

ABB BALDOR RELIANCE III

Customer information packet

EM3770T-BG

7.5HP, 1770RPM, 3PH, 60HZ, 213T, TEFC, F1

Class - None

Division - Not Applicable

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	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGX790
Layout	07LYN555
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

NP1259L											
CAT.NO.	EM3770T-BG										
SPEC.	07-0000-0097										
HP	7.5										
VOLTS	230/460										
AMP	19/9.5										
RPM	1770										
FRAME	213T		HZ	60				PH	3		
SER.F.	1.15	CODE	J	DES	A	CL	H				
NEMA-NOM-EFF	91.7	PF	81								
RATING	40C AMB-CONT										
CC	010A										
DE	6307		ODE	6307							
ENCL	TEFC	SN									

AC Induction Motor Performance Data

Record # 75447

Typical performance - not guaranteed values

Winding: 07WGX790-R019			Type: 0738M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		7.5	Full Load Torque		22.18 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	3	Locked-rotor Torque		43 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		70.8 A
Service Factor (S.F.)		1.15	No-load Current		4.3 A		
NEMA Nom. Eff.		91.7	Power Factor	81	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		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

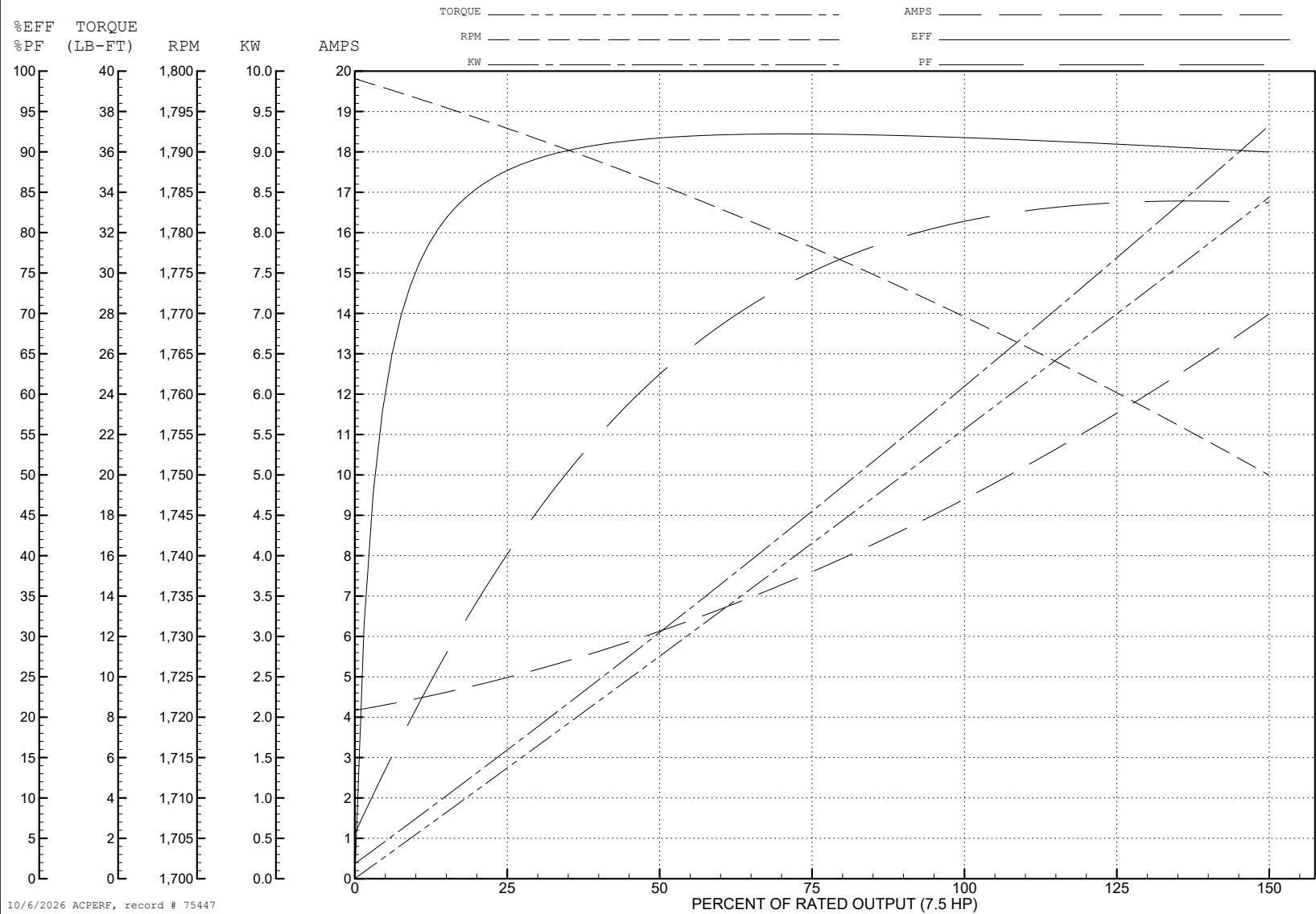
ABB Motors and Mechanical Inc.

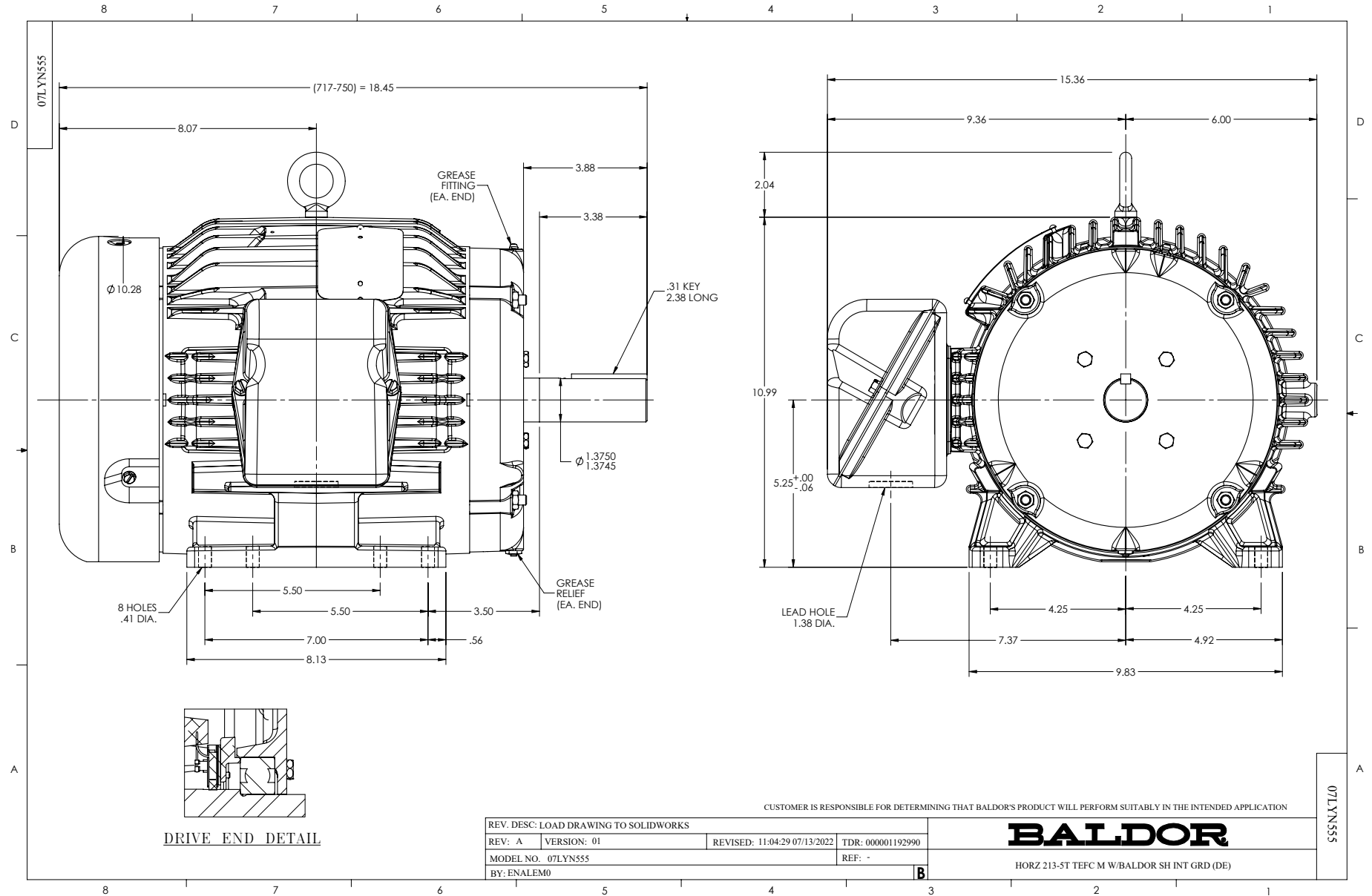
WINDING # 07WGX790

Typical performance - not guaranteed values.

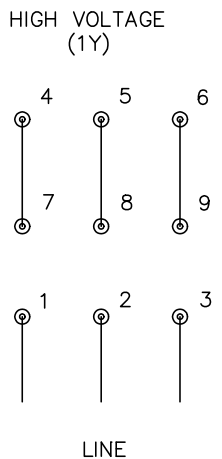
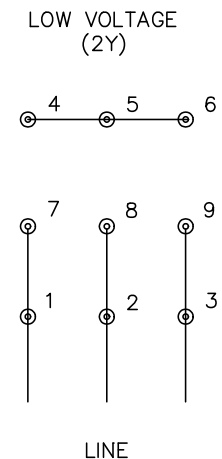
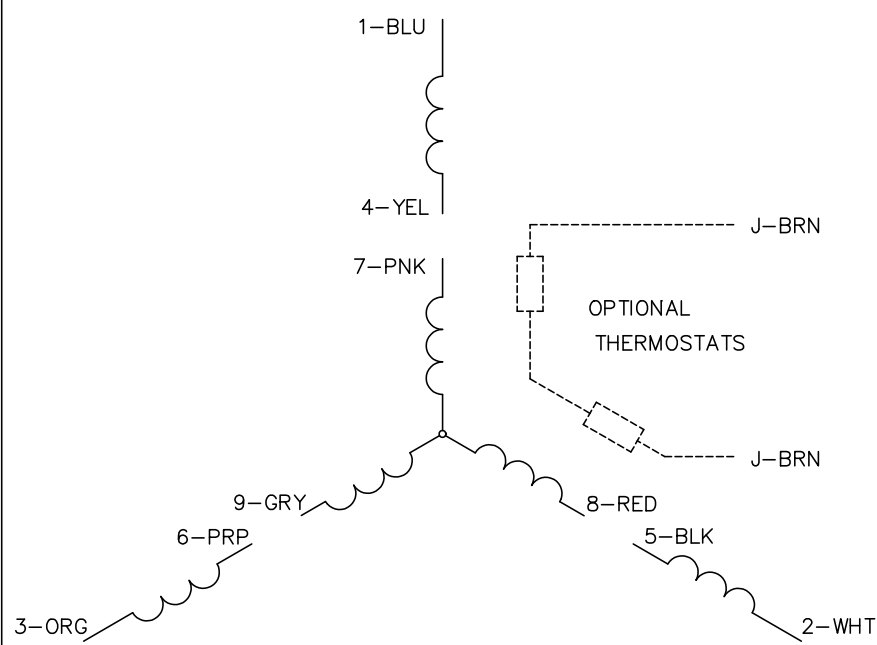
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

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





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.

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