

ABB BALDOR RELIANCE III

Customer information packet

VEM3538

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	C UR US CE CSA UR WEEE
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	2.020 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	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	E
Type	AC
Mech. spec.	35J302
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYJ302
Eff. date	05-27-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
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	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 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
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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

NP2136L									
CAT.NO.	VEM3538								
SPEC.	35J302G069								
HP	.5/.37KW								
VOLTS	208-230/460								
AMP	2/1								
RPM	1775 1/min IP44 IC411 14KG								
FRAME	56C		HZ	60		PH	3		
SER.F.	1.25		CODE	N		DES	B		CL F
NEMA-NOM-EFF	77.3		PF	63					
RATING	40C AMB-S1 CONT								
CC						USABLE AT 208V			N/A
DE	6205		ODE	6203					
ENCL	TEFC		SN						
	IE3-78.4(75%)72.5(50%)								

AC Induction Motor Performance Data

Record # 101707

Typical performance - not guaranteed values

Winding: 35WGG069-R098			Type: 3514M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.48 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		2/1	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.)		1.25	No-load Current		0.85 A	
NEMA Nom. Eff.	77.3	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		2.2/1.1	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	S.F.
Power Factor	24	37	48	58	65	71	65
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.6
Speed	1793	1788	1782	1776	1771	1763	1771
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.11

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





