

BALDOR® • RELIANCE 

Product Information Packet

CEM3770T

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

Part Detail							
Revision:	X	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:	06-14-2021	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
Motor Letter Type:	Three Phase	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	0738M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	81
	CSA EEV	Product Family:	General Purpose
	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:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End

Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	19.000 A @ 230.0 V	Shaft Rotation:	Reversible
	19.800 A @ 208.0 V	Shaft Slinger Indicator:	No Slinger
	9.500 A @ 460.0 V	Speed Code:	Single Speed
Design Code:	A	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Winding:	None
Feedback Device:	NO FEEDBACK	Vibration Sensor Indicator:	No Vibration Sensor
Front Face Code:	Standard	Winding Thermal 1:	None
Front Shaft Indicator:	None	Winding Thermal 2:	None

Parts List		
Part Number	Description	Quantity
SA126211	SA 07H058X790	1.000 EA
RA116527	RA 07H058X790	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	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
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
37EP1100A41	FR ENDPLATE ASSEMBLY FOR ROUTING	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	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
HW4500A17	317400 ALEMITE GREASE RELIEF	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	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 LB
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 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
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 34382

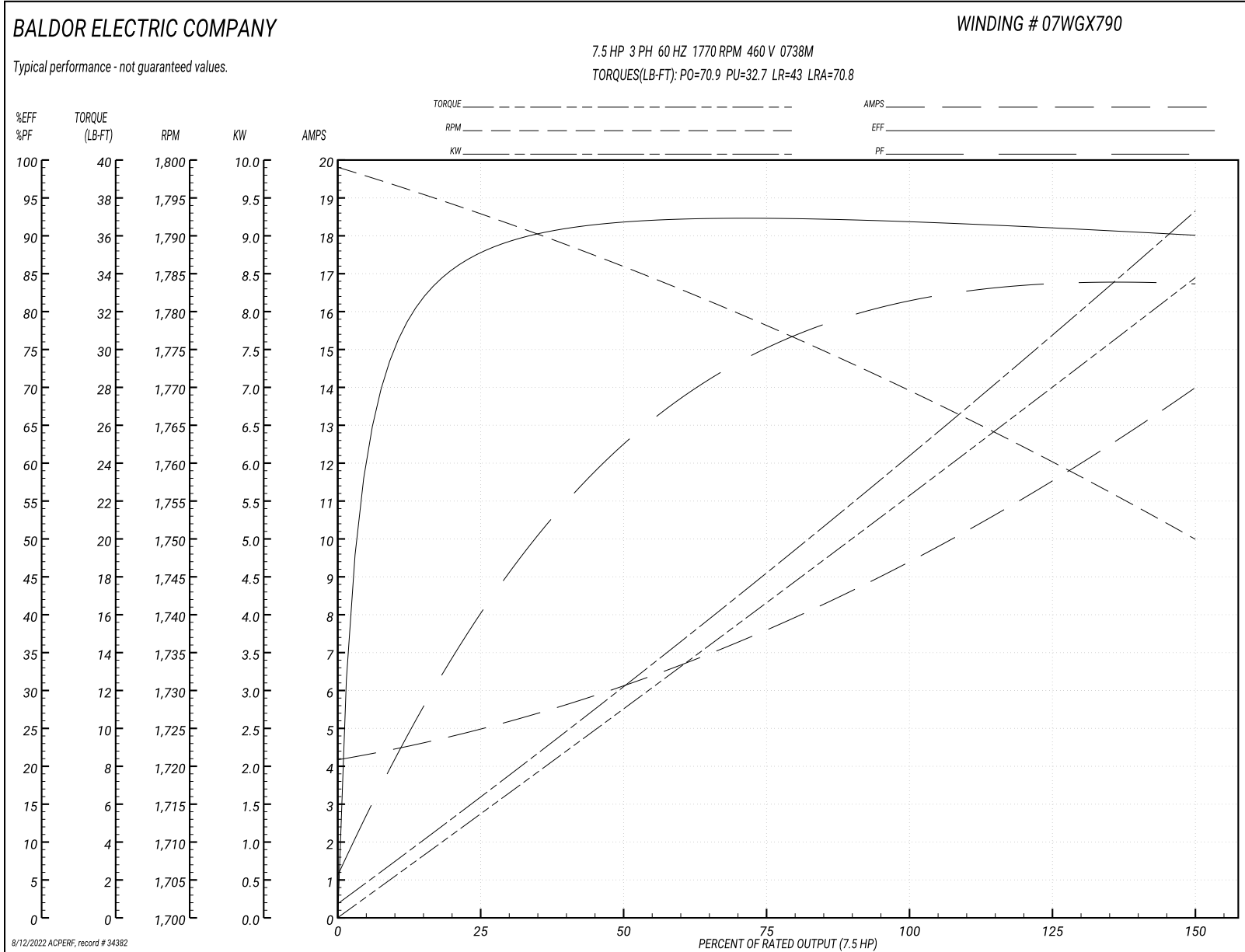
Typical performance - not guaranteed values

Winding: 07WGX790-R010		Type: 0738M	Enclosure: 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	Locked-rotor Torque	43 LB-FT
NEMA Design Code	A KVA Code	Starting Current	70.8 A
Service Factor (S.F.)	1.15	No-load Current	4.3 A
NEMA Nom. Eff.	91.7 Power Factor	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

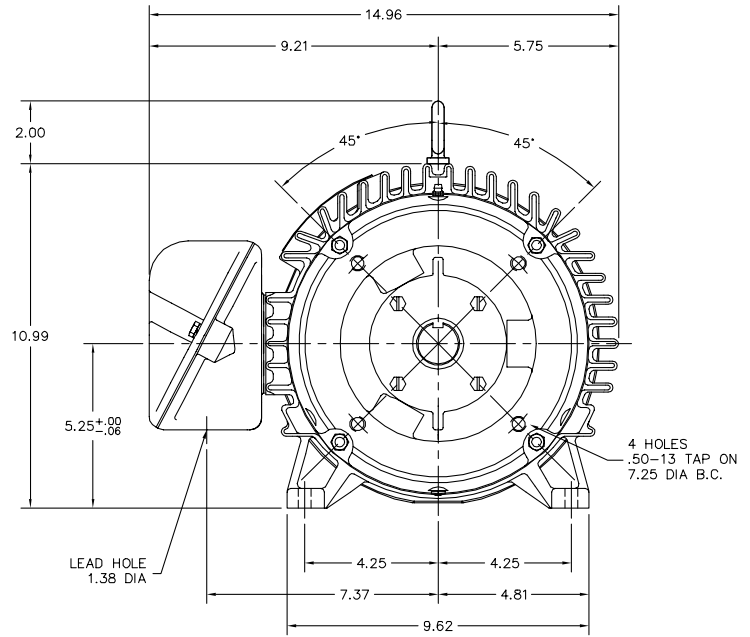
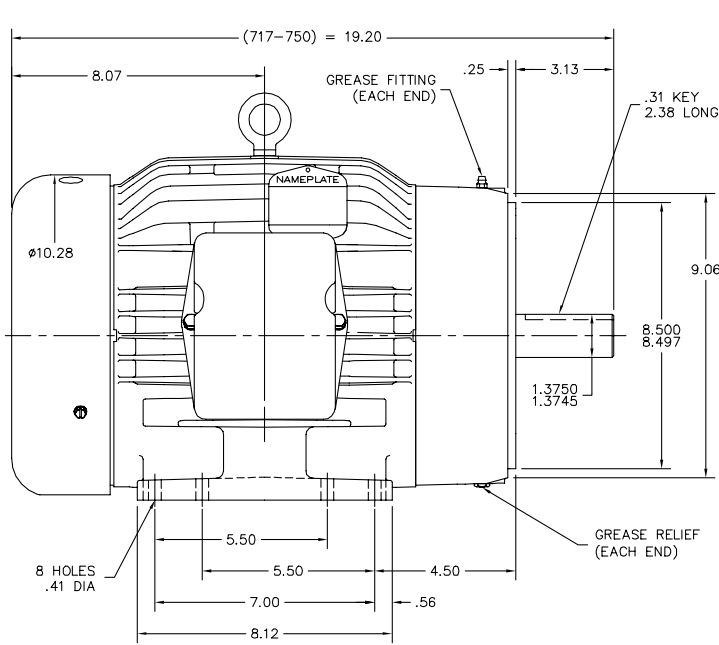
Load Characteristics 460 V, 60 Hz, 7.5 HP

% 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



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005