

**BALDOR® • RELIANCE** 

**Product Information Packet**

**ECP83664T-5**

**2HP,1165RPM,3PH,60HZ,184T,0642M,TEFC,F1**

Part Detail							
Revision:	T	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	06WGX236	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	06H759	Layout:	06LYH759	Poles:	06	Created Date:	12-06-2010
Base:	RG	Eff. Date:	09-07-2017	Leads:	3#16		

Specs			
Catalog Number:	ECP83664T-5	Inverter Code:	Inverter Duty
Enclosure:	TEFC	KVA Code:	H
Frame:	184T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	2.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 16 AWG
Synchronous Speed @ Frequency:	1200 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Ring Terminals
XP Class and Group:	None	Motor Type:	0642M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	68
	CSA EEV	Product Family:	Super-E Chemical Processing
	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:	Rigid	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:	1.8	Shaft Rotation:	Reversible

<b>Current @ Voltage:</b>	2.500 A @ 575.0 V	<b>Shaft Slinger Indicator:</b>	Shaft 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>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None
<b>Insulation Class:</b>	F	<b>XP Temp Code:</b>	T3C

<b>Nameplate NP3235E</b>	
<b>CAT.NO.</b>	ECP83664T-5
<b>SPEC.</b>	06H759X236G1
<b>HP</b>	2 TE IP 56
<b>VOLTS</b>	575
<b>AMP</b>	2.5
<b>RPM</b>	1165
<b>FRAME</b>	184T HZ 60
<b>SER.F.</b>	1.15 CODE H DES B
<b>RATING</b>	40C AMB-CONT
<b>SN</b>	
<b>DE</b>	6206 ODE 6206
<b>NEMA-NOM-EFF</b>	88.5 PF 68
<b>G.MIN.EFF</b>	86.5 CC 010A
<b>T. CODE</b>	T3C T= 160
	PH 3
	CL F

Nameplate NP3186E			
SPEC.	06H759X236G1		
D.E. BRG.	30BC02X30X		
O.D.E. BRG.	30BC02X30X		
GREASE	POLYREX EM		
WEIGHT	128	# OF ROTOR BARS	27
RPM MAX	1800	MAX. KVAR	1.0
BLANK			
INV. TYPE	PWM	# OF STATOR SLOTS	36
T=	160		
C HP FR	60	C HP TO	90
CT HZ FROM	1.8	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
SA213045	SA 06H759X236G1	1.000 EA
RA200272	RA 06H759X236G1	1.000 EA
36FN3000B01	EXFN, PLASTIC, 6.00 OD, .912 ID	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	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 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
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
WD1000B16	T&B CX70TN TERMINAL	2.000 EA
10XN2520G06	1/4 20X3/8 HX HD CAP, GREEN	2.000 EA
06PE1132A02G	FREP ASSEMBLY FOR ROUTING PURPOSES	1.000 EA
HW4601B24	INPRO SEAL, 206 BRG, MINI66	1.000 EA
HW4500A32	FIT./EXT 1698-B (ALEMITE)GREASE FITTING	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	4.000 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	4.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
06EP1132A01G	PUEP ENCL 206,BRG RET,GRSR,RLF,DRAIN FIT	1.000 EA
HW4601B24	INPRO SEAL, 206 BRG, MINI66	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
HA3101A34	THRUBOLT- 1/4-20 X 10.375	4.000 EA
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 EA
06FH1004A01G	FAN HOUSING MACH, W/GRAY EPOXY	1.000 EA
10XN2520A24	1/4-20X 1 1/2 HEX HD X	3.000 EA
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	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
MJ5004A59	ADHESIVE LOCTITE #401 SURFACE INSENSITIV	0.010 EA
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	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
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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.028 GA
LB1119N	WARNING LABEL	1.000 EA

Product Information Packet: ECP83664T-5 - 2HP,1165RPM,3PH,60HZ,184T,0642M,TEFC,F1

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
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA



**AC Induction Motor Performance Data**

Record # 64841 - Typical performance - not guaranteed values

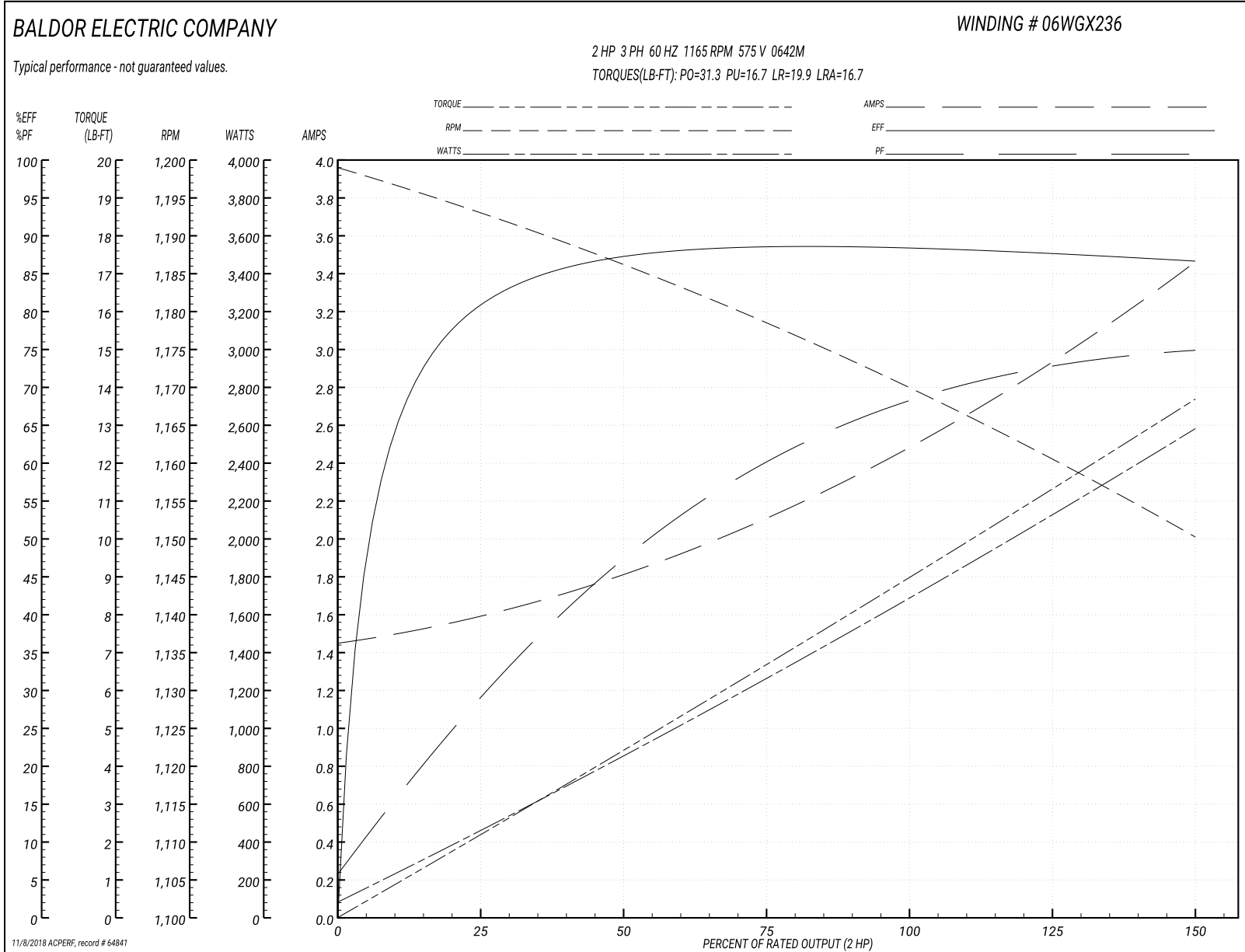
<b>Winding:</b> 06WGX236-R006	<b>Type:</b> 0642M	<b>Enclosure:</b> TEFC
-------------------------------	--------------------	------------------------

Nameplate Data				575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	2			Full Load Torque	9 LB-FT
Volts	575			Start Configuration	direct on line
Full Load Amps	2.5			Breakdown Torque	31.3 LB-FT
R.P.M.	1165			Pull-up Torque	16.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	19.9 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	16.7 A
Service Factor (S.F.)	1.15			No-load Current	1.47 A
NEMA Nom. Eff.	88.5	Power Factor	68	Line-line Res. @ 25°C	8.07 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	27°C
S.F. Amps				Temp. Rise @ S.F. Load	32°C
				Locked-rotor Power Factor	28.6
				Rotor inertia	0.395 LB-FT <sup>2</sup>

Load Characteristics 575 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	48	60	68	73	75	71
Efficiency	80.4	87.1	88.5	88.6	87.6	86.6	88.1
Speed	1193	1186	1178	1170	1161	1150	1165
Line amperes	1.57	1.8	2.13	2.5	2.94	3.45	2.76

Performance Graph at 575V, 60Hz, 2.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 70961 - Typical performance - not guaranteed values

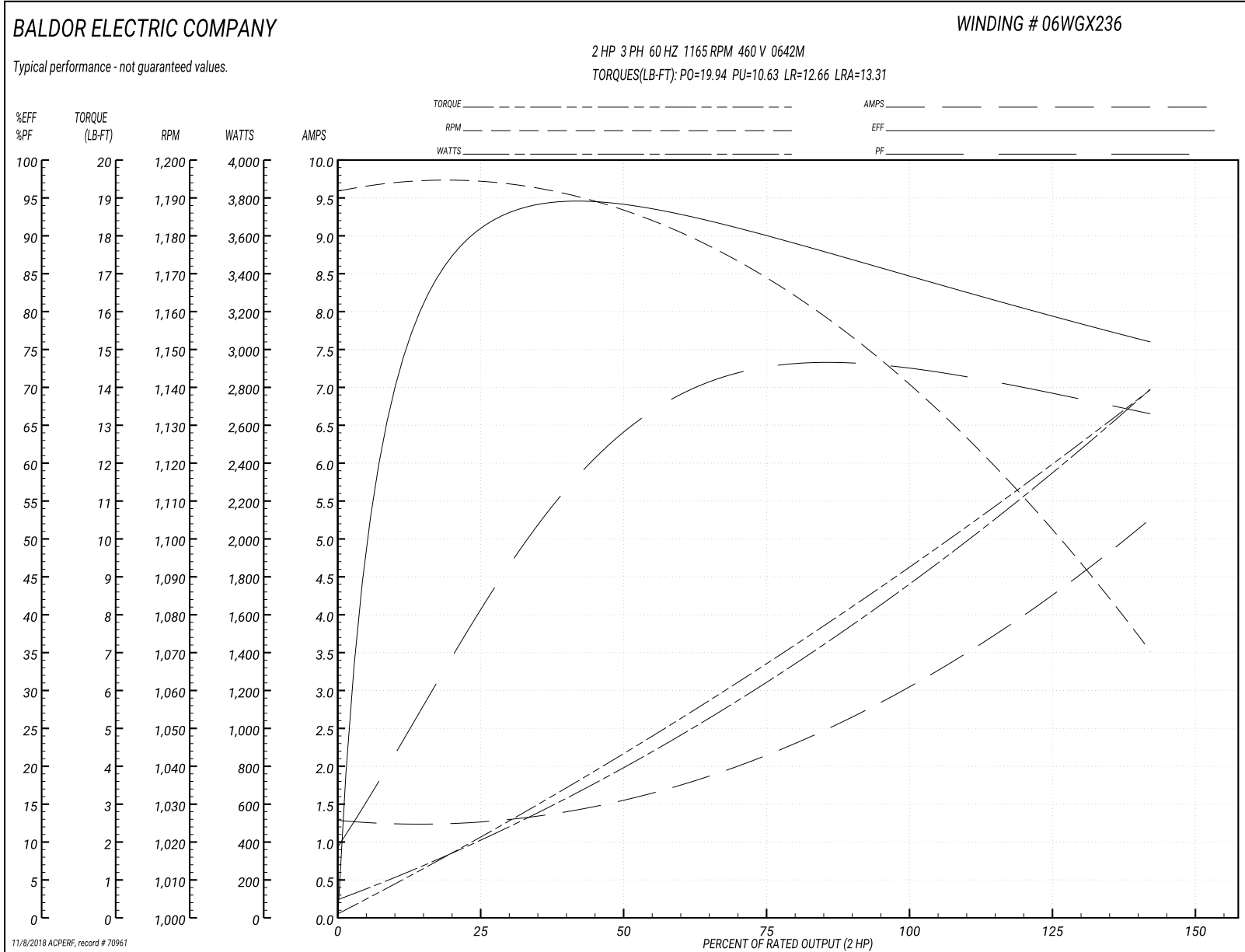
<b>Winding:</b> 06WGX236-R006	<b>Type:</b> 0642M	<b>Enclosure:</b> TEFC
-------------------------------	--------------------	------------------------

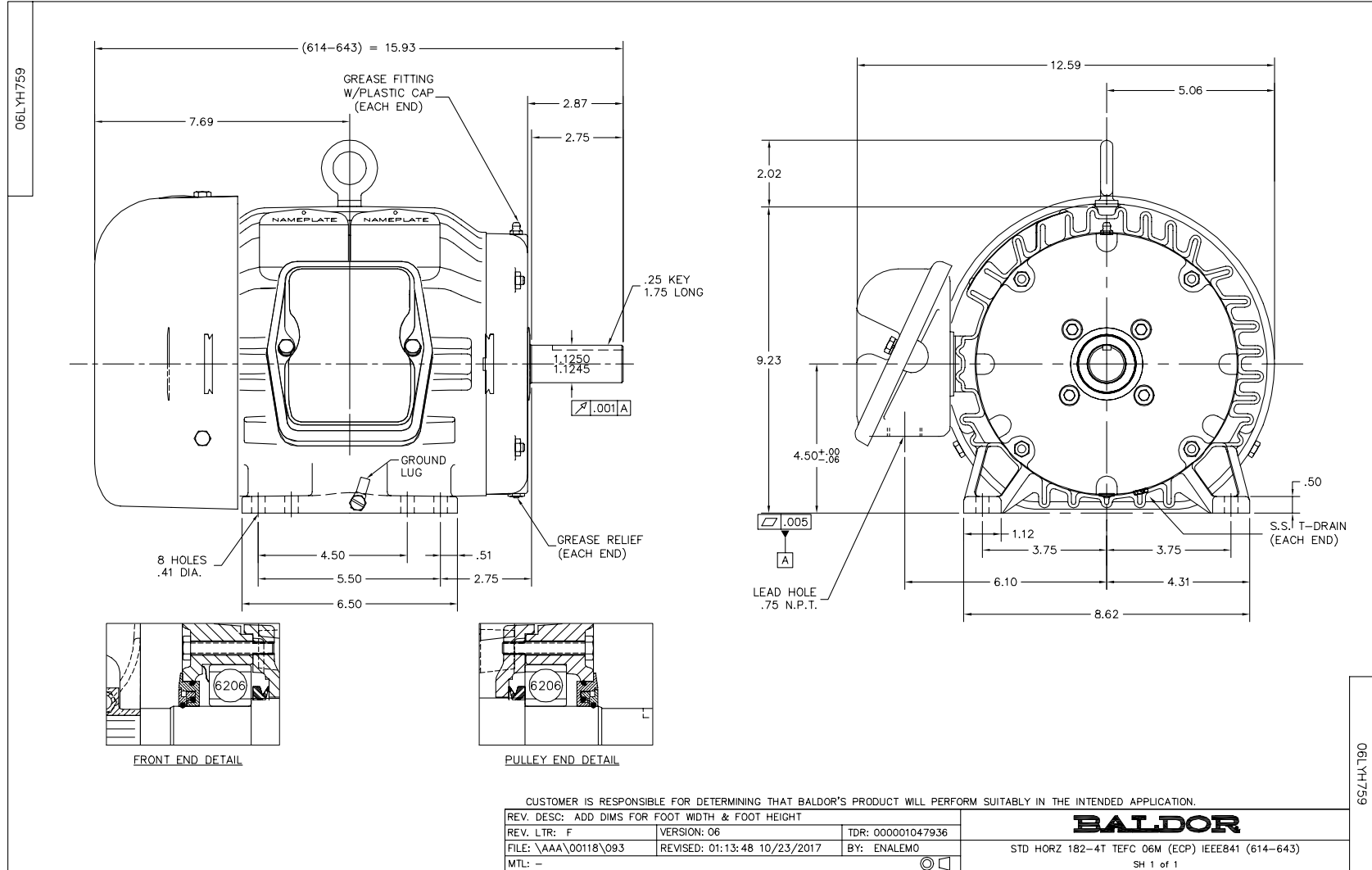
Nameplate Data				460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	2			Full Load Torque	9.16 LB-FT
Volts	575			Start Configuration	direct on line
Full Load Amps	2.5			Breakdown Torque	19.94 LB-FT
R.P.M.	1165			Pull-up Torque	10.63 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	12.66 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	13.31 A
Service Factor (S.F.)	1.15			No-load Current	1.16 A
NEMA Nom. Eff.	88.5	Power Factor	68	Line-line Res. @ 25°C	8.07 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	33°C
S.F. Amps				Temp. Rise @ S.F. Load	44°C
				Locked-rotor Power Factor	28.5
				Rotor inertia	0.395 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 2 HP

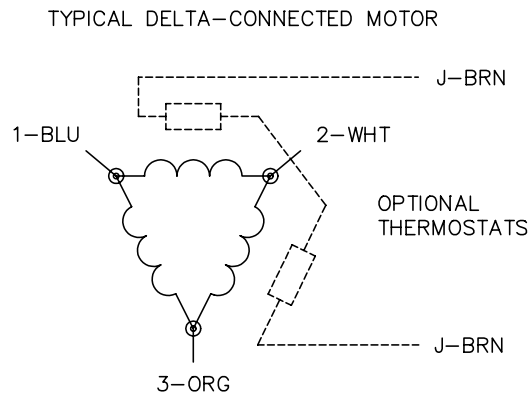
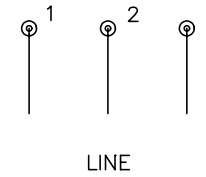
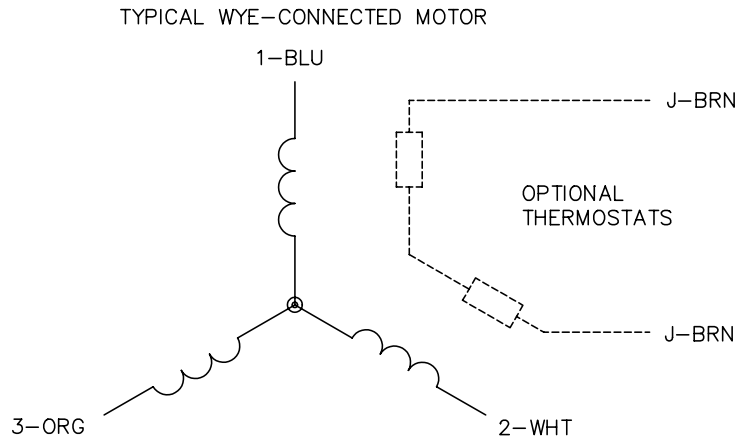
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	61	70	74	74	64	74
Efficiency	85	88.9	88.3	86.8	83.3	73.5	84.7
Speed	1189	1178	1164	1148	1125	1052	1134
Line amperes	1.34	1.73	2.27	2.92	3.78	5.64	3.44

Performance Graph at 460V, 60Hz, 2.0HP 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