

BALDOR • RELIANCE

Customer information packet

CEM3710T

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
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
XP Class and Group	None
XP Division	Not Applicable
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	9.500 A @ 460.0 V
	20.000 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
Front Shaft Indicator	None

Part detail

Revision	A
Type	AC
Mech. spec.	37G814
Base	
Status	PRD/A
Elec. spec.	37WGL864
Layout	37LYG814
Eff. date	03-19-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	11-11-2020

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 Quantity/Wire Size	9 @ 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	80
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 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.	CEM3710T						
SPEC	37G814L864G1						
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	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 # 85467

Preliminary Data Sheet

Winding: 37WGL864-R001		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	19.0/9.5	Breakdown Torque	69.8 LB-FT		
R.P.M.	1770	Pull-up Torque	31.5 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	41 LB-FT	
NEMA Design Code	A	KVA Code	J	Starting Current	70.7 A
Service Factor (S.F.)	1.15	No-load Current	4.32 A		
NEMA Nom. Eff.	91.7	Power Factor	80	Line-line Res. @ 25°C	1.48 Ω
Rating - Duty	40C	AMB-CONT		Temp. Rise @ Rated Load	64°C
S.F. Amps	21.4/10.7			Temp. Rise @ S.F. Load	84°C
				Locked-rotor Power Factor	41.9
				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	83
Efficiency	87.1	91.4	92	91.7	90.7	89.6	90.7
Speed	1793	1786	1778	1770	1760	1750	1761
Line amperes	4.83	6.03	7.64	9.5	11.6	13.9	10.7

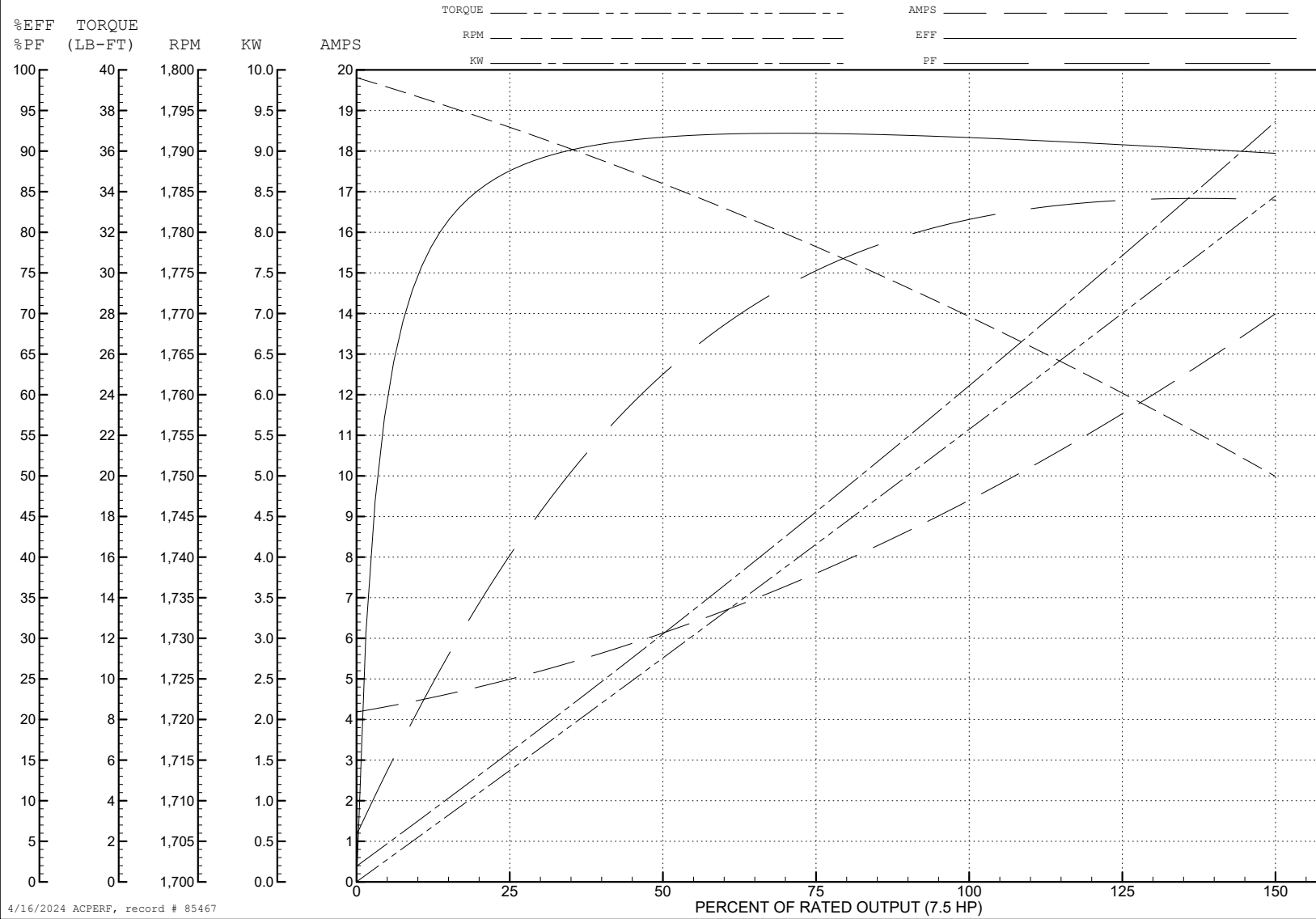
ABB Motors and Mechanical Inc.

WINDING # 37WGL864

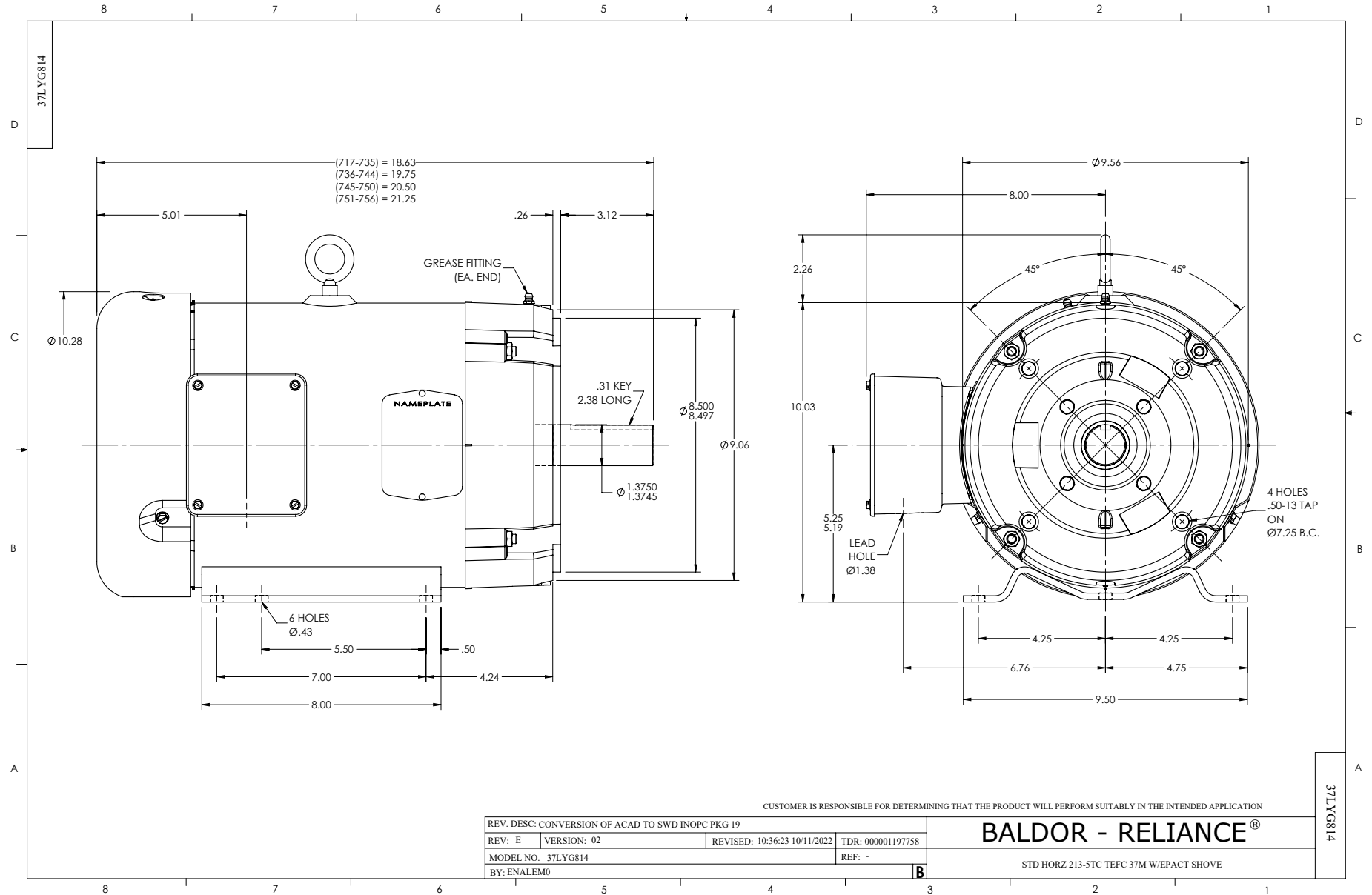
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=69.8 PU=31.5 LR=41 LRA=70.7



4/16/2024 ACPERF, record # 85467



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.

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

CD0005