

**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

<b>Current @ Voltage:</b>	2.200 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	4.400 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	4.500 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	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, MOBIL POLYREX EM - 124047	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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
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 (2100/bx) 4/22	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 32593

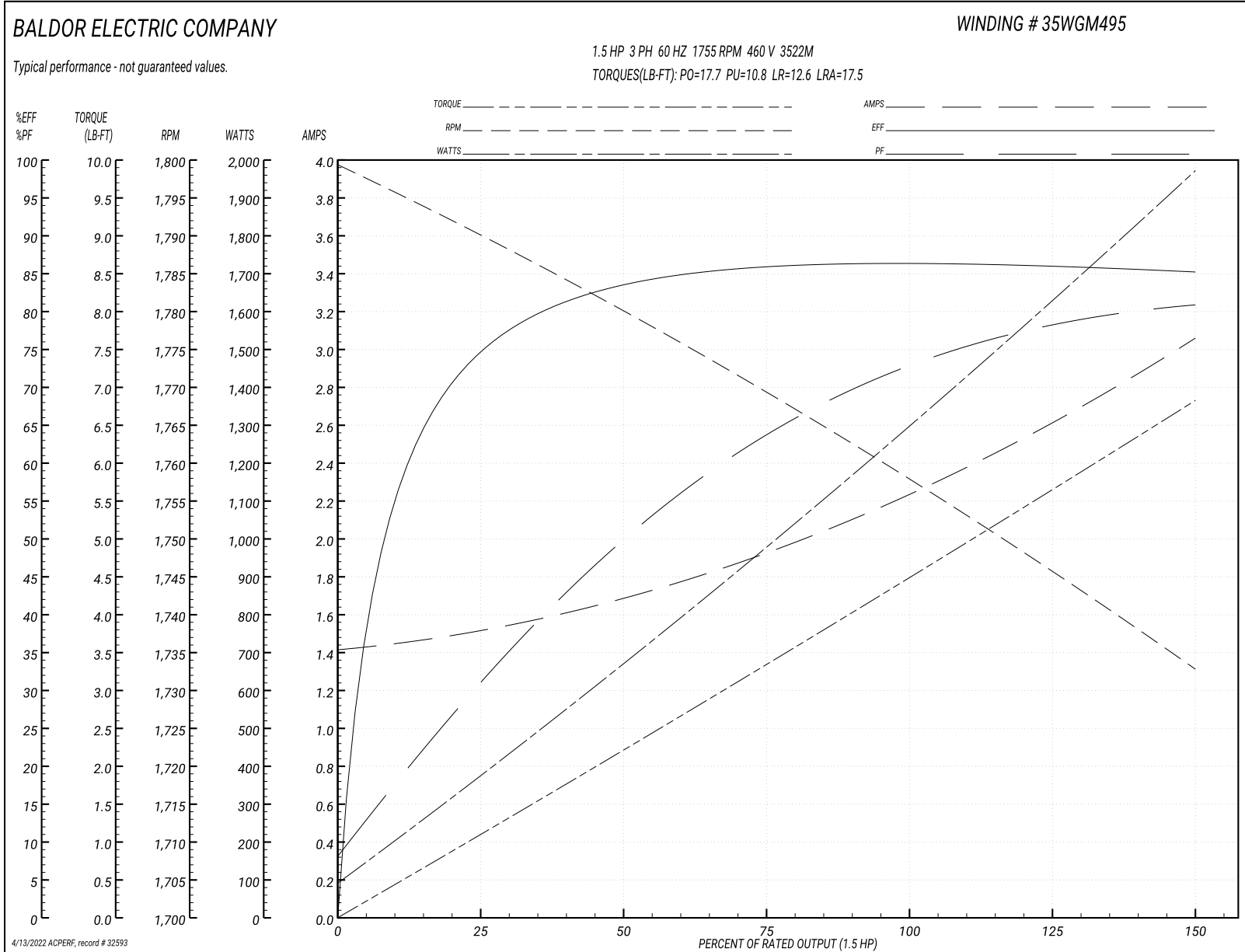
Typical performance - not guaranteed values

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

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	32	50	63	72	78	81	76
<b>Efficiency</b>	74.7	83.5	86	86.6	86.3	85.3	86.4
<b>Speed</b>	1789.9	1780.2	1769.2	1758.4	1746.3	1732.6	1751
<b>Line amperes</b>	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

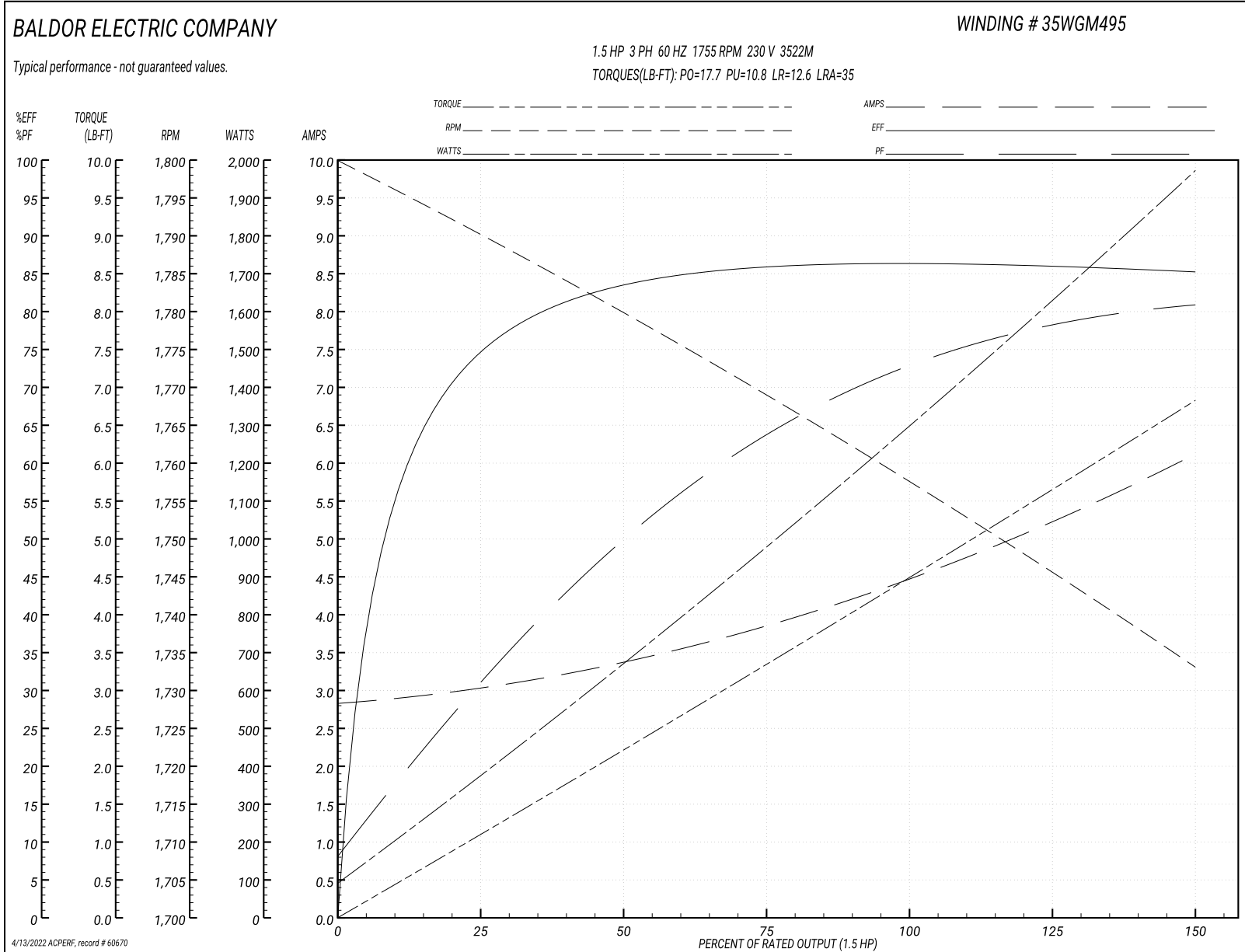
Typical performance - not guaranteed values

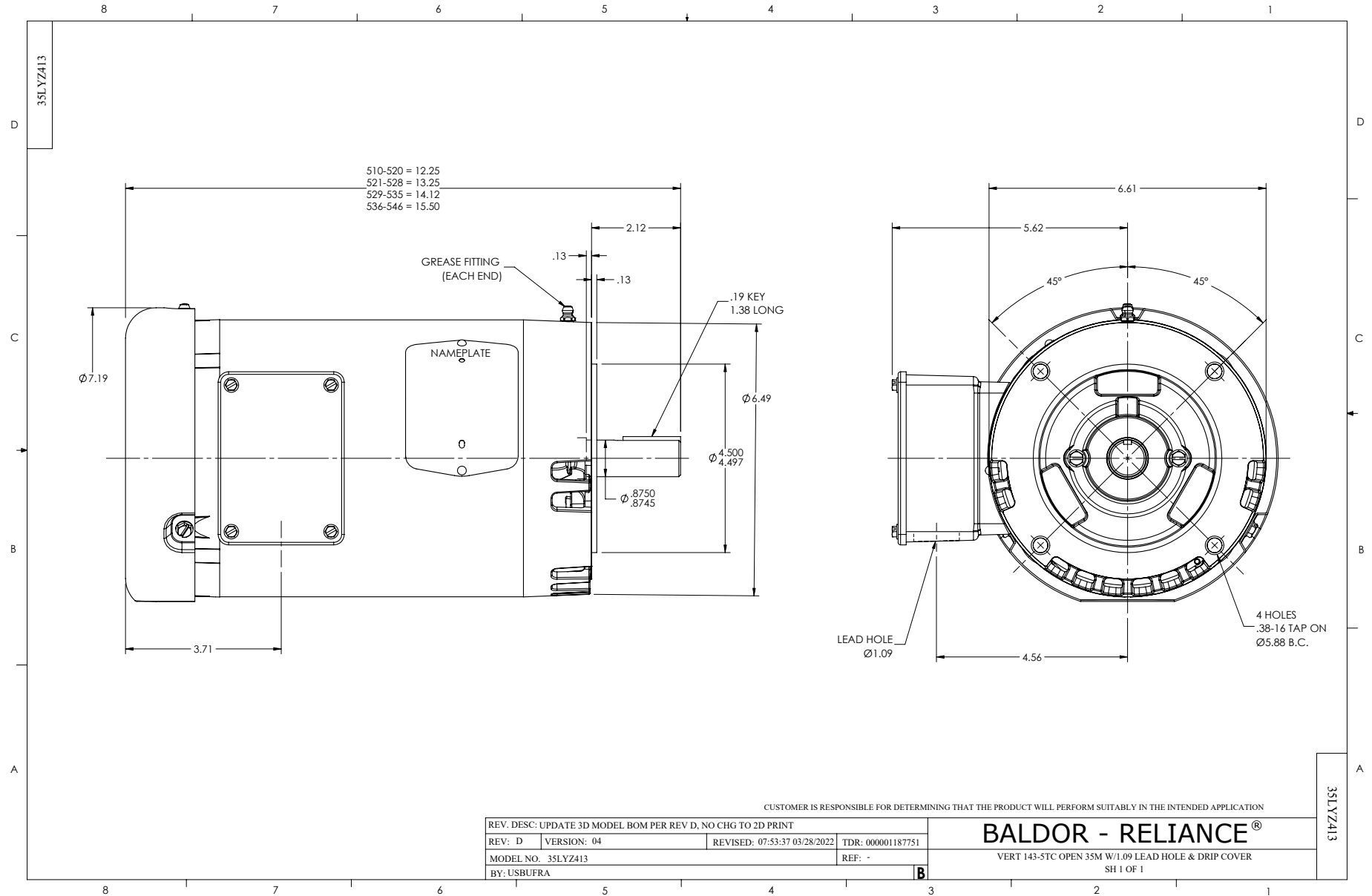
<b>Winding: 35WGM495-R001</b>		<b>Type: 3522M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	1.5	<b>Full Load Torque</b>	4.46 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	4.4/2.2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

**Load Characteristics 230 V, 60 Hz, 1.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	32	50	63	72	78	81	76
<b>Efficiency</b>	74.7	83.3	85.9	86.5	86.1	85.2	86.3
<b>Speed</b>	1790	1780	1769	1758	1746	1733	1751
<b>Line amperes</b>	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

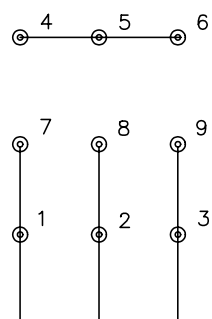




CD0005

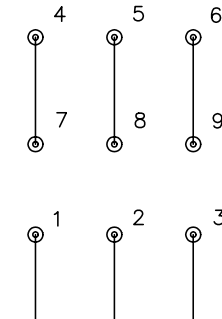


LOW VOLTAGE  
(2Y)



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: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005