

BALDOR® • RELIANCE 

Product Information Packet

VEM3154T

1.5HP,1755RPM,3PH,60HZ,145TC,3522M,ODP,F

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM495	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35Z413	Layout:	35LYZ413	Poles:	04	Created Date:	04-24-2015
Base:	N	Eff. Date:	01-30-2018	Leads:	9#18		

Specs			
Catalog Number:	VEM3154T	Heater Indicator:	No Heater
Enclosure:	ODP	Insulation Class:	F
Frame:	145TC	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	L
Output @ Frequency:	1.500 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:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3522M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	72
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
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

Current @ Voltage:	2.200 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
	4.400 A @ 230.0 V	Shaft Rotation:	Reversible
	4.500 A @ 208.0 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 (OLD)
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 NP3553LUA

CAT.NO.	VEM3154T							
SPEC.	35Z413M495G1							
HP	1.5							
VOLTS	230/460							
AMPS	4.4/2.2							
RPM	1755							
FRAME	145TC		HZ	60		PH	3	
SF	1.15		CODE	L	DES	B	CLASS	F
NEMA NOM. EFF	86.5		PF	72				
RATING	40C AMB-CONT							
CC	010A		USABLE AT 208V			4.5		
DE	6205		ODE	6203				
ENCL	ODP		SN					
VPWM INVERTER READY								
CT30-60(2:1) VT3-60(20:1)								
USABLE AT	50HZ 1.5HP 190/380V 5.2/2.6A						SF1.0	

Parts List		
Part Number	Description	Quantity
SA299827	SA 35Z413M495G1	1.000 EA
RA286860	RA 35Z413M495G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3209A02	A00 W/DRIP COVER	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3402B00	MASTER DE,205 BRG,OPEN,W/GREASER	1.000 EA
35AD2000	AIR BAFFLE - GALVANNEAL	1.000 EA
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
35FH4006A09	DRIP COVER W/FLAT, W/ PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	2.000 EA
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 32593 - Typical performance - not guaranteed values

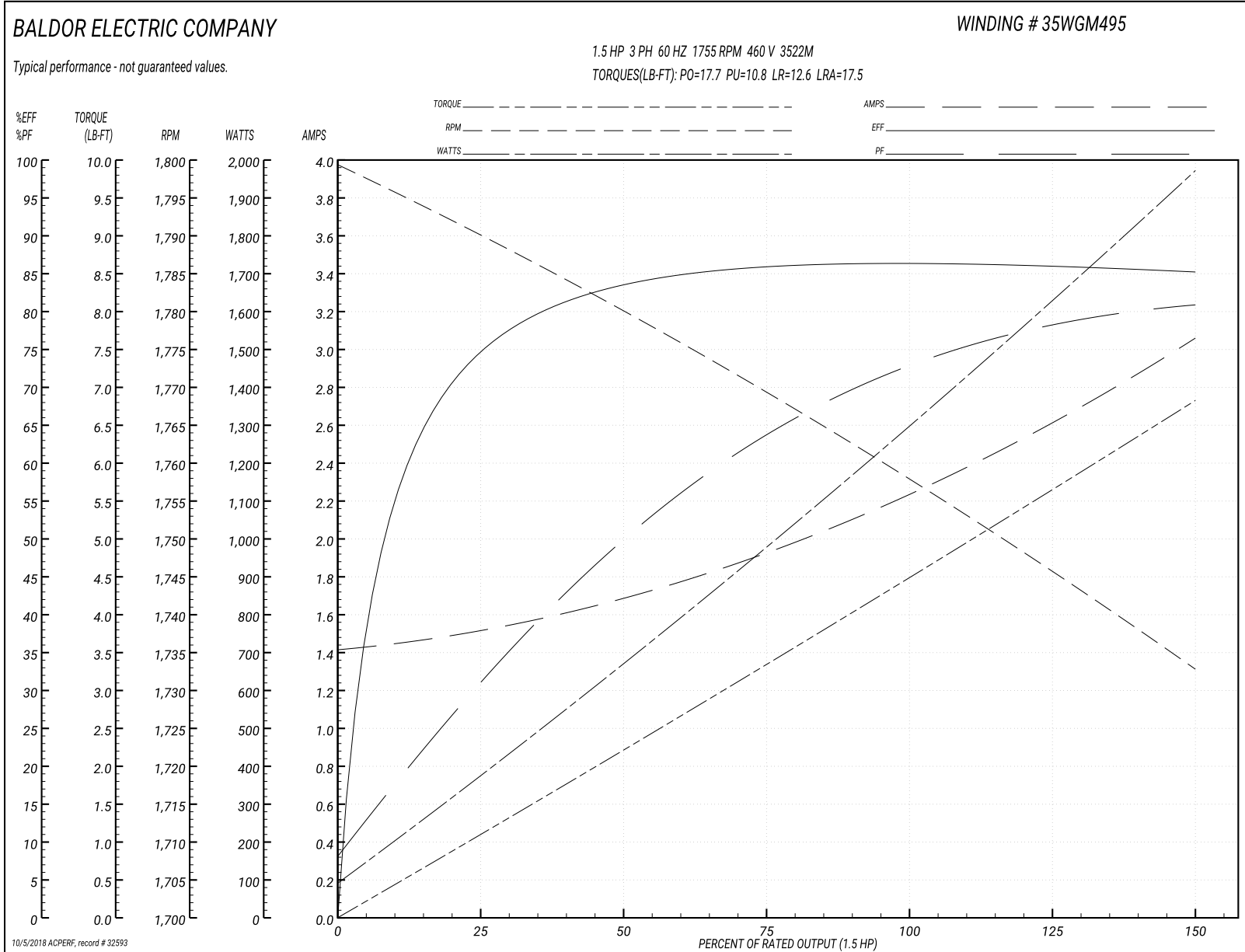
Winding: 35WGM495-R001	Type: 3522M	Enclosure: OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	4.46 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	4.50/2.25			Breakdown Torque	17.7 LB-FT
R.P.M.	1755			Pull-up Torque	10.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	12.6 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	17.5 A
Service Factor (S.F.)	1.15			No-load Current	1.43 A
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	10.73 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	40°C

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	78	81	76
Efficiency	74.7	83.5	86	86.6	86.3	85.3	86.4
Speed	1789.9	1780.2	1769.2	1758.4	1746.3	1732.6	1751
Line amperes	1.5	1.67	1.93	2.24	2.61	3.05	2.46

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 60670 - Typical performance - not guaranteed values

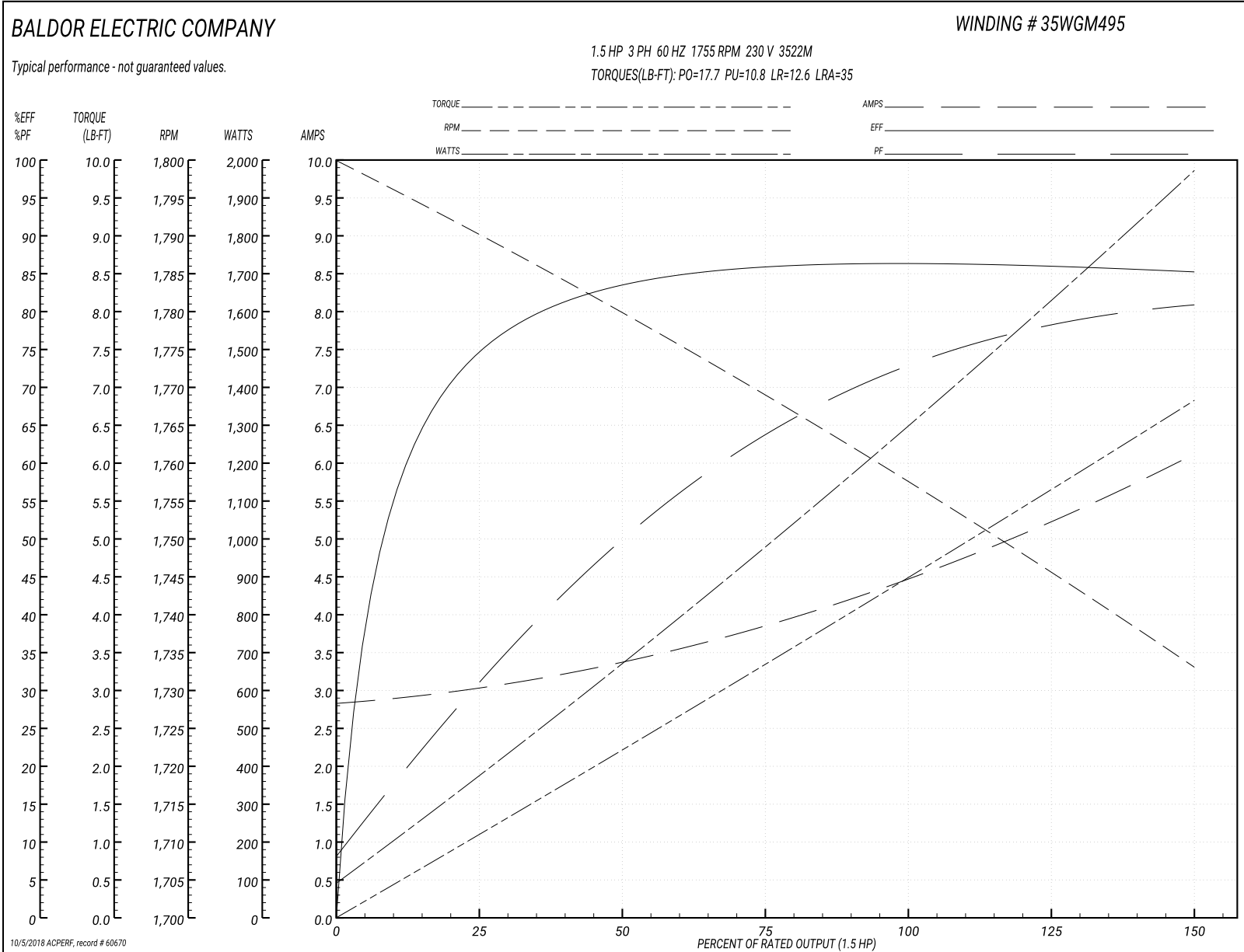
Winding: 35WGM495-R001	Type: 3522M	Enclosure: OPSB
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Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	4.46 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	4.4/2.2			Breakdown Torque	17.7 LB-FT
R.P.M.	1755			Pull-up Torque	10.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	12.6 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	35 A
Service Factor (S.F.)	1.15			No-load Current	2.86 A
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	2.59 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	40°C
				Locked-rotor Power Factor	52.5
				Rotor inertia	0.13 LB-FT ²

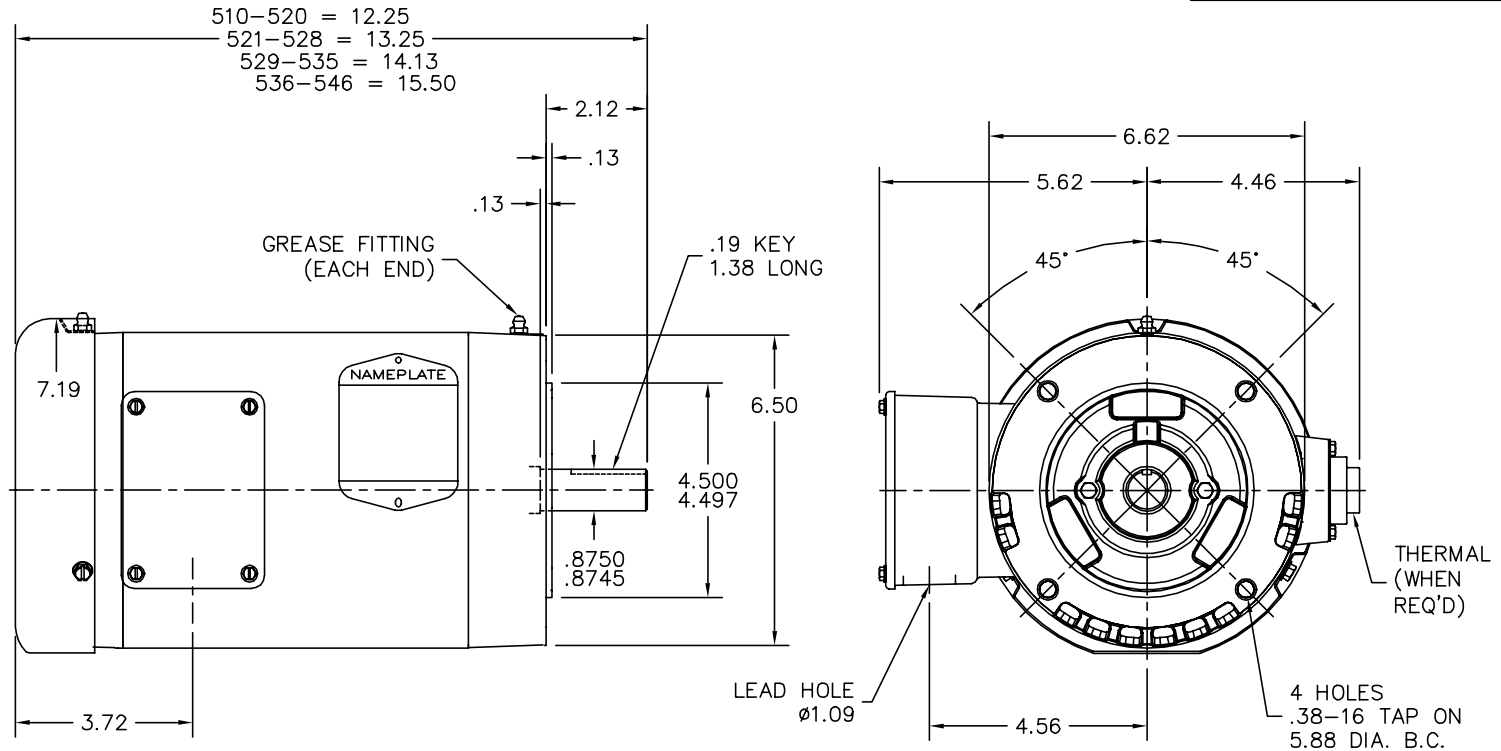
Load Characteristics 230 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	78	81	76
Efficiency	74.7	83.3	85.9	86.5	86.1	85.2	86.3
Speed	1790	1780	1769	1758	1746	1733	1751
Line amperes	3	3.34	3.86	4.48	5.22	6.1	4.92

Performance Graph at 230V, 60Hz, 1.5HP Typical performance - Not guaranteed values



35LYZ413



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: REPLACE ENDPLATES		
REV. LTR: B	VERSION: 02	TDR: 000001041474
FILE: \AAA\00179\600	REVISED: 04:01:53 09/07/2017	BY: USJOBUR22
MTL: -	☉ □	

BALDOR

VERT 143-5TC OPEN 35M W/1.09 LEAD HOLE & DRIP COVER

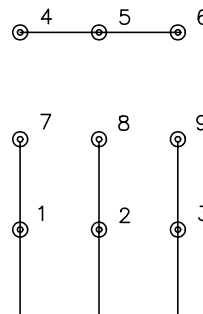
SH 1 of 1

35LYZ413

CD0005

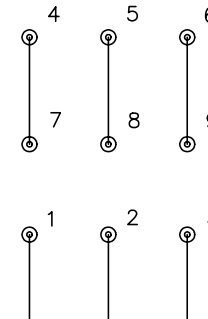


LOW VOLTAGE
(2Y)



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
900000		FILE: AAA00005140	MDL: -
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005