

BALDOR® • RELIANCE 

Product Information Packet

ECP83583T-4

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

Part Detail							
Revision:	AU	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGW176	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	05E811	Layout:	05LYE811	Poles:	02	Created Date:	11-18-2005
Base:	RG	Eff. Date:	06-15-2018	Leads:	3#18 15" LEAD LENGTH,0#0 Dbl Dip & Bake,0#0 Phase InsulaY		

Specs			
Catalog Number:	ECP83583T-4	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	M
Frame:	143T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	1.500 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	@ 0 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ		3 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	CLI GP A,B,C,D	Motor Lead Termination:	Flying Leads
XP Division:	Division II	Motor Type:	0524M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	83
	CSA	Product Family:	Chem Process S/P 32-8 IEEE 841
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
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:	Shaft Slinger
Drip Cover:	No 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
		XP Temp Code:	T4

Nameplate NP3235E										
CAT.NO.	ECP83583T-4									
SPEC.	05E811W176									
HP	1.5	TE								
VOLTS	460									
AMP	2									
RPM	3450									
FRAME	143T					HZ	60			
SER.F.	1.15			CODE	M	DES	B			
RATING	40C AMB-CONT									
SN										
DE	6205				ODE	6205				
NEMA-NOM-EFF	85.5			PF	83					
G.MIN.EFF	82.5			CC	010A					
T. CODE	T4			T=	135					
						IP	56			
						PH	3			
						CL	F			

Nameplate NP3186E			
SPEC.	05E811W176		
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 TO	90
C HP FR	60	CT HZ TO	60
CT HZ FROM	6	VT HZ TO	60
VT HZ FROM	3	HTR-AMPS	N/A
HTR-VOLTS	N/A	MAX. SPACE HEATER TEMP.	N/A
HTR-WATTS			

Parts List		
Part Number	Description	Quantity
SA135852	SA 05E811W176	1.000 EA
RA125564	RA 05E811W176	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.	1.000 EA
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
05EP1100A02G	FREP TEFC 205,GRSR,RLF,DRAIN FITTING,INP	1.000 EA
HW4601B22	INPRO SEAL, 205 BRG, MINI66	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
05EP1100A01G	PUEP ENCL 205,BRG RET,GRSR,RLF,DRAIN FIT	1.000 EA
HW4601B22	INPRO SEAL, 205 BRG, MINI66	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

Parts List (continued)		
Part Number	Description	Quantity
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
HA3100A37	THRUBOLT 10-32 X 8.500	4.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
35FH1000A19G	35FH1000A19 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
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
MJ5004A59	ADHESIVE LOCTITE #401 SURFACE INSENSITIV	0.010 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 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
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA

Product Information Packet: ECP83583T-4 - 1.5HP,3450RPM,3PH,60HZ,143,T,0524M,TEFC

MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN	0.022 GA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
LB1449	DIV-2/NEC WARNING 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) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 47131 - Typical performance - not guaranteed values

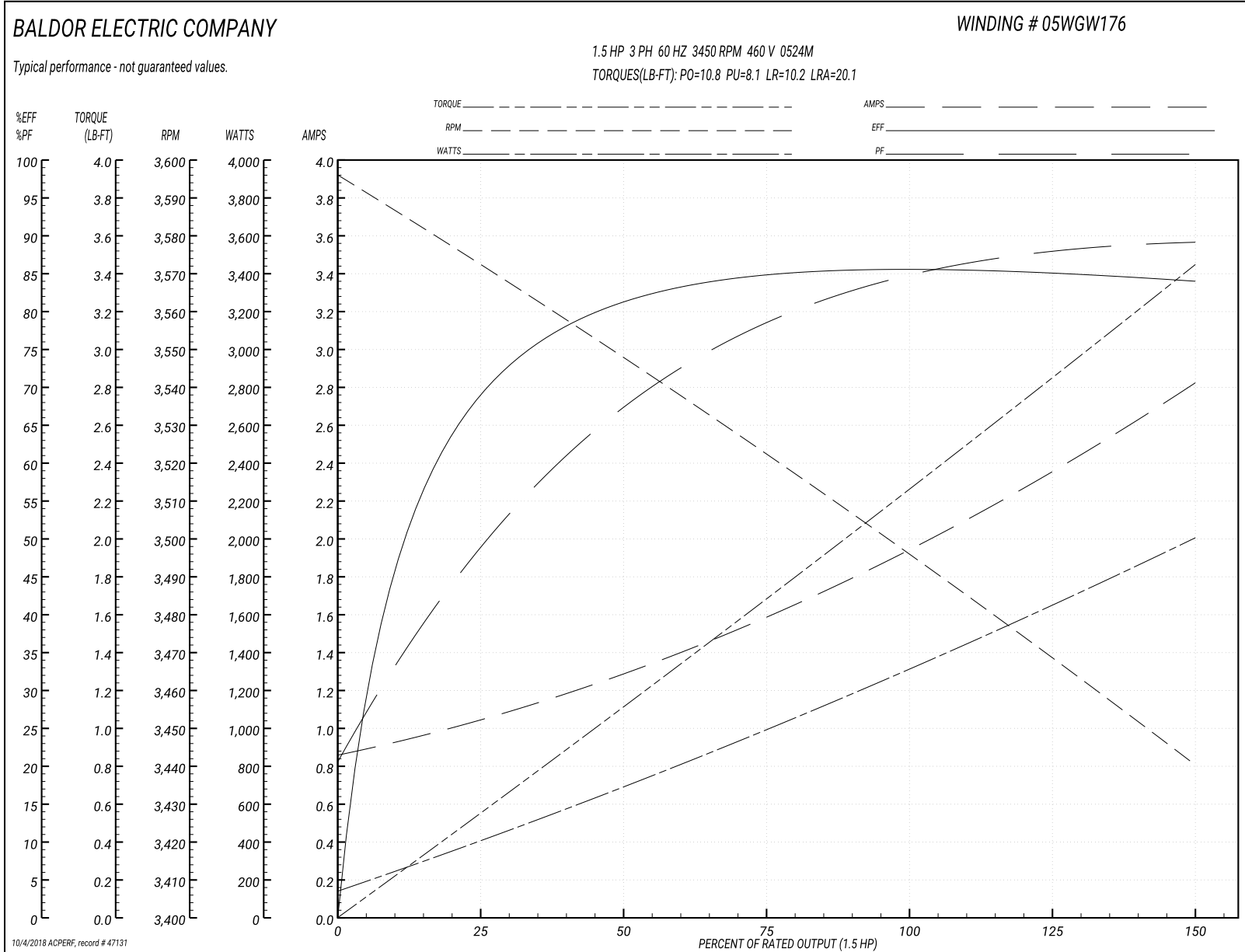
Winding: 05WGW176-R028	Type: 0524M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	1.5			Full Load Torque	2.3 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	2			Breakdown Torque	10.8 LB-FT
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

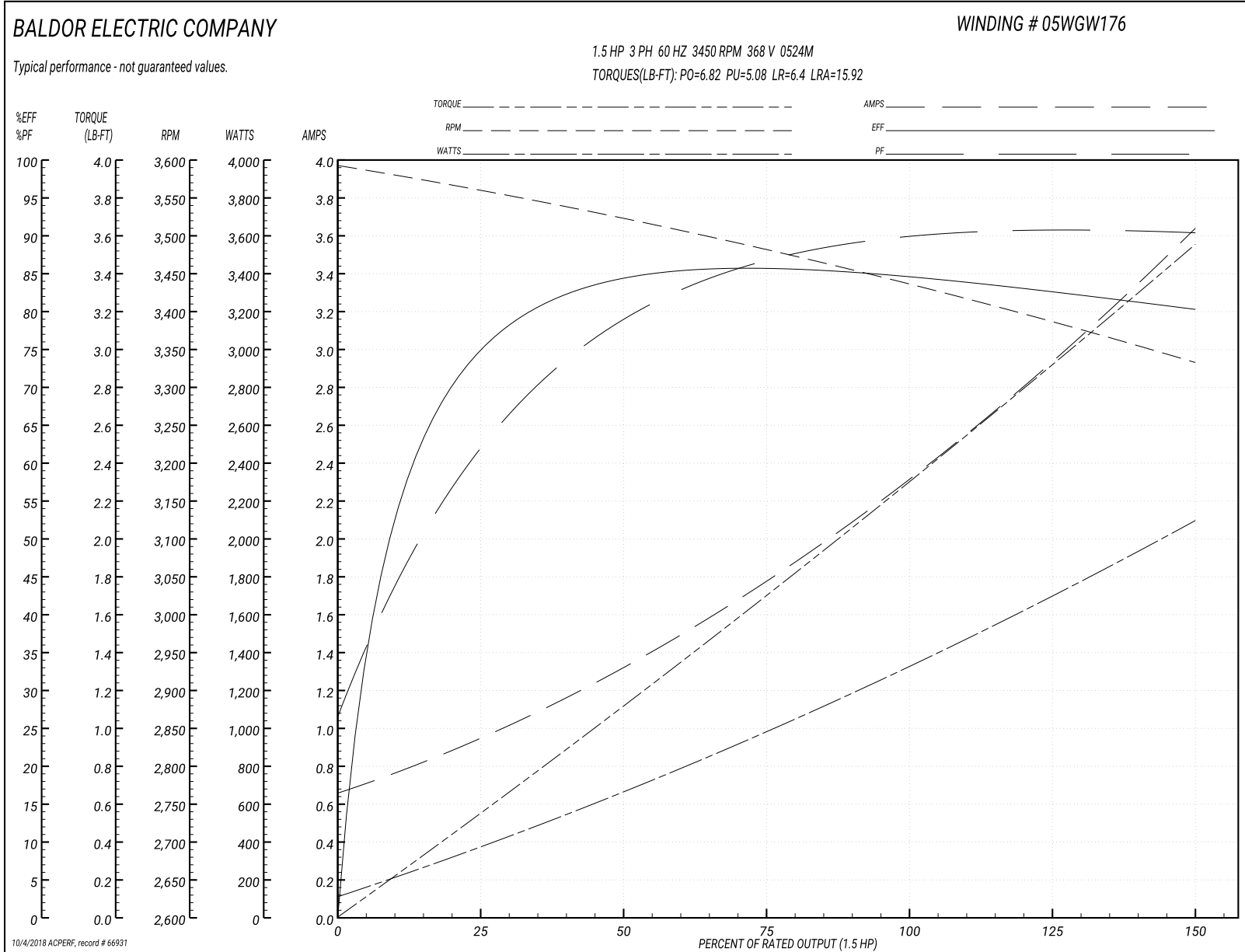
Winding: 05WGW176-R028	Type: 0524M	Enclosure: TEFC
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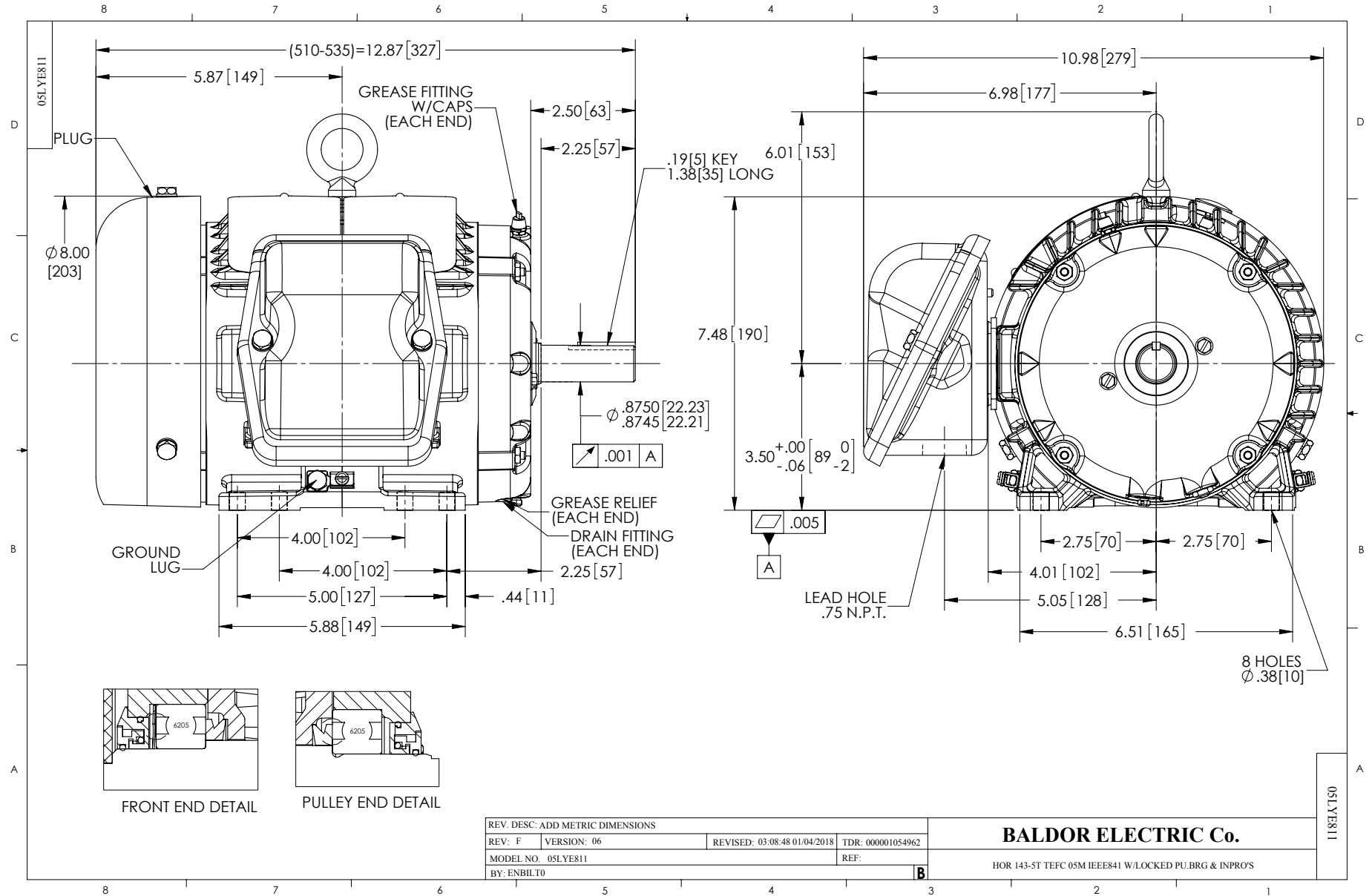
Nameplate Data				368 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	1.5			Full Load Torque	2.34 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	2			Breakdown Torque	6.82 LB-FT
R.P.M.	3450			Pull-up Torque	5.08 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	6.4 LB-FT
NEMA Design Code	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

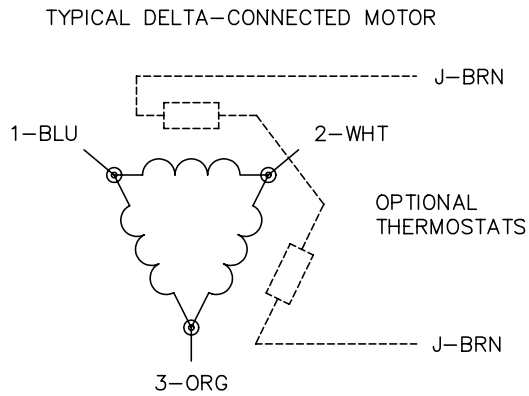
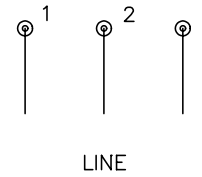
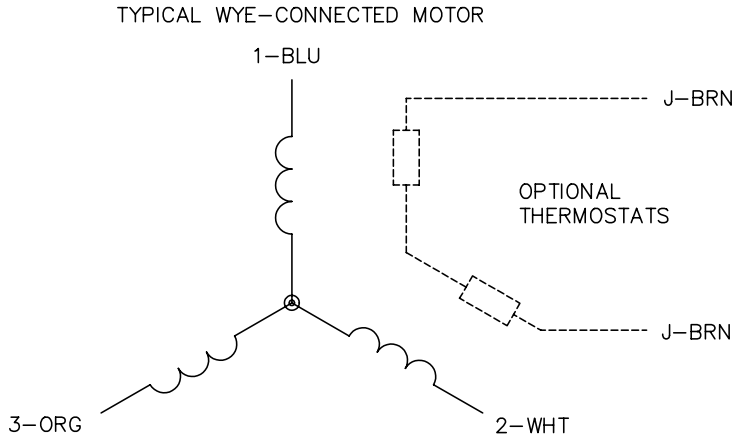
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	81	88	89	90	91	90
Efficiency	77.2	84	85.2	84.7	82.7	80.2	83.5
Speed	3555	3518	3479	3436	3387	3330	3407
Line amperes	0.931	1.34	1.81	2.38	2.98	3.62	2.74

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





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.

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