

BALDOR • RELIANCE

Customer information packet

CEM3710T-5

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3738M, TEFC

Class - None

Division - Not Applicable

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	575.0 V @ 60 HZ
Agency Approvals	CSA EEV 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	7.600 A @ 575.0 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
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.6 a

Part detail

Revision	F
Type	AC
Mech. spec.	37G814
Base	
Status	PRD/A
Elec. spec.	37WGR907
Layout	37LYG814
Eff. date	05-02-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	12-10-2015

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	3 @ 14 AWG
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	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
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**NP3441L**

CAT.NO.	CEM3710T-5						
SPEC.	37G814R907G1						
HP	7.5						
VOLTS	575						
AMP	7.6						
RPM	1770						
FRAME	213TC		HZ	60		PH	3
SER.F.	1.15	CODE	J	DES	A	CL	F
NEMA-NOM-EFF	91.7	PF	82				
RATING	40C AMB-CONT						
CC	010A						
DE	6307	ODE	6206				
ENCL	TEFC	SN					

VPWM INVERTER READY

CT6-60H(10:1)VT3-60H(20:1)

AC Induction Motor Performance Data

Record # 54313

Typical performance - not guaranteed values

Winding: 37WGR907-R004		Type: 3738M	Enclosure: TEFC
Nameplate Data		575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5	Full Load Torque	22.2 LB-FT
Volts	575	Start Configuration	direct on line
Full Load Amps	7.6	Breakdown Torque	71 LB-FT
R.P.M.	1770	Pull-up Torque	32.6 LB-FT
Hz	60 Phase	Locked-rotor Torque	43 LB-FT
NEMA Design Code	A KVA Code	Starting Current	56.9 A
Service Factor (S.F.)	1.15	No-load Current	3.48 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	2.22 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	37.3
		Rotor inertia	0.934 LB-FT ²

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	63	75	80	83	84	82
Efficiency	87.1	91.7	91.9	92.1	91	89.9	91.4
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	3.9	4.84	6.1	7.61	9.29	11.1	8.62

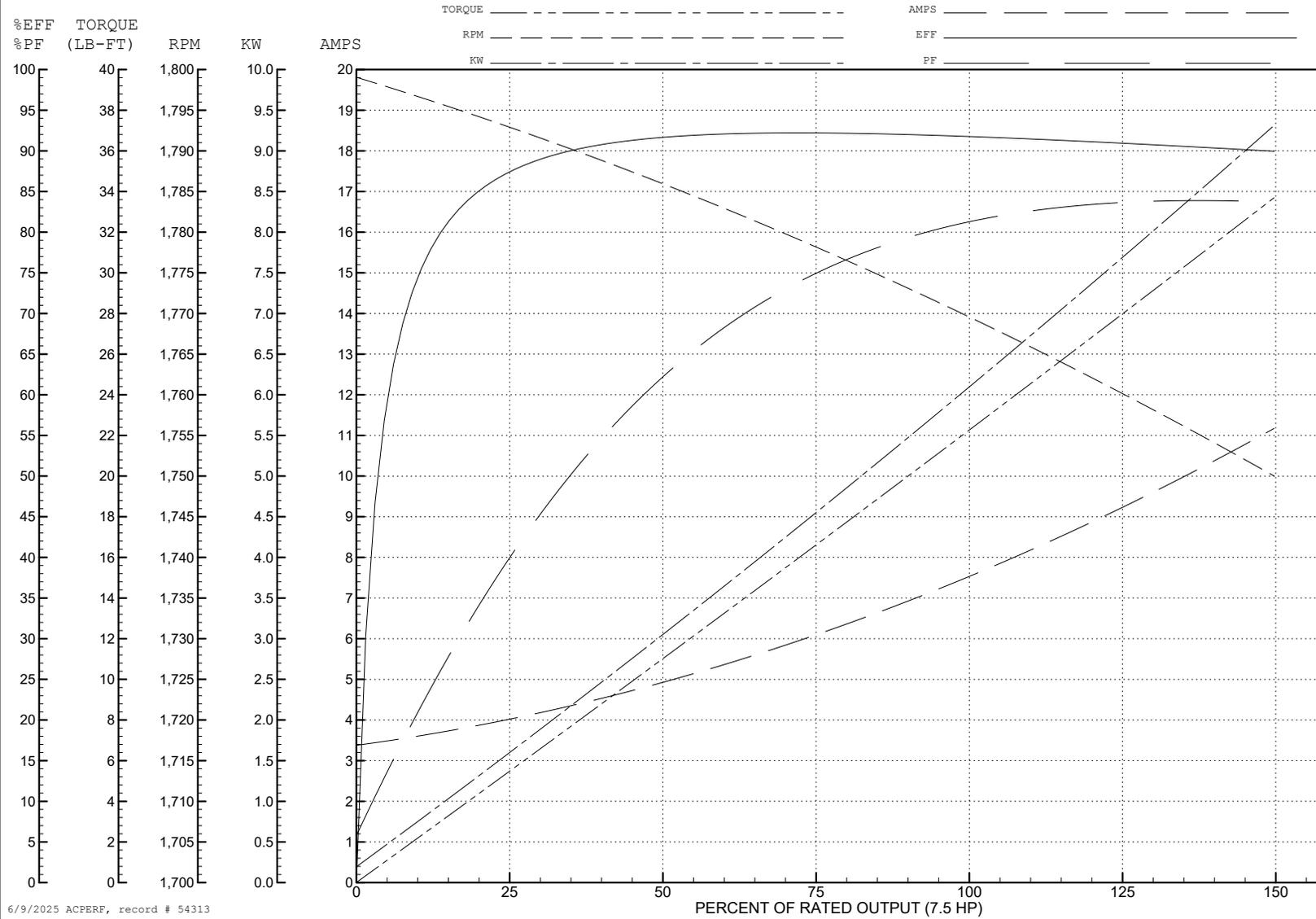
ABB Motors and Mechanical Inc.

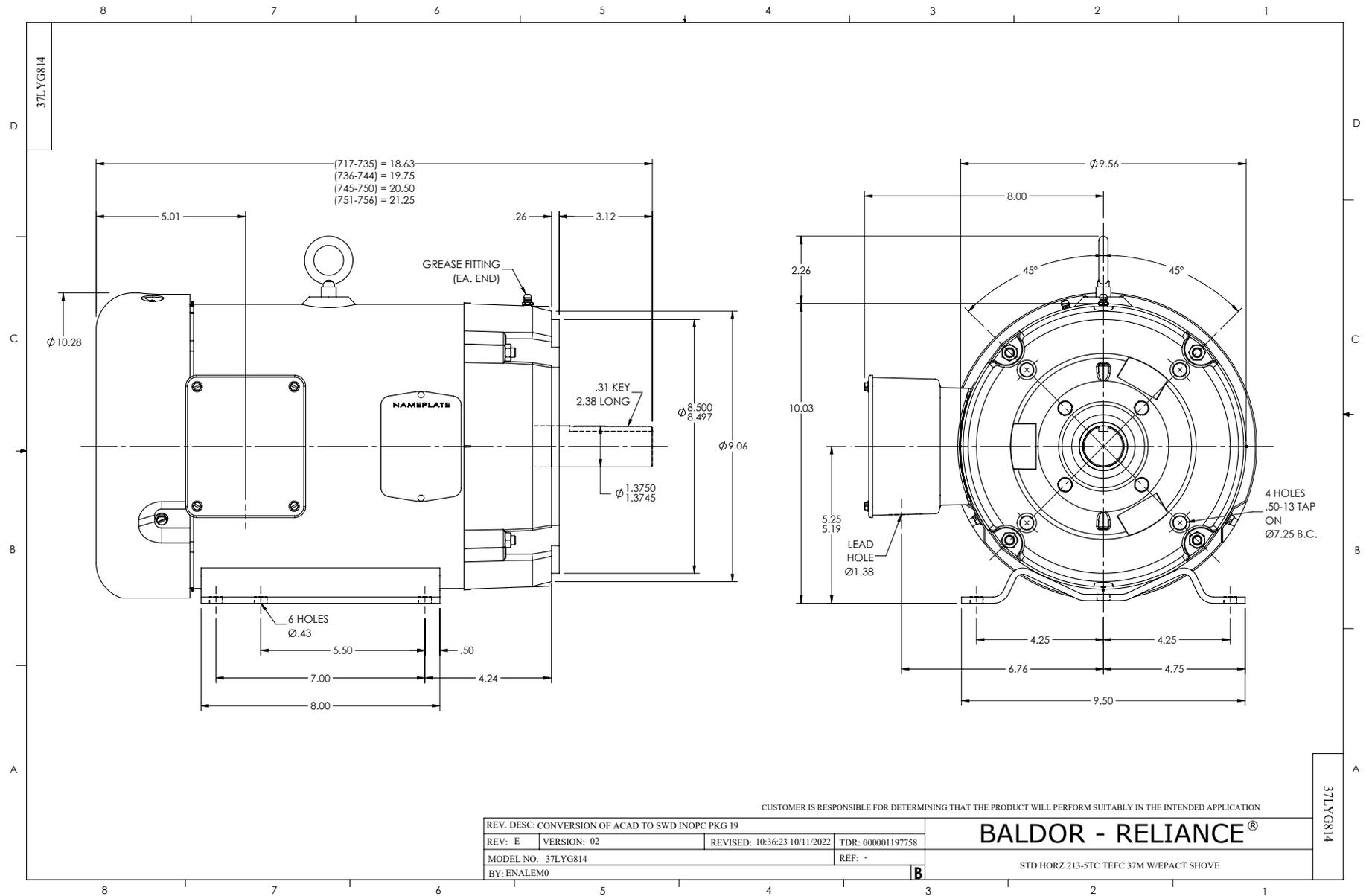
WINDING # 37WGR907

Typical performance - not guaranteed values.

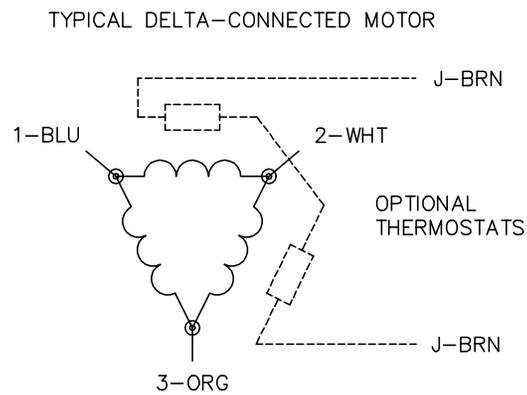
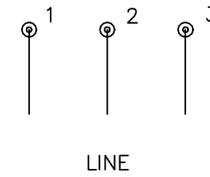
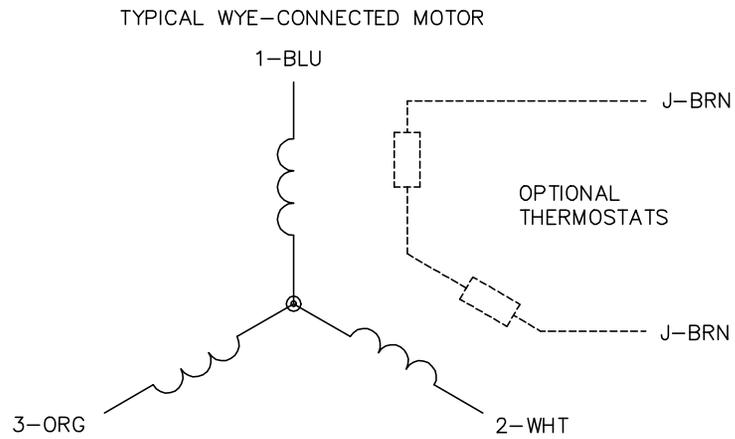
7.5 HP 3 PH 60 HZ 1770 RPM 575 V 3738M

TORQUES (LB-FT): PO=71 PU=32.6 LR=43 LRA=56.9





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1