

ABB BALDOR RELIANCE III

Customer information packet

ZDVSNM3538

.5HP, 1775RPM, 3PH, 60HZ, 56C, 3514M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
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	.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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	2.020 A @ 230.0 V 1.010 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	H

Part Detail

Revision	B
Type	AC
Mech. spec.	35R457
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYR457
Eff. date	09-30-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Inverter Code	Inverter Duty
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.84 IN
Power Factor	63
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: Connected Standard
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP3304L									
CAT NO	ZDVSNM3538								
SPEC.	35R457G069G2								
FRAME	56C	HP		.5 TE					
VOLTS	230/460								
MAG CUR	1.7/.85			FLA		2.02/1.01			
RPM	1775	RPM MAX			6000				
HZ	60	PH	3	CLASS		H			
SER.F.	1.00		SL HZ			0.5			
NEMA-NOM-EFF	81.5	WK2		0.101					
RATING	40C AMB-CONT								
DE BRG	6205	ODE BRG			6203				
CC	SER.NO								
	1000:1 CT/VT								

Parts List

Part number	Description	Quantity
SA418462	SA 35R457G069G2	1.000 ea
RA410365	RA 35R457G069G2	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122K01	K00 W/SH ENC CVR	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	1.000 ea
35FH4801G	THRU-SHAFT ENCODER COVER INV/VECTOR F1 &	1.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	4.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HA1005A05SP	SLINGER, OD 1.50, ID .659, 203 BRG	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.005 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
OE5011A05SP	HS25 ENCODER ASSY - TENV	1.000 ea
MG1000N49	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.017 ga
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP3304L	ALUM VEC UL CSA CC (W/OUT DESIGN FIELD)	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-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 101037

Typical performance - not guaranteed values

Winding: 35WGG069-R080			Type: 3514M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.48 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		2.02/1.01	Breakdown Torque		8 LB-FT		
R.P.M.		1775	Pull-up Torque		4.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.1 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		8.4 A
Service Factor (S.F.)			1	No-load Current		0.85 A	
NEMA Nom. Eff.		81.5	Power Factor	63	Line-line Res. @ 25°C		30.3 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		19°C	
S.F. Amps				Temp. Rise @ S.F. Load		21°C	
				Locked-rotor Power Factor		66.8	
				Rotor inertia		0.101 LB-FT2	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	24	37	48	58	65	71
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5
Speed	1793	1788	1782	1776	1771	1763
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4



