

BALDOR® • RELIANCE 

Product Information Packet

PFC EQUIPMENT

VEM3770T

7.5HP,1770RPM,3PH,60HZ,213TC,0738M,TEFC

Part Detail							
Revision:	T	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGX790	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	07G082	Layout:	07LYG082	Poles:	04	Created Date:	
Base:	N	Eff. Date:	07-11-2019	Leads:	9#14		

Specs			
Catalog Number:	VEM3770T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	213TC	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	J
Output @ Frequency:	7.500 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	0738M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	81
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	No Mounting	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	19.000 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding
	19.800 A @ 208.0 V	Shaft Rotation:	Reversible
	9.500 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	A	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
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
		Winding Thermal 2:	None

Nameplate NP3441LUA										
CAT.NO.	VEM3770T									
SPEC	07G082X790									
HP	7.5									
VOLTS	230/460									
AMPS	19/9.5									
RPM	1770									
FRAME	213TC				HZ	60			PH	3
SF	1.15		CODE	J	DES	A		CLASS	F	
NEMA NOM. EFF	91.7		PF	81						
RATING	40C AMB-CONT									
CC	010A			USABLE AT 208V			19.8			
ENCL	TEFC		SER							
DE	6307			ODE	6206					
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1										
	50Hz 7.5HP 190/380V 22/11A								SF1.0	

Parts List		
Part Number	Description	Quantity
SA126208	SA 07G082X790	1.000 EA
RA116524	RA 07G082X790	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
WD1000B17	T&B CX35TN TERMINAL	1.000 EA
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
37EP1100A41	FR ENDPLATE ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37PE1300A10	PUEP ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
07FH4007SP	PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
09GS1013SP	09 GS FOR 09CB3501 LID - LEXIDE	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 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

Parts List (continued)		
Part Number	Description	Quantity
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.036 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	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 (1200/bx) 3/19	1.000 EA

AC Induction Motor Performance Data

Record # 34382 - Typical performance - not guaranteed values

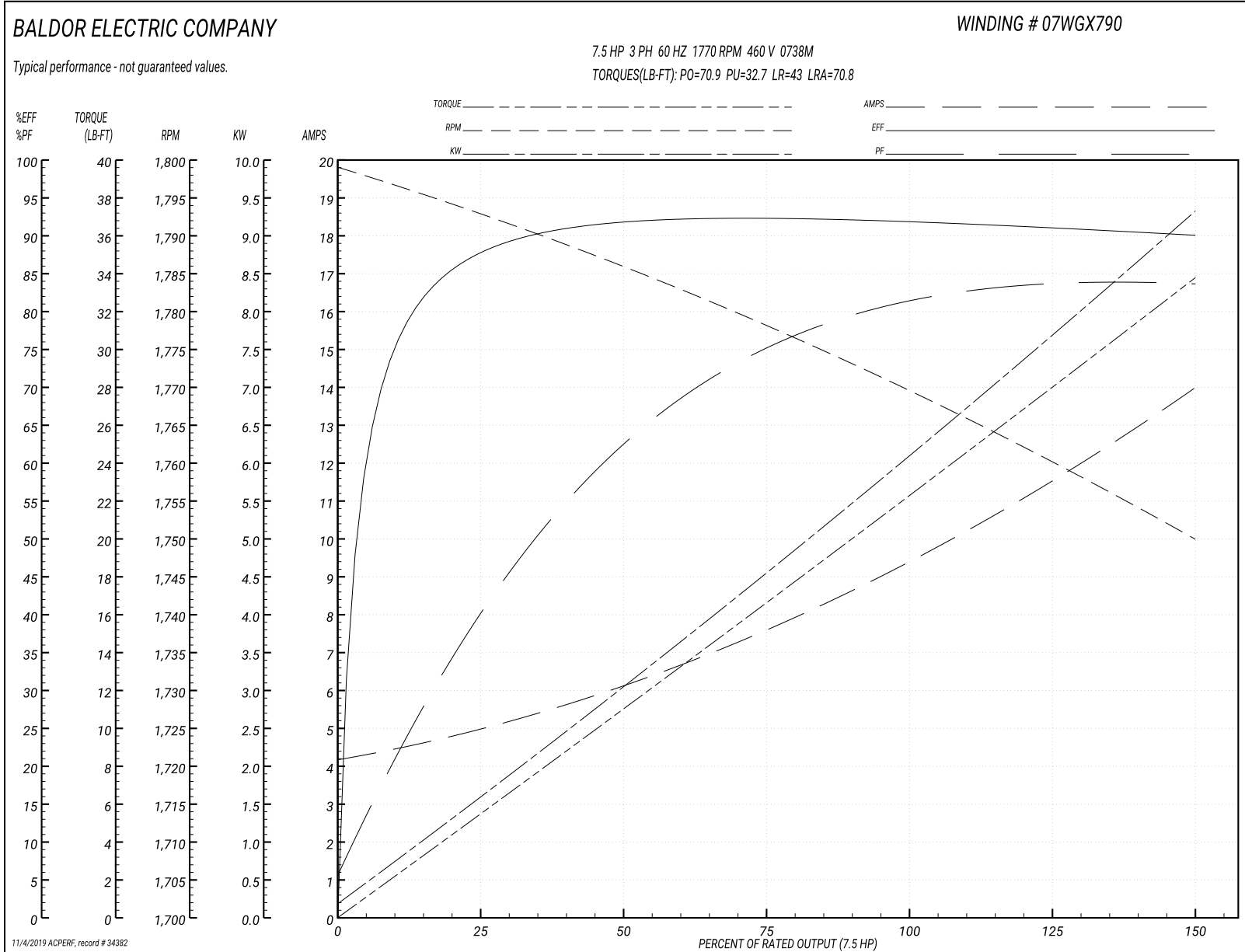
Winding: 07WGX790-R010	Type: 0738M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5			Full Load Torque	22.2 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	19/9.5			Breakdown Torque	70.9 LB-FT
R.P.M.	1770			Pull-up Torque	32.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	43 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	70.8 A
Service Factor (S.F.)	1.15			No-load Current	4.3 A
NEMA Nom. Eff.	91.7	Power Factor	81	Line-line Res. @ 25°C	1.41 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	50°C
				Locked-rotor Power Factor	37.2
				Rotor inertia	0.934 LB-FT ²

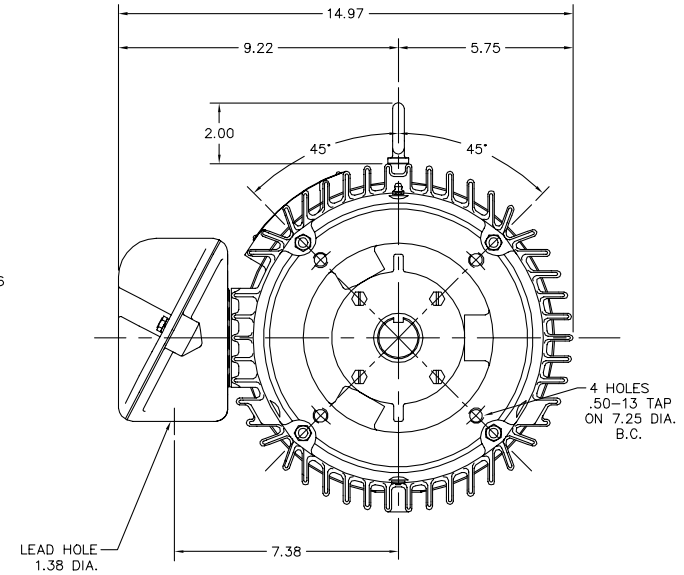
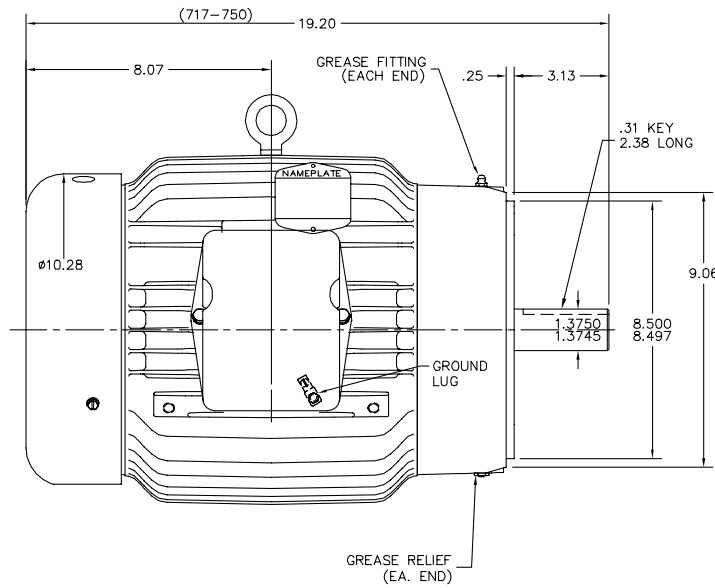
Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	80	83	84	82
Efficiency	87.5	91.6	92.5	91.8	91.1	90.1	91.5
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9	10.7

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



07LYG082



07LYG082

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

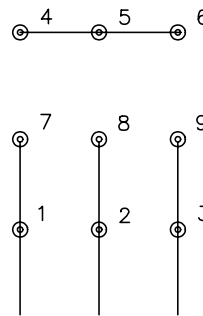
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MTL: -		

BALDOR
VERT TEFC 307M 213-5TC, HI-EFF
SH 1 of 1

CD0005

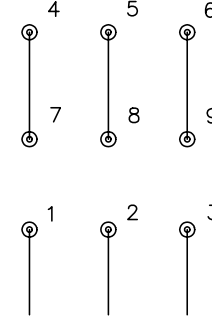


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005