

ABB BALDOR RELIANCE III

Customer information packet

EJMM3116T

1HP, 1770RPM, 3PH, 60HZ, 143JM, 3520M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	143JM
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	1.000 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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.200 A @ 230.0 V 3.200 A @ 208.0 V 1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	G
Type	AC
Mech. spec.	35LL509
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYLL509
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-10-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.75 IN
Power Factor	69
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	Included
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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.	EJMM3116T								
SPEC.	35LL509G004G1								
HP	1								
VOLTS	230/460								
AMPS	3.2/1.6								
RPM	1770								
FRAME	143JM		HZ	60		PH	3		
SF	1.15	CODE	N	DES	B	CLASS	F		
NEMA NOM. EFF	85.5	PF	69						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SN							
DE	6206		ODE	6203					
VPWM INVERTER READY		SFA 3.4/1.7							
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 1HP 190/380V 3.6/1.8A						SF1.0		

Parts List

Part number	Description	Quantity
SA402489	SA 35LL509G004G1	1.000 ea
RA393766	RA 35LL509G004G1	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 ea
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3209A00	MASTER ODE,203 BRG,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA1100A03	SCREEN, RODENT	1.000 ea
51XT1032A04	10-32X1/4 HX WA SL SR TYT (F/S)	4.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3401A03	PU ENDPLATE -OPEN W/SCREENS & GREASER W/	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA1102A08	RODENT SCREEN 35 OPEN FACE MTD	1.000 ea
51XT1032A04	10-32X1/4 HX WA SL SR TYT (F/S)	4.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HA1005A02	SLINGER, OD 2.00, ID 1.14, 206 BRG,	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HW1000A10	#10 FLAT WASHER (SAE)	4.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
HA3100A14	THRUBOLT 10-32 X 7.875	4.000 ea
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	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
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000004	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 91625

Typical performance - not guaranteed values

Winding: 35WGG004-R001			Type: 3520M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		2.982 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		3.2/1.6	Breakdown Torque		14.6 LB-FT		
R.P.M.		1770	Pull-up Torque		7.57 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		9.17 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		14.6 A
Service Factor (S.F.)		1.15	No-load Current		1.2 A		
NEMA Nom. Eff.		85.5	Power Factor	69	Line-line Res. @ 25°C		16.049 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		36°C
S.F. Amps		3.4/1.7	Temp. Rise @ S.F. Load		41°C		
			Locked-rotor Power Factor		61.549		
			Rotor inertia		0.144 lb-ft²		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	45	58	67	73	78	71
Efficiency	71.1	81.2	84.7	85.8	86	85.6	85.9
Speed	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
Line amperes	1.22	1.31	1.46	1.64	1.86	2.11	1.77

ABB Motors and Mechanical Inc.

WINDING # 35WGG004

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

TORQUES (LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6





