

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VEM3558T-57**

**2HP,1445RPM,3PH,50HZ,145TC,3528M,TEFC,F1**

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGN364	CD Diagram:	CD0022	Mfg Plant:	
Mech. Spec:	35AA003	Layout:	35LYAA003	Poles:	04	Created Date:	12-22-2015
Base:	N	Eff. Date:	03-13-2018	Leads:	6#18		

Specs			
Catalog Number:	VEM3558T-57	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	145TC	KVA Code:	K
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	2.000 HP @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1500 RPM @ 50 HZ	Motor Lead Quantity/Wire Size:	6 @ 18 AWG
Voltage @ Frequency:	400.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 50 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:	73
	WEEE	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
	CE	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	No Mounting	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End

<b>Blower:</b>	None	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Current @ Voltage:</b>	3.400 A @ 400.0 V	<b>Shaft Rotation:</b>	Reversible
	5.900 A @ 230.0 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 (OLD)
<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>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

Nameplate NP2716L											
CAT NO	VEM3558T-57										
SPEC.	35AA003N364G1										
HP	2							PH	3		
VOLTS	230/400										
AMP	5.9/3.4										
RPM	1445										
FRAME	145TC				HZ	50			I.P.	54	
SER.F.	1.15			CODE	K		DES	B		CL	F
NOM.EFF.	85.3							%		(100%)	
PF	73							USABLE AT 208V			
RATING	40C AMB-CONT						CC				
DE BRG	6205				ODE	6203					
ENCL	TEFC			SN							
BLANK	IE3 - 84.9 (75%) 83.1 (50%)										

Parts List		
Part Number	Description	Quantity
SA312328	SA 35AA003N364G1	1.000 EA
RA299769	RA 35AA003N364G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 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
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	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
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.017 GA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 EA
HA4067A01	PUSH IN DRAIN FITTING (BLACK)	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0034	CONNECTION LABEL	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
NP2716L	ALUM SUPER-E NEMA IE3 UL CSA CC CE	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 54645 - Typical performance - not guaranteed values

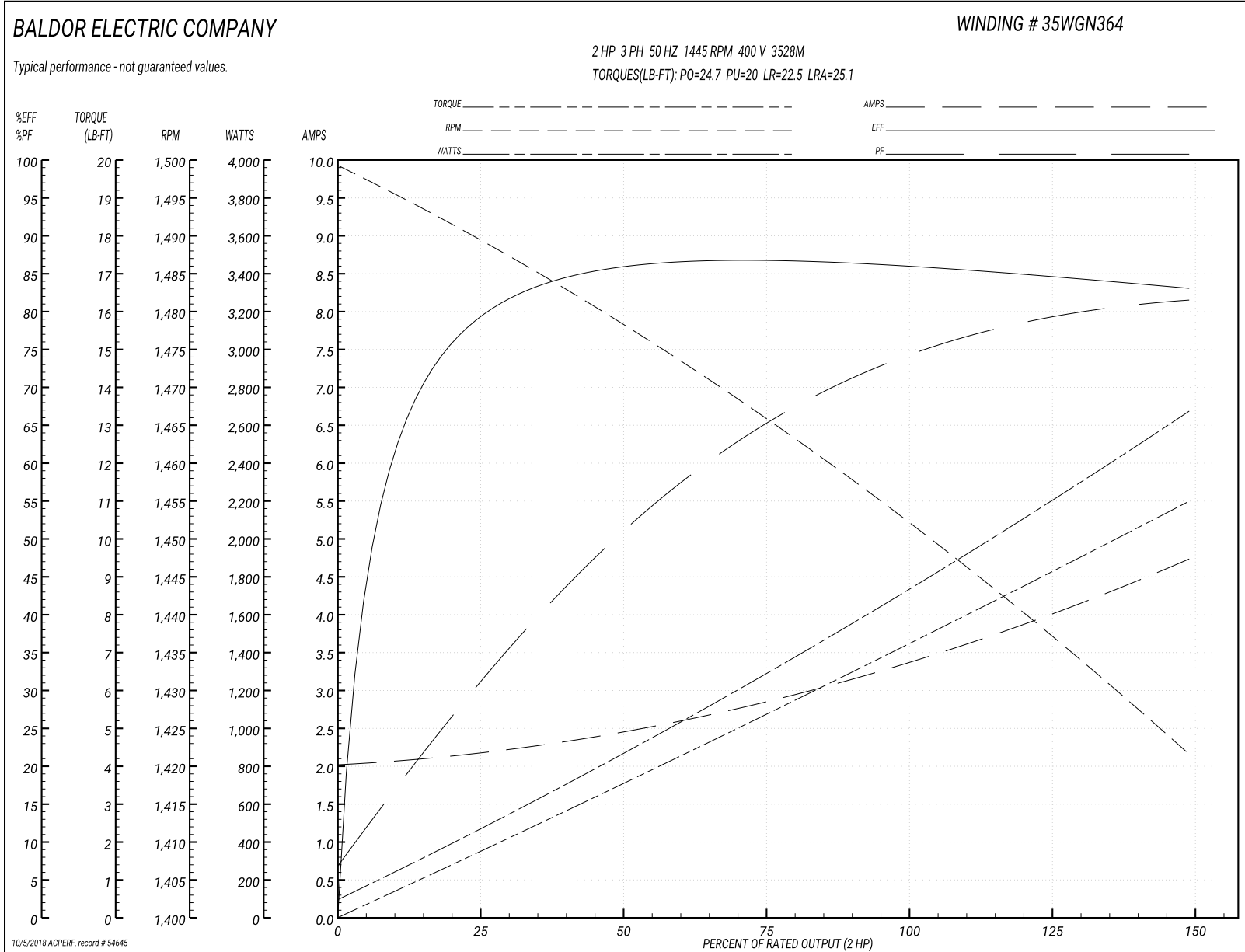
<b>Winding:</b> 35WGN364-R004	<b>Type:</b> 3528M	<b>Enclosure:</b> TEFC
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Nameplate Data				400 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	7.12 LB-FT
Volts	230/400			Start Configuration	direct on line
Full Load Amps	5.9/3.4			Breakdown Torque	24.7 LB-FT
R.P.M.	1445			Pull-up Torque	20 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	22.5 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	25.1 A
Service Factor (S.F.)	1.15			No-load Current	2.05 A
NEMA Nom. Eff.	85.3	Power Factor	73	Line-line Res. @ 25°C	7.21 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps				Temp. Rise @ S.F. Load	81°C
				Locked-rotor Power Factor	56.6
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 400 V, 50 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	51	65	73	79	82	77
Efficiency	78.4	85.5	86.9	86.1	84.9	83	85.4
Speed	1490	1479	1466	1453	1437	1422	1443
Line amperes	2.14	2.41	2.85	3.37	4.01	4.71	3.75

Performance Graph at 400V, 50Hz, 2.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 64312 - Typical performance - not guaranteed values

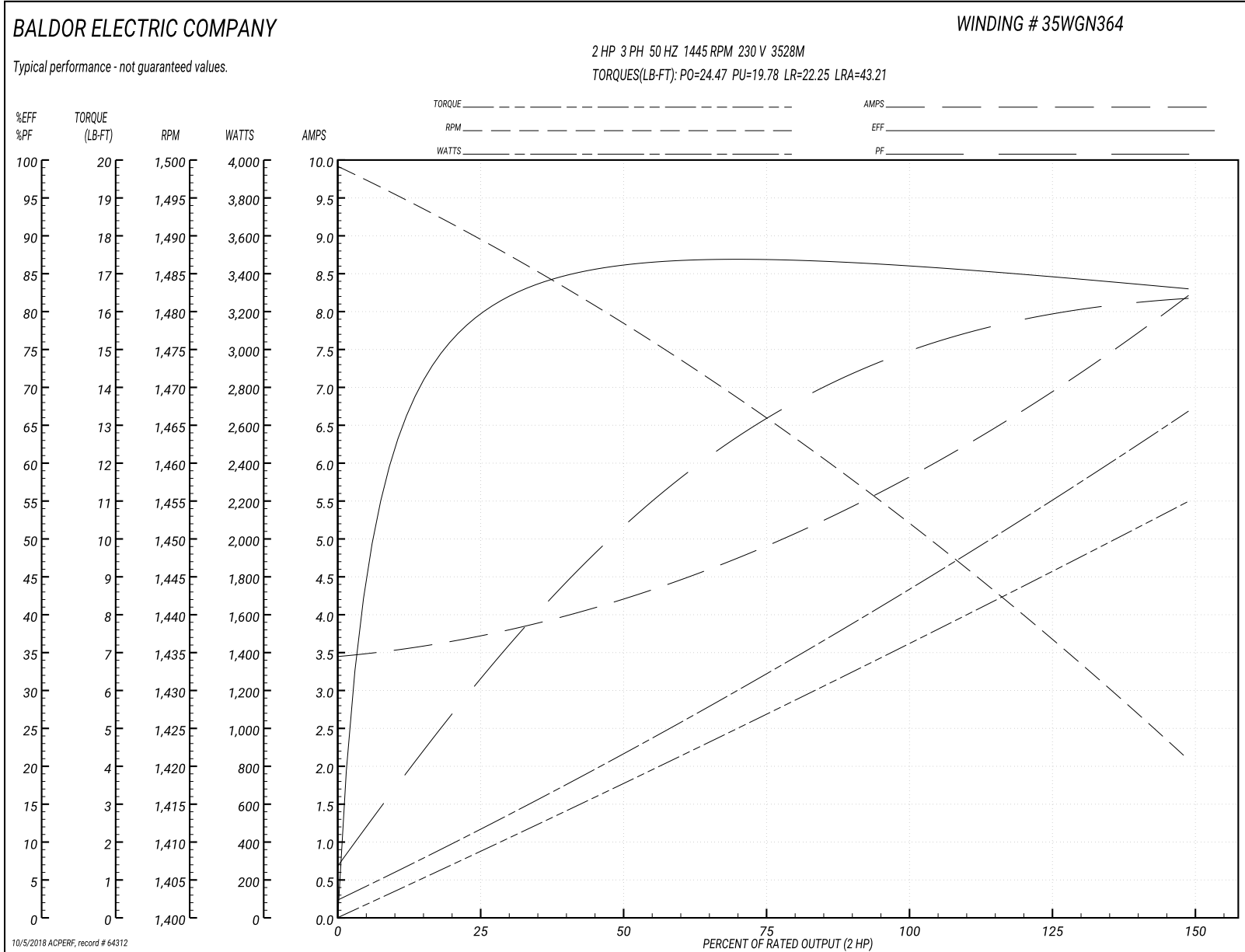
<b>Winding:</b> 35WGN364-R004	<b>Type:</b> 3528M	<b>Enclosure:</b> TEFC
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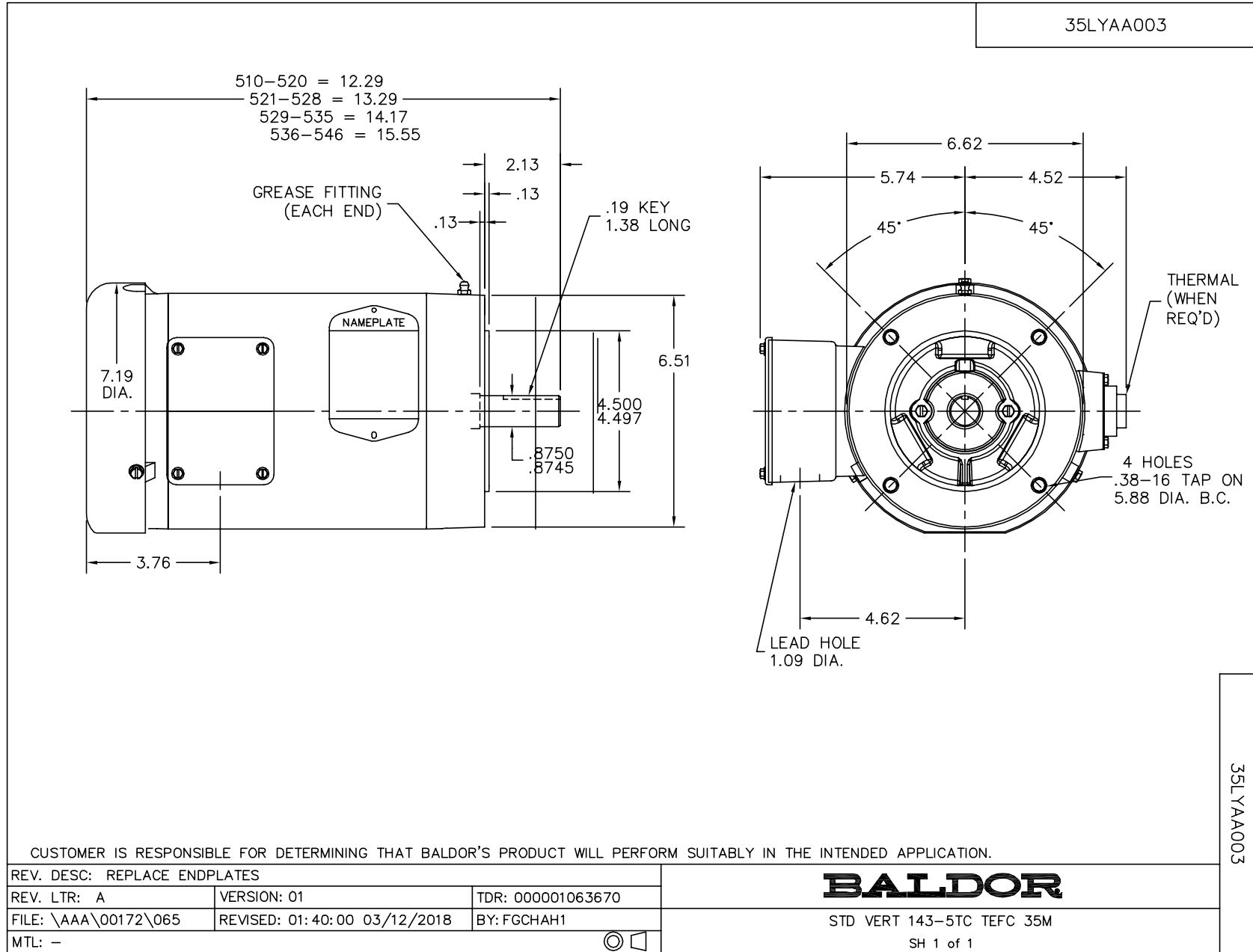
Nameplate Data				230 V, 50 Hz: Low Voltage Connection	
Rated Output (HP)	2			Full Load Torque	7.12 LB-FT
Volts	230/400			Start Configuration	direct on line
Full Load Amps	5.9/3.4			Breakdown Torque	24.47 LB-FT
R.P.M.	1445			Pull-up Torque	19.78 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	22.25 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	43.21 A
Service Factor (S.F.)	1.15			No-load Current	3.5 A
NEMA Nom. Eff.	85.3	Power Factor	73	Line-line Res. @ 25°C	2.4 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps				Temp. Rise @ S.F. Load	82°C
				Locked-rotor Power Factor	56.5
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 230 V, 50 Hz, 2 HP

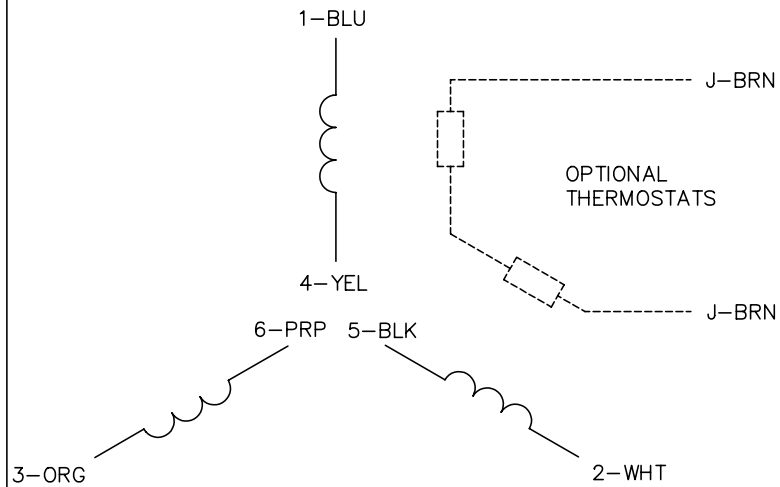
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	52	66	74	79	82	77
Efficiency	78.7	85.7	86.9	86.1	84.8	82.8	85.3
Speed	1490	1479	1466	1453	1437	1421	1443
Line amperes	3.66	4.13	4.9	5.82	6.94	8.17	6.49

Performance Graph at 230V, 50Hz, 2.0HP Typical performance - Not guaranteed values

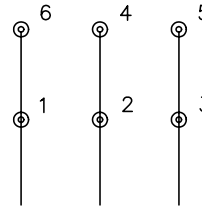




CD0022

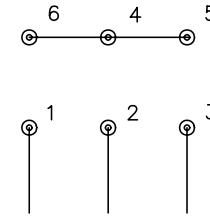


LOW VOLTAGE  
(1D)



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: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022