

ABB BALDOR RELIANCE III

Customer information packet

VESSWDM3558

2HP, 1760RPM, 3PH, 60HZ, 56C, 3532M, TEFC, F1, N

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	2.000 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	CURUSEEV NEMA PREMIUM
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	2.800 A @ 460.0 V 5.600 A @ 230.0 V 6.000 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	2.8 a

Part Detail

Revision	-
Type	AC
Mech. spec.	35W179
Base	
Status	PRD/A
Elec. spec.	35WGK632
Layout	35LYW179
Eff. date	03-04-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	02-28-2025

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	L
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	3532M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.34 IN
Power Factor	77
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 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

NP1953A01											
CAT.NO.	VESSWDM3558										
SPEC.	35W179K632G1										
HP	2										
VOLTS	230/460										
AMP	5.6/2.8										
RPM	1760										
FRAME	56C			HZ	60			PH		3	
SER.F.	1.15		CODE	L	DES	B		CLASS		H	
NEMA-NOM-EFF	86.5			PF	77						
RATING	40C AMB-CONT										
CC	010A										
DE	6205			ODE	6203						
ENCL	TEFC		SN								
	SFA 6.3/3.15										

Parts List

Part number	Description	Quantity
SA435343	SA 35W179K632G1	1.000 ea
RA427657	RA 35W179K632G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB5001A08	CONDUIT BOX KIT, S/P 9-2 (ALL STAINLESS)	1.000 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP1913A02	FR EP MADE FROM 35EP1913A01	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW4606A01	JM CLIPPER/SEAL (WDE-0667-1064-BH49)	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1914A02	PU EP FOR LOCKED 6205 BRG	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
12XN1032S22	10-32 X 1 3/8 SLOT HEX, 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
35FH4005A39	IEC FH NO GREASER DEBURR/CLEAN - SS	1.000 ea
10XN1032S06	HEX HD CAP SCREW, SS	3.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100S27	THRUBOLT 10-32 X 9.625 SS TDR #23687	4.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000007	ZRTG FE ASSEMBLY	1.000 ea
PE-0000012	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 111071

Typical performance - not guaranteed values

Winding: 35WGK632-R001			Type: 3532M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		2	Full Load Torque		6.01 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		5.6/2.8	Breakdown Torque		22.9 LB-FT	
R.P.M.		1760	Pull-up Torque		12.9 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		16.3 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		24.4 A
Service Factor (S.F.)		1.15	No-load Current		1.55 A	
NEMA Nom. Eff.		86.5	Power Factor	Line-line Res. @ 25°C		8.6033 Ω
Rating - Duty		40C	AMB-CONT	Temp. Rise @ Rated Load		66°C
S.F. Amps		6.3/3.15	Temp. Rise @ S.F. Load		81°C	
			Locked-rotor Power Factor		53.6	
			Rotor inertia		0.231 lb-ft²	

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	57	70	78	82	85	80
Efficiency	78.6	85.5	86.9	86.6	85.5	84	85.9
Speed	1789.9	1780.7	1770.8	1760.2	1748.4	1735.8	1753
Line amperes	1.67	1.94	2.33	2.81	3.35	3.94	3.13

ABB Motors and Mechanical Inc.

WINDING # 35WGK632

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 3532M

TORQUES (LB-FT): PO=22.9 PU=12.9 LR=16.3 LRA=24.4





