

BALDOR • RELIANCE

Customer information packet

CEM3770T

7.5HP, 1770RPM, 3PH, 60HZ, 213, TC, 0738M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	19.800 A @ 208.0 V 9.500 A @ 460.0 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

Part detail

Revision	AA
Type	AC
Mech. spec.	07H058
Base	
Status	PRD/A
Elec. spec.	07WGX790
Layout	07LYH058
Eff. date	10-17-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-01-0001

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.20 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3441LUA

CAT.NO.	CEM3770T						
SPEC	07H058X790						
HP	7.5						
VOLTS	230/460						
AMPS	19/9.5						
RPM	1770						
FRAME	213TC	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						
ENCL	TEFC	SER					
DE	6307	ODE	6206				
VPWM INVERTER READY							
CT6-60H(10:1)VT3-60H(20:1	50Hz 7.5HP 190/380V 22/11A						SF1.0

AC Induction Motor Performance Data

Record # 34382

Typical performance - not guaranteed values

Winding: 07WGX790-R010		Type: 0738M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5	Full Load Torque	22.2 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	Locked-rotor Torque	43 LB-FT
NEMA Design Code	A KVA Code	Starting Current	70.8 A
Service Factor (S.F.)	1.15	No-load Current	4.3 A
NEMA Nom. Eff.	91.7 Power Factor	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	50°C
		Locked-rotor Power Factor	37.2
		Rotor inertia	0.934 LB-FT ²

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	87.5	91.6	92.5	91.8	91.1	90.1	91.5
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9	10.7

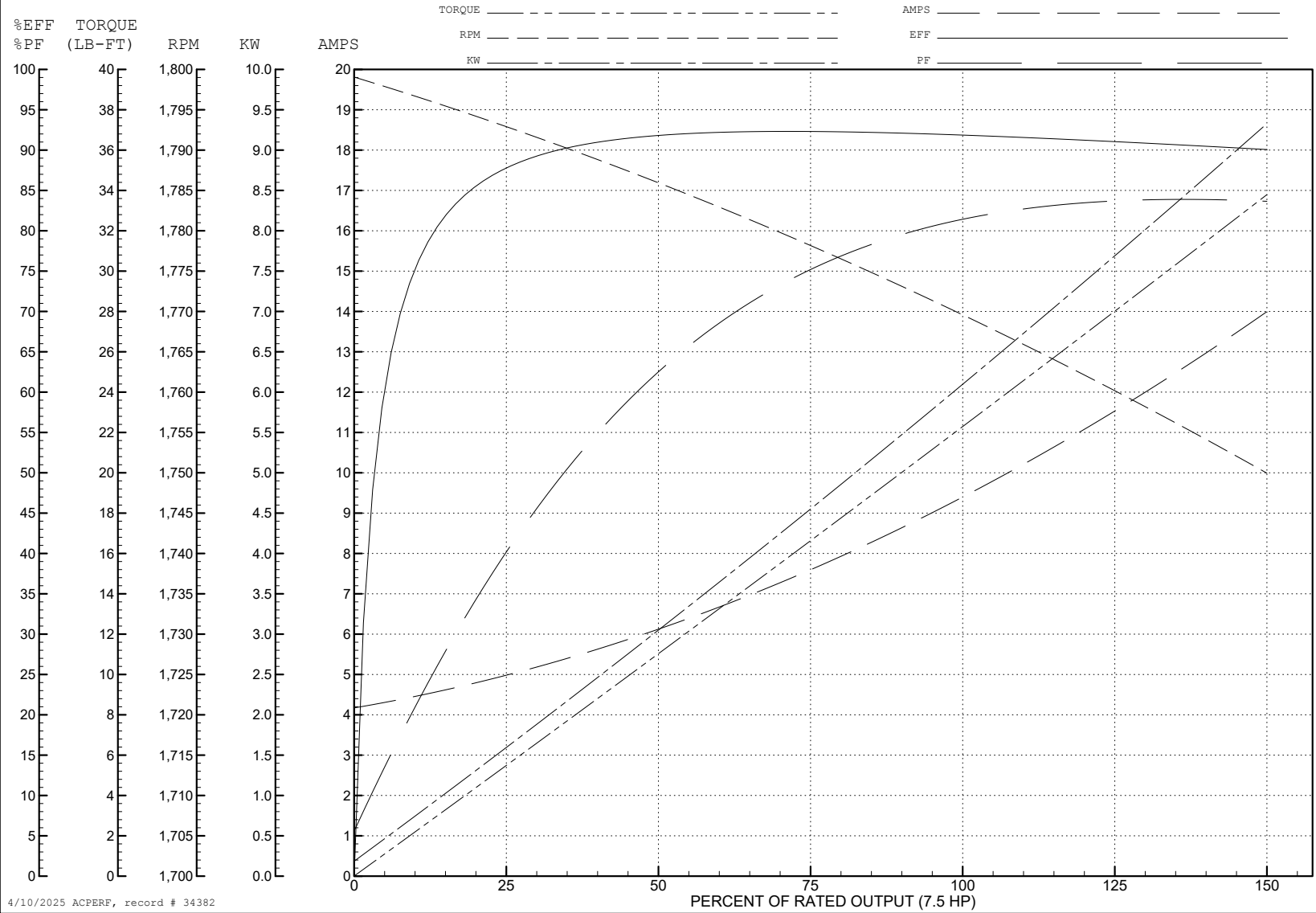
ABB Motors and Mechanical Inc.

WINDING # 07WGx790

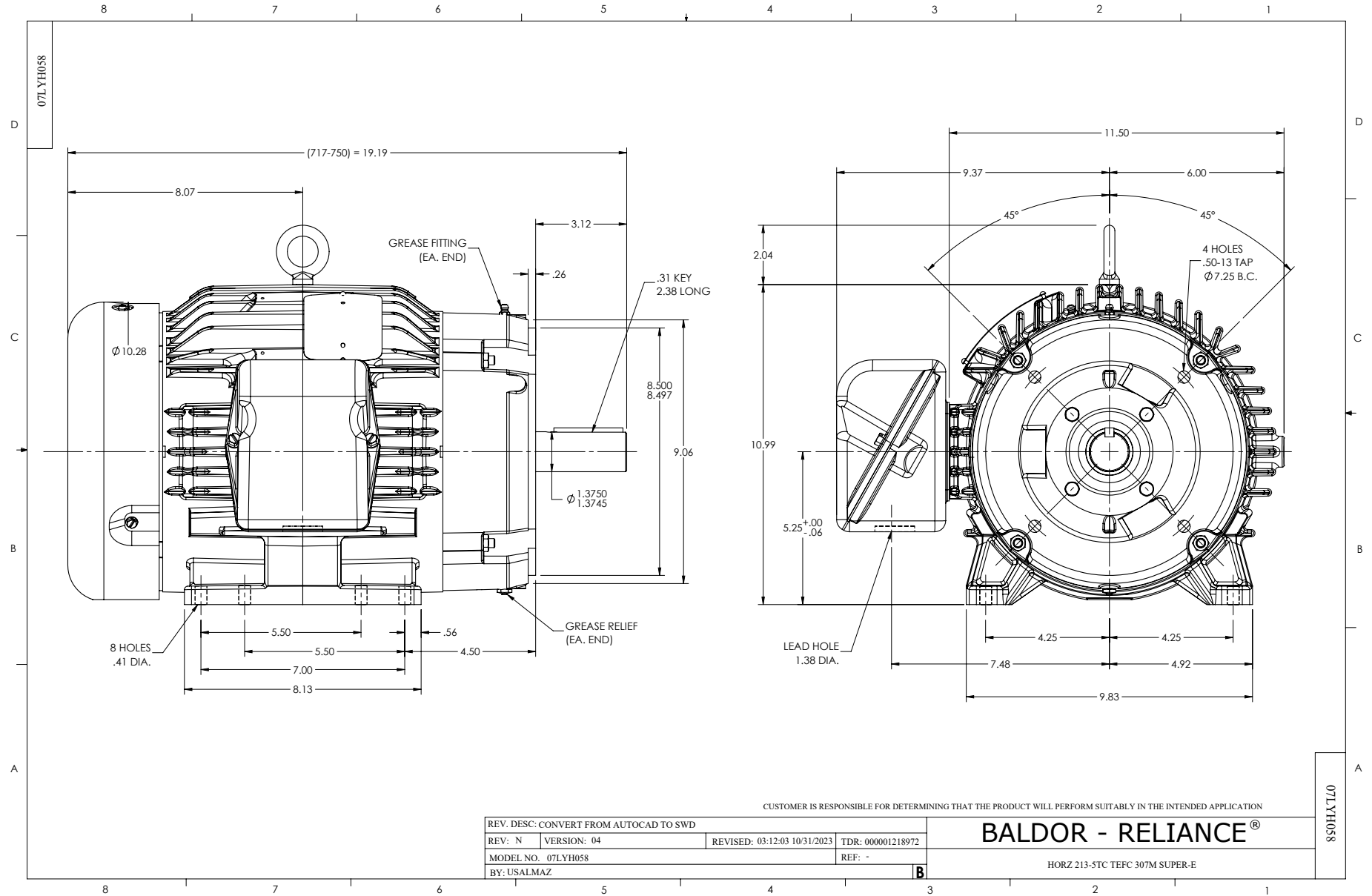
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

Typical performance - not guaranteed values.

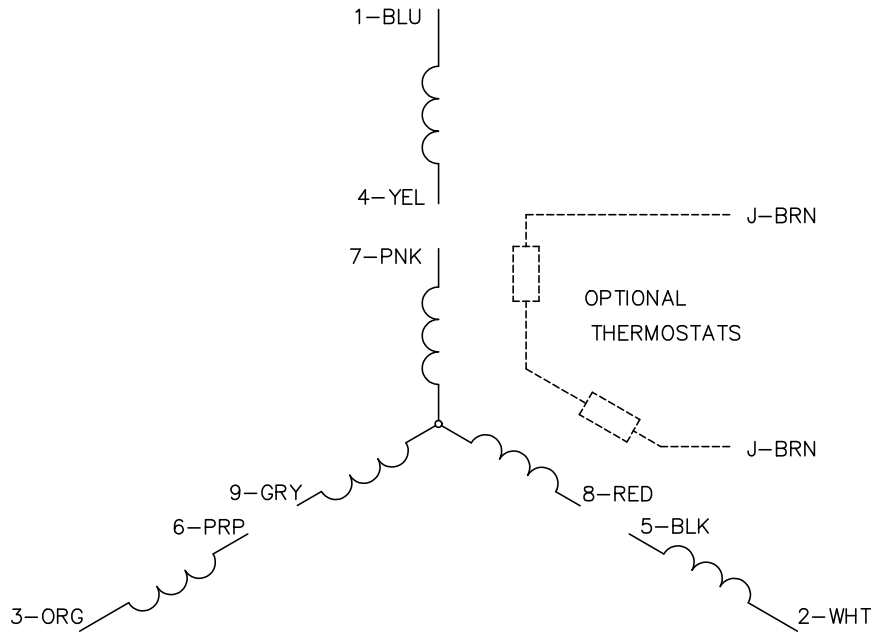
TORQUES (LB-FT): PO=70.9 PU=32.7 LR=43 LRA=70.8



4/10/2025 ACPERF, record # 34382



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS