

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3770T**

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

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGT510	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	07H002	Layout:	07LYH002	Poles:	04	Created Date:	11-11-2020
Base:	RG	Eff. Date:	06-14-2021	Leads:	9#14		

Specs			
Catalog Number:	EM3770T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	213T	KVA Code:	J
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 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

<b>Current @ Voltage:</b>	19.000 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	20.000 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>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

Nameplate NP3441LUA

CAT.NO.	EM3770T					
SPEC	07H002T510					
HP	7.5					
VOLTS	230/460					
AMPS	19/9.5					
RPM	1770					
FRAME	213T		HZ	60	PH	3
SF	1.15		CODE	J	DES	A
NEMA NOM. EFF	91.7		PF	81	CLASS	F
RATING	40C AMB-CONT					
CC	010A		USABLE AT 208V			20
ENCL	TEFC		SER			
DE	6307		ODE	6206		
VPWM INVERTER READY						
CT6-60H(10:1)VT3-60H(20:1)						

Parts List		
Part Number	Description	Quantity
SA388059	SA 07H002T510	1.000 EA
RA378401	RA 07H002T510	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
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	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
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
37PE1101A22	PU 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
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 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
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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	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
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
37-1304	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 85534

Preliminary Data Sheet

<b>Winding: 07WGT510-R001</b>		<b>Type: 0738M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	22.3 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	19/9.5	<b>Breakdown Torque</b>	69.1 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	28.7 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	39.1 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	J	<b>Starting Current</b>	67.4 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	4.07 A		
<b>NEMA Nom. Eff.</b>	91.7 <b>Power Factor</b>	81	<b>Line-line Res. @ 25°C</b>	1.55 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	48°C		
<b>S.F. Amps</b>	21.4/10.7	<b>Temp. Rise @ S.F. Load</b>	62°C		
		<b>Locked-rotor Power Factor</b>	41.2		
		<b>Rotor inertia</b>	0.934 lb-ft <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	44	66	76	81	84	85	83
<b>Efficiency</b>	88	91.7	92.2	91.7	90.7	89.3	90.9
<b>Speed</b>	1792	1785	1777	1769	1759	1749	1761
<b>Line amperes</b>	4.61	5.85	7.48	9.43	11.6	13.9	10.7



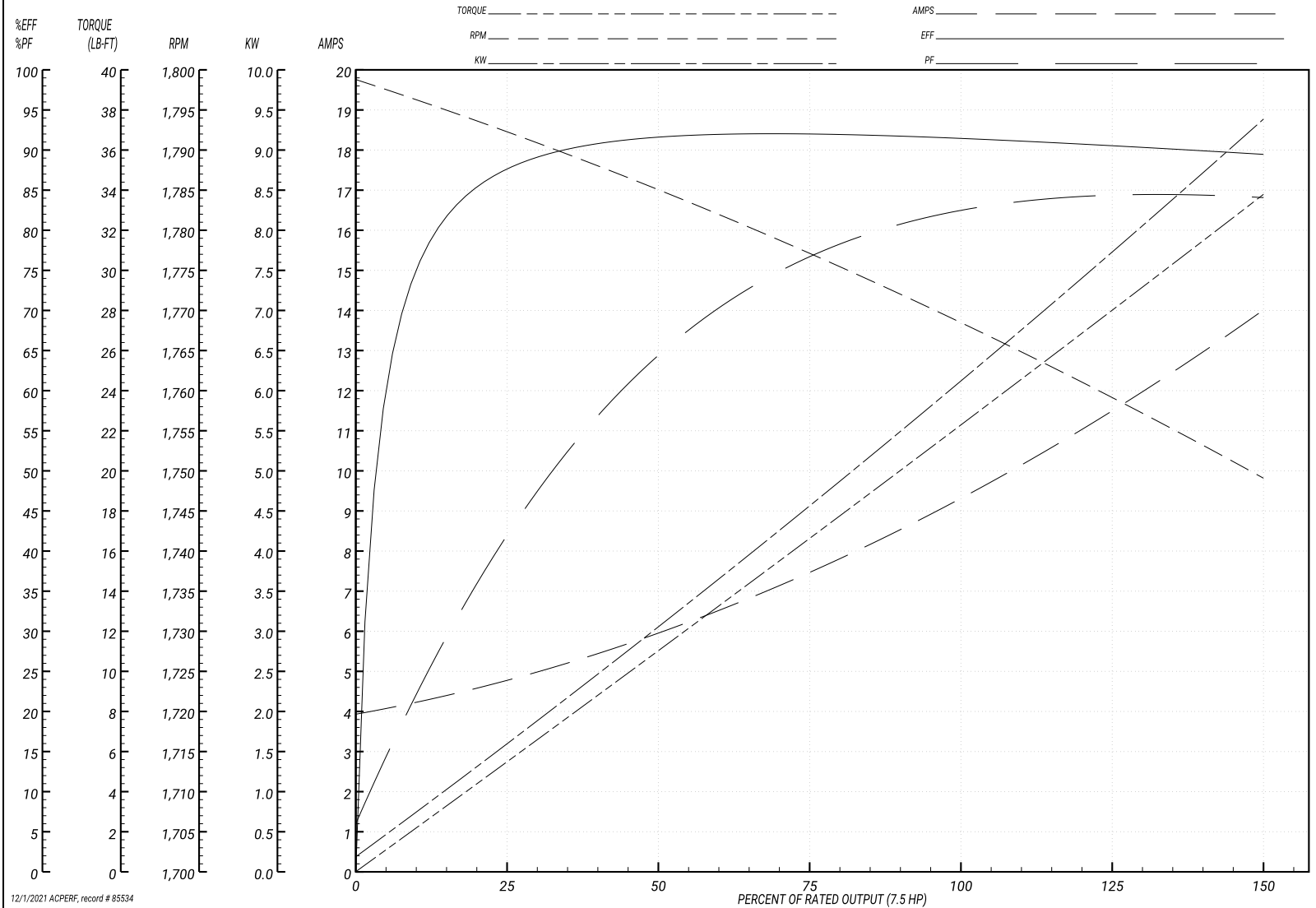
Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values

**BALDOR ELECTRIC COMPANY**

WINDING # 07WGT510

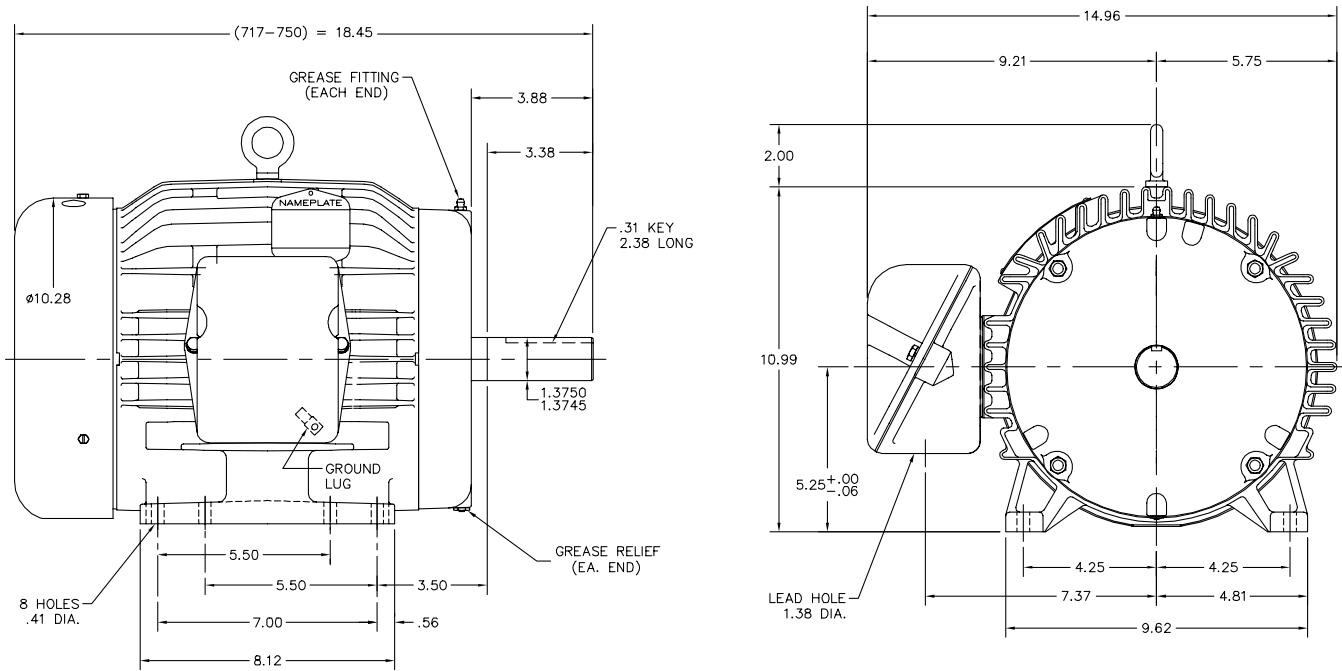
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M  
 TORQUES(LB-FT): PO=69.1 PU=28.7 LR=39.1 LRA=67.4



12/1/2021 ACPERF, record # 85534

07LYH002



07LYH002

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

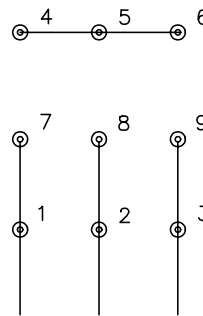
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**BALDOR**  
 HORZ 213-5T TEFC 307M  
 SH 1 of 1

CD0005

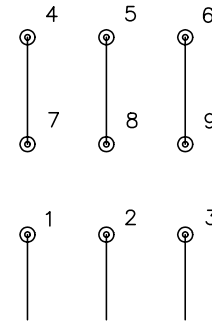


LOW VOLTAGE  
(2Y)



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.

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**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

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