

ABB BALDOR RELIANCE III

Customer information packet

CDRX050744

.75//.5HP, 1765//1470RPM, 3PH, 60//50HZ, 56C

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 50 HZ .750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UL
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
Constant Torque Speed Range	6
Current @ Voltage	2.420 A @ 208.0 V 2.400 A @ 230.0 V 2.200 A @ 190.0 V 1.200 A @ 460.0 V 1.100 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	-
Type	AC
Mech. spec.	35X738
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYX738
Eff. date	06-04-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	06-04-2025

Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.1 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.28 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1470 rpm
	1765 rpm

Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1401XPSL											
NO.						CC					
S/N						TEMP CODE	T3C				
SPEC.	35X738G069G2					INV.TYPE	PWM				
CAT.NO.	CDRX050744					C HP FR	60	C HP TO	90		
HP	.75//.5					CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380					VT HZ FROM	6	VT HZ TO	60		
AMPS	2.4/1.2//2.2/1.1				MAG CUR	1.7/.85					
RPM	1765//1470				MX RPM	2700					
HZ	60//50	PH	3	CL	F	NOM.EFF.	82.5				
SER.F.	1.00	DES	B	SL HZ	1.2	WK2	0.101				
FRAME	56C	RATING		40C AMB-CONT							
	55C AMB @ 1.0 SF										
	1.15 SF SINEWAVE				NEMA MG-1 PT 5, IP55						

Parts List

Part number	Description	Quantity
SA438427	SA 35X738G069G2	1.000 ea
RA430795	RA 35X738G069G2	1.000 ea
35CB1005A01	CONDUIT BOX,MACH - GROUP "C" MTRS	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP3700B07	FR ENDPLATE, XPFC - GROUP C, W/ DRAIN	1.000 ea
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1704A39	PUEP 205 BRG XP GRP C W/SLINGER, DRAIN	1.000 ea
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
84XN1032J20	SCREW, SOC 10-32 X 1 1/4"BMH4602	2.000 ea
HW4001A01	1/4 HX SOC PIPE PLG (F/S) ALLOY STEEL W/	2.000 ea
63XN1032A07	10-32 X 7/16 TRUSS HEAD,TORX SERRATED ZN	2.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35FH4005A01SP	IEC FH NO GREASER W/PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB1501A01	CONDUIT BOX LID, MACH. - GROUP "C" MTRS	1.000 ea
RM1020A41	O-RING, -150 BUNA-N, .103 CS X 2.862 ID	1.000 ea
HA2071A02	ALUM SLINGER 205 BRG DRILL RIG MOTOR	1.000 ea
80XN1032J04	10-32 X 1/4 SET SCREW, HEX SOC, CUP PT	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	6.000 ea
LB1359F	ALUM XP CAUTION LABEL	1.000 ea
HA1025A21	WSHR,FELT .125" THK	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.017 ga
HA3104A06	THRUBOLT 5/16-18 X 8.50 OHIO ROD	4.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP1401XPSL	SS XP INV UL CSA CC CL-I GP-C&D	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 89843

Typical performance - not guaranteed values

Winding: 35WGG069-R027			Type: 3514M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		.75//.5		Full Load Torque		1.79 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		2.4/1.2//2.2/1.1		Breakdown Torque		7.1 LB-FT		
R.P.M.		1765//1470		Pull-up Torque		4.1 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		4.8 LB-FT	
NEMA Design Code		B		KVA Code	K	Starting Current		7.7 A
Service Factor (S.F.)		1		No-load Current		0.83 A		
NEMA Nom. Eff.		82.5	Power Factor	74	Line-line Res. @ 25°C		30.3 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		21°C		
				Locked-rotor Power Factor		72.2		
				Rotor inertia		0.101 lb-ft²		

Load Characteristics 380 V, 50 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	28	43	56	66	73	78
Efficiency	63.5	75.7	79.7	81.1	81.1	80.2
Speed	1492	1486	1480	1472	1465	1456
Line amperes	0.84	0.89	0.97	1.07	1.21	1.37

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

Typical performance - not guaranteed values.

0.5 HP 3 PH 50 HZ 1472 RPM 380 V 3514M

TORQUES (LB-FT): PO=7.1 PU=4.1 LR=4.8 LRA=7.7





