

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3770T-8G**

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

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGX497	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	07L783	Layout:	07LYL783	Poles:	04	Created Date:	09-11-2013
Base:	RG	Eff. Date:	01-09-2018	Leads:	3#12		

Specs			
Catalog Number:	EM3770T-8G	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	J
Frame:	213T	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 @ 12 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	200.0 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:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	21.200 A @ 208.0 V	Shaft Ground Indicator:	Shaft Grounding

	21.400 A @ 200.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	A	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
<b>Insulation Class:</b>	H	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3441L</b>										
<b>CAT.NO.</b>	EM3770T-8G									
<b>SPEC.</b>	07L783X497G1									
<b>HP</b>	7.5									
<b>VOLTS</b>	200									
<b>AMP</b>	21.4									
<b>RPM</b>	1770									
<b>FRAME</b>	213T				<b>HZ</b>	60			<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	J	<b>DES</b>	A		<b>CL</b>	H	
<b>NEMA-NOM-EFF</b>	91.7		<b>PF</b>	81						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>			21.2		
<b>DE</b>	6307				<b>ODE</b>	6206				
<b>ENCL</b>	TEFC		<b>SN</b>							
<b>VPWM INVERTER READY</b>										
CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA269064	SA 07L783X497G1	1.000 EA
RA255718	RA 07L783X497G1	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
37EP1100A01	FR ENDPLATE MACH	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37EP1101A09	SPL PULLEY EP ENCL 37 307 BRG.	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A26	1/4-20X 1 5/8 HEX HD	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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
37FN3002A01SP	EXFN, PLASTIC, 9.00 OD, 1.155 ID	1.000 EA
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.036 GA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 EA
10XL3808A28	3/8 X 1 3/4" LAG SCREW	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

**AC Induction Motor Performance Data**

Record # 50351 - Typical performance - not guaranteed values

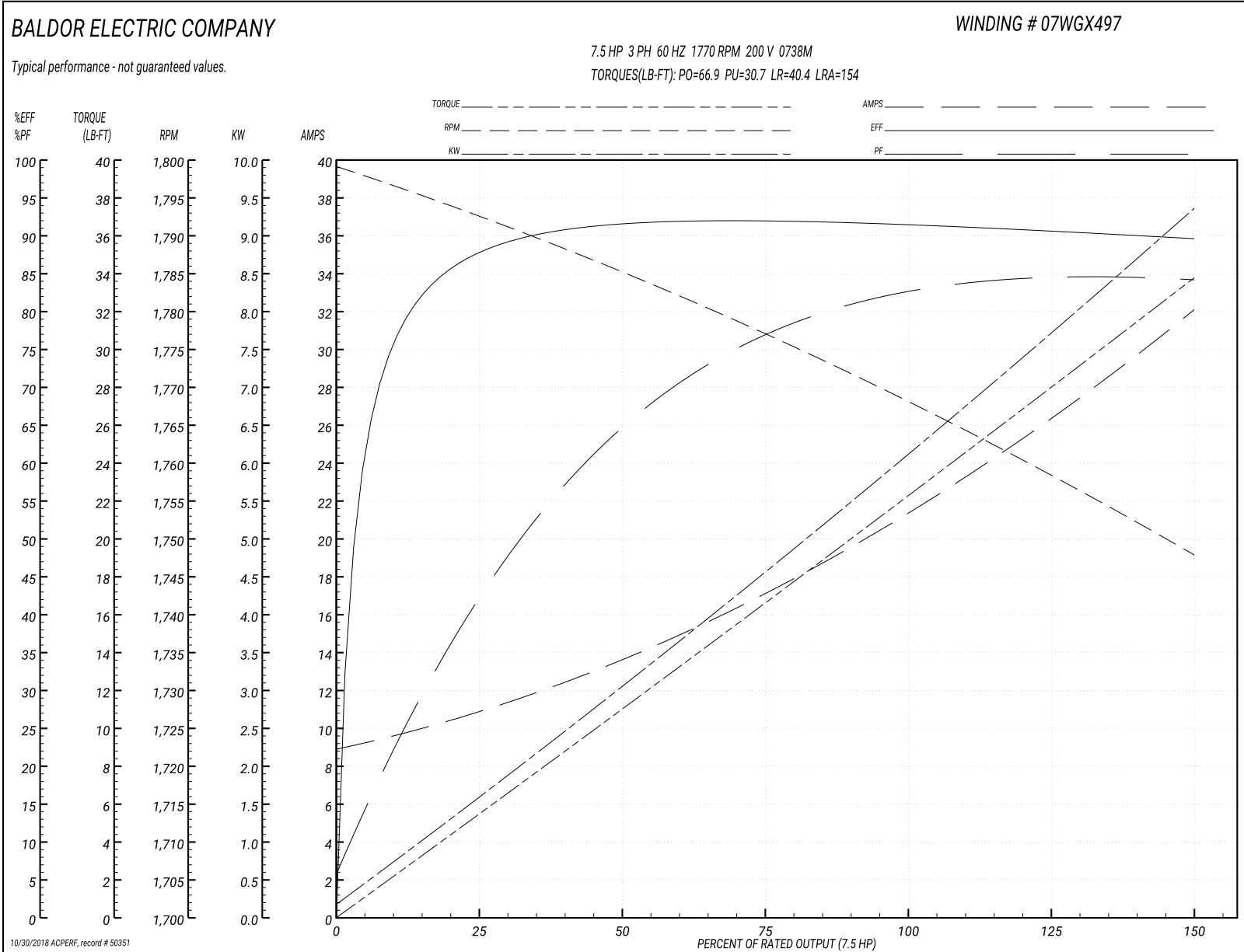
<b>Winding:</b> 07WGX497-R007	<b>Type:</b> 0738M	<b>Enclosure:</b> TEFC
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Nameplate Data				200 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5			Full Load Torque	22.1 LB-FT
Volts	200			Start Configuration	direct on line
Full Load Amps	21.4			Breakdown Torque	66.9 LB-FT
R.P.M.	1770			Pull-up Torque	30.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	40.4 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	154 A
Service Factor (S.F.)	1.15			No-load Current	9.21 A
NEMA Nom. Eff.	91.7	Power Factor	81	Line-line Res. @ 25°C	0.29 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	42°C
S.F. Amps				Temp. Rise @ S.F. Load	51°C
				Locked-rotor Power Factor	37.6
				Rotor inertia	0.934 LB-FT <sup>2</sup>

Load Characteristics 200 V, 60 Hz, 7.5 HP

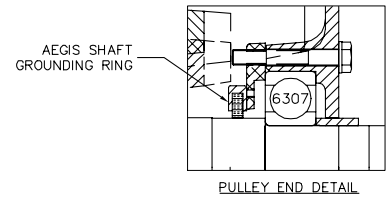
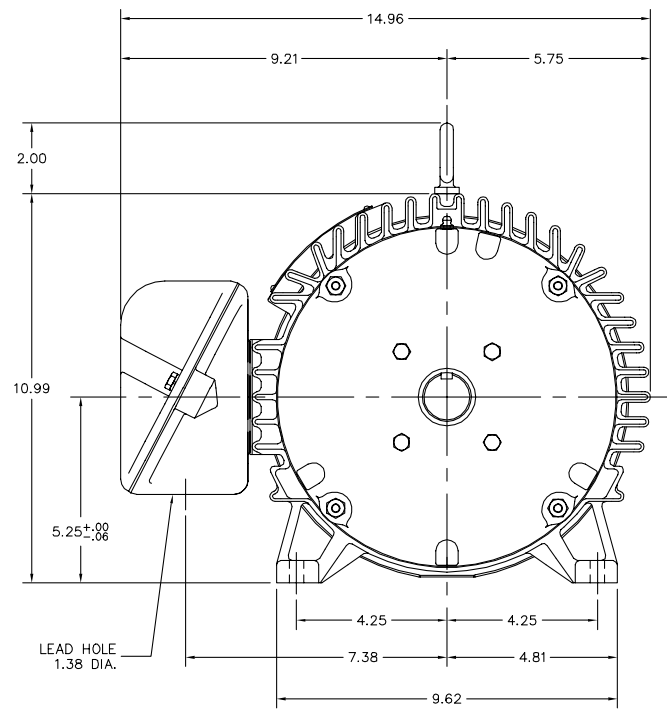
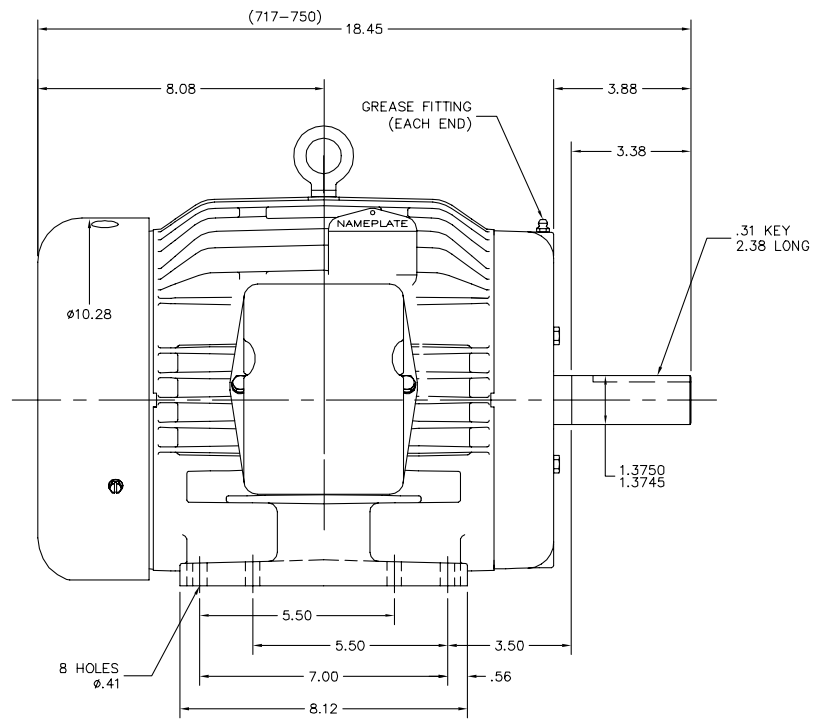
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	66	76	81	84	85	83
Efficiency	87.7	91.4	92	91.7	90.7	89.6	91.1
Speed	1793	1785	1777	1769	1758	1748	1762
Line amperes	10.5	13.4	17.1	21.5	26.5	31.9	24.4

Performance Graph at 200V, 60Hz, 7.5HP Typical performance - Not guaranteed values





07LYL783



PULLEY END DETAIL

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

REV. DESC: CHANGED SHAFT TO 07SH1E10		
REV. LTR: A	VERSION: 01	TDR: 000000859913
FILE: \AAA\00180\432	REVISED: 12:28:48 06/25/2014	BY: ENCHALO
MTL: -		

**BALDOR**

HORZ 213-5T TEFC M, LOCKED BRG, INTERNAL AEGIS SHAFT GROUND

SH 1 of 1

07LYL783

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000D		FILE: AAA00005141	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

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

CD0006