ABB BALDOR RELIANCE

Customer information packet

CEM3710T-G

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

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Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Steel
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
	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
	19.000 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
High Voltage Full Load Amps	9.5 a

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGR872
Layout	37LYJ841
Eff. date	08-25-2026
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	12-17-2019

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	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.76 IN
Power Factor	80
Product Family	General Purpose
Pulley Face Code	C-Face
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 - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3441LUA										
CAT.NO.	CEM3710T-G									
SPEC	37-0000-0184									
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**	H			
NEMA NOM. EFF	91.7	**PF**	80							
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 22.4/11.2A									SF1.0

AC Induction Motor Performance Data
Record # 54310
Typical performance - not guaranteed values

Winding: 37WGR872-R005	**Type:** 3738M	**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**	32.6 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	43 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	70.9 A
Service Factor (S.F.)			1.15	**No-load Current**	4.31 A
NEMA Nom. Eff.	91.7	**Power Factor**	80	**Line-line Res. @ 25ºC**	1.41 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	63°C
S.F. Amps				**Temp. Rise @ S.F. Load**	77°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	87.1	91.6	92	92	91.1	89.8	91.5
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9	10.8

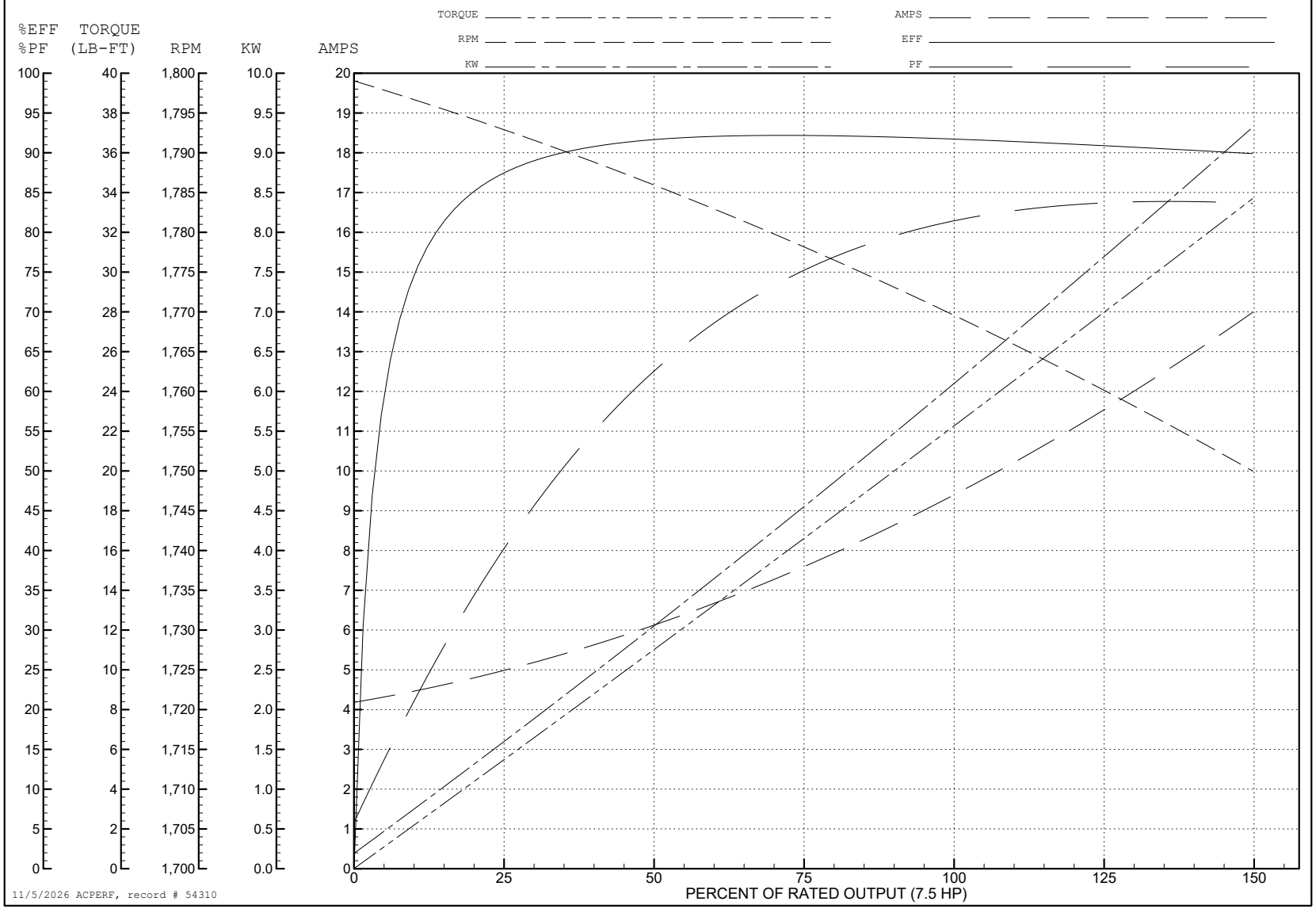
ABB Motors and Mechanical Inc.

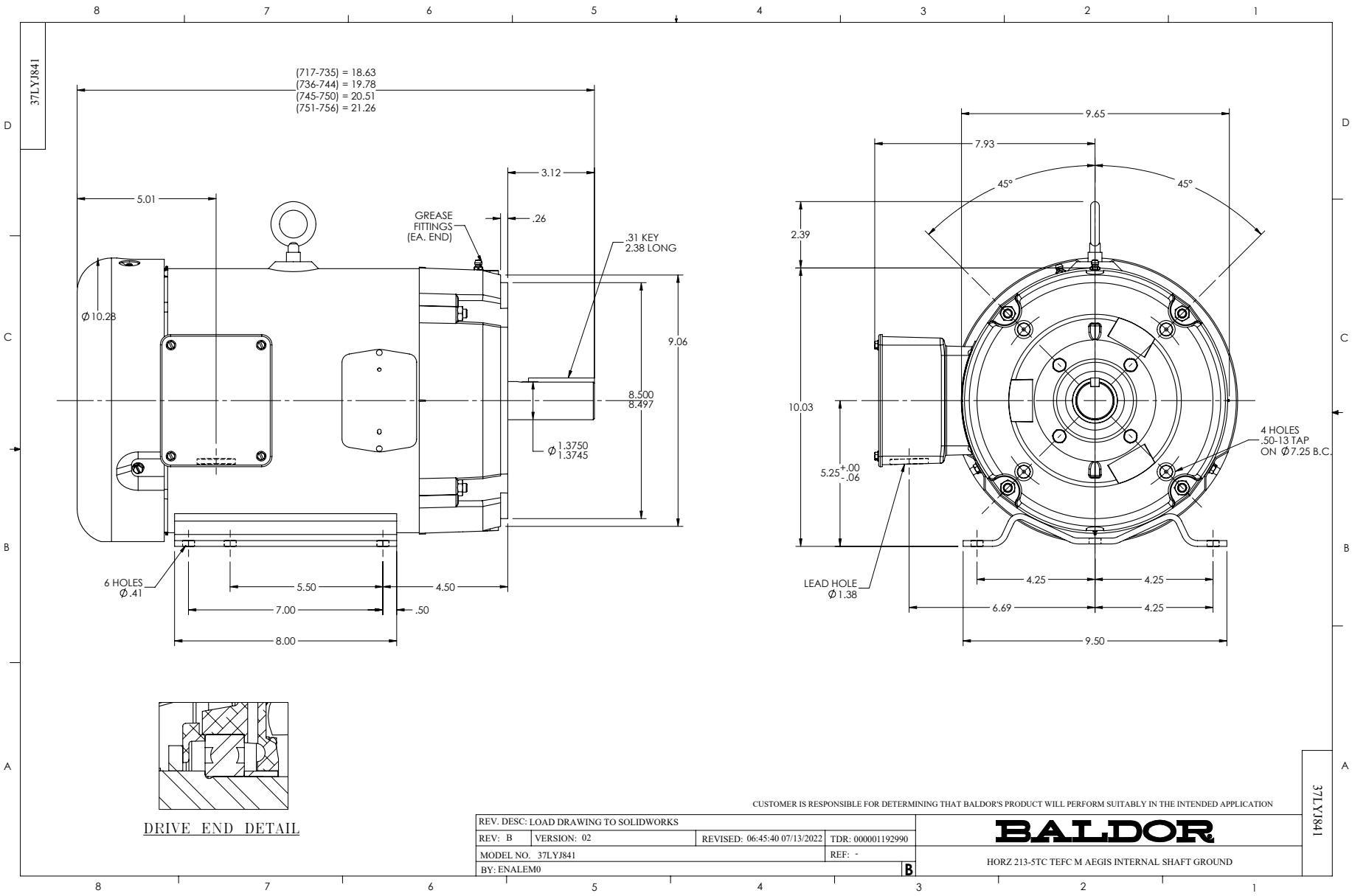
WINDING # 37WGR872

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

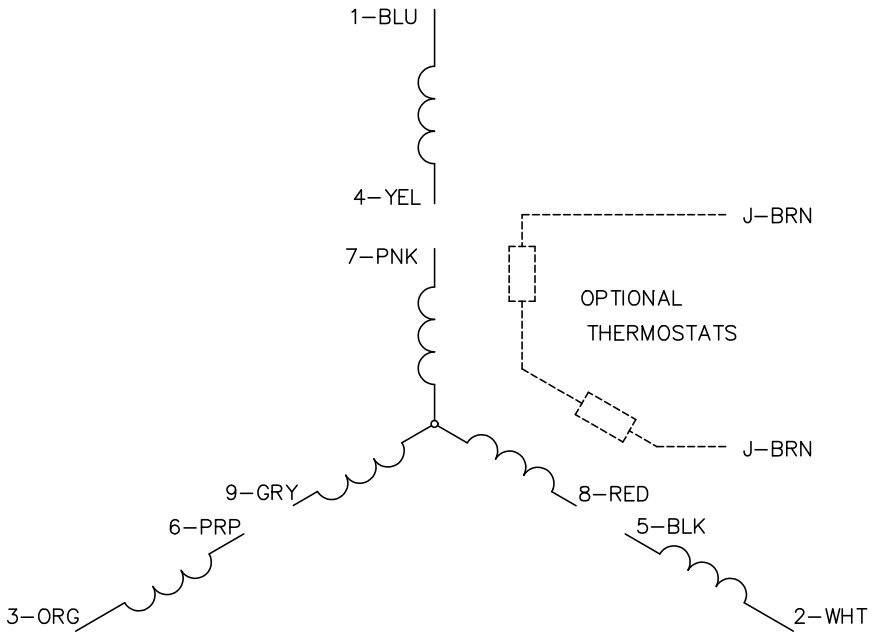
Typical performance - not guaranteed values.

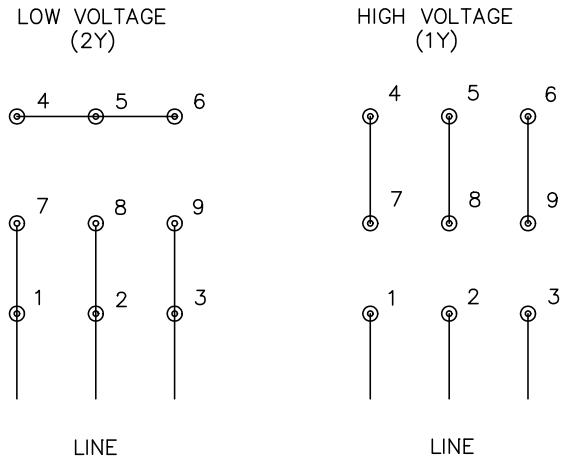
TORQUES(LB-FT): PO=70.9 PU=32.6 LR=43 LRA=70.9




37LYJ841
(717-735) = 18.63
(736-744) = 19.78
(745-750) = 20.51
(751-756) = 21.26
5.01
3.12
.26
GREASE FITTINGS (EA. END)
.31 KEY 2.38 LONG
Ø10.28
9.06
8.500
8.497
Ø1.3750
1.3745
6 HOLES Ø.41
5.50
4.50
7.00
.50
8.00
9.65
7.93
45°
45°
2.39
10.03
5.25 +.00 -.06
4 HOLES .50-13 TAP ON Ø7.25 B.C.
LEAD HOLE Ø1.38
4.25
4.25
6.69
4.25
9.50
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: B
VERSION: 02
REVISED: 06:45:40 07/13/2022
TDR: 000001192990
MODEL NO. 37LYJ841
REF: -
BY: ENALEM0
B
BALDOR
HORZ 213-5TC TEFC M AEGIS INTERNAL SHAFT GROUND
37LYJ841

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