

BALDOR • RELIANCE

Customer information packet

CEM3311T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3734M, OPSB

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
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 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	9.800 A @ 460.0 V 20.600 A @ 208.0 V 19.600 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part detail

Revision	E
Type	AC
Mech. spec.	37B102
Base	
Status	PRD/A
Elec. spec.	37WGL863
Layout	37LYB102
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-29-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	9.8 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	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.07 IN
Power Factor	79
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 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

NP3553LUA										
CAT.NO.	CEM3311T									
SPEC.	37B102L863G1									
HP	7.5									
VOLTS	230/460									
AMPS	19.6/9.8									
RPM	1770									
FRAME	213TC		HZ	60		PH	3			
SF	1.15	CODE	J	DES	A	CLASS	F			
NEMA NOM. EFF	91	PF	79							
RATING	40C AMB-CONT									
CC	010A									
ENCL	OPSB	SN								
DE	6307	ODE	6206							
VPWM INVERTER READY										
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	50HZ 7.5HP 190/380V 23.2/11.6A							SF1.0		

Parts list

Part number	Description	Quantity
SA390859	SA 37B102L863G1	1.000 ea
RA381327	RA 37B102L863G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 ea
51XW2520A10	.25-20 X .62, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3203A00	MASTER,ODE,206 BRG,GREASER	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3400A01	FACE MT EP-OPEN-307 BRG-213-215TC W/GREA	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
37AD2001A01	BAFFLE PLATE, PLASTIC 0.63" WIDTH	2.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.028 ga
HA3104A27	THRUBOLT 5/16 18 X 12.438	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 85452

Preliminary Data Sheet

Winding: 37WGL863-R001		Type: 3734M	Enclosure: OPSB	
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	19.6/9.8	Breakdown Torque	74.8 LB-FT	
R.P.M.	1770	Pull-up Torque	37.1 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	45.4 LB-FT
NEMA Design Code	A KVA Code	J	Starting Current	72 A
Service Factor (S.F.)		1.15	No-load Current	4.87 A
NEMA Nom. Eff.	91 Power Factor	79	Line-line Res. @ 25°C	1.67 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	35°C
S.F. Amps	22.0/11.0		Temp. Rise @ S.F. Load	47°C
			Locked-rotor Power Factor	45.8
			Rotor inertia	0.836 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	39	60	73	79	82	83	81
Efficiency	85	90.1	91.1	90.9	90.1	89	90.3
Speed	1793	1786	1779	1772	1764	1755	1766
Line amperes	5.34	6.47	7.99	9.87	11.9	14.2	11.1

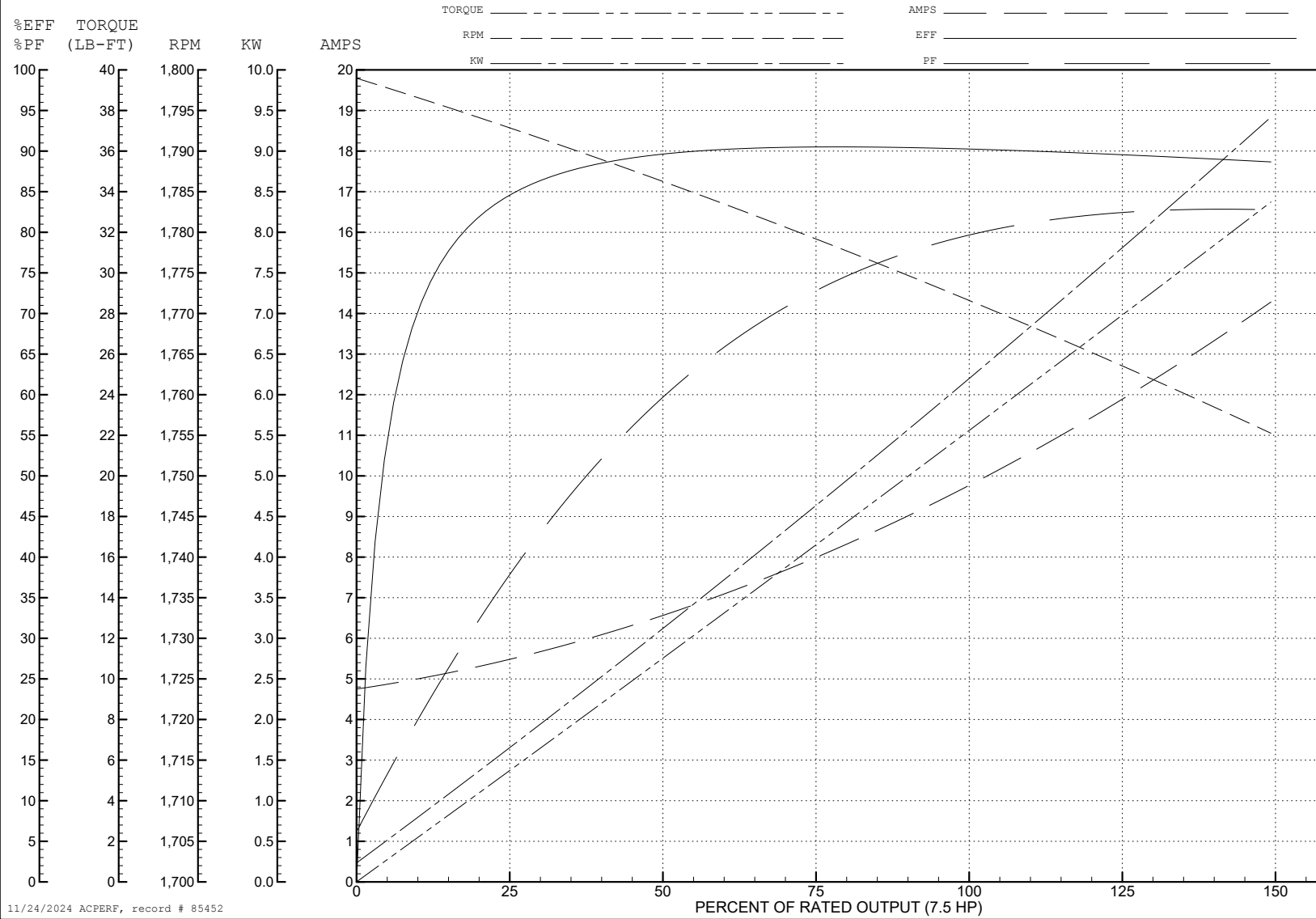
ABB Motors and Mechanical Inc.

WINDING # 37WGL863

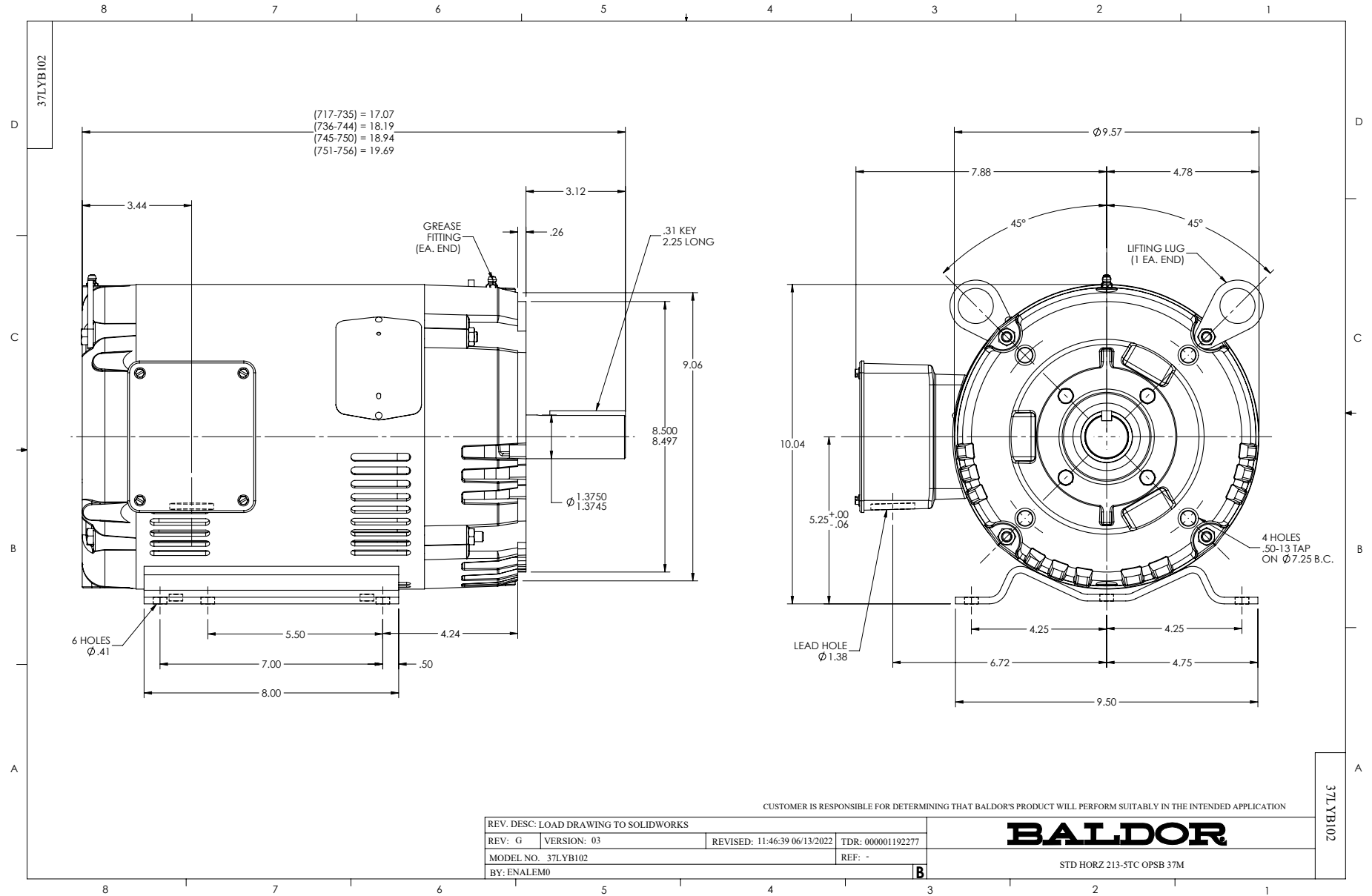
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M

TORQUES (LB-FT): PO=74.8 PU=37.1 LR=45.4 LRA=72



11/24/2024 ACPERF, record # 85452



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