

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VECP83771T-4**

**10HP,3475RPM,3PH,60HZ,215TC,0742M,TEFC,F**

Part Detail							
Revision:	AA	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGY930	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	07M323	Layout:	07LYM323	Poles:	02	Created Date:	08-21-2012
Base:	N	Eff. Date:	08-27-2021	Leads:	3#14		

Specs			
Catalog Number:	VECP83771T-4	Inverter Code:	Inverter Duty
Enclosure:	TEFC	KVA Code:	H
Frame:	215TC	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:	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)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Constant Torque Speed Range:	6	Shaft Rotation:	Reversible

<b>Current @ Voltage:</b>	11.300 A @ 460.0 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
<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>	VECP83771T-4		
<b>SPEC.</b>	07M323Y930G1		
<b>HP</b>	10	<b>TE</b>	<b>IP</b> 56
<b>VOLTS</b>	460		
<b>AMPS</b>	11.3		
<b>R.P.M.</b>	3500		
<b>FRAME</b>	215TC	<b>HZ</b>	60
<b>SER.F.</b>	1.15	<b>CODE</b>	H <b>DES.</b> B
<b>RATING</b>	40C AMB-CONT		
<b>SN</b>			
<b>DE</b>	6307	<b>ODE</b>	6307
<b>NEMA NOM. EFF.</b>	91	<b>P.F.</b>	91
<b>GUAR. MIN. EFF.</b>	89.5	<b>CC</b>	010A
<b>T. CODE</b>	T3C	<b>TEMP=</b>	160
		<b>PH</b>	3
		<b>CLASS</b>	F

<b>Nameplate NP3186E</b>			
<b>SPEC.</b>	07M323Y930G1		
<b>ABMA DE BRG</b>	35BC03X30X		
<b>ABMA ODE BRG</b>	35BC03X30X		
<b>GREASE</b>	POLYREX EM		
<b>MOTOR WEIGHT</b>	182	<b>ROTOR BARS</b>	28
<b>MAX. R.P.M.</b>	5400	<b>MAX. KVAR</b>	N/A
		<b>STATOR BARS</b>	36
<b>INV. TYPE</b>	PWM		
<b>T=</b>	160	<b>TO</b>	90
<b>CHP</b>	60	<b>TO</b>	60
<b>CT</b>	6	<b>TO</b>	60
<b>VT</b>	3		
<b>HTR-VOLTS</b>	N/A	<b>HTR-AMPS</b>	N/A
<b>HTR-WATTS</b>			
		<b>MAX. SPACE HEATER TEMP.</b>	N/A

Parts List		
Part Number	Description	Quantity
SA250237	SA 07M323Y930G1	1.000 EA
RA237093	RA 07M323Y930G1	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
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
07EP1119A02G	307 BRG,C.I.FH,GRSR,RLF,DRAIN FITTING,IN	1.000 EA
HW4601A25	200.O SEAL, 307 BRG, VBX,	1.000 EA
10XN2520A26	1/4-20X 1 5/8 HEX HD	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
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
37EP1314A01G	PU ENDPLATE, MACH GRAY	1.000 EA
HW4601A25	200.O SEAL, 307 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

Parts List (continued)		
Part Number	Description	Quantity
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 EA
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 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	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
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, MOBIL POLYREX EM - 124047	0.050 LB
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.036 GA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA

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
07PA1095	PKG GRP, VER 07 CAST IRON	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA



**AC Induction Motor Performance Data**

Record # 47355

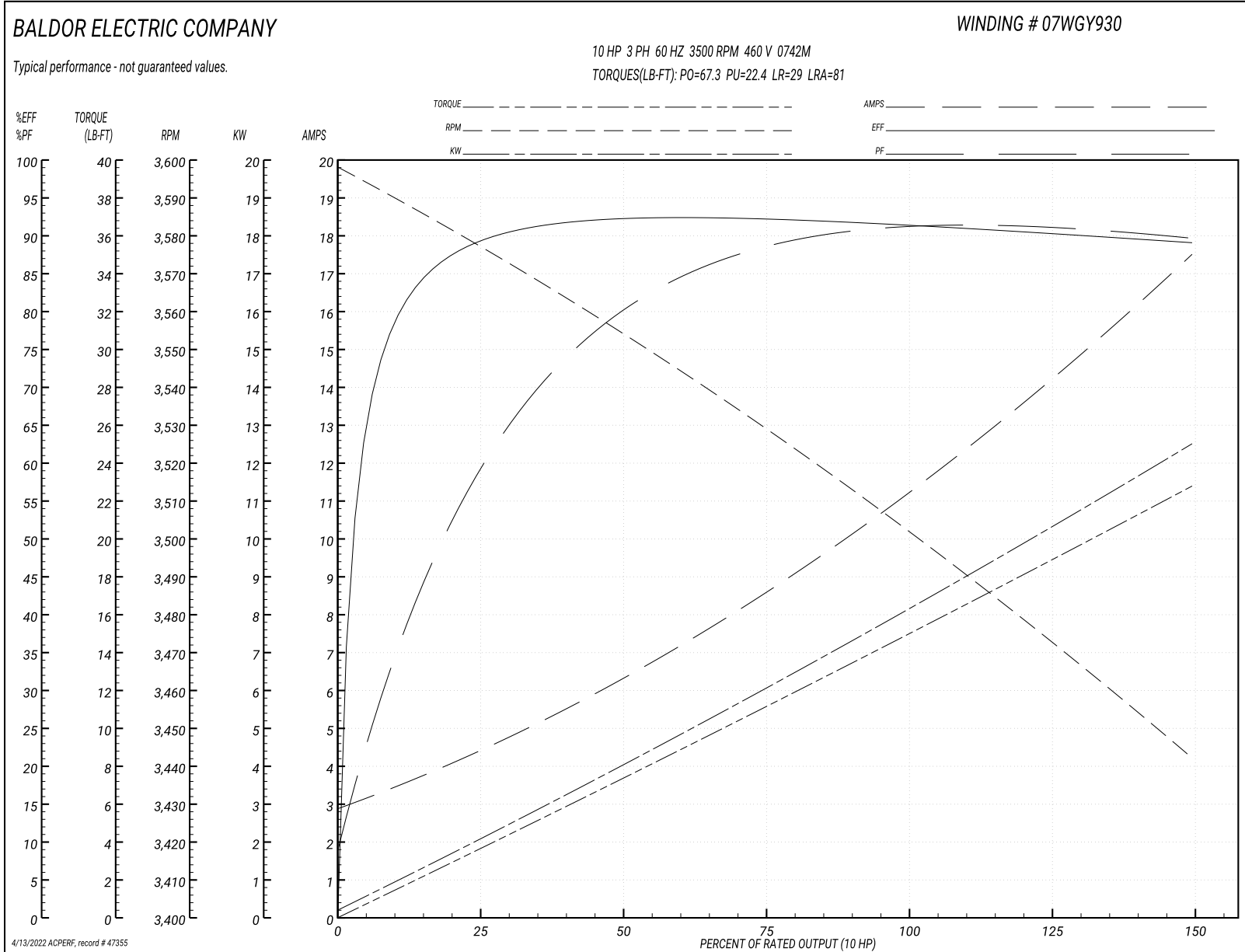
Typical performance - not guaranteed values

Winding: 07WGY930-R013		Type: 0742M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>460 V, 60 Hz: Single Voltage Motor</b>	
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	Locked-rotor Torque	29 LB-FT
NEMA Design Code	B KVA Code	Starting Current	81 A
Service Factor (S.F.)	1.15	No-load Current	3.11 A
NEMA Nom. Eff.	91 Power Factor	Line-line Res. @ 25°C	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-FT <sup>2</sup>

**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

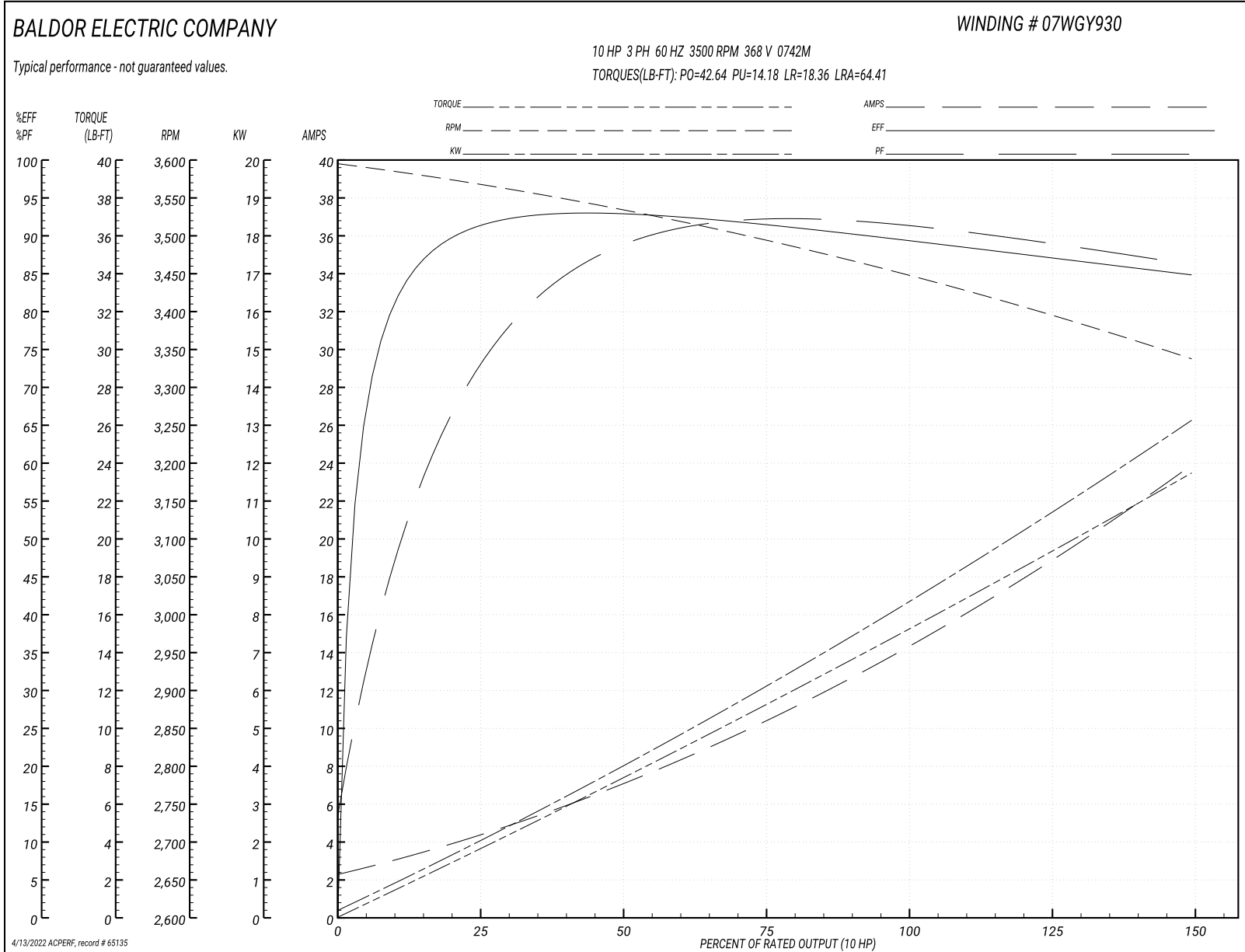
Typical performance - not guaranteed values

<b>Winding: 07WGY930-R013</b>		<b>Type: 0742M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>368 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	10	<b>Full Load Torque</b>	15.02 LB-FT		
<b>Volts</b>	460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	11.3	<b>Breakdown Torque</b>	42.64 LB-FT		
<b>R.P.M.</b>	3500	<b>Pull-up Torque</b>	14.18 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	18.36 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	H	<b>Starting Current</b>	64.41 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	2.43 A	
<b>NEMA Nom. Eff.</b>	91 <b>Power Factor</b>	91	<b>Line-line Res. @ 25°C</b>	0.791 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	66°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	87°C	
			<b>Locked-rotor Power Factor</b>	30.1	
			<b>Rotor inertia</b>	0.383 LB-FT <sup>2</sup>	

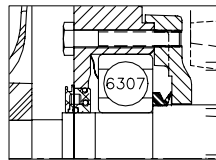
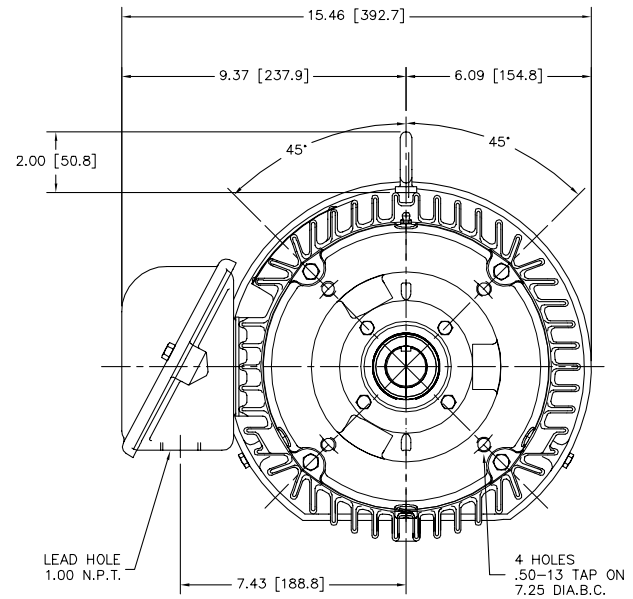
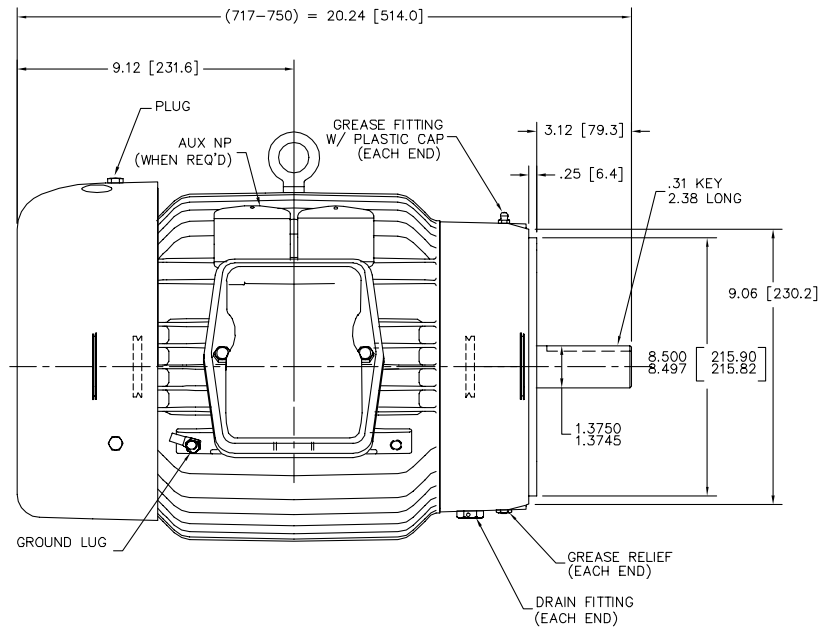
**Load Characteristics 368 V, 60 Hz, 10 HP**

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

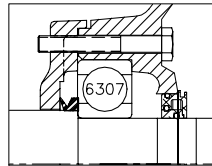
Performance Graph at 368V, 60Hz, 10.0HP Typical performance - Not guaranteed values



07LYM323



FRONT END DETAIL



PULLEY END DETAIL

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

REV. DESC: ADD METRIC DIMS	VERSION: 03	TDR: 000001165551
REV. LTR: C	REVISED: 04:00:05 04/16/2021	BY: USTRYAY1
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MTL: -		

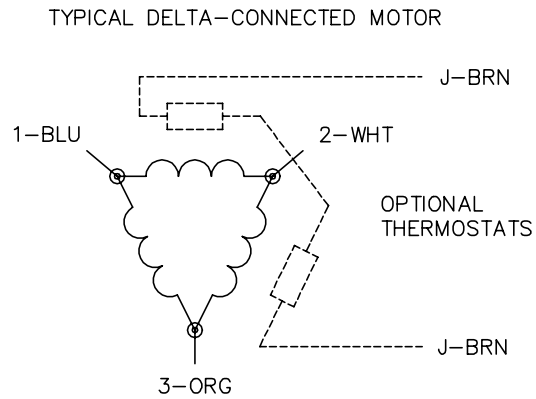
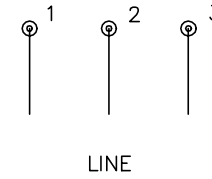
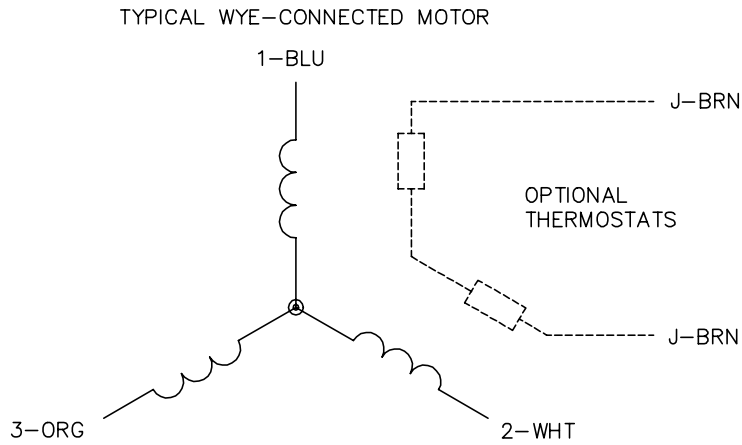
**BALDOR - RELIANCE**®

STD VERT 213-5TC TEFC M IEEE841

SH 1 of 1

07LYM323

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
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

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

SH 1 of 1