

ABB BALDOR RELIANCE III

Customer information packet

EM2237

7.5HP, 1775RPM, 3PH, 60HZ, 254U, 0936M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	254U
Frame Material	Iron
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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	20.000 A @ 208.0 V 9.400 A @ 460.0 V 18.800 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 Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	T
Type	AC
Mech. spec.	09C111
Base	
Status	PRD/A
Elec. spec.	09WGT178
Layout	09LYC111
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	02-23-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	9.4 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.03 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	Shaft Slinger
Speed	1775 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

NP1259L									
CAT.NO.	EM2237								
SPEC.	09C111T178G1								
HP	7.5								
VOLTS	230/460								
AMP	18.8/9.4								
RPM	1775								
FRAME	254U		HZ	60			PH	3	
SER.F.	1.15	CODE	K	DES	A	CL	F		
NEMA-NOM-EFF	91.7	PF	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6309		ODE	6208					
ENCL	TEFC	SN							

Parts List

Part number	Description	Quantity
SA294161	SA 09C111T178G1	1.000 ea
RA280243	RA 09C111T178G1	1.000 ea
09FN3001D01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
09EP1100A14	FREP ASSM, (FOR INTRL ROUTING PURPOSE)	1.000 ea
HA3400A33	STUD- 3/8-16 X 4.96 HEX	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 ea
09EP1101A11SP	PU ENDPLATE, MACH	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09FH4000SP	309 FH - BLACK PRIMER	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501F24	KEY, 5/16 SQ X 2.750	1.000 ea
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea

HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
09PA1000	PACKAGING GROUP COMBINED PRINT	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea
PE-0000003	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 49384

Typical performance - not guaranteed values

Winding: 09WGT178-R001			Type: 0936M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		7.5	Full Load Torque		22.1 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		18.8/9.4	Breakdown Torque		96.4 LB-FT		
R.P.M.		1775	Pull-up Torque		39.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		50 LB-FT	
NEMA Design Code		A	KVA Code		K		
Service Factor (S.F.)		1.15	Starting Current		75.6 A		
NEMA Nom. Eff.		91.7	Power Factor		78		
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		23°C
S.F. Amps					Temp. Rise @ S.F. Load		27°C
					Locked-rotor Power Factor		34.7
					Rotor inertia		1.57 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	65	76	81	84	85	83
Efficiency	83	89.5	91.7	91.9	91.5	91	91.7
Speed	1795	1789	1783	1776	1769	1762	1772
Line amperes	4.87	6	7.51	9.43	11.4	13.5	10.6

ABB Motors and Mechanical Inc.

WINDING # 09WGT178

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1775 RPM 460 V 0936M

TORQUES (LB-FT): PO=96.4 PU=39.6 LR=50 LRA=75.6





