

BALDOR® • RELIANCE 

Product Information Packet

VEM3558

2HP,1755RPM,3PH,60HZ,56C,3528M,TEFC,F1,N

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGN909	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35J302	Layout:	35LYJ302	Poles:	04	Created Date:	06-20-2013
Base:	N	Eff. Date:	03-02-2018	Leads:	9#18		Y

Specs			
Catalog Number:	VEM3558	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	56C	KVA Code:	L
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	2.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 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:	3528M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	75
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	2.900 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
	5.800 A @ 230.0 V	Shaft Rotation:	Reversible
	6.600 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
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
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3441LUA										
CAT.NO.	VEM3558									
SPEC	35J302N909G1									
HP	2									
VOLTS	230/460									
AMPS	5.8/2.9									
RPM	1755									
FRAME	56C				HZ	60			PH	3
SF	1.15		CODE	L	DES	B		CLASS	F	
NEMA NOM. EFF	86.5		PF	75						
RATING	40C AMB-CONT									
CC	010A			USABLE AT 208V						6.6
ENCL	TEFC		SER							
DE	6205			ODE	6203					
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)										
50Hz 2HP 190/380V 6.6/3.3A									SF1.0	

Parts List		
Part Number	Description	Quantity
SA265088	SA 35J302N909G1	1.000 EA
RA251792	RA 35J302N909G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT	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
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	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
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1100/bx) 11/14	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 53344 - Typical performance - not guaranteed values

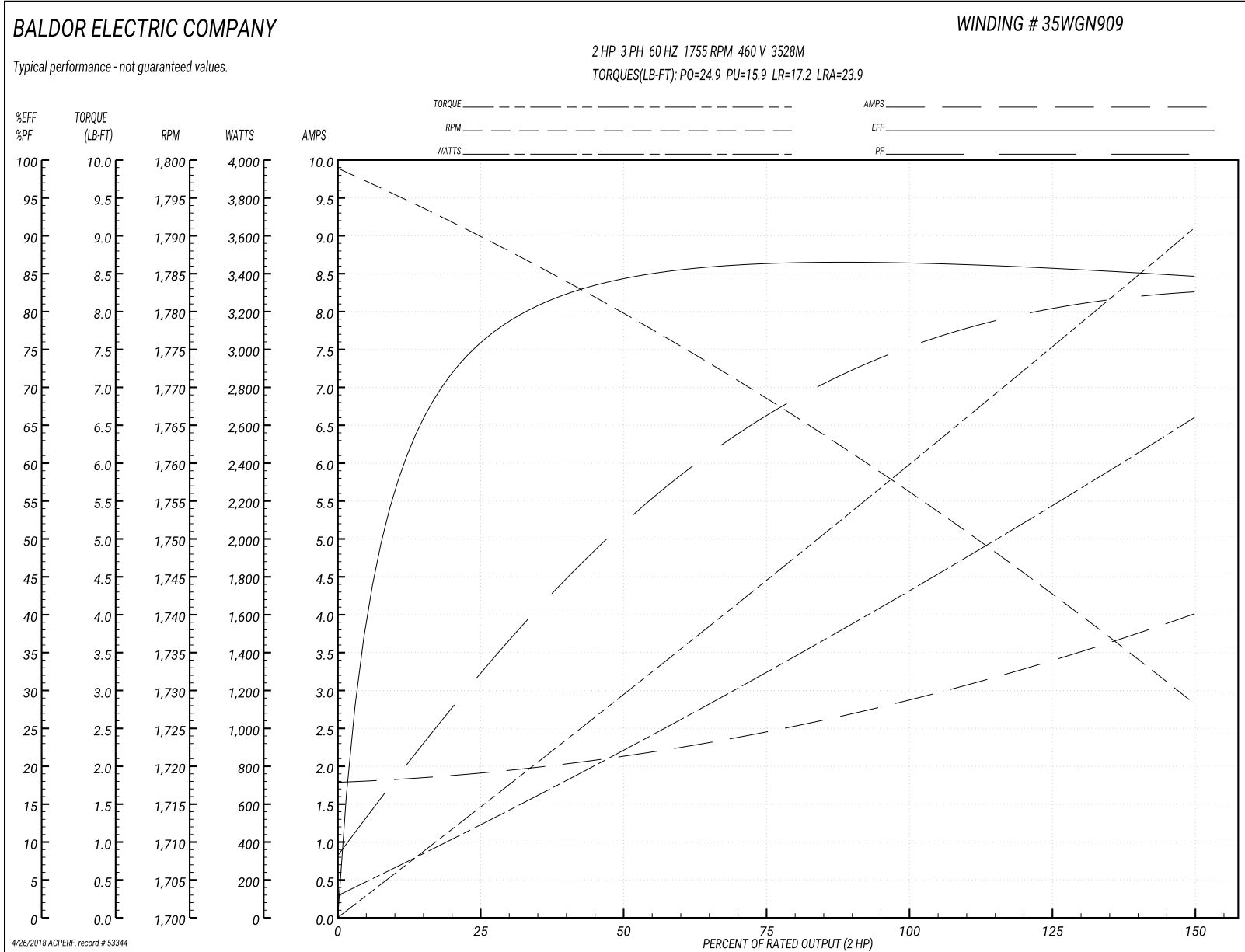
Winding: 35WGN909-R032	Type: 3528M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	24.9 LB-FT
R.P.M.	1755			Pull-up Torque	15.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17.2 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	23.9 A
Service Factor (S.F.)	1.15			No-load Current	1.81 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	8.02 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	65°C
S.F. Amps				Temp. Rise @ S.F. Load	77°C
				Locked-rotor Power Factor	52.4
				Rotor inertia	0.165 LB-FT ²

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	66	74	80	83	78
Efficiency	75.5	84	86.3	86.5	85.8	84.5	86.2
Speed	1790	1779	1769	1756	1743	1728	1748
Line amperes	1.89	2.11	2.46	2.91	3.4	4	3.2

Performance Graph at 460V, 60Hz, 2.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 57956 - Typical performance - not guaranteed values

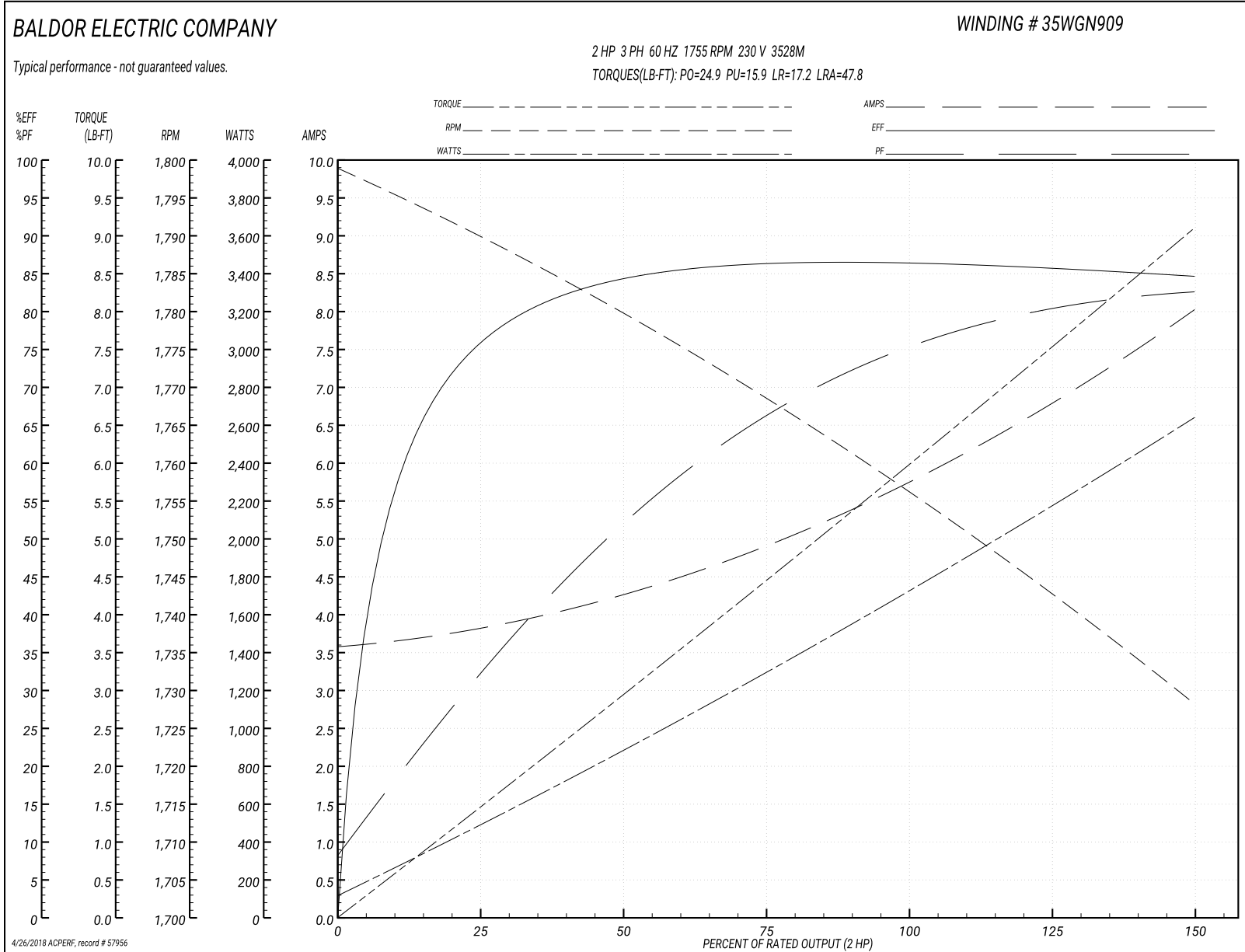
Winding: 35WGN909-R032	Type: 3528M	Enclosure: TEFC
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Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	2			Full Load Torque	5.99 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	24.9 LB-FT
R.P.M.	1755			Pull-up Torque	15.9 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17.2 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	47.8 A
Service Factor (S.F.)	1.15			No-load Current	3.62 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	2 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	65°C
S.F. Amps				Temp. Rise @ S.F. Load	77°C
				Locked-rotor Power Factor	52.4
				Rotor inertia	0.165 LB-FT ²

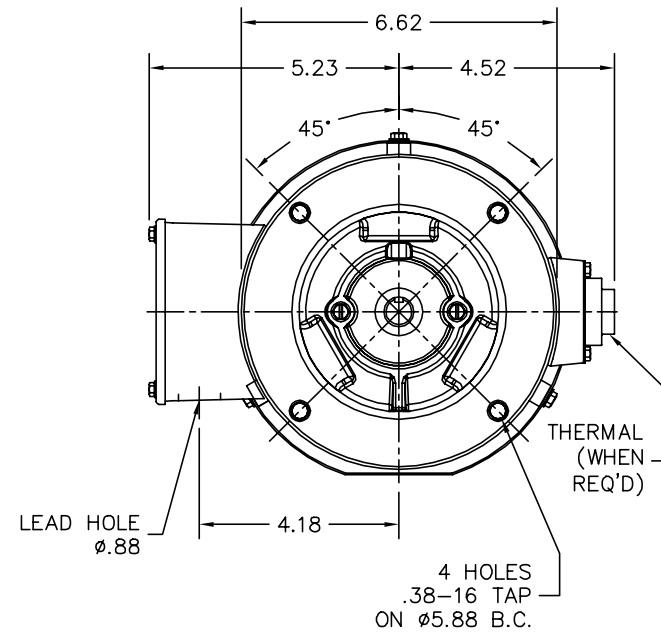
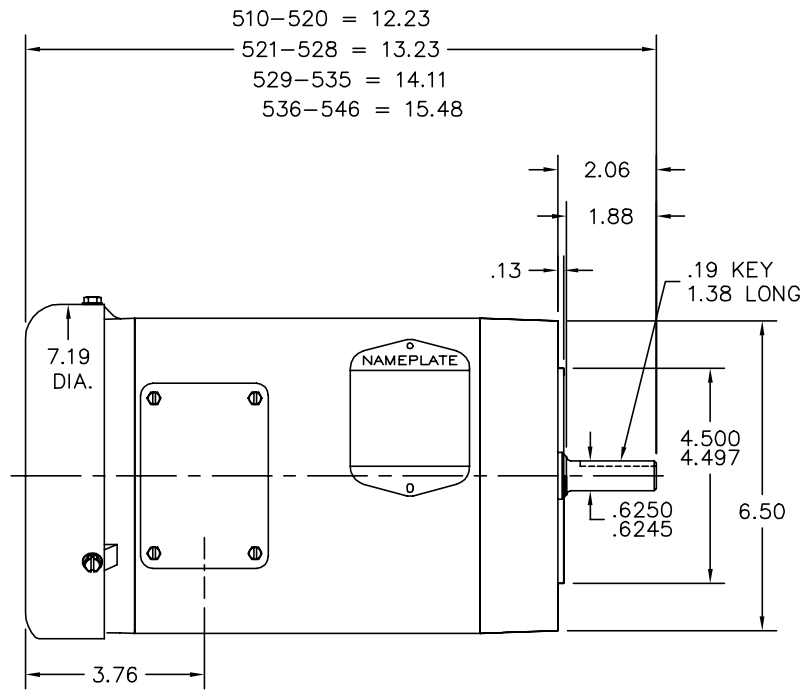
Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	66	74	80	83	78
Efficiency	75.6	84.1	86.4	86.6	85.9	84.6	86.2
Speed	1790	1779	1769	1756	1743	1728	1748
Line amperes	3.78	4.22	4.92	5.82	6.8	8	6.41

Performance Graph at 230V, 60Hz, 2.0HP Typical performance - Not guaranteed values



35LYJ302



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

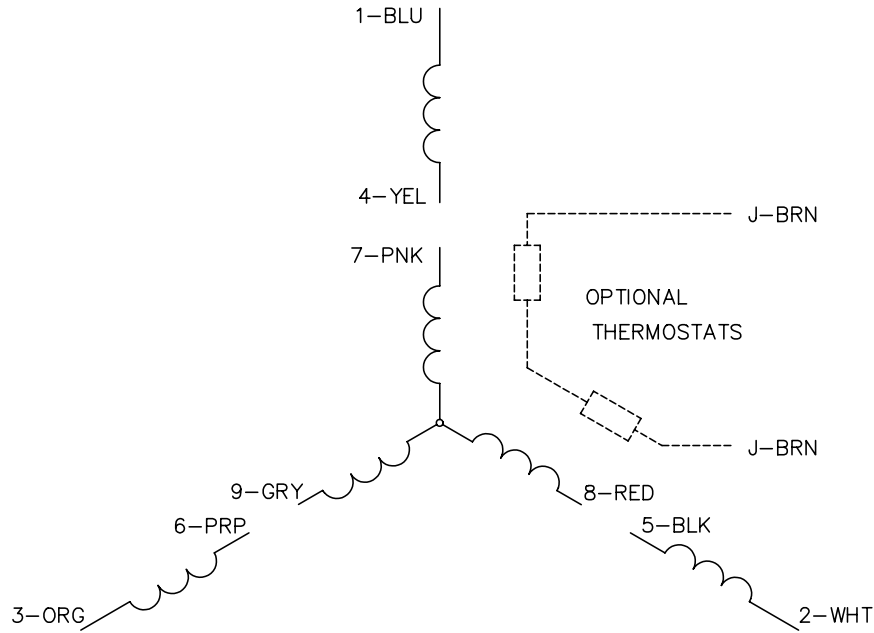
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MTL: -	☉ □	

BALDOR

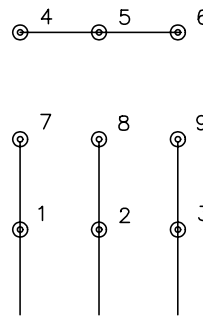
VERT 56C TEFC 35M
 SH 1 of 1

35LYJ302

CD0005

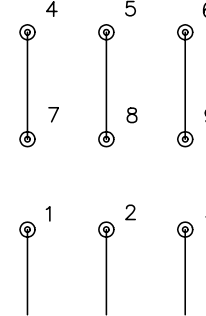


LOW VOLTAGE
(2Y)



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
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005