

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VENM3581T**

**1HP,1745RPM,3PH,60HZ,143TC,0524M,TENV,F1**

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGX129	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	05E124	Layout:	05LYE124	Poles:	04	Created Date:	08-11-2010
Base:	N	Eff. Date:	07-19-2017	Leads:	9#18		

Specs			
Catalog Number:	VENM3581T	Heater Indicator:	No Heater
Enclosure:	TENV	Insulation Class:	F
Frame:	143TC	Inverter Code:	Not Inverter
Frame Material:	Iron	KVA Code:	M
Output @ Frequency:	1.000 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	0524M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	76
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	No Mounting	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	1.450 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	2.900 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	3.000 A @ 208.0 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>Winding Thermal 2:</b>	None

<b>Nameplate NP3441LUA</b>										
<b>CAT.NO.</b>	VENM3581T									
<b>SPEC</b>	05E124X129G1									
<b>HP</b>	1									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	2.9/1.45									
<b>RPM</b>	1745									
<b>FRAME</b>	143TC				<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	M	<b>DES</b>	B		<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	85.5		<b>PF</b>	76						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A			<b>USABLE AT 208V</b>						3
<b>ENCL</b>	TENV		<b>SER</b>							
<b>DE</b>	6205			<b>ODE</b>	6203					
<b>VPWM INVERTER READY</b>										
<b>CT6-60H(10:1)VT3-60H(20:1</b>	50Hz 1HP 190/380V 3.4/1.7A									
										SF1.0

Parts List		
Part Number	Description	Quantity
SA201294	SA 05E124X129G1	1.000 EA
RA188595	RA 05E124X129G1	1.000 EA
06CB1000A03	CONDUIT BOX, MACH	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
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
35EP1100A14	FRONT ENDPLATE TENV 35 FRAME W/GREASER	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP1300A35	PU ENDPLATE, MACH	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
HA3100A47	THRUBOLT 10-32 X 7.625	4.000 EA
06CB1500A01	CONDUIT BOX LID, MACH	1.000 EA
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 EA
10XN2520A12	O1/4-20X 3/4 HEX HEAD CAP	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 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
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	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) 5/18	1.000 EA

**AC Induction Motor Performance Data**

Record # 32100 - Typical performance - not guaranteed values

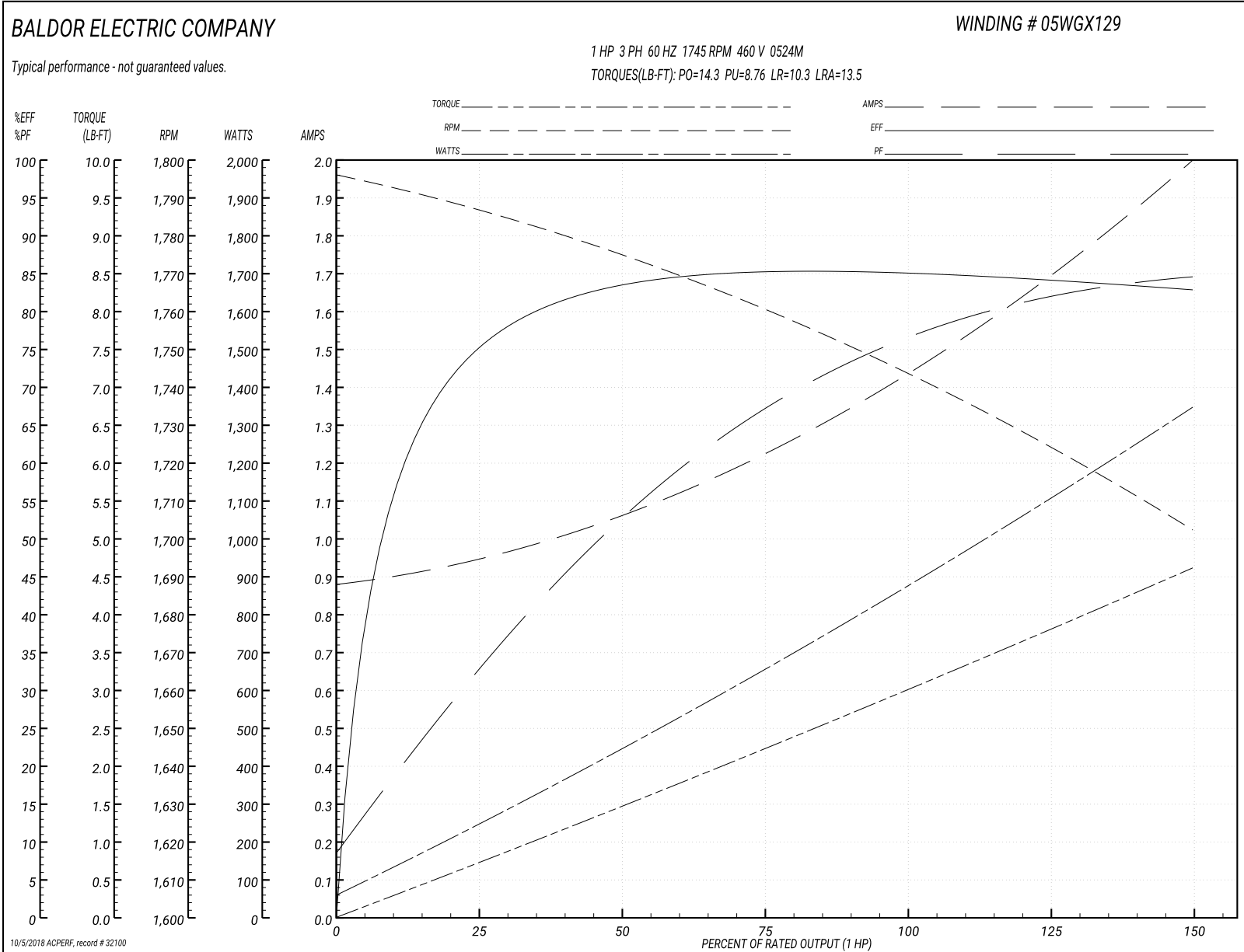
<b>Winding:</b> 05WGX129-R014	<b>Type:</b> 0524M	<b>Enclosure:</b> TENV
-------------------------------	--------------------	------------------------

Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	3.02 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	2.9/1.45			Breakdown Torque	14.3 LB-FT
R.P.M.	1745			Pull-up Torque	8.76 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	10.3 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	13.5 A
Service Factor (S.F.)	1.15			No-load Current	0.89 A
NEMA Nom. Eff.	85.5	Power Factor	76	Line-line Res. @ 25°C	15.922 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	38°C
S.F. Amps				Temp. Rise @ S.F. Load	45°C

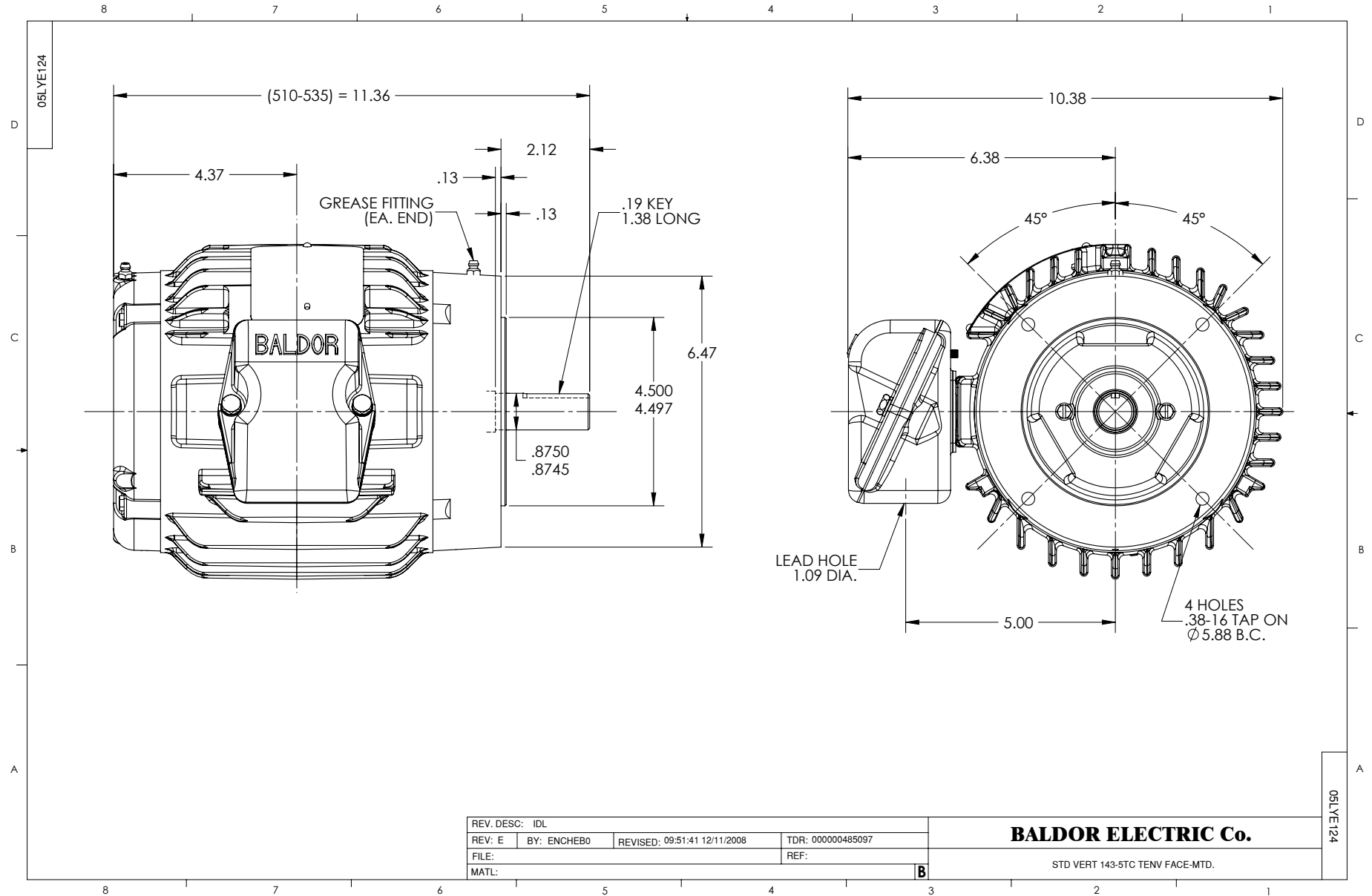
Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	67	76	81	85	79
Efficiency	74.6	83.4	85.4	85.5	84.7	82.6	85
Speed	1783.9	1773.9	1759.9	1743.9	1730.8	1698.3	1736
Line amperes	0.935	1.05	1.22	1.45	1.7	1.99	1.6

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values







CD0005

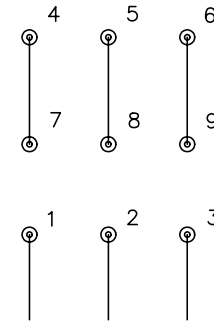


LOW VOLTAGE  
(2Y)



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005