

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								

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



