

# **BALDOR**® • *RELIANCE*

## **Product Information Packet**

# **CEM3770T**

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

Part Detail							
Revision:	V	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGX790	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	07H058	Layout:	07LYH058	Poles:	04	Created Date:	
Base:	RG	Eff. Date:	11-13-2017	Leads:	9#14		

Specs			
Catalog Number:	CEM3770T	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:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

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

Nameplate NP3441LUA

CAT.NO.	CEM3770T							
SPEC	07H058X790							
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							

**AC Induction Motor Performance Data**

Record # 34382 - Typical performance - not guaranteed values

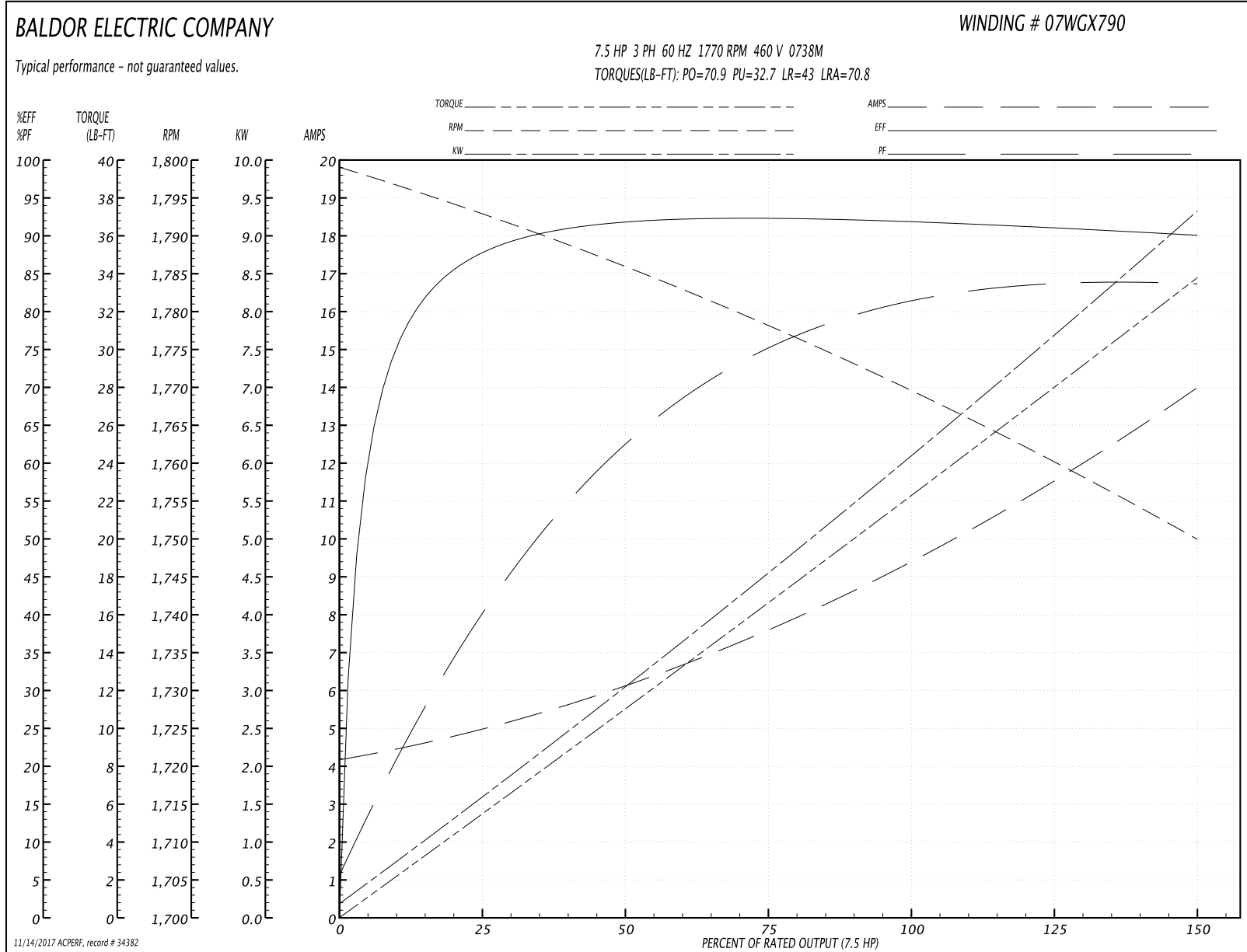
<b>Winding:</b> 07WGX790-R010	<b>Type:</b> 0738M	<b>Enclosure:</b> TEFC
-------------------------------	--------------------	------------------------

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 <sup>2</sup>

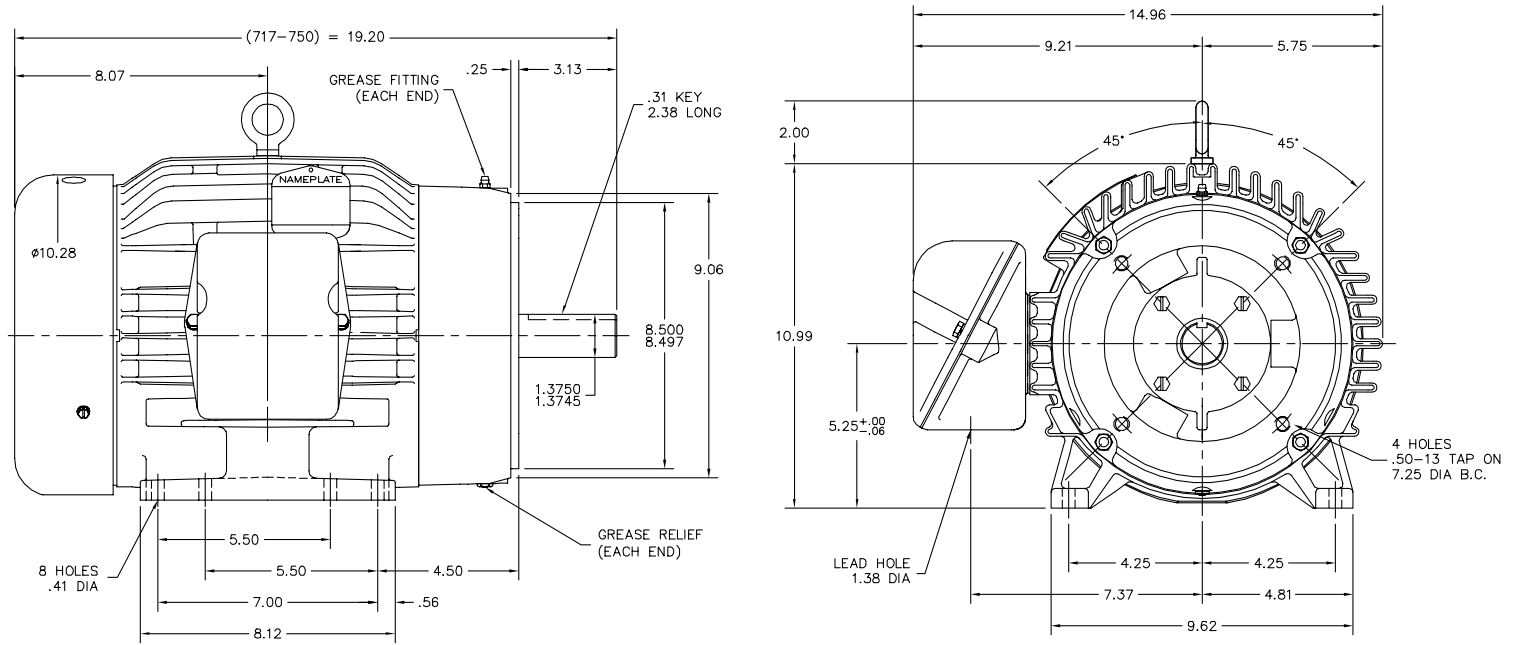
Load Characteristics 460 V, 60 Hz, 7.5 HP

% 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



07LYH058



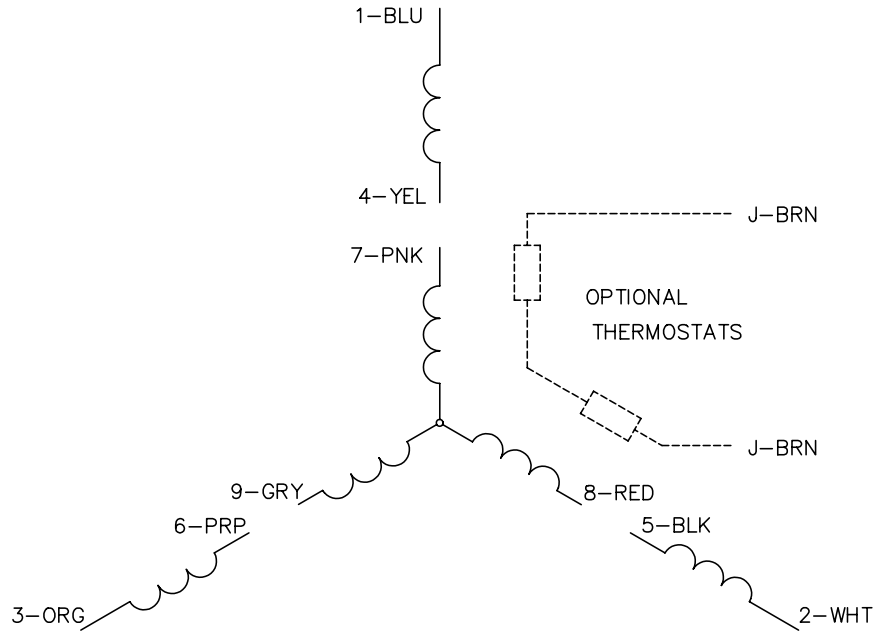
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: OMIT GROUND LUG FROM LAYOUT		
REV. LTR: M	VERSION: 03	TDR: 000000569767
FILE: \AAA\00016\842	REVISED: 08:57:45 12/03/2010	BY: ENMATRO
MTL: -		

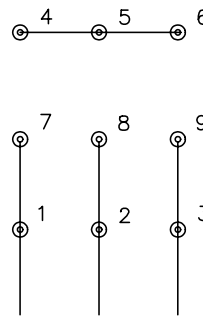
**BALDOR**  
 HORZ 213-5TC TEFC 307M SUPER-E  
 SH 1 of 1

07LYH058

CD0005

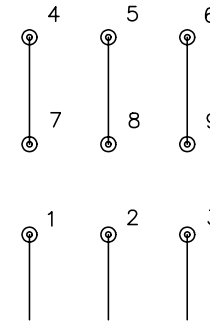


LOW VOLTAGE  
(2Y)



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			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005