

BALDOR® • RELIANCE 

Product Information Packet

VECP83583T-4

1.5HP,3450RPM,3PH,60HZ,143TC,0524M,TEFC

Part Detail							
Revision:	AM	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGW176	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	05F161	Layout:	05LYF161	Poles:	02	Created Date:	11-27-2007
Base:	N	Eff. Date:	10-04-2018	Leads:	3#18 15" LEAD LENGTH,0#0 Dbl Dip & Bake,0#0 Phase InsulaY		

Specs			
Catalog Number:	VECP83583T-4	KVA Code:	M
Enclosure:	TEFC	Lifting Lugs:	Standard Lifting Lugs
Frame:	143TC	Locked Bearing Indicator:	Locked Bearing
Frame Material:	Iron	Motor Lead Quantity/Wire Size:	@ 0 AWG
Output @ Frequency:	1.500 HP @ 60 HZ		3 @ 18 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Termination:	Ring Terminals
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:	83
	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:	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
Constant Torque Speed Range:	6	Shaft Ground Indicator:	No Shaft Grounding

Current @ Voltage:	2.000 A @ 460.0 V	Shaft Rotation:	Reversible
Design Code:	B	Shaft Slinger Indicator:	No Slinger
Drip Cover:	Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	NONE (OLD)
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None
Inverter Code:	Inverter Ready	XP Temp Code:	T4

Nameplate NP3235E											
CAT.NO.	VECP83583T-4										
SPEC.	05F161W176										
HP	1.5	TE					IP	56			
VOLTS	460										
AMP	2										
RPM	3450										
FRAME	143TC					HZ	60				
SER.F.	1.15			CODE	M	DES	B			PH	3
RATING	40C AMB-CONT									CL	F
SN											
DE	6205					ODE	6205				
NEMA-NOM-EFF	85.5					PF	83				
G.MIN.EFF	82.5					CC	010A				
T. CODE	T4					T=	135				

Nameplate NP3186E

SPEC.	05F161W176		
D.E. BRG.	25BC02X30X		
O.D.E. BRG.	25BC02X30X		
GREASE	POLYREX EM		
WEIGHT	58	# OF ROTOR BARS	20
RPM MAX	5400	MAX. KVAR	.25
BLANK			
INV. TYPE	PWM		# OF STATOR SLOTS 24
T=	135		
C HP FR	60	C HP TO	90
CT HZ FROM	6	CT HZ TO	60
VT HZ FROM	3	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
SA165925	SA 05F161W176	1.000 EA
RA154313	RA 05F161W176	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 TERMINAL	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
05EP1100A03G	FREP TEFC 203,GRSR,RLF,NO DRAIN	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
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
35EP1329A33G	EP ENCL,GRSR,RLF,(2).25-28 DRAINS, 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	2.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH1000A27G	35FH1000A27 W/GRAY FLUIDIZ	1.000 EA
10XN2520A16	1/4-20 X 1 HEX HEAD CAP SCR, ZINC PLATED	3.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 EA
35FH4500A01	DRIP COVER, STAMPED X - W/PRIMED	1.000 EA
HA2001A13	35-10103 SPACER WELKER	3.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	3.000 EA
WD4100A03	DE-750 HEYCO PLUG 62MP0750 MICRO PLASTIC	1.000 EA
06CB1503A01G	LIPPED CONDUIT BOX LID, MACH GRAY EPOXY	1.000 EA
06GS1009	GASKET, KOBX LID, 1/8" THICK BLACK NEOPR	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
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. CONTAINE	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, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA

Product Information Packet: VECP83583T-4 - 1.5HP,3450RPM,3PH,60HZ,143TC,0524M,TEFC

MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN	0.017 GA
MG1500Y02	WILKOPON PRIMER YELLOW	0.017 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
36PA1001	PKG GRP, PRINT PK1017A06	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 # 47131 - Typical performance - not guaranteed values

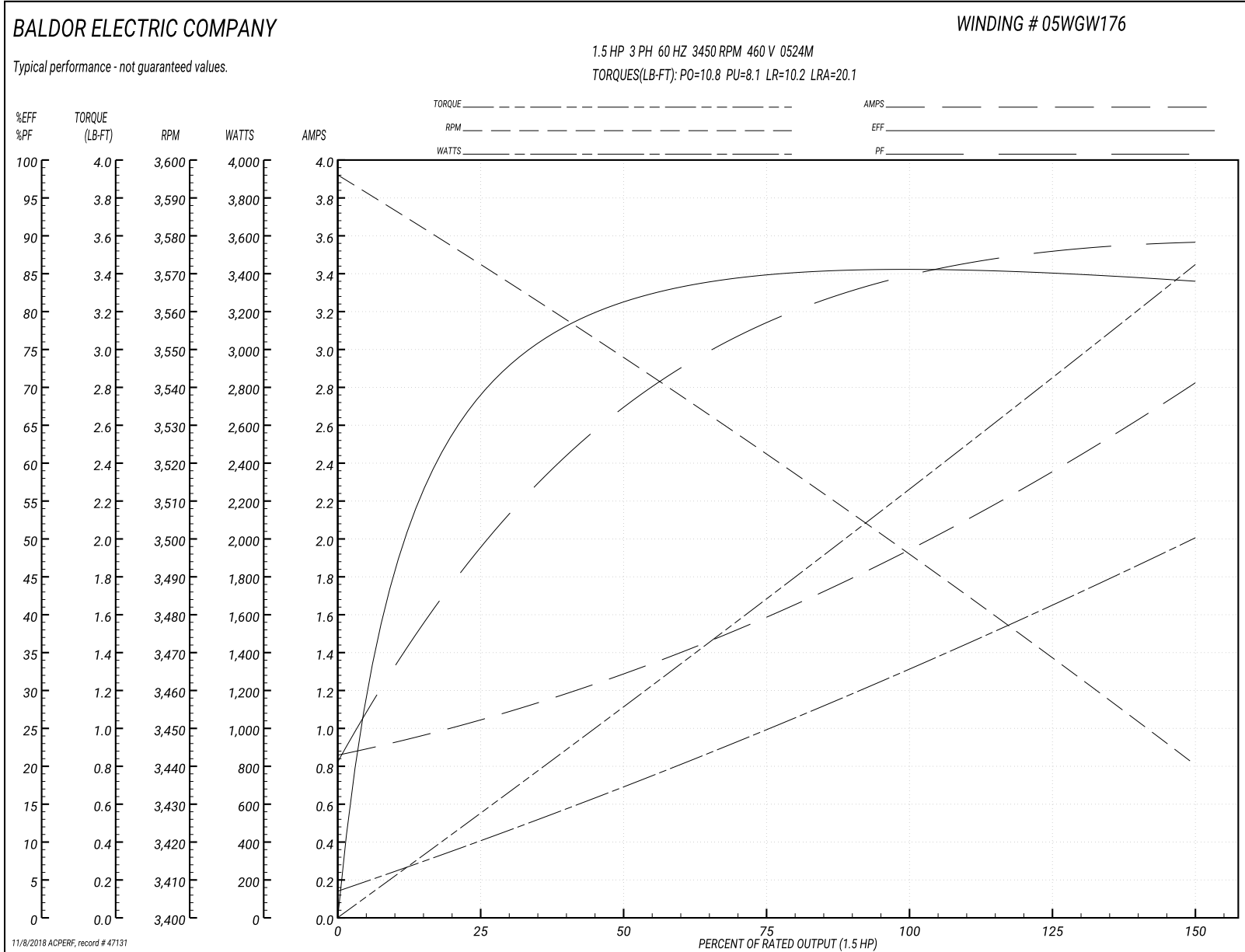
Winding: 05WGW176-R028	Type: 0524M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	1.5			Full Load Torque	2.3 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	2			Breakdown Torque	10.8 LB-FT
R.P.M.	3450			Pull-up Torque	8.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	10.2 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	20.1 A
Service Factor (S.F.)	1.15			No-load Current	0.88 A
NEMA Nom. Eff.	85.5	Power Factor	83	Line-line Res. @ 25°C	8.38 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	32°C
S.F. Amps				Temp. Rise @ S.F. Load	37°C
				Locked-rotor Power Factor	50.3
				Rotor inertia	0.0664 LB-FT ²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	69	80	84	87	90	85
Efficiency	71.9	81.3	84.5	85.5	85.1	84	85.2
Speed	3569	3545	3521	3496	3468	3439	3479
Line amperes	1.03	1.29	1.6	2	2.4	2.8	2.25

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 66931 - Typical performance - not guaranteed values

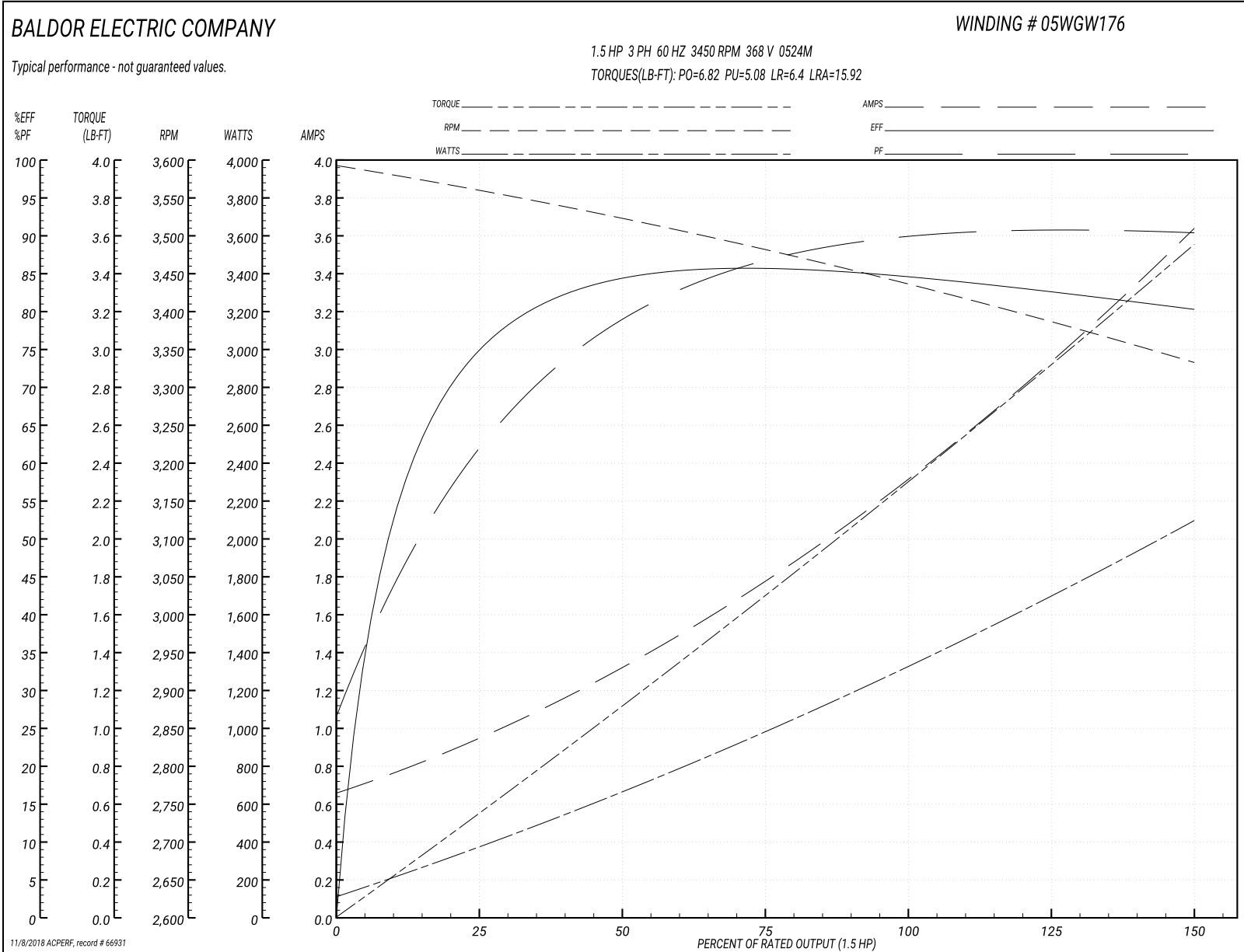
Winding: 05WGW176-R028	Type: 0524M	Enclosure: TEFC
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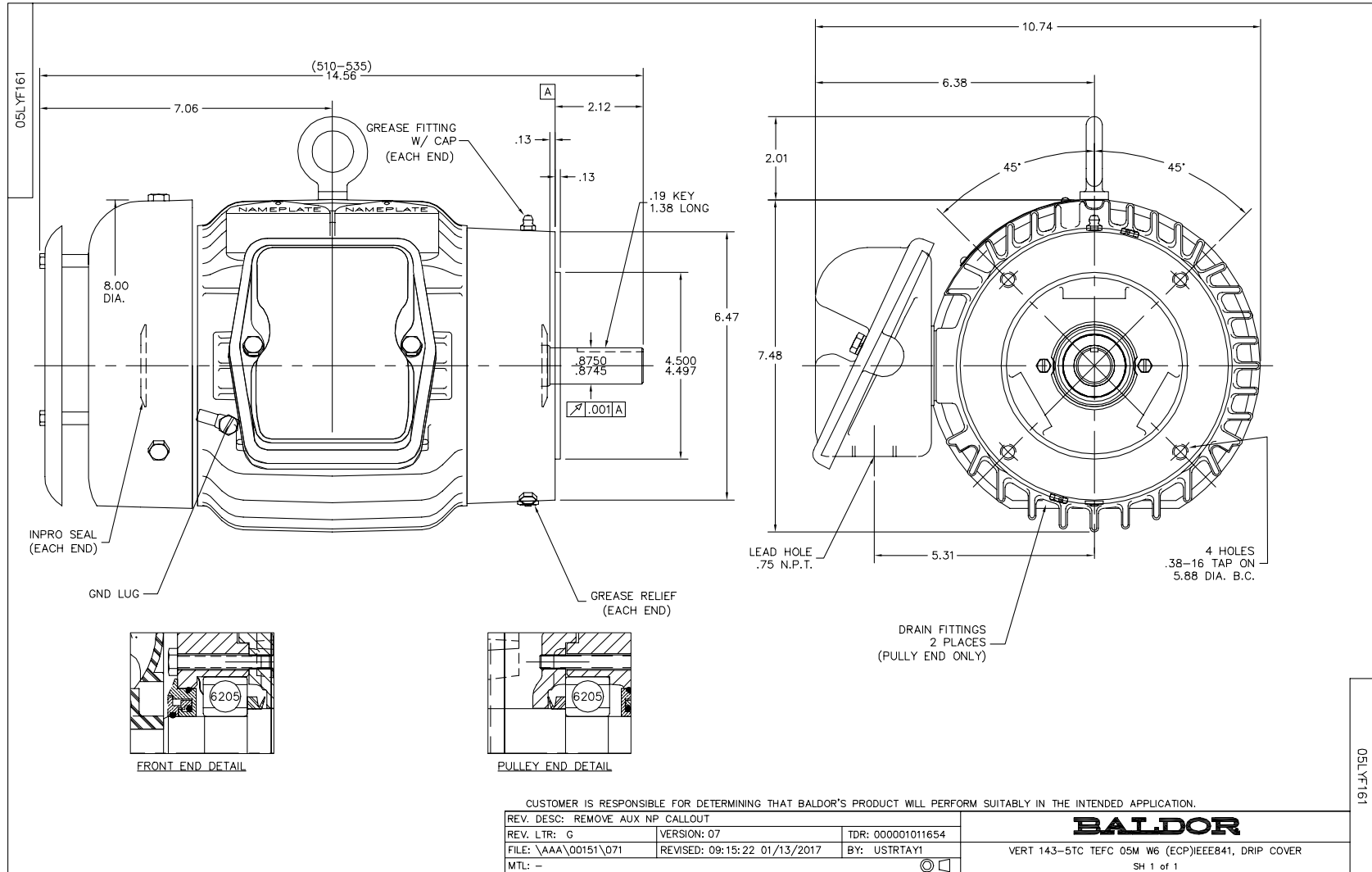
Nameplate Data				368 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	1.5			Full Load Torque	2.34 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	2			Breakdown Torque	6.82 LB-FT
R.P.M.	3450			Pull-up Torque	5.08 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	6.4 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	15.92 A
Service Factor (S.F.)	1.15			No-load Current	0.68 A
NEMA Nom. Eff.	85.5	Power Factor	83	Line-line Res. @ 25°C	8.38 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	35°C
S.F. Amps				Temp. Rise @ S.F. Load	44°C
				Locked-rotor Power Factor	50.3
				Rotor inertia	0.0664 LB-FT ²

Load Characteristics 368 V, 60 Hz, 1.5 HP

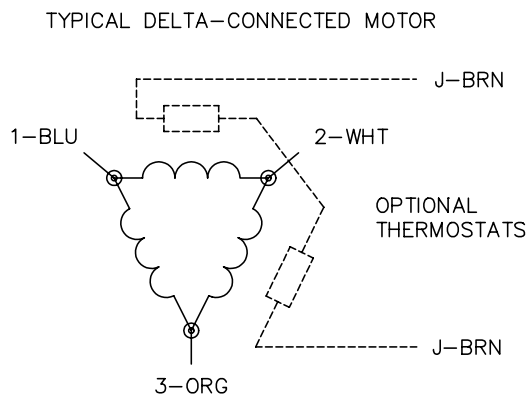
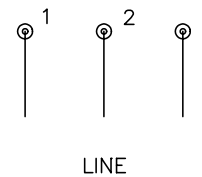
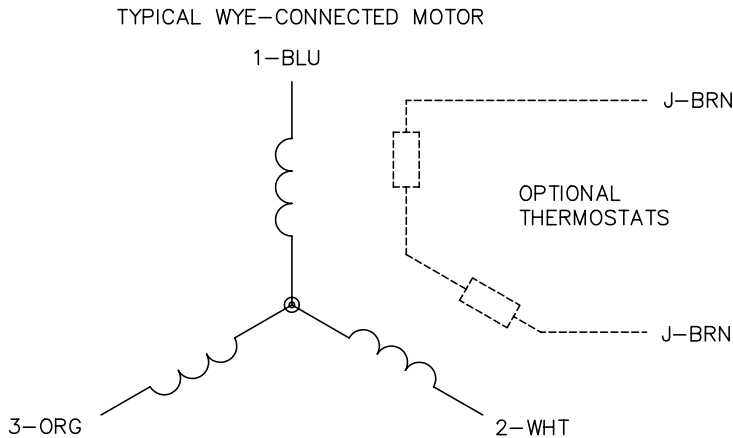
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	81	88	89	90	91	90
Efficiency	77.2	84	85.2	84.7	82.7	80.2	83.5
Speed	3555	3518	3479	3436	3387	3330	3407
Line amperes	0.931	1.34	1.81	2.38	2.98	3.62	2.74

Performance Graph at 368V, 60Hz, 1.5HP Typical performance - Not guaranteed values





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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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000D		FILE: AAA00005141	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006