	1725			Pull-up Torque	3.69 LB-FT
Hz	60	Phase	1	Locked-rotor Torque	5.49 LB-FT
NEMA Design Code	N	KVA Code	M	Starting Current	22.6 A
Service Factor (S.F.)	1.25			No-load Current	2.89 A
NEMA Nom. Eff.	68	Power Factor	65	Line-line Res. @ 25°C	4.0781 Ω A Ph 2.4038 Ω B Ph
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps	8.2/4.1			Temp. Rise @ S.F. Load	80°C

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	46	56	65	71	76	71
Efficiency	41.6	57.1	64.6	68	69	69	69
Speed	1783.2	1772	1759.8	1745.9	1730.5	1714.5	1730
Line amperes	2.95	3.09	3.35	3.69	4.1	4.61	4.1

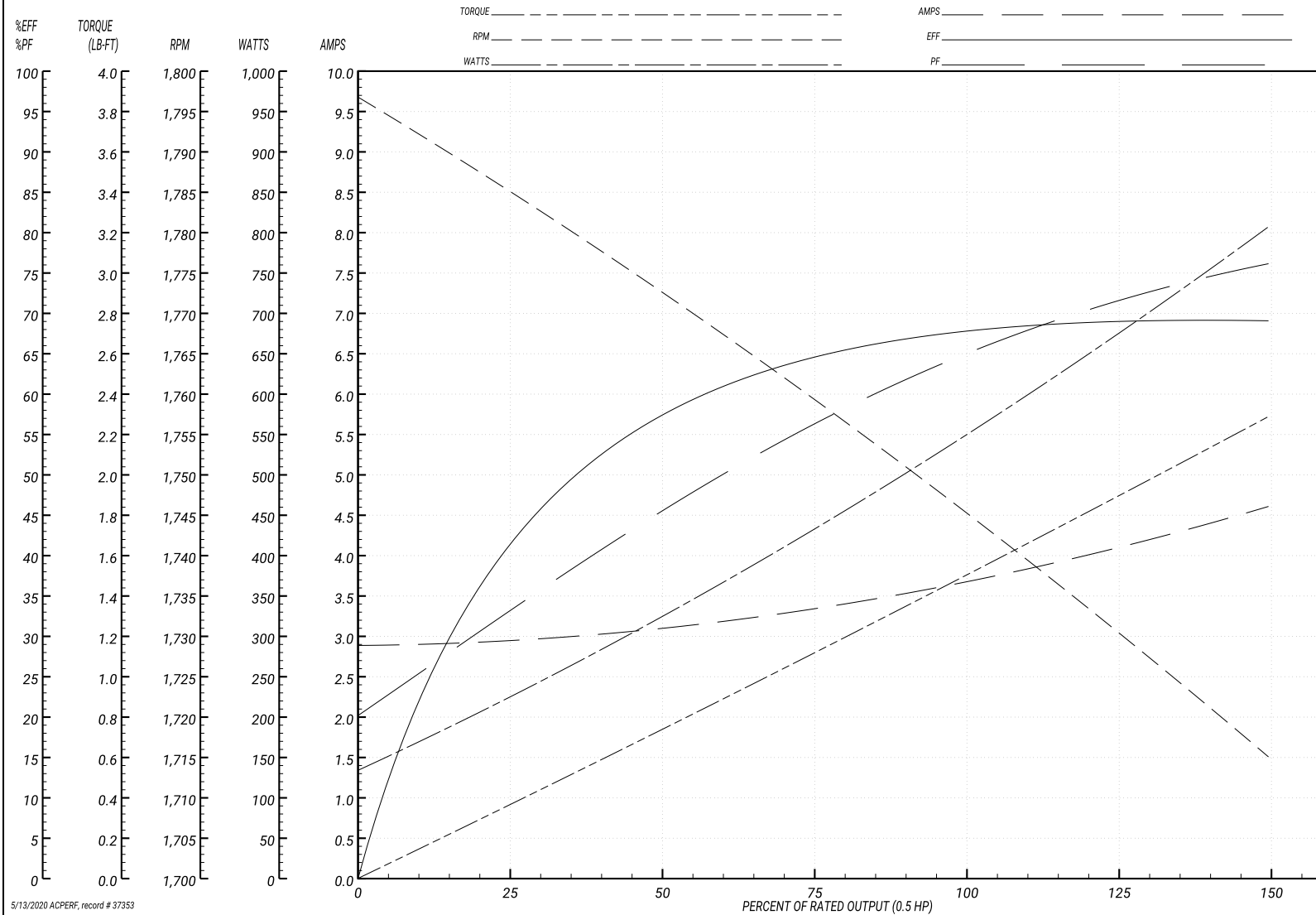
Performance Graph at 230V, 60Hz, 0.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 35WGN406

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1725 RPM 230 V 3520L  
 TORQUES(LB-FT): PO=4.62 PU=3.69 LR=5.49 LRA=22.6



5/13/2020 ACPERF, record # 37353

**AC Induction Motor Performance Data**

Record # 62947 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGN406-R001	<b>Type:</b> 3520L	<b>Enclosure:</b> TEFC
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Nameplate Data				115 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	.5			Full Load Torque	1.51 LB-FT
Volts	115/230			Start Configuration	direct on line
Full Load Amps	7.4/3.7			Breakdown Torque	4.62 LB-FT
R.P.M.	1725			Pull-up Torque	3.69 LB-FT
Hz	60	Phase	1	Locked-rotor Torque	5.49 LB-FT
NEMA Design Code	N	KVA Code	M	Starting Current	45.2 A
Service Factor (S.F.)	1.25			No-load Current	5.78 A
NEMA Nom. Eff.	68	Power Factor	65	Line-line Res. @ 25°C	1.06 Ω A Ph 2.39 Ω B Ph
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps	8.2/4.1			Temp. Rise @ S.F. Load	79°C
				Locked-rotor Power Factor	96.2
				Rotor inertia	0.119 LB-FT <sup>2</sup>

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	46	56	65	72	76	72
Efficiency	41.5	57.1	64.8	68	69.2	69	69.2
Speed	1783	1772	1760	1746	1731	1715	1731
Line amperes	5.9	6.18	6.7	7.38	8.2	9.22	8.2

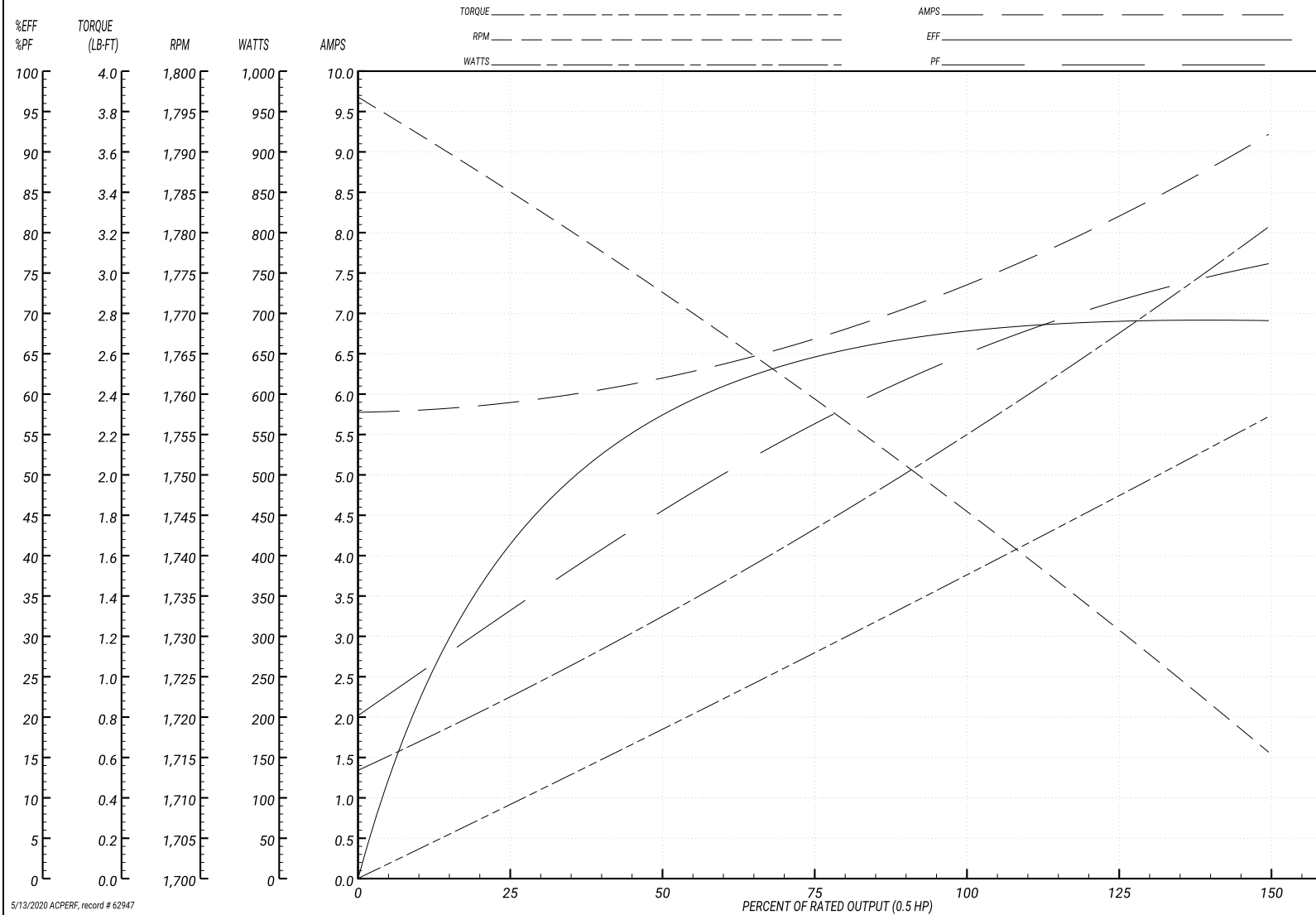
Performance Graph at 115V, 60Hz, 0.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

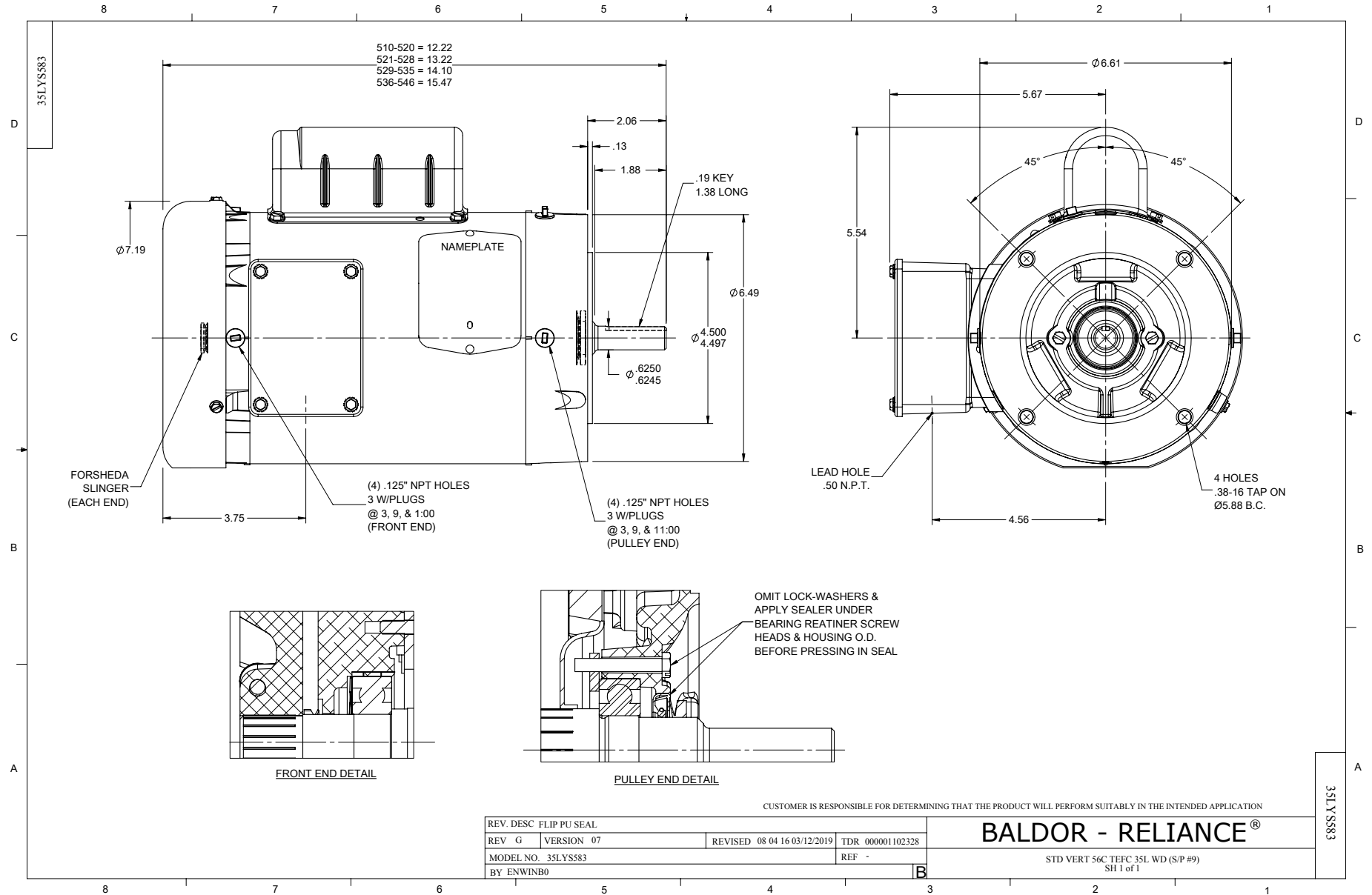
WINDING # 35WGN406

Typical performance - not guaranteed values.

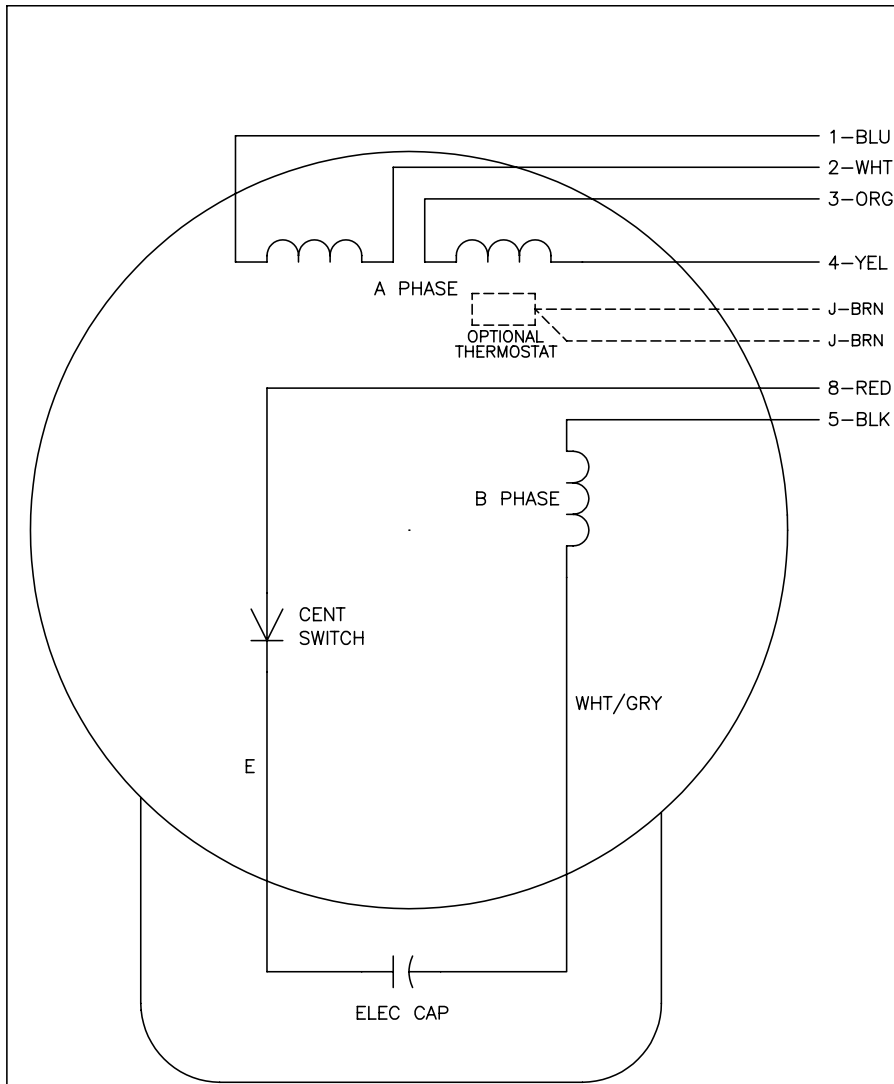
0.5 HP 1 PH 60 HZ 1725 RPM 115 V 3520L  
 TORQUES(LB-FT): PO=4.62 PU=3.69 LR=5.49 LRA=45.2



5/13/2020 ACPERF, record # 62947



CD0001



	LINE A	LINE B	JOIN
HIGH STD	1	4,5	2,3,8
HIGH OPP	1	4,8	2,3,5
LOW STD	1,3,8	2,4,5	-
LOW OPP	1,3,5	2,4,8	-

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. OPTIONAL THERMOSTAT IS PROVIDED WHEN SPECIFIED.
3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:16	TDR: 0178636
100000		FILE: AAA00007405	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

TYPE L, DV, REV, 6 LEADS

CD0001