

BALDOR® • RELIANCE 

Product Information Packet

VEM3559T

3HP,3450RPM,3PH,60HZ,145TC,3532M,TEFC,F1

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGQ060	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35AA003	Layout:	35LYAA003	Poles:	02	Created Date:	04-20-2015
Base:	N	Eff. Date:	06-12-2018	Leads:	9#18		

Specs			
Catalog Number:	VEM3559T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	145TC	KVA Code:	L
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	3.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	3600 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:	3532M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	92
	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:	3.600 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
	7.200 A @ 230.0 V	Shaft Rotation:	Reversible
	7.900 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
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3441LUA	
CAT.NO.	VEM3559T
SPEC	35AA003Q060G1
HP	3
VOLTS	230/460
AMPS	7.2/3.6
RPM	3450
FRAME	145TC
	HZ 60
	PH 3
SF	1.15
	CODE L
	DES B
	CLASS F
NEMA NOM. EFF	86.5
	PF 92
RATING	40C AMB-CONT
CC	010A
	USABLE AT 208V 7.9
ENCL	TEFC
	SER
DE	6205
	ODE 6203
VPWM INVERTER READY	
CT6-60H(10:1)VT3-60H(20:1)	
	50Hz 3HP 190/380V 8.8/4.4A
	SF1.0

Parts List		
Part Number	Description	Quantity
SA299883	SA 35AA003Q060G1	1.000 EA
RA286918	RA 35AA003Q060G1	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
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
PK3083T	STYROFOAM PACKING CRADLE	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	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 # 50261 - Typical performance - not guaranteed values

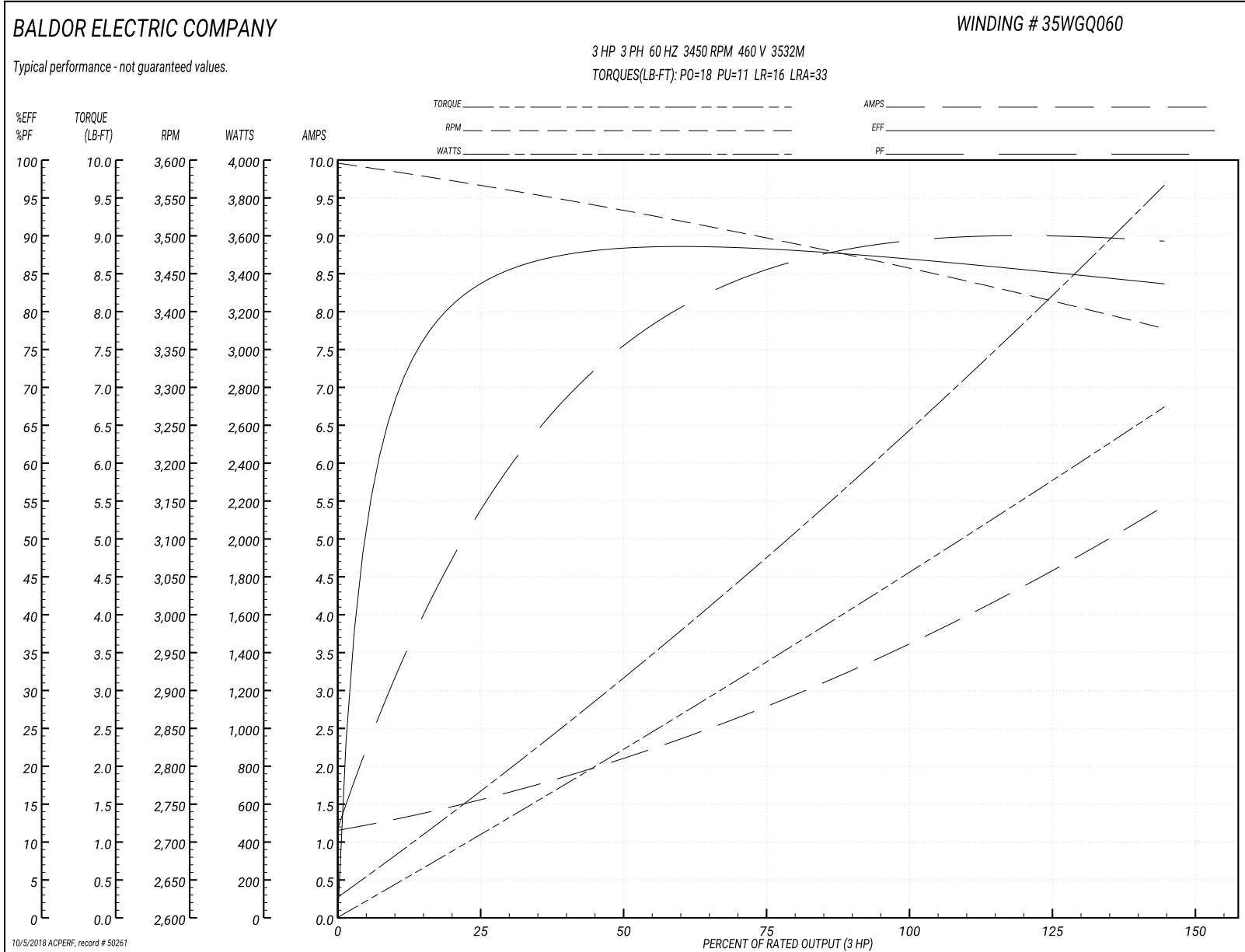
Winding: 35WGQ060-R002	Type: 3532M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	3			Full Load Torque	4.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	7.2/3.6			Breakdown Torque	18 LB-FT
R.P.M.	3450			Pull-up Torque	11 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	16 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	33 A
Service Factor (S.F.)	1.15			No-load Current	1.2 A
NEMA Nom. Eff.	86.5	Power Factor	92	Line-line Res. @ 25°C	4.72 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	61°C
S.F. Amps				Temp. Rise @ S.F. Load	76°C

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	81	88	92	93	94	93
Efficiency	83.7	87.9	88.2	87.2	85.6	83.5	86.2
Speed	3562	3531	3498	3462	3421	3375	3437
Line amperes	1.5	2.1	2.8	3.6	4.5	5.4	4.1

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



AC Induction Motor Performance Data

Record # 59171 - Typical performance - not guaranteed values

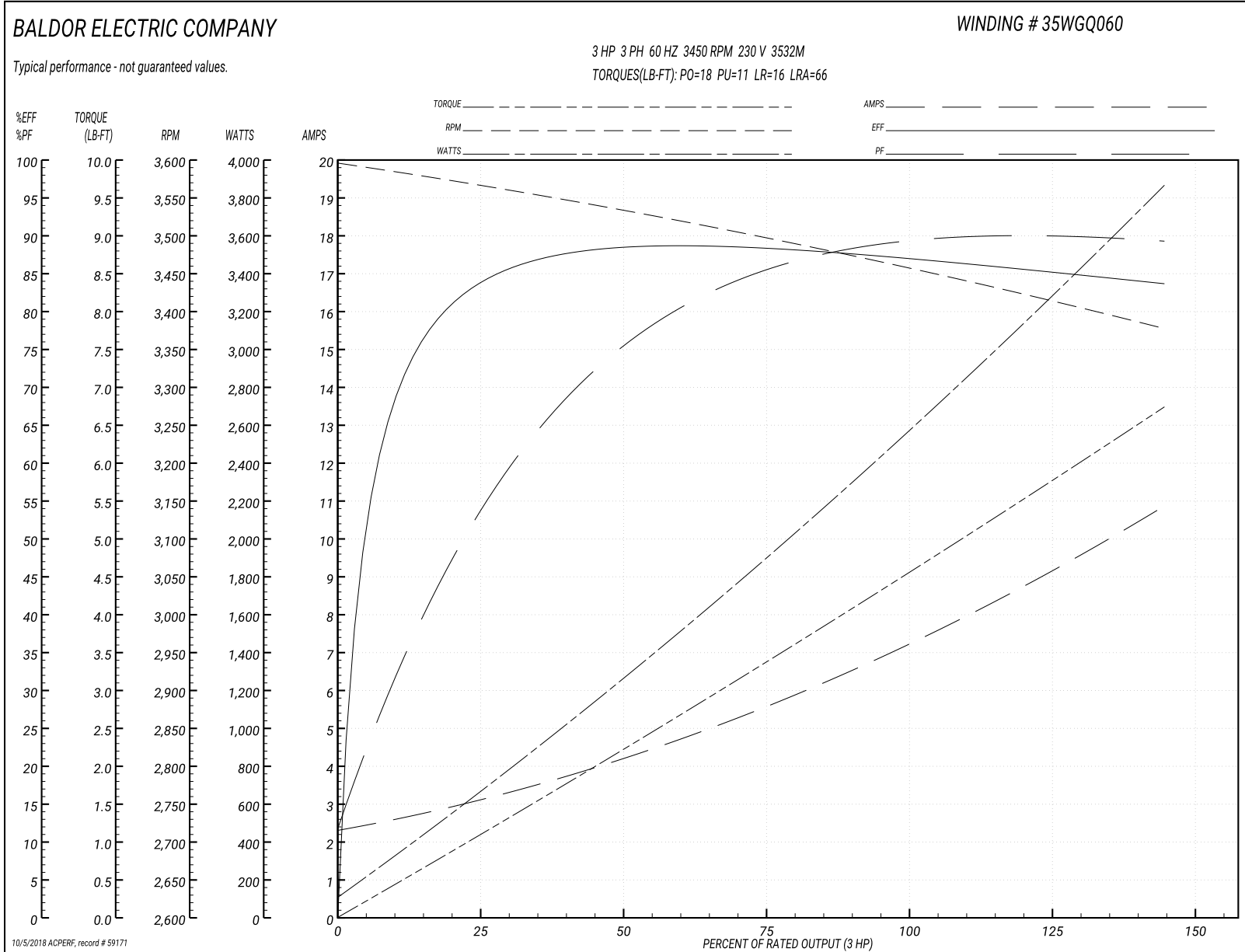
Winding: 35WGQ060-R002	Type: 3532M	Enclosure: TEFC
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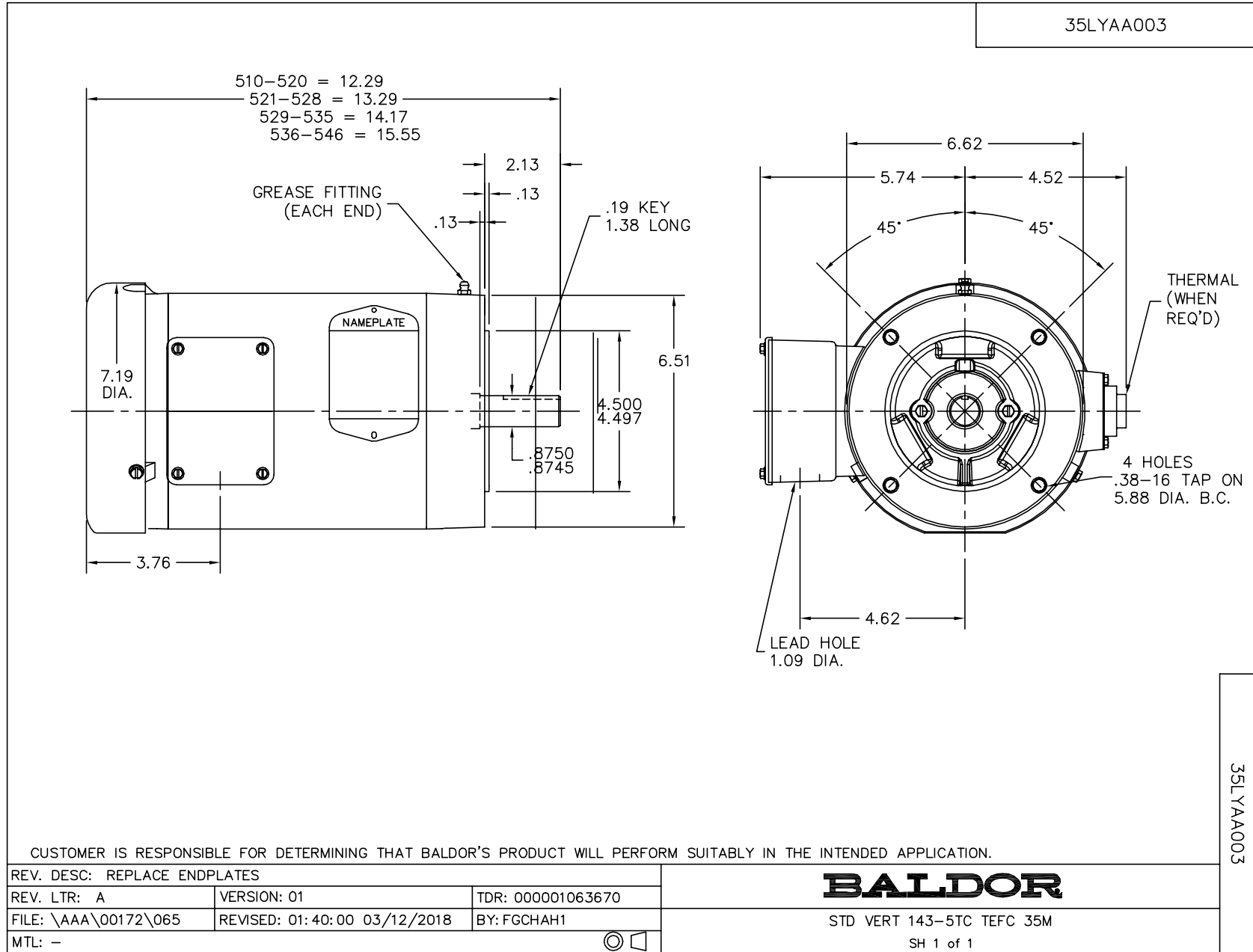
Nameplate Data				230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	3			Full Load Torque	4.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	7.2/3.6			Breakdown Torque	18 LB-FT
R.P.M.	3450			Pull-up Torque	11 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	16 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	66 A
Service Factor (S.F.)	1.15			No-load Current	2.4 A
NEMA Nom. Eff.	86.5	Power Factor	92	Line-line Res. @ 25°C	1.17 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	61°C
S.F. Amps				Temp. Rise @ S.F. Load	73°C
				Locked-rotor Power Factor	47.1
				Rotor inertia	0.0885 LB-FT ²

Load Characteristics 230 V, 60 Hz, 3 HP

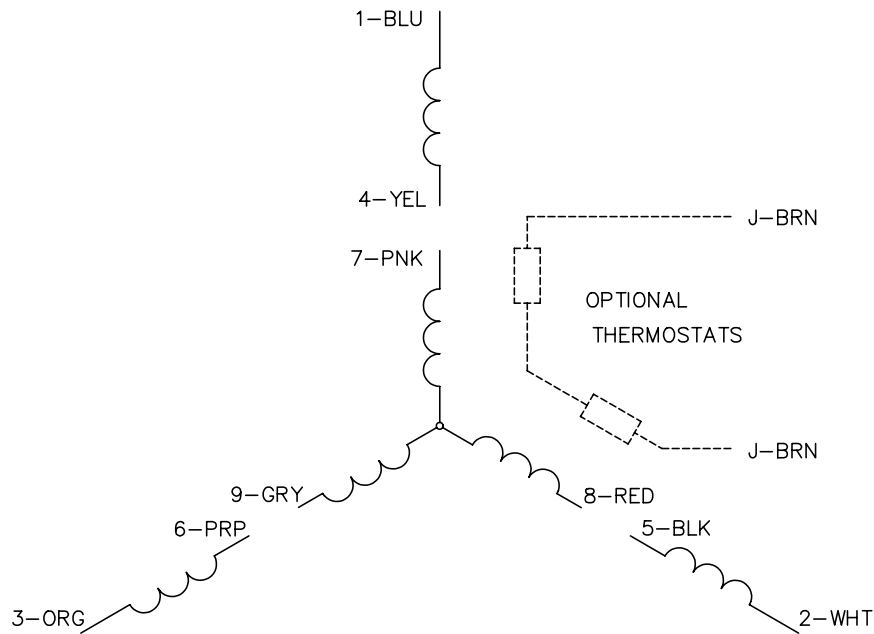
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	77	85	88	89	90	89
Efficiency	84.1	87.9	88.4	87.2	85.7	83.5	86.3
Speed	3562	3531	3498	3462	3421	3375	3437
Line amperes	3	4.2	5.6	7.2	9	10.8	8.28

Performance Graph at 230V, 60Hz, 3.0HP Typical performance - Not guaranteed values

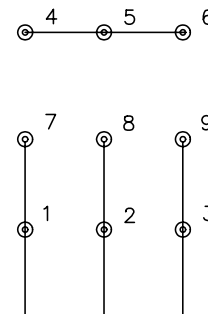




CD0005

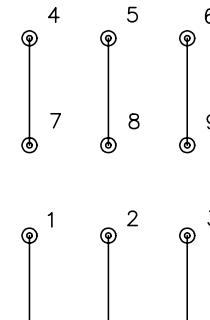


LOW VOLTAGE
(2Y)



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
9000D		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005