

ABB BALDOR RELIANCE III

Customer information packet

CEM3311T-G

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, OPSB, F1

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 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	9.700 A @ 460.0 V 19.400 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
Heater Indicator	No Heater
High Voltage Full Load Amps	9.7 a

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGS520
Layout	37LYK447
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	03-08-2020

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	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.06 IN
Power Factor	79
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

NP3553LUA									
CAT.NO.	CEM3311T-G								
SPEC.	37-0000821								
HP	7.5								
VOLTS	230/460								
AMPS	19.4/9.7								
RPM	1770								
FRAME	213TC		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
SA379797	SA 37-0000821	1.000 ea
RA369821	RA 37-0000821	1.000 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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A27	THRUBOLT 5/16 18 X 12.438	4.000 ea
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
37EP3203A00	MASTER,ODE,206 BRG,GREASER	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
37EP3400A01	FACE MT EP-OPEN-307 BRG-213-215TC W/GREA	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
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 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
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
37AD2001A01	BAFFLE PLATE, PLASTIC 0.63" WIDTH	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
37AD2001A01	BAFFLE PLATE, PLASTIC 0.63" WIDTH	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 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
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 52783

Typical performance - not guaranteed values

Winding: 37WGS520-R013			Type: 3734M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		7.5	Full Load Torque		22.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		19.4/9.7	Breakdown Torque		77.6 LB-FT		
R.P.M.		1770	Pull-up Torque		38.7 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		46.3 LB-FT		
NEMA Design Code		A KVA Code	J		Starting Current		72.2 A
Service Factor (S.F.)		1.15	No-load Current		4.94 A		
NEMA Nom. Eff.		91 Power Factor	79	Line-line Res. @ 25°C		1.53 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		37°C		
S.F. Amps			Temp. Rise @ S.F. Load		45°C		
			Locked-rotor Power Factor		39.2		
			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	38	60	72	78	82	83	81
Efficiency	85.1	90.4	91.6	91.3	90.5	89.4	90.7
Speed	1792	1785	1778	1769	1760	1749	1766
Line amperes	5.35	6.5	8.01	9.89	11.9	14.2	11

ABB Motors and Mechanical Inc.

WINDING # 37WGS520

Typical performance - not guaranteed values.

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

TORQUES (LB-FT): PO=77.6 PU=38.7 LR=46.3 LRA=72.2



