

BALDOR® • RELIANCE 

Product Information Packet

VECP83770T-4

7.5HP, 1765RPM, 3PH, 60HZ, 213TC, 0740M, TEFC

Part Detail							
Revision:	AJ	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGX814	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	07M323	Layout:	07LYM323	Poles:	04	Created Date:	08-21-2012
Base:	N	Eff. Date:	02-11-2022	Leads:	3#14		

Specs			
Catalog Number:	VECP83770T-4	Inverter Code:	Inverter Duty
Enclosure:	TEFC	KVA Code:	H
Frame:	213TC	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	7.500 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 14 AWG
Synchronous Speed @ Frequency:	1800 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:	0740M
XP Division:	Division II	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	81
	CSA EEV	Product Family:	Chem Process S/P 32-8 IEEE 841
	UR	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:	1.2	Shaft Ground Indicator:	No Shaft Grounding

Current @ Voltage:	9.500 A @ 460.0 V	Shaft Rotation:	Reversible
Design Code:	B	Shaft Slinger Indicator:	No 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
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:	T3C

Nameplate NP3235E											
CAT.NO.	VECP83770T-4										
SPEC.	07M323X814G1										
HP	7.5	TE						IP	56		
VOLTS	460										
AMPS	9.5										
R.P.M.	1765										
FRAME	213TC						HZ	60			
SER.F.	1.15			CODE	H		DES.	B			
RATING	40C AMB-CONT										
SN											
DE	6307				ODE	6307					
NEMA NOM. EFF.	91.7				P.F.	82					
GUAR. MIN. EFF.	90.2				CC	010A					
T. CODE	T3C				TEMP=	160					
							PH	3		CLASS	F

Nameplate NP3186E			
SPEC.	07M323X814G1		
ABMA DE BRG	35BC03X30X		
ABMA ODE BRG	35BC03X30X		
GREASE	POLYREX EM		
MOTOR WEIGHT	211	ROTOR BARS	28
MAX. R.P.M.	2700	MAX. KVAR	1.3
		STATOR BARS	36
INV. TYPE	PWM		
T=	160	TO	90
CHP	60	TO	60
CT	1.2	TO	60
VT	0-		
HTR-VOLTS	N/A	HTR-AMPS	N/A
HTR-WATTS			
		MAX. SPACE HEATER TEMP.	N/A

Parts List		
Part Number	Description	Quantity
SA250236	SA 07M323X814G1	1.000 EA
RA237092	RA 07M323X814G1	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 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. CONTAIN	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
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.036 GA
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
LB1119N	WARNING LABEL	1.000 EA

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LB1002N	LABEL,MARINE DUTY (ON ROLLS)	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 # 83955

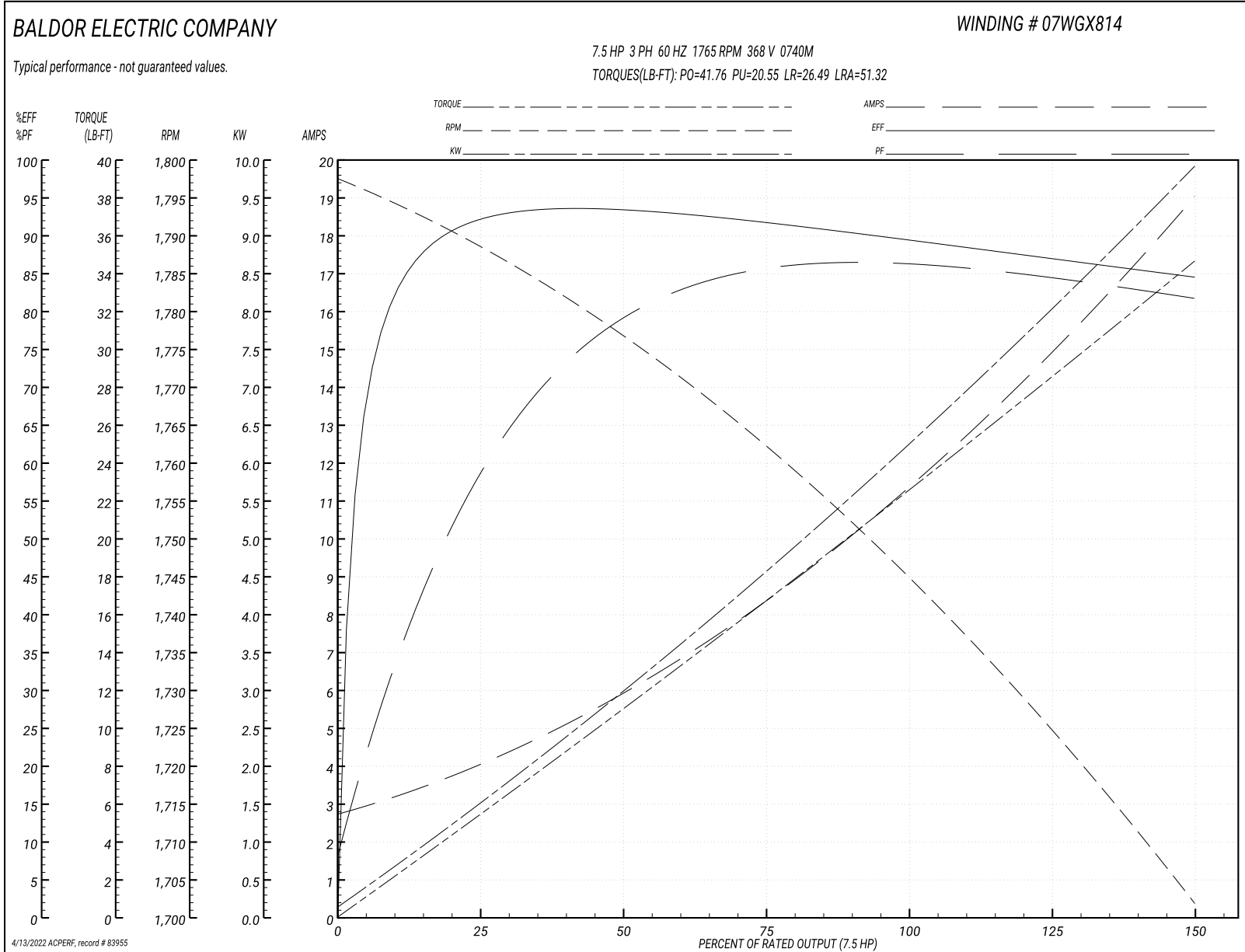
Typical performance - not guaranteed values

Winding: 07WGX814-R056		Type: 0740M	Enclosure: TEFC
Nameplate Data		368 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5	Full Load Torque	22.6 LB-FT
Volts	460	Start Configuration	direct on line
Full Load Amps	9.5	Breakdown Torque	41.76 LB-FT
R.P.M.	1765	Pull-up Torque	20.55 LB-FT
Hz	60 Phase	Locked-rotor Torque	26.49 LB-FT
NEMA Design Code	B KVA Code	Starting Current	51.32 A
Service Factor (S.F.)	1.15	No-load Current	2.84 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	1.47 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	73°C
S.F. Amps		Temp. Rise @ S.F. Load	97°C
		Locked-rotor Power Factor	36.2
		Rotor inertia	0.984 lb-ft ²

Load Characteristics 368 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	80	85	86	84	82	85
Efficiency	90.9	92.4	91.5	89.8	87.4	84.2	88.4
Speed	1787	1775	1762	1746	1727	1700	1735
Line amperes	3.89	5.98	8.5	11.39	14.91	19.04	13.5

Performance Graph at 368V, 60Hz, 7.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 92344

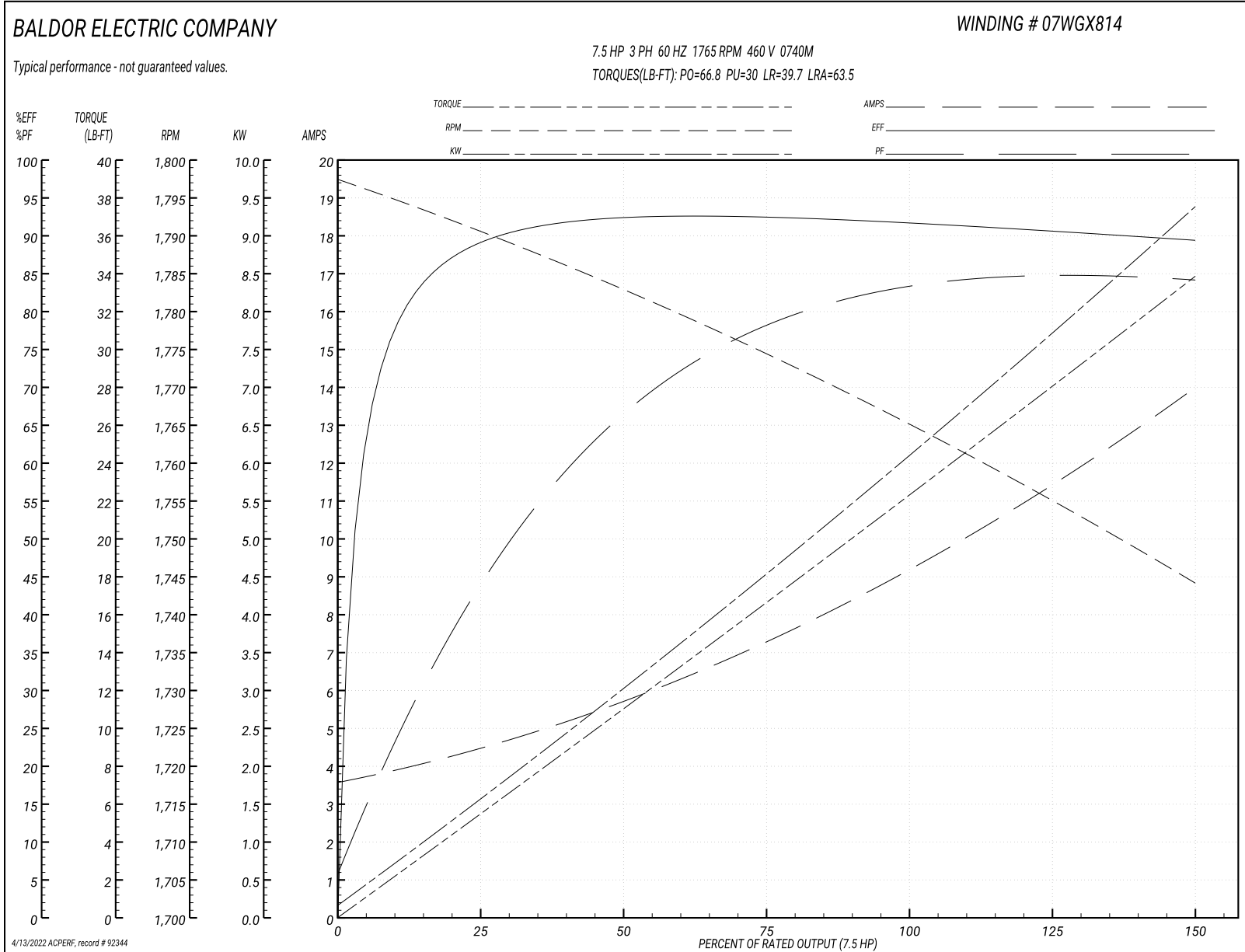
Typical performance - not guaranteed values

Winding: 07WGX814-R056		Type: 0740M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5	Full Load Torque	22.32 LB-FT
Volts	460	Start Configuration	direct on line
Full Load Amps	9.5	Breakdown Torque	66.8 LB-FT
R.P.M.	1765	Pull-up Torque	30 LB-FT
Hz	60 Phase	Locked-rotor Torque	39.7 LB-FT
NEMA Design Code	B KVA Code	Starting Current	63.5 A
Service Factor (S.F.)	1.15	No-load Current	3.71 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	1.485 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	49°C
S.F. Amps		Temp. Rise @ S.F. Load	61°C
		Locked-rotor Power Factor	36.2

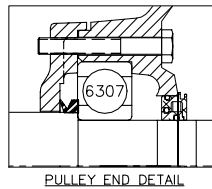
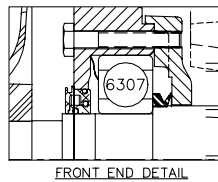
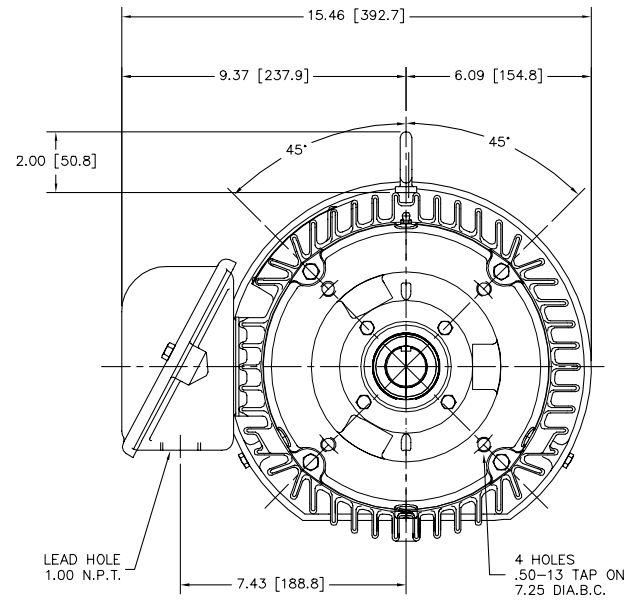
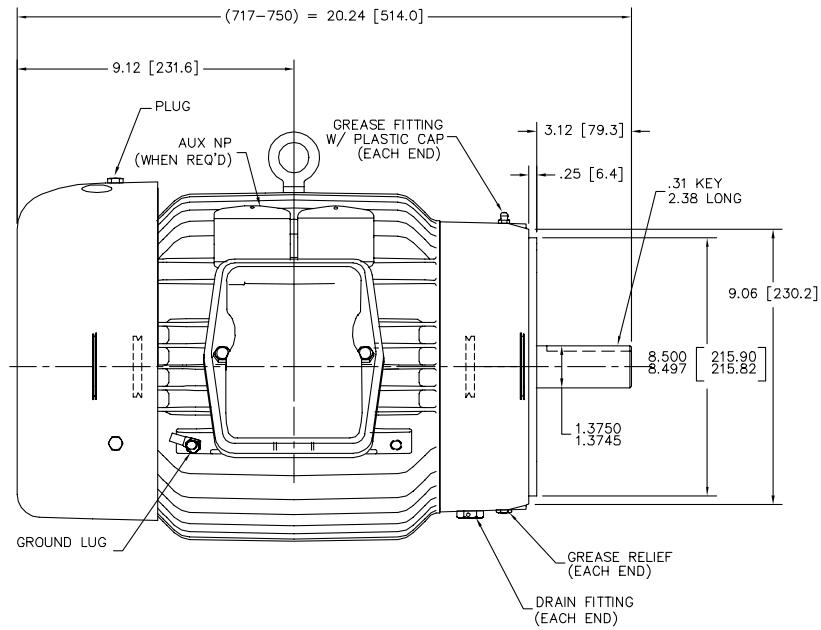
Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	85	83
Efficiency	88.6	92.1	92.4	91.7	90.7	89.3	91.1
Speed	1789.9	1782.7	1774.5	1765.4	1755.6	1743.7	1760
Line amperes	4.3	5.61	7.32	9.31	11.5	13.9	10.6

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values



07LYM323



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
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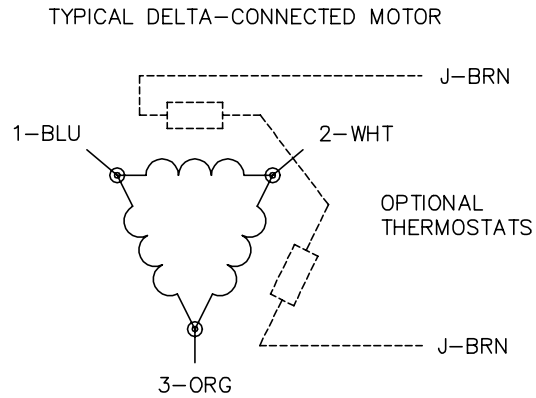
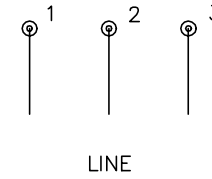
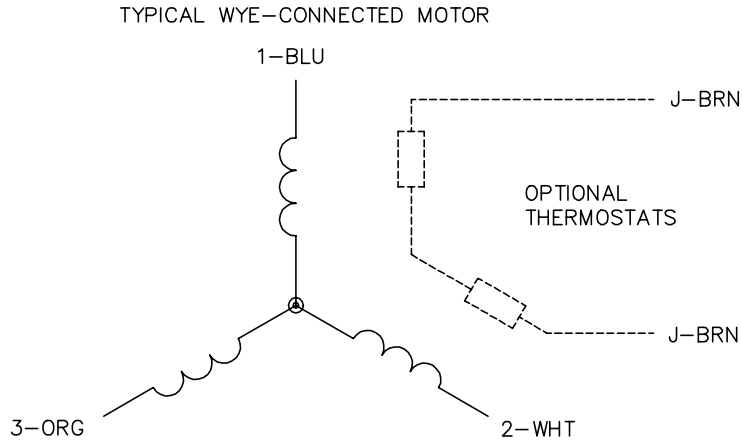
BALDOR - RELIANCE®

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

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