

# **BALDOR® • RELIANCE**

## **Product Information Packet**

# **VEM3158T**

**3HP,3450RPM,3PH,60HZ,145TC,3528M,ODP,F1**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	3532M	Elec. Spec:	35WGP974	CD Diagram:	CD0005
Enclosure:	OPEN	Mfg Plant:		Mech. Spec:	35BB005	Layout:	35LYBB005
Frame:	145TC	Mounting:	F1	Poles:	02	Created Date:	04-27-2015
Base:	N	Rotation:	R	Insulation:	F	Eff. Date:	10-08-2015
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP1256L										
CAT.NO.	VEM3158T									
SPEC.	35BB005P974G1									
HP	3									
VOLTS	230/460									
AMP	7.4/3.7									
RPM	3450									
FRAME	145TC				HZ	60			PH	3
SER.F.	1.15		CODE	L	DES	B		CLASS	F	
NEMA-NOM-EFF	85.5			PF	90					
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V			7.9		
DE	6205				ODE	6203				
ENCL	OPEN		SN							

Parts List		
Part Number	Description	Quantity
SA299895	SA 35BB005P974G1	1.000 EA
RA286930	RA 35BB005P974G1	1.000 EA
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
S/P107-000-001	SUPER E PROC'S-FS, WS & CK PLTS	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
35EP3201A02	FR ENDPLATE, MACH	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP3400A14	SPL FACE MTD END PLATE - OPEN-143-5TC-05	1.000 EA
35AD2000	AIR BAFFLE	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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4006A04	DRIP COVER SPECIAL, W/ PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA
NP1256L	ALUM UL CSA CC	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA

**AC Induction Motor Performance Data**

Record # 53131 - Typical performance - not guaranteed values

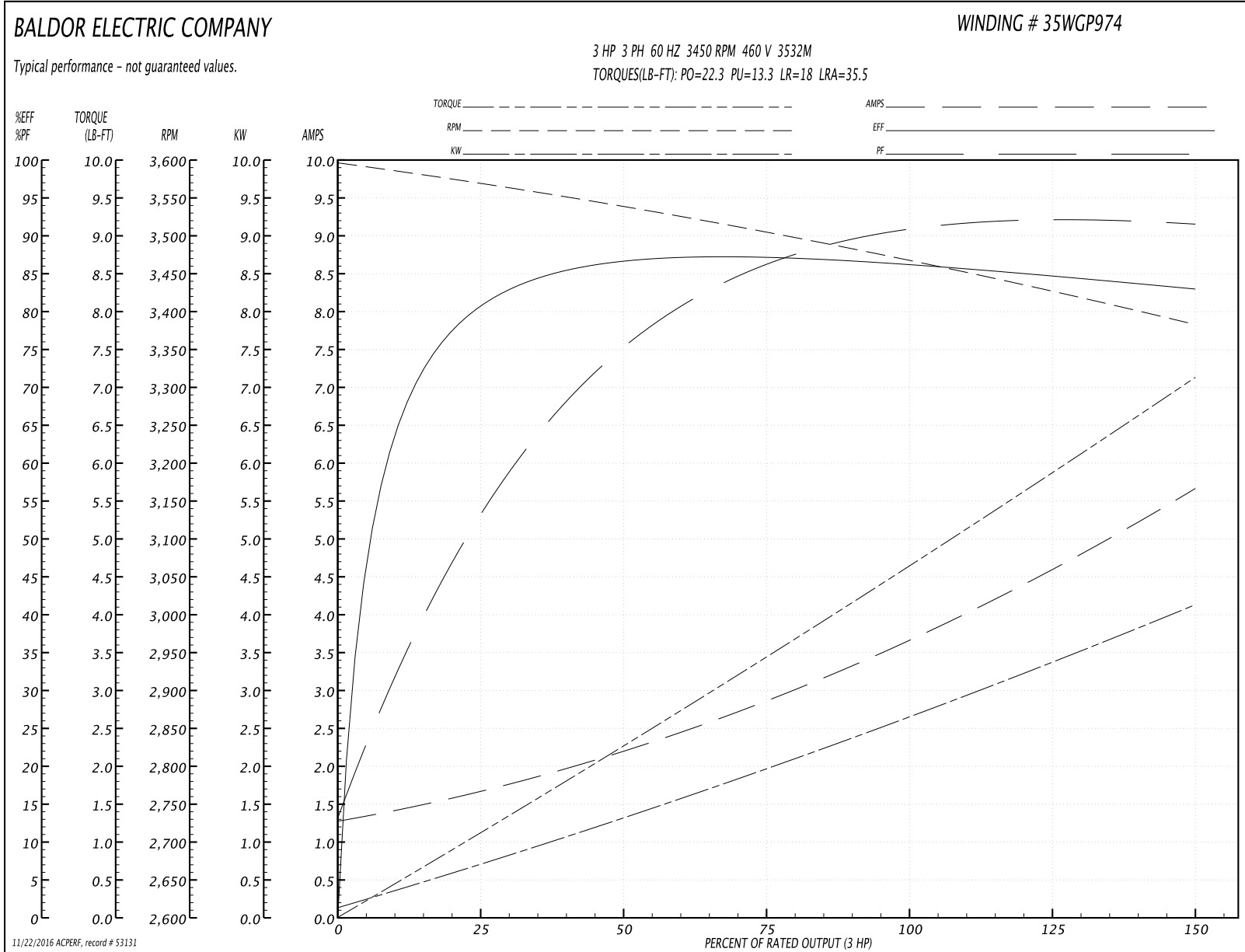
<b>Winding:</b> 35WGP974-R029	<b>Type:</b> 3532M	<b>Enclosure:</b> OPEN
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	3			Full Load Torque	4.7 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	7.4/3.7			Breakdown Torque	22.3 LB-FT
R.P.M.	3450			Pull-up Torque	13.3 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	18 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	35.5 A
Service Factor (S.F.)	1.15			No-load Current	1.32 A
NEMA Nom. Eff.	85.5	Power Factor	90	Line-line Res. @ 25°C	4.5 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	64°C
S.F. Amps				Temp. Rise @ S.F. Load	76°C
				Locked-rotor Power Factor	48.5
				Rotor inertia	0.0885 LB-FT <sup>2</sup>

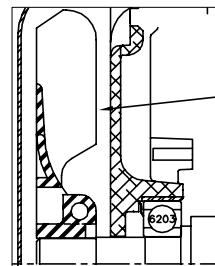
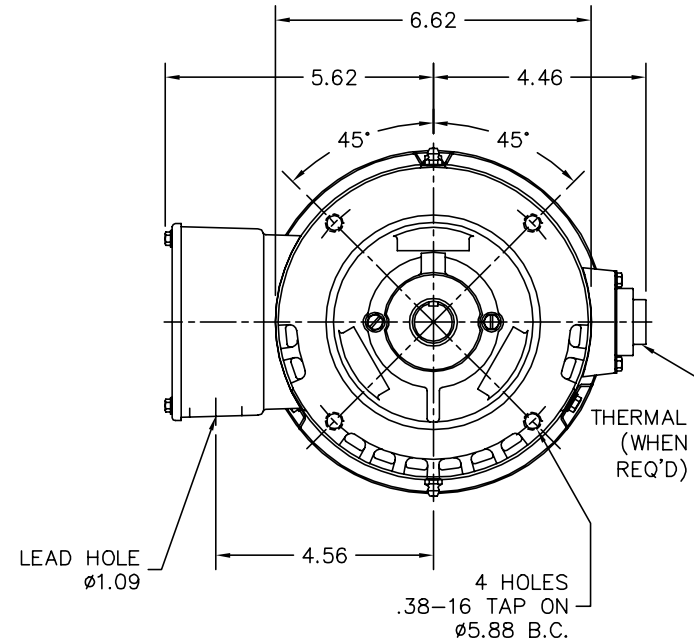
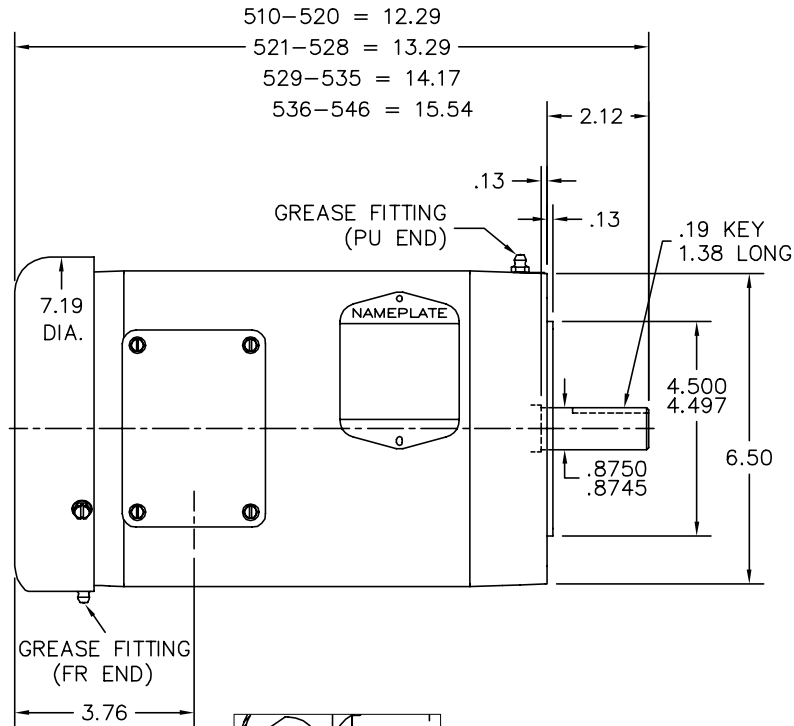
Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	78	86	90	92	92	91
Efficiency	81.4	86.3	87	86.4	84.9	82.8	85.5
Speed	3564	3535	3501	3467	3426	3381	3442
Line amperes	1.65	2.22	2.98	3.73	4.68	5.64	4.3

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values



35LYBB005



INSTALL EXT. FAN W/BLADES  
 FACING THE FRONT ENDPLATE

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

REV. DESC: UPDATE PARTS		
REV. LTR: B	VERSION: 02	TDR: 000000933694
FILE: \AAA\00172\253	REVISED: 07: 32:12 07/15/2015	BY: ENBENBO
MTL: -	©	

**BALDOR**

STD VER 143-5TC ODTF 35M W/DRIP CVR, EXT FAN, 1.09 LEAD HOLE

SH 1 of 1

35LYBB005

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