

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **VEM3587T**

**2HP,1755RPM,3PH,60HZ,145TC,0535M,TEFC,F1**

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	0528M	Elec. Spec:	05WGX095	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	05C053	Layout:	05LYC053
Frame:	145TC	Mounting:	F1	Poles:	04	Created Date:	10-20-2010
Base:	N	Rotation:	R	Insulation:	F	Eff. Date:	04-19-2016
Leads:	9#18					Replaced By:	
Literature:		Elec. Diagram:					

<b>Nameplate NP3441LUA</b>									
<b>CAT.NO.</b>	VEM3587T								
<b>SPEC.</b>	05C053X095G1								
<b>HP</b>	2								
<b>VOLTS</b>	230/460								
<b>AMP</b>	5.8/2.9								
<b>RPM</b>	1750								
<b>FRAME</b>	145TC			<b>HZ</b>	60			<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	L		<b>DES</b>	B	<b>CL</b>	F
<b>NEMA-NOM-EFF</b>	86.5		<b>PF</b>	75					
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A					<b>USABLE AT 208V</b>	5.8		
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>ENCL</b>	TEFC		<b>SN</b>						
<b>VPWM INVERTER READY</b>									
<b>CT6-60H(10:1)VT3-60H(20:1</b>									
50Hz 2HP 190/380V 6.6/3.3A									SF1.0

Parts List		
Part Number	Description	Quantity
SA204973	SA 05C053X095G1	1.000 EA
RA192221	RA 05C053X095G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
06CB3000	BALDOR CONDUIT BOX CAST	1.000 EA
06GS1000	GASKET,CONDUIT BOX	1.000 EA
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #8 SCREW	1.000 EA
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03SP	WAVY WASHER (W1543-017)	1.000 EA
35EP1329A01	PU EP ENCL 143-5TC 205 BRG W/GRSR & STD	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
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A02	IEC FH W/GREASER - W/PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
06CB3500	BALDOR CONDUIT BOX LID	1.000 EA
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 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,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA

**AC Induction Motor Performance Data**

Record # 32606 - Typical performance - not guaranteed values

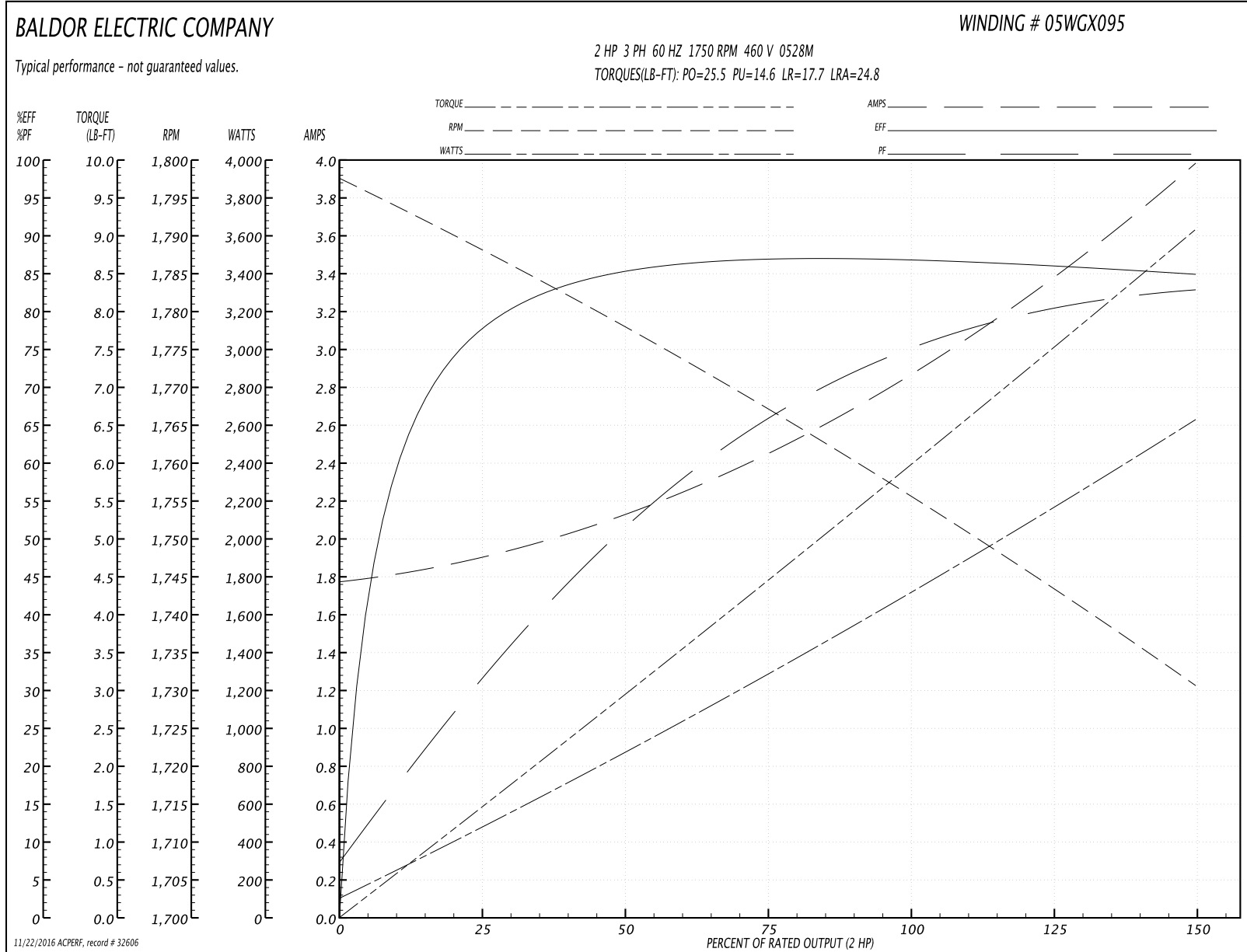
<b>Winding:</b> 05WGX095-R001	<b>Type:</b> 0528M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	6.01 LB-FT
Volts	208-230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	25.5 LB-FT
R.P.M.	1750			Pull-up Torque	14.6 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	17.7 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	24.8 A
Service Factor (S.F.)	1.15			No-load Current	1.8 A
NEMA Nom. Eff.	86.5	Power Factor	75	Line-line Res. @ 25°C	8.2285 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	50°C
S.F. Amps				Temp. Rise @ S.F. Load	59°C
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	52	66	75	80	83	78
Efficiency	77.5	85.1	86.9	86.9	86.2	84.8	86.5
Speed	1788	1777	1767	1756	1744	1730	1749
Line amperes	1.87	2.11	2.47	2.9	3.39	3.97	3.19

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



**AC Induction Motor Performance Data**

Record # 57059 - Typical performance - not guaranteed values

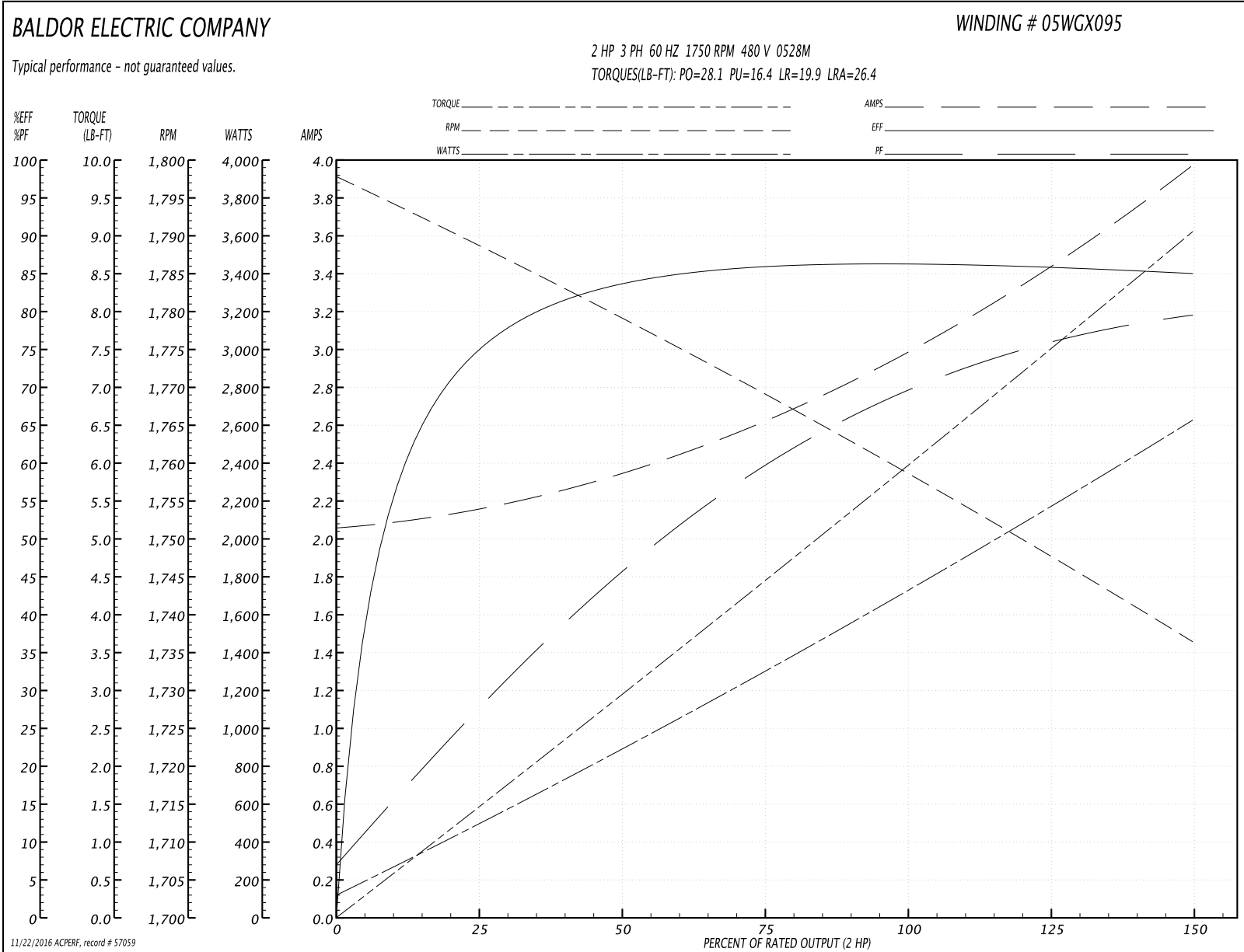
<b>Winding:</b> 05WGX095-RXXX	<b>Type:</b> 0528M	<b>Enclosure:</b> TEFC
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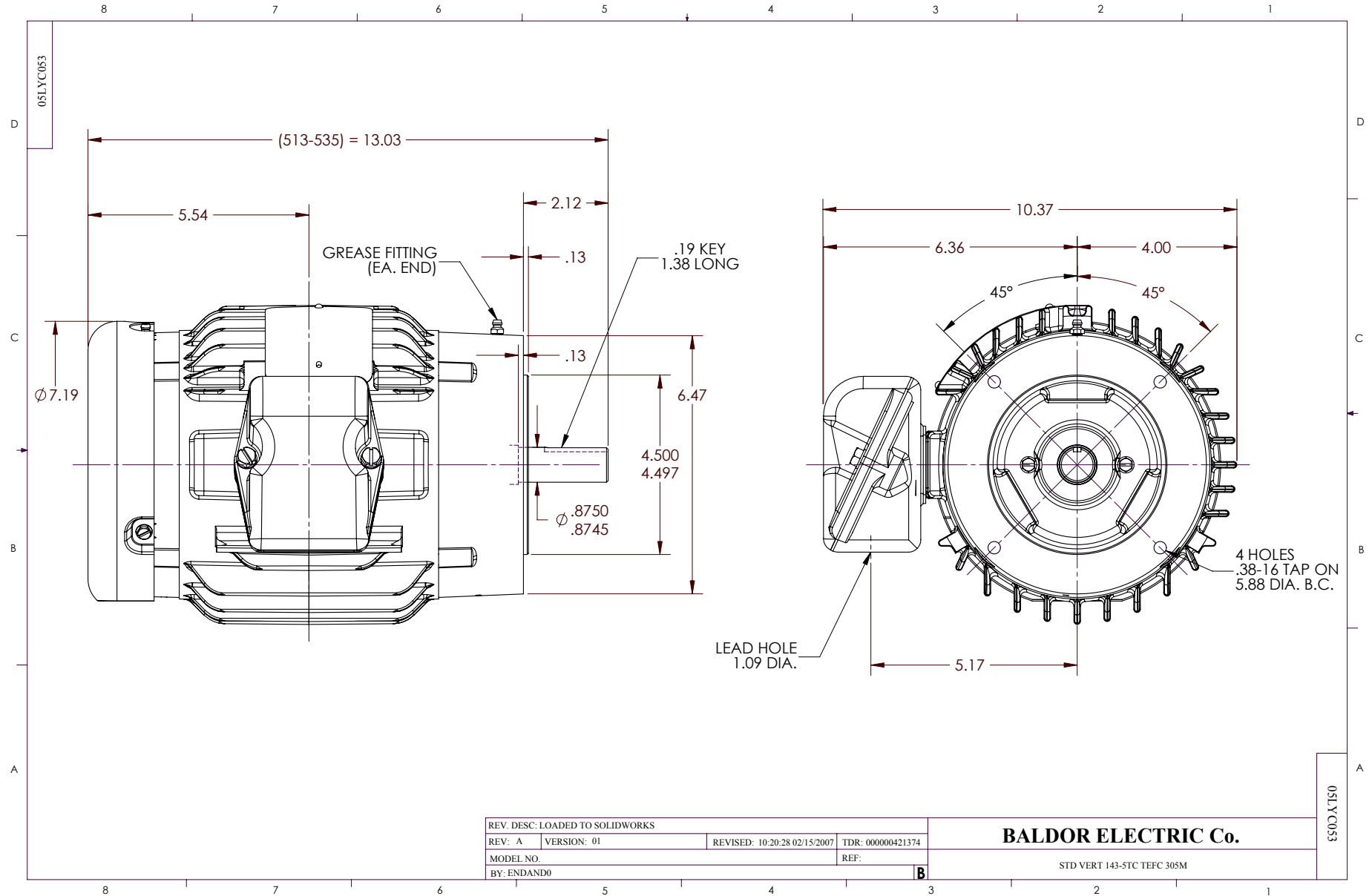
Nameplate Data				480 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2			Full Load Torque	6 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	5.8/2.9			Breakdown Torque	28.1 LB-FT
R.P.M.	1750			Pull-up Torque	16.4 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	19.9 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	26.4 A
Service Factor (S.F.)	1.15			No-load Current	2.08 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	52°C
S.F. Amps				Temp. Rise @ S.F. Load	61°C
				Locked-rotor Power Factor	53.3
				Rotor inertia	0.165 LB-FT <sup>2</sup>

Load Characteristics 480 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	46	60	69	76	80	73
Efficiency	74.7	83.7	85.8	86.5	86	85	86.2
Speed	1789	1778	1769	1759	1748	1736	1752
Line amperes	2.13	2.33	2.64	3.01	3.45	3.96	3.27

Performance Graph at 480V, 60Hz, 2.0HP Typical performance - Not guaranteed values

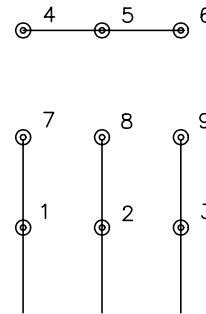




CD0005

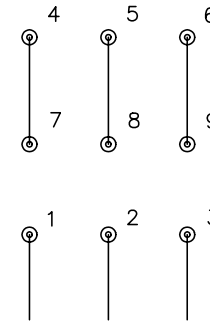


LOW VOLTAGE  
(2Y)



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
900003		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005