

ABB BALDOR RELIANCE III

Customer information packet

EM3311T-G

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

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	213T
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	9.800 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	D
Type	AC
Mech. spec.	37J839
Base	
Status	PRD/A
Elec. spec.	37WGL863
Layout	37LYJ839
Eff. date	01-08-2026
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	11-10-2020

Heater Indicator	No Heater
High Voltage Full Load Amps	9.8 a
Insulation Class	H
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	16.32 IN
Power Factor	79
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	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.	EM3311T-G									
SPEC.	37J839L863G1									
HP	7.5									
VOLTS	230/460									
AMPS	19.6/9.8									
RPM	1770									
FRAME	213T		HZ	60			PH	3		
SF	1.15		CODE	J	DES	A	CLASS	H		
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
SA387929	SA 37J839L863G1	1.000 ea
RA378269	RA 37J839L863G1	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
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3204B00	MASTER,DE,307 BRG,GREASER,LOCKED BEARING	1.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	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
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA3104A39	THRUBOLT-5/16-18 X 12.250	4.000 ea
37AD2001A01	BAFFLE PLATE, PLASTIC 0.63" WIDTH	2.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga
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 PK1017A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1350	BAR CODE LABEL FOR YORK	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 86440

Preliminary Data Sheet

Winding: 37WGL863-R002			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			Temp. Rise @ S.F. Load		47°C			
			Locked-rotor Power Factor		45.8			
			Rotor inertia		0.836 lb-ft²			

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





