ABB BALDOR RELIANCE

Customer information packet

EM3770T-G

7.5HP, 1770RPM, 3PH, 60HZ, 213T, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	NEMA PREMIUM
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	9.500 A @ 460.0 V
	19.800 A @ 208.0 V
	19.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGX790
Layout	07LYL783
Eff. date	04-29-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	04-12-2019

High Voltage Full Load Amps	9.5 a
Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.45 IN
Power Factor	81
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3441LUA										
CAT.NO.	EM3770T-G									
SPEC	07-0000-0088									
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**	H			
NEMA NOM. EFF	91.7	**PF**	81							
RATING	40C AMB-CONT									
CC	010A									
ENCL	TEFC	**SER**								
DE	6307	**ODE**	6206							
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1										
	50HZ 5HP 190/380V 15.8/7.9A									SF1.0

AC Induction Motor Performance Data
Record # 75447
Typical performance - not guaranteed values

Winding: 07WGX790-R019	**Type:** 0738M	**Enclosure:** TEFC

Nameplate Data			
Rated Output (HP)			7.5
Volts			230/460
Full Load Amps			19/9.5
R.P.M.			1770
Hz	60	**Phase**	3
NEMA Design Code	A	**KVA Code**	J
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	91.7	**Power Factor**	81
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	22.18 LB-FT
Start Configuration	direct on line
Breakdown Torque	70.9 LB-FT
Pull-up Torque	32.7 LB-FT
Locked-rotor Torque	43 LB-FT
Starting Current	70.8 A
No-load Current	4.3 A
Line-line Res. @ 25ºC	1.41 Ω
Temp. Rise @ Rated Load	41°C
Temp. Rise @ S.F. Load	51°C
Locked-rotor Power Factor	37.2
Rotor inertia	0.934 LB-FT2

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	87.4	91.5	92.2	91.8	91	89.9	91.3
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.62	13.88	10.8

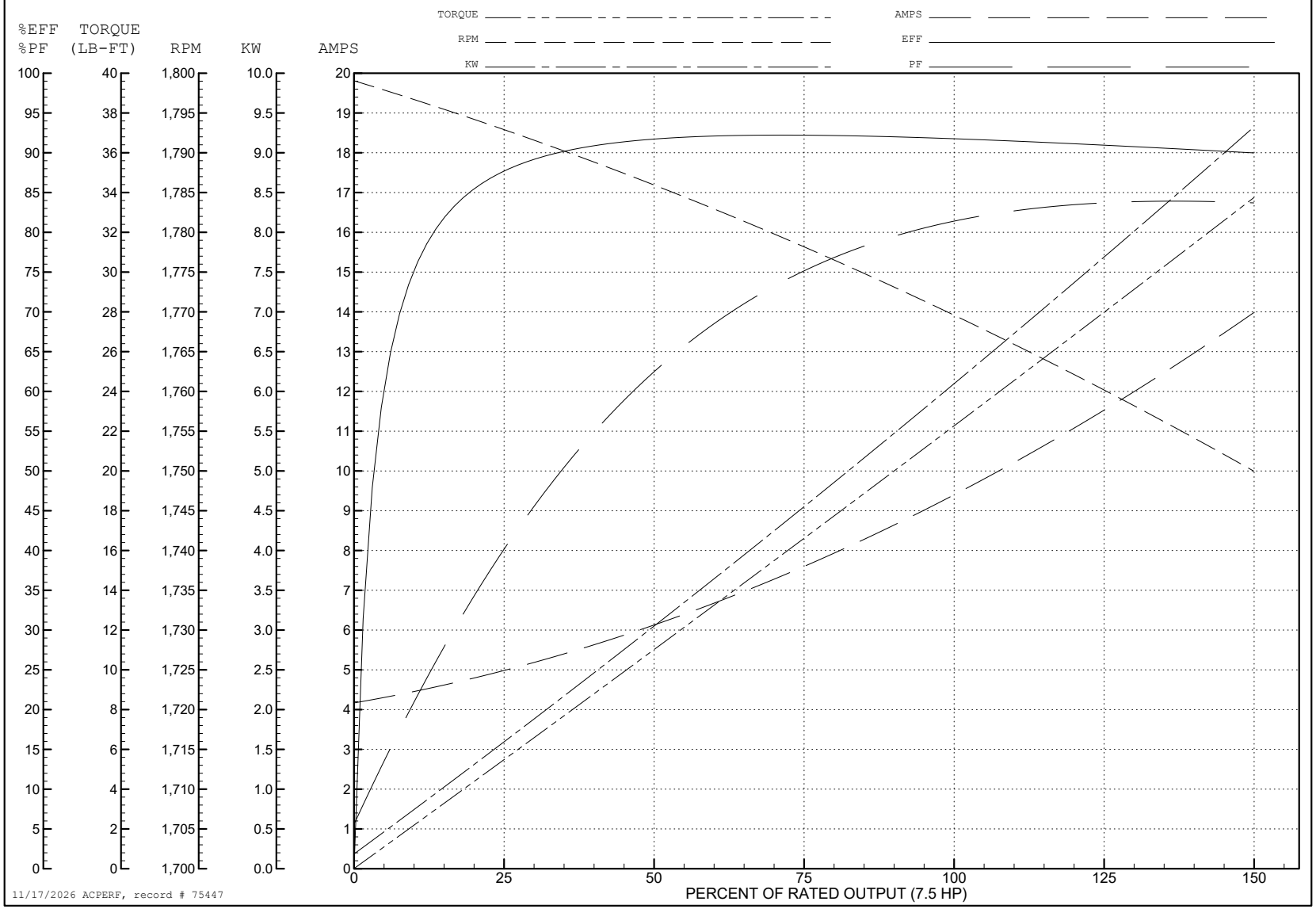
ABB Motors and Mechanical Inc.

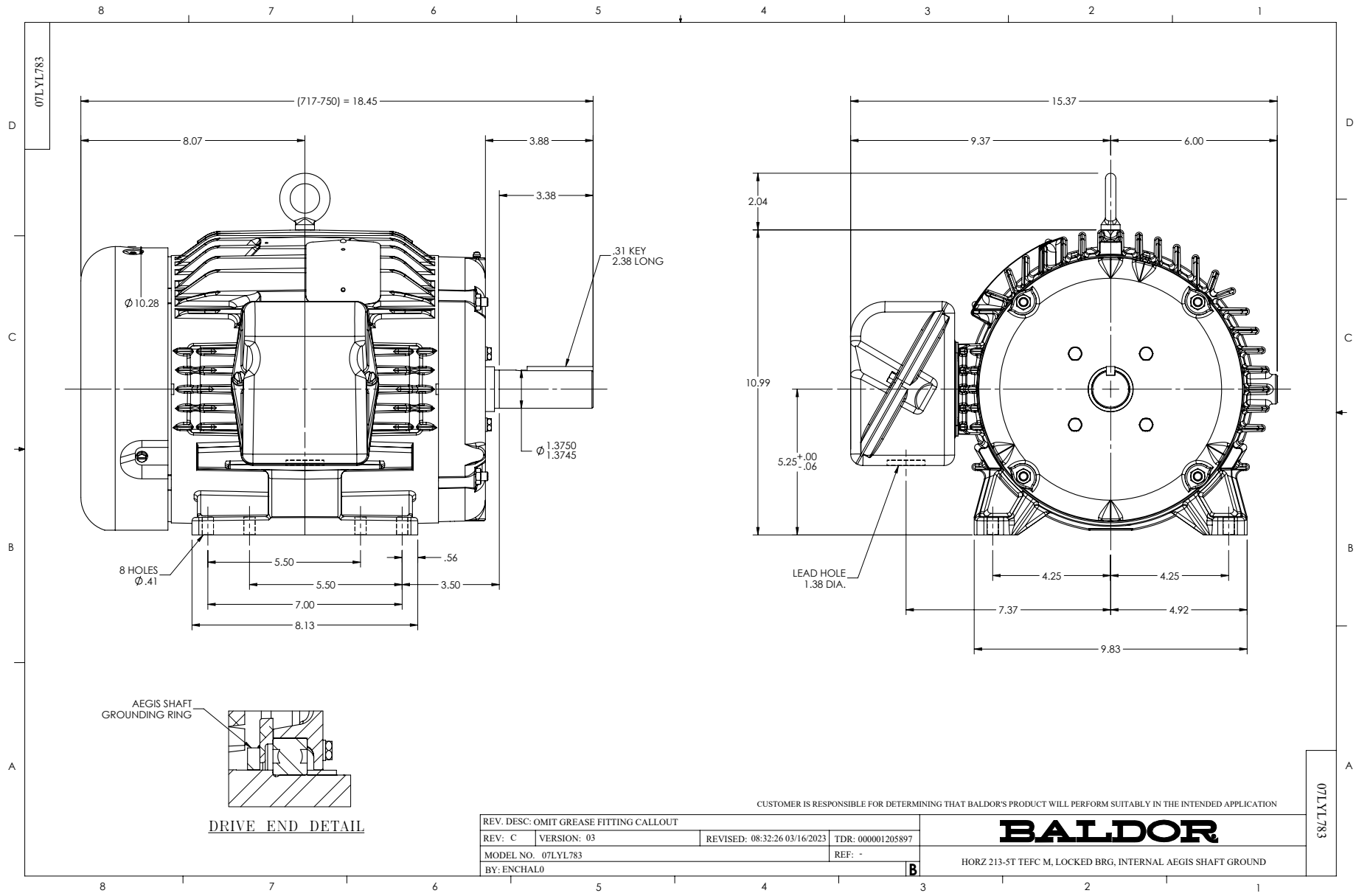
WINDING # 07WGX790

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

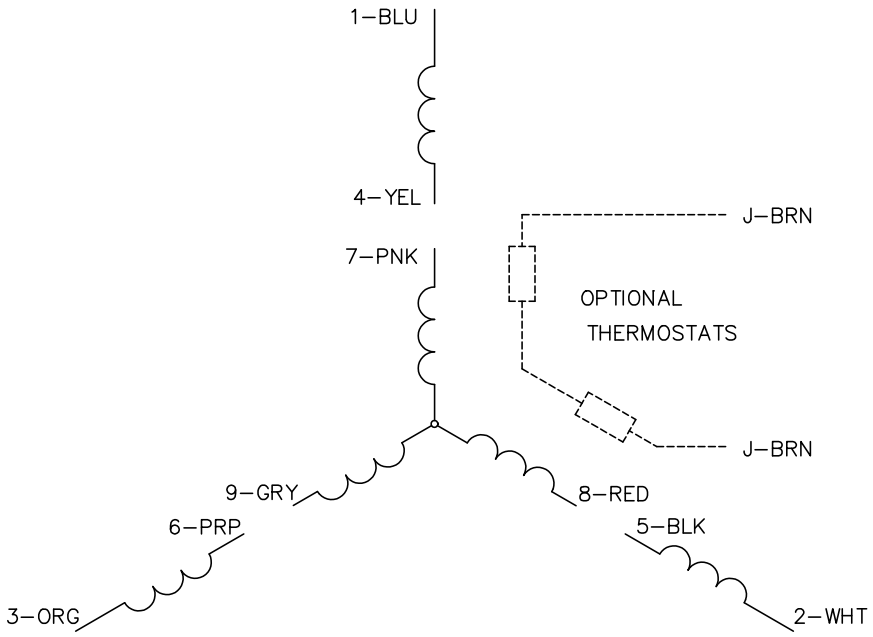
Typical performance - not guaranteed values.

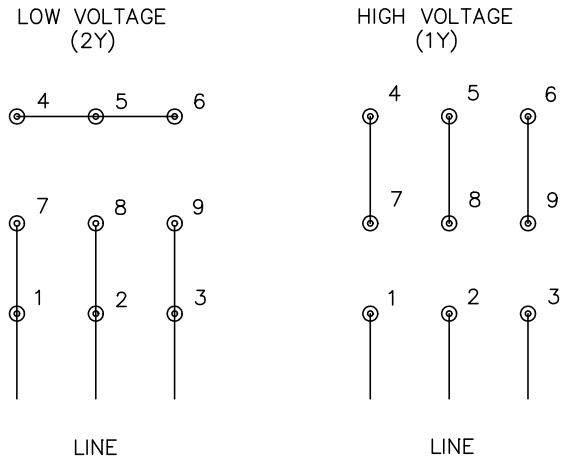
TORQUES(LB-FT): PO=70.9 PU=32.7 LR=43 LRA=70.8




07LYL783
(717-750) = 18.45
8.07
3.88
3.38
.31 KEY
2.38 LONG
Ø 10.28
Ø 1.3750
1.3745
8 HOLES
Ø .41
5.50
.56
5.50
3.50
7.00
8.13
15.37
9.37
6.00
2.04
10.99
5.25 +.00 -.06
LEAD HOLE
1.38 DIA.
4.25
4.25
7.37
4.92
9.83
AEGIS SHAFT
GROUNDING RING
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: OMIT GREASE FITTING CALLOUT
REV: C
VERSION: 03
REVISED: 08:32:26 03/16/2023
TDR: 000001205897
MODEL NO. 07LYL783
REF: -
BY: ENCHAL0
B
BALDOR
HORZ 213-5T TEFC M, LOCKED BRG, INTERNAL AEGIS SHAFT GROUND
07LYL783

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS