

BALDOR® • RELIANCE 

Product Information Packet

VENC P83581 T-4

1HP, 1765RPM, 3PH, 60HZ, 143TC, 0524M, TENV, F1

Part Detail							
Revision:	X	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGW751	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	05F158	Layout:	05LYF158	Poles:	04	Created Date:	11-26-2007
Base:	N	Eff. Date:	01-17-2020	Leads:	3#18		

Specs			
Catalog Number:	VENC83581T-4	Inverter Code:	Inverter Ready
Enclosure:	TENV	KVA Code:	N
Frame:	143TC	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	1.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP A,B,C,D	Motor Type:	0524M
XP Division:	Division II	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	70
	CSA EEV	Product Family:	Chem Process S/P 32-8 IEEE 841
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	No Mounting	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Constant Torque Speed Range:	1.2	Shaft Rotation:	Reversible

Current @ Voltage:	1.500 A @ 460.0 V	Shaft Slinger Indicator:	Shaft 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
Insulation Class:	F	XP Temp Code:	T4

Nameplate NP3235E											
CAT.NO.	VENC83581T-4										
SPEC.	05F158W751G1										
HP	1	TE						IP	56		
VOLTS	460										
AMPS	1.5										
R.P.M.	1765										
FRAME	143TC						HZ	60	PH	3	
SER.F.	1.15			CODE	N	DES.	B			CLASS	F
RATING	40C AMB-CONT										
SN											
DE	6205				ODE	6205					
NEMA NOM. EFF.	87.5				P.F.	70					
GUAR. MIN. EFF.	85.5				CC	010A					
T. CODE	T4				TEMP=	135					

Nameplate NP3186E		
SPEC.	05F158W751G1	
D.E. BRG.	25BC02X30X	
O.D.E. BRG.	25BC02XP30X	
GREASE	POLYREX EM	
WEIGHT	63	# OF ROTOR BARS 28
RPM MAX	2700	MAX. KVAR .46
BLANK		# OF STATOR SLOTS 36
INV. TYPE	PWM	
T=	135	
C HP FR	60	C HP TO 90
CT HZ FROM	1.2	CT HZ TO 60
VT HZ FROM	0-	VT HZ TO 60
HTR-VOLTS	N/A	HTR-AMPS N/A
HTR-WATTS		MAX. SPACE HEATER TEMP. N/A

Parts List		
Part Number	Description	Quantity
SA166082	SA 05F158W751G1	1.000 EA
RA154463	RA 05F158W751G1	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
06CB1001A01G	CONDUIT BOX, MACH GRAY	1.000 EA
RM1016	LEAD SEPARATOR GASKET - 305/306 C.P.MOTO	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
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
35EP1102B48G	FREP TENV 205 BRG W/GRSR,REL,GRD,.25-20	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 EA
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
35EP1329A32G	EP ENCL 205 BRG,GRSR,RLF,NPT DRAIN,INPRO	1.000 EA
HW4601A22	INPRO SEAL, 205 BRG, VBX	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	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

Parts List (continued)		
Part Number	Description	Quantity
06CB1503A01G	LIPPED CONDUIT BOX LID, MACH GRAY EPOXY	1.000 EA
06GS1009	GASKET, KOBX LID, 1/8" THICK BLACK NEOPR	1.000 EA
10XN2520A12	1/4-20 X 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
MJ5004A59	ADHESIVE LOCTITE #401 SURFACE INSENSITIV	0.010 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
MJ1000A73	INPRO P-80 ASSEMBLY LUB./ 1 QT. CONTAIN	0.001 QT
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LT0019A00	MOTOR NO-LOAD PERFORMANCE DATA SHEET	1.000 EA
WD1000D21	TRM,T&B #B71M,RING,18-14,.25,NON-INSL	3.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.022 GA
LB1119N	WARNING LABEL	1.000 EA
LB1449	DIV-2/NEC WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3235E	SS IEEE841 DIV-2 UL CSA-C US EEV PREM	1.000 EA
NP3186E	SS IEEE841 INV AUX DATA INFORMATION	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

AC Induction Motor Performance Data

Record # 61030 - Typical performance - not guaranteed values

Winding: 05WGW751-R098	Type: 0524M	Enclosure: TENV
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Nameplate Data				460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	1			Full Load Torque	2.983 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	1.5			Breakdown Torque	15.1 LB-FT
R.P.M.	1765			Pull-up Torque	9.63 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	10.8 LB-FT
NEMA Design Code	B	KVA Code	N	Starting Current	15 A
Service Factor (S.F.)	1.15			No-load Current	1.08 A
NEMA Nom. Eff.	87.5	Power Factor	70	Line-line Res. @ 25°C	11.599 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	59°C
S.F. Amps				Temp. Rise @ S.F. Load	66°C
				Locked-rotor Power Factor	48.9

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	47	59	68	75	79	72
Efficiency	70.8	81.2	84.6	85.9	86.2	85.7	86.1
Speed	1789.8	1781.4	1773.1	1763.3	1753.7	1742.9	1758
Line amperes	1.13	1.24	1.39	1.6	1.81	2.08	1.73

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

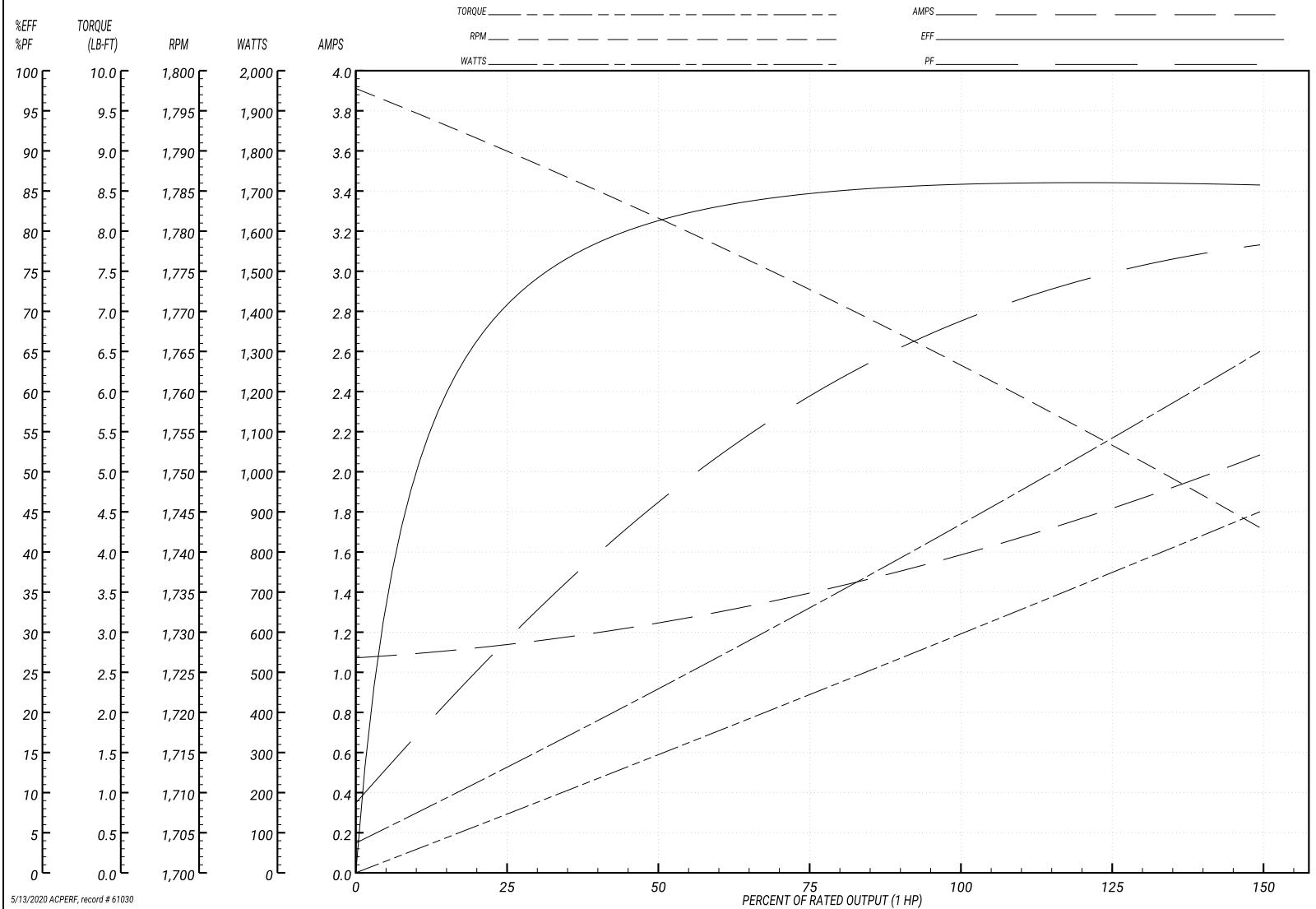
ABB Motors and Mechanical Inc.

WINDING # 05WGW751

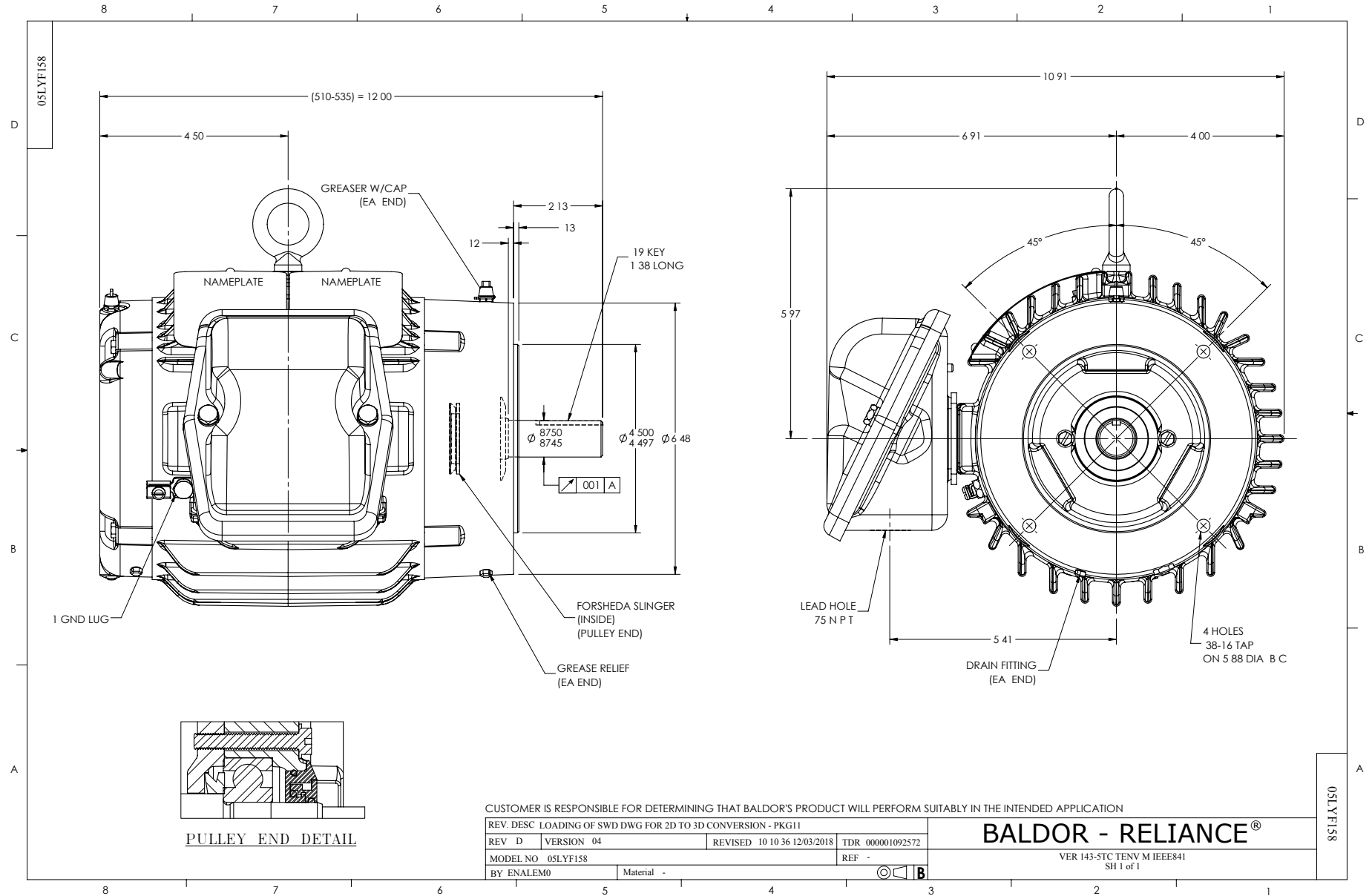
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1765 RPM 460 V 0524M

TORQUES(LB-FT): PO=15.1 PU=9.63 LR=10.8 LRA=15



5/13/2020 ACPERF, record # 61030



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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