

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3770T**

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

Part Detail							
Revision:	D	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:	01-13-2023	Leads:	9#14		

Specs			
Catalog Number:	EM3770T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	213T	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:	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:	NEMA_PREMIUM	Power Factor:	81
	UR	Product Family:	General Purpose
	NEMA PREMIUM	Pulley End Bearing Type:	Ball
	CSA EEV	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT

<b>Bearing Grease Type:</b>	Polyrex EM (-20F +300F)	<b>Shaft Extension Location:</b>	Pulley End
<b>Blower:</b>	None	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Current @ Voltage:</b>	20.000 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	9.500 A @ 460.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	19.000 A @ 230.0 V	<b>Speed Code:</b>	Single Speed
<b>Design Code:</b>	A	<b>Motor Standards:</b>	NEMA
<b>Drip Cover:</b>	No Drip Cover	<b>Starting Method:</b>	Direct on line
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Bearing:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Winding:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 1:</b>	None
<b>Front Shaft Indicator:</b>	None	<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
	CLASS F
NEMA NOM. EFF	91.7
	PF 81
RATING	40C AMB-CONT
CC	010A
	USABLE AT 208V N/A
ENCL	TEFC
	SER
DE	6307
	ODE 6206
VPWM INVERTER READY	SFA 21.4/10.7
CT6-60H(10:1)VT3-60H(20:1)	50HZ 7.5HP 190/380V 22.4/11.2A
	SF1.0

**AC Induction Motor Performance Data**

Record # 85534

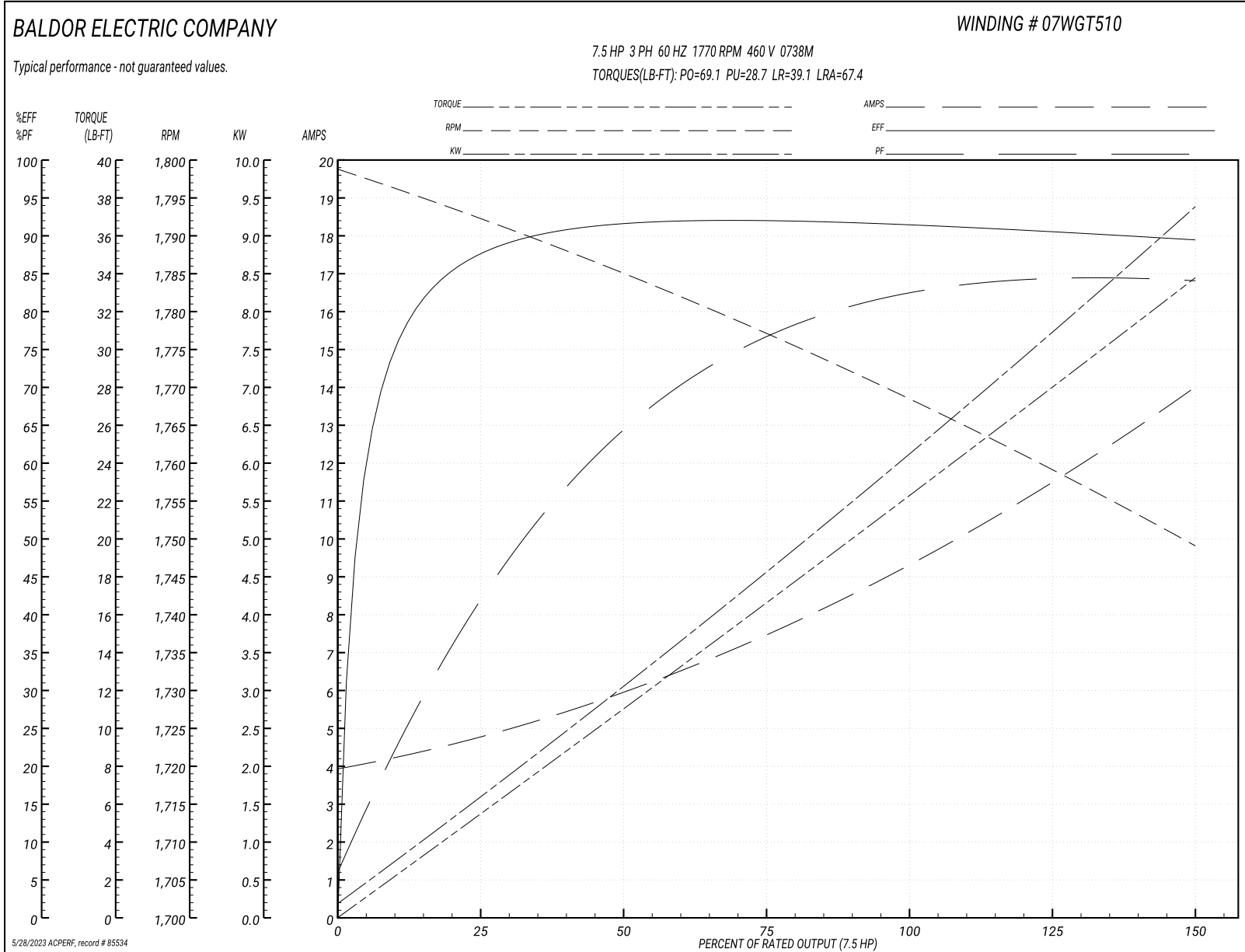
Preliminary Data Sheet

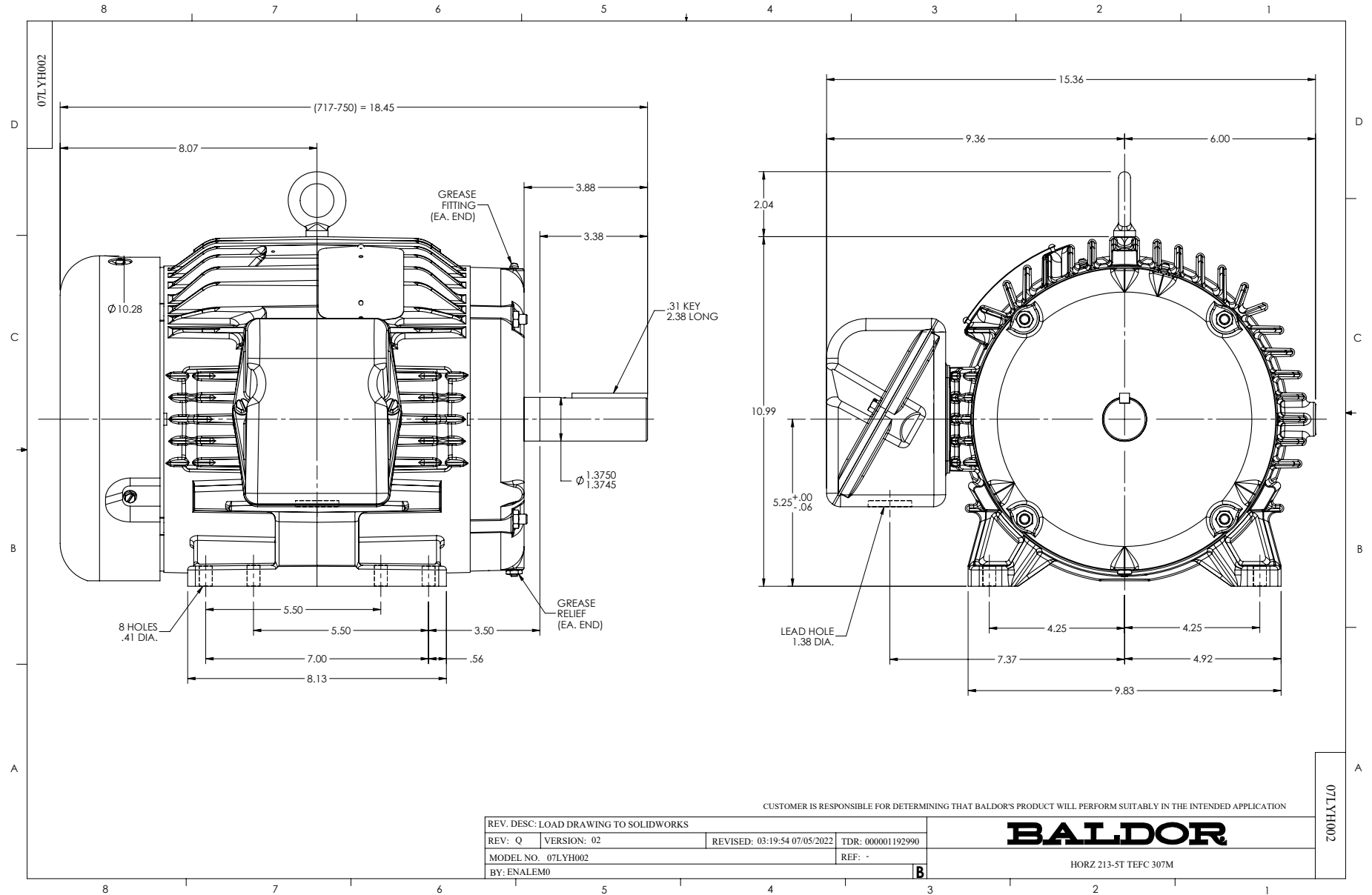
<b>Winding: 07WGT510-R001</b>		<b>Type: 0738M</b>		<b>Enclosure: TEFC</b>		
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>			
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	22.3 LB-FT			
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line			
<b>Full Load Amps</b>	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

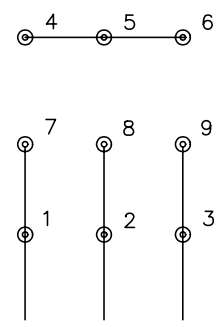




CD0005

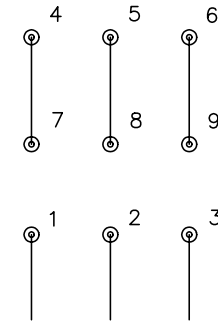


LOW VOLTAGE  
(2Y)



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