

ABB BALDOR RELIANCE III

Customer information packet

IDVSWDM3554

1.5HP, 1770RPM, 3PH, 60HZ, 56C, 3524M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.500 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 UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.300 A @ 460.0 V 4.600 A @ 230.0 V 4.640 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a

Part Detail

Revision	-
Type	AC
Mech. spec.	35S640
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYS640
Eff. date	09-30-2022
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	03-11-2022

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.22 IN
Power Factor	72
Product Family	Wash Down Paint Free
Pulley End Bearing Type	Sealed Bearing
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	Shaft Slinger
Speed	1770 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

NP1608L									
CAT NO	IDVSWDM3554								
SPEC.	35S640L955G1								
FRAME	56C			HP	1.5 TE				
VOLTS	230/460								
MAG CUR	3/1.5			FLA		4.6/2.3			
RPM	1770			RPM MAX			4000		
HZ	60	PH	3	CLASS			H		
SER.F.	1.00	DES	B	SL HZ			1		
NEMA-NOM-EFF	86.5	WK2		0.174					
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6205	ODE BRG			6203				
CC	010A	SN							
	INV WDG ISR WIRE								

Parts List

Part number	Description	Quantity
SA407579	SA 35S640L955G1	1.000 ea
RA399078	RA 35S640L955G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB5001A03	CONDUIT BOX KIT, FOR SUPER II WASHDOWN	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122B00U	MASTER ODE,203 BRG,.683SH,.125NPT DRNS,F	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307E00U	MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW4606A02	JM CLIPPER/SEAL (LWE-0938-1624-AL23)	1.000 ea
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 ea
HA1049A01	DUBO LOK WASHER SIZE 10 (NYLON LOCK SEAL	2.000 ea
HA1049A01	DUBO LOK WASHER SIZE 10 (NYLON LOCK SEAL	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A53	IEC FH NO GREASER (CLEAN ONLY)	1.000 ea
11XW1032S06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	3.000 ea
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100S24	THRUBOLT 8.625 LENGTH 1.250 TH LENGTH SS	4.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP1608L	SS WD INV UL CSA CC REV MTG	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	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 # 95394

Typical performance - not guaranteed values

Winding: 35WGL955-R008			Type: 3524M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5	Full Load Torque		4.48 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		4.6/2.3	Breakdown Torque		18.8 LB-FT	
R.P.M.		1770	Pull-up Torque		9.6 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		12.6 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		19.7 A	
Service Factor (S.F.)		1	No-load Current		1.51 A	
NEMA Nom. Eff.		86.5 Power Factor	Line-line Res. @ 25°C		11.8 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		48°C	
			Locked-rotor Power Factor		58.4	
			Rotor inertia		0.173 lb-ft ²	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	31	49	63	72	78	81
Efficiency	75.1	83.5	86	86.5	85.8	84.8
Speed	1792	1785	1777	1769	1760	1750
Line amperes	1.56	1.72	1.97	2.28	2.65	3.06

ABB Motors and Mechanical Inc.

WINDING # 35WGL955

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3524M

TORQUES (LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7





