BALDOR • RELIANCE

Product Information Packet

ECP83771T-4

10HP,3475RPM,3PH,60HZ,215T,0742M,TEFC,F1

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Part Detail

Revision:	U	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Elec. Spec:**	07WGY930	**CD Diagram:**	CD0006	**Mfg Plant:**	
Mech. Spec:	07K629	**Layout:**	07LYK629	**Poles:**	02	**Created Date:**	01-14-2012
Base:	RG	**Eff. Date:**	05-22-2017	**Leads:**	3#14		

Specs

Catalog Number:	ECP83771T-4	**Inverter Code:**	Inverter Duty
Enclosure:	TEFC	**KVA Code:**	H
Frame:	215T	**Lifting Lugs:**	Standard Lifting Lugs
Frame Material:	Iron	**Locked Bearing Indicator:**	Locked Bearing
Output @ Frequency:	10.000 HP @ 60 HZ	**Motor Lead Quantity/Wire Size:**	3 @ 14 AWG
Synchronous Speed @ Frequency:	3600 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:**	0742M
XP Division:	Division II	**Mounting Arrangement:**	F1
Agency Approvals:	UR	**Power Factor:**	91
	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:	6	**Shaft Rotation:**	Reversible

Current @ Voltage:	11.300 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 (OLD)
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:**	T3C

Nameplate NP3235E

CAT.NO.	ECP83771T-4						
SPEC.	07K629Y930G1						
HP	10 TE			**IP**	56		
VOLTS	460						
AMP	11.3						
RPM	3500						
FRAME	215T	**HZ**	60			**PH**	3
SER.F.	1.15	**CODE**	H	**DES**	B	**CL**	F
RATING	40C AMB-CONT						
SN							
DE	6307	**ODE**	6307				
NEMA-NOM-EFF	91	**PF**	91				
G.MIN.EFF	89.5	**CC**	010A				
T. CODE	T3C	**T=**	160				

Nameplate NP3186E

SPEC.	07K629Y930G1				
D.E. BRG.	35BC03X30X				
O.D.E. BRG.	35BC03X30X				
GREASE	POLYREX EM				
WEIGHT	182	**# OF ROTOR BARS**	28	**# OF STATOR SLOTS**	36
RPM MAX	5400	**MAX. KVAR**	N/A		
BLANK					
INV.TYPE	PWM				
T=	160				
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
SA237639	SA 07K629Y930G1	1.000 EA
RA224567	RA 07K629Y930G1	1.000 EA
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 ID	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
09CB1002A05G	CONDUIT BOX, 1.00 N.P.T. (GRAY)	1.000 EA
RM1017	LEAD SEPERATOR GASKET MODEL 307 1/8" THK	1.000 EA
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	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
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	1.000 EA
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
07EP1119A02G	206 BRG,C.I.FH,GRSR,RLF,DRAIN FITTING,IN	1.000 EA
HW4601B25	INPRO SEAL, 307 BRG, MINI66	1.000 EA
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
HW4500A32	FIT./EXT 1698-B (ALEMITE)GREASE FITTING	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
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
07EP1119A01G	307 BRG,BRG RET,GRSR,RLF,DRAIN FITTING,I	1.000 EA
HW4601B25	INPRO SEAL, 307 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
07FH1001A01G	SPL FAN HOUSING, 307, W/GREASER, GRAY EP	1.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	3.000 EA
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 EA
12CB1503G	CONDUIT BOX CAST. (GRAY)	1.000 EA
09GS1013A01	09 GS FOR 09CB3501 LID - BLACK NEOPRENE	1.000 EA
10XN2520A12	O1/4-20X 3/4 HEX HEAD CAP	2.000 EA
MJ5004A59	ADHESIVE LOCTITE #401 SURFACE INSENSITIV	0.010 EA
HW2501F21	KEY, 5/16 SQ X 2.375	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
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN	0.036 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
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 EA
10XL3808A28	3/8 X 1 3/4" LAG SCREW	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

AC Induction Motor Performance Data

Record # 47355 - Typical performance - not guaranteed values

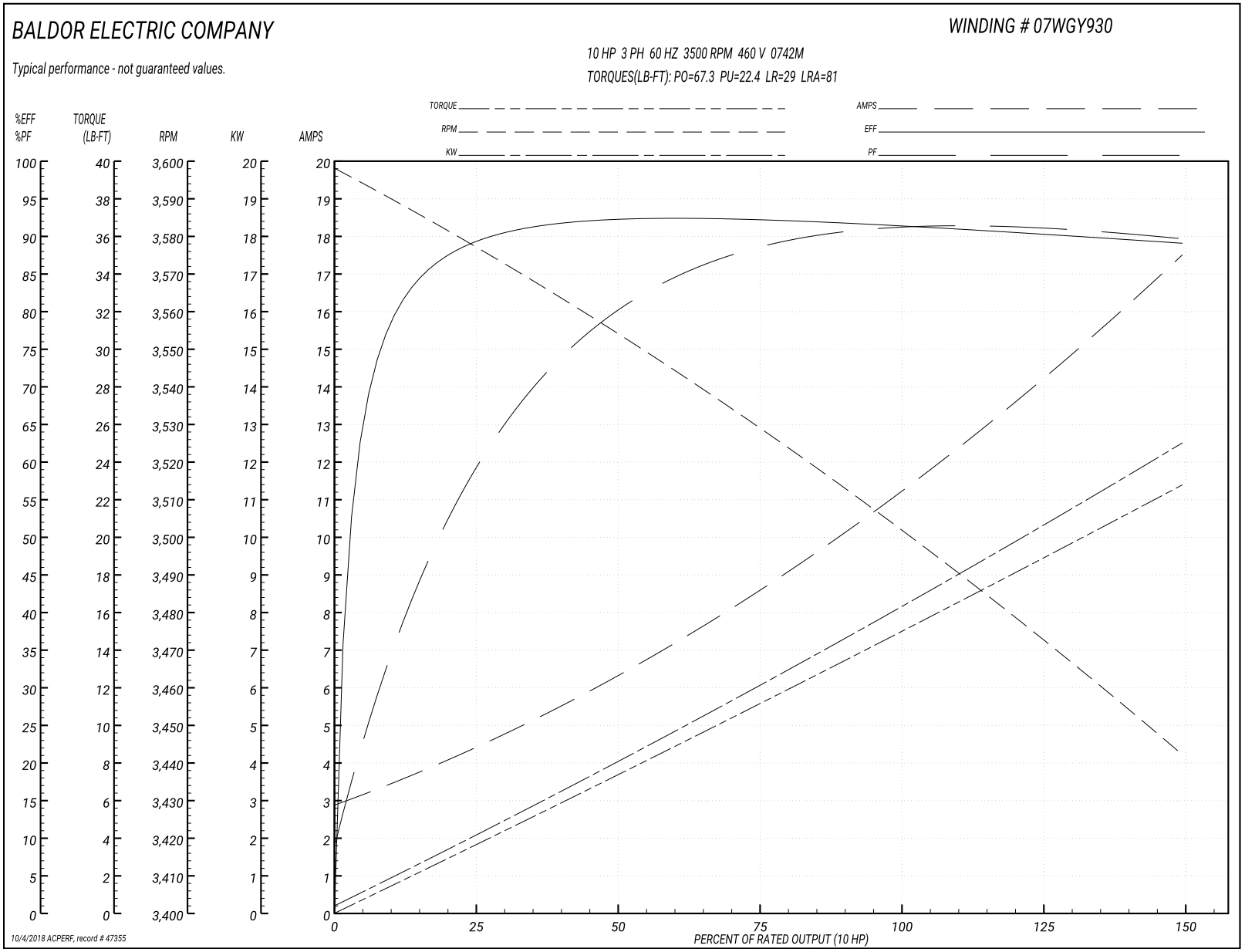
Winding: 07WGY930-R013	**Type:** 0742M	**Enclosure:** TEFC

Nameplate Data				460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	10			Full Load Torque	14.8 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	11.3			Breakdown Torque	67.3 LB-FT
R.P.M.	3500			Pull-up Torque	22.4 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	29 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	81 A
Service Factor (S.F.)	1.15			No-load Current	3.11 A
NEMA Nom. Eff.	91	Power Factor	91	Line-line Res. @ 25ºC	0.791 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	50°C
S.F. Amps				Temp. Rise @ S.F. Load	62°C
				Locked-rotor Power Factor	30.3
				Rotor inertia	0.383 LB-FT2

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	81	88	89	91	90	91
Efficiency	89.1	92.2	92.3	91.6	90.3	89.1	90.9
Speed	3576	3554	3530	3504	3474	3442	3486
Line amperes	4.08	6.21	8.61	11.3	14.1	17.4	13

Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 65135 - Typical performance - not guaranteed values

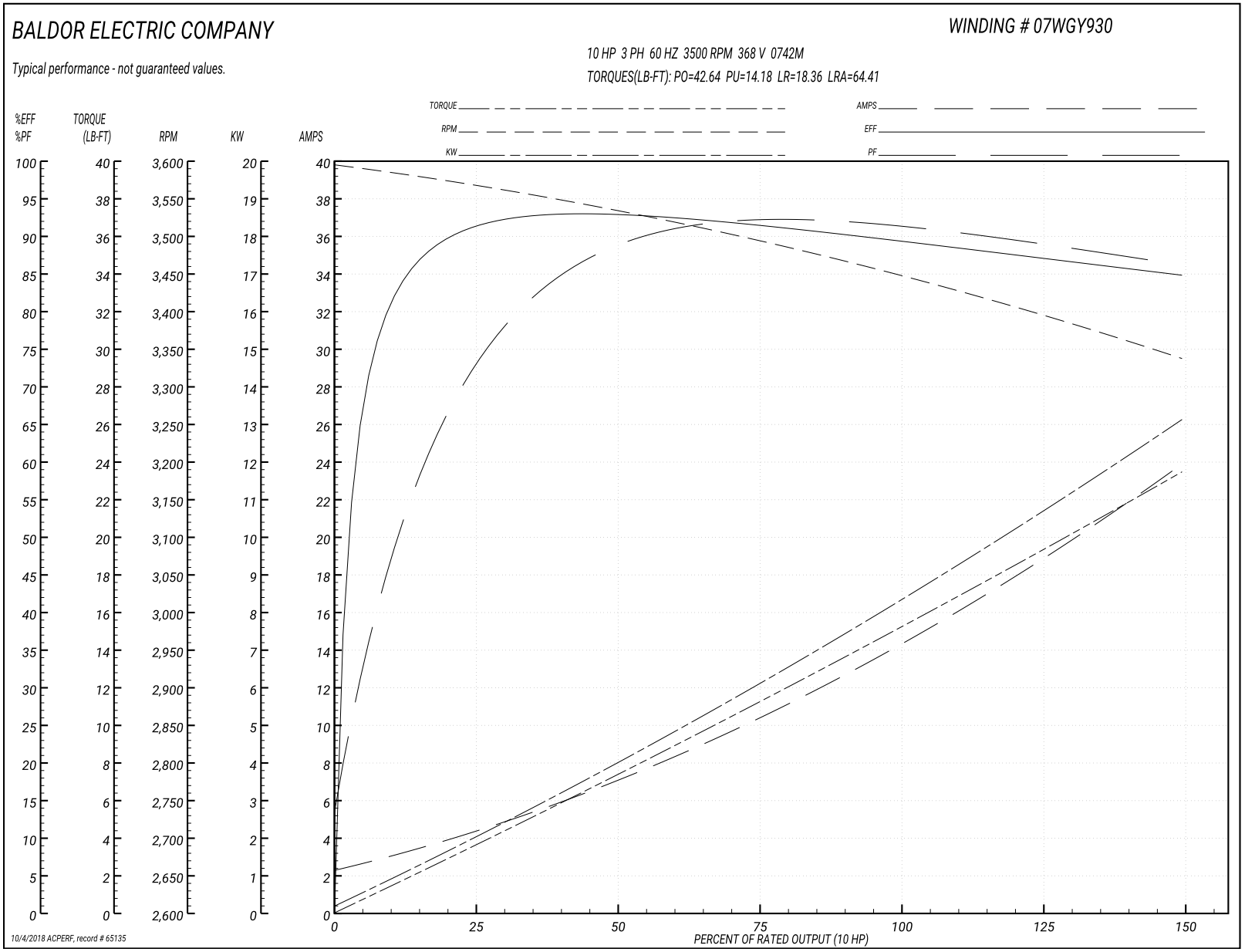
Winding: 07WGY930-R013	**Type:** 0742M	**Enclosure:** TEFC

Nameplate Data				368 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	10			Full Load Torque	15.02 LB-FT
Volts	460			Start Configuration	direct on line
Full Load Amps	11.3			Breakdown Torque	42.64 LB-FT
R.P.M.	3500			Pull-up Torque	14.18 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	18.36 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	64.41 A
Service Factor (S.F.)	1.15			No-load Current	2.43 A
NEMA Nom. Eff.	91	Power Factor	91	Line-line Res. @ 25ºC	0.791 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	66°C
S.F. Amps				Temp. Rise @ S.F. Load	87°C
				Locked-rotor Power Factor	30.1
				Rotor inertia	0.383 LB-FT2

Load Characteristics 368 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	79	89	91	90	90	86	90
Efficiency	90.5	92.3	91.4	89.7	87.4	84.6	88.3
Speed	3565	3532	3495	3453	3401	3335	3422
Line amperes	4.09	7.1	10.43	14.25	18.44	23.94	16.8

Performance Graph at 368V, 60Hz, 10.0HP Typical performance - Not guaranteed values



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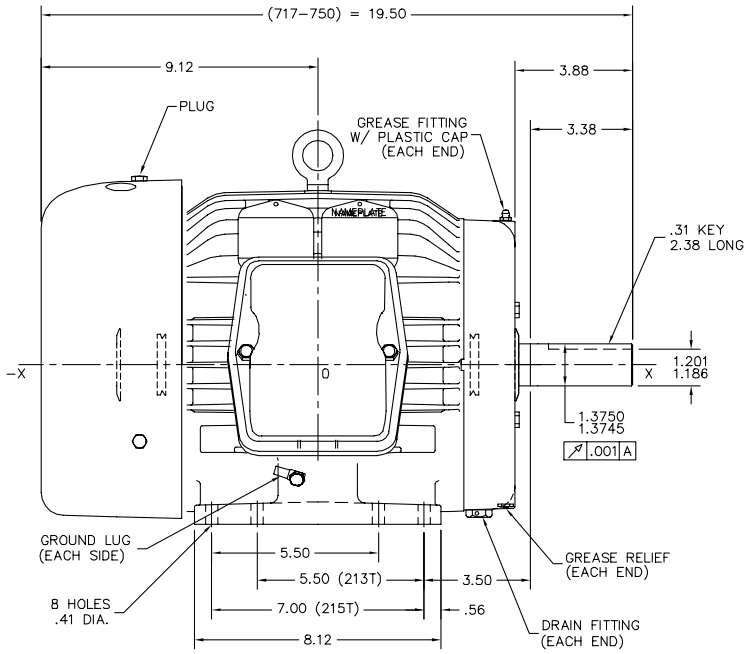
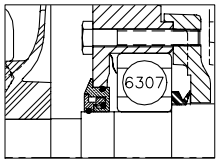
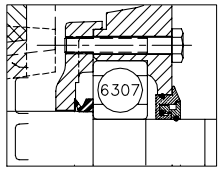
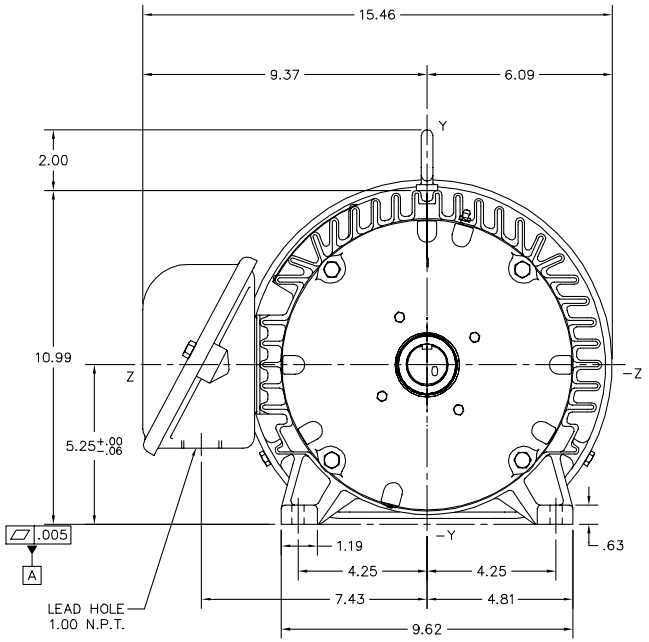




FRONT END DETAIL



PULLEY END DETAIL



SPEC	MOTOR WEIGHT	C.O.G. FROM CENTERLINE
07K629X813G32	231 LBS	X=.01, Y=.48, Z=.24

07LYK629

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADD X, Y, Z & 0,0,0		
REV. LTR: G	VERSION: 07	TDR: 000000996213
FILE: \AAA\00118\406	REVISED: 03:23:06 09/08/2016	BY: ENALEM0
MTL: –		

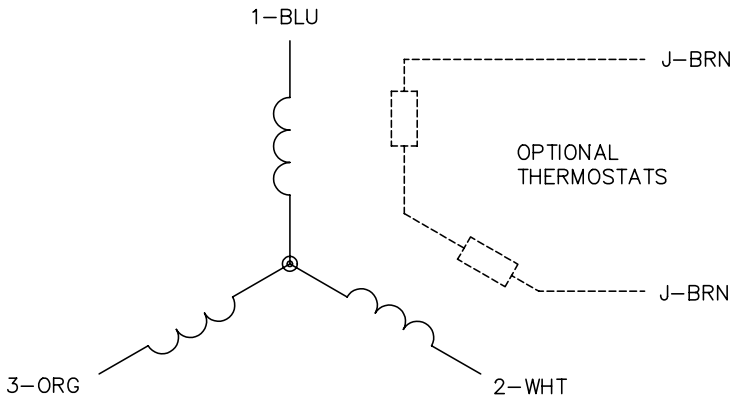
BALDOR

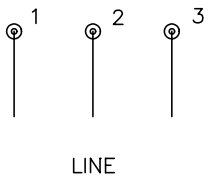
STD HORZ 213–5T TEFC 07M (ECP) IEEE841

SH 1 of 1

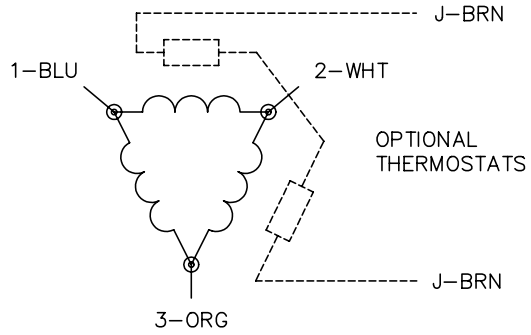
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000CD		FILE: AAA00005141	MDL: –
		MTL: –	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED