

ABB BALDOR RELIANCE III

Customer information packet

VBM3542-S

.75/.55 KWHP, 1765 1/MIN IP44 IC411 20KGR

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	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR WEEE CE
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	2.420 A @ 230.0 V 2.420 A @ 208.0 V 1.210 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	H
Type	AC
Mech. spec.	35X055
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYX055
Eff. date	01-12-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
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	F3
Number of Poles	4
Overall Length	14.34 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Ball
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	1765 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

NP1372L											
CAT.NO.	VBM3542-S										
SPEC.	35X055G069G1										
HP	.75/.55 KW										
VOLTS	208-230/460										
AMP	2.42/1.21										
R.P.M. (1/MIN)	1765										
FRAME	56C		HZ		60		PH		3		
SER.F.	1.15	CODE		K	DES	B	CL	F			
NEMA-NOM-EFF	82.5	PF		74							
RATING	40C AMB-S1 CONT										
CC			IP44 IC411 20KG								
DE	6205		ODE		6205						
ENCL	TEFC	SN									
	IE2-83.3(75%)81(50%)										

AC Induction Motor Performance Data

Record # 90018

Typical performance - not guaranteed values

Winding: 35WGG069-R006			Type: 3514M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.75	Full Load Torque		2.25 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		2.42/1.21	Breakdown Torque		7.38 LB-FT		
R.P.M.		1765	Pull-up Torque		4.07 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		4.7 LB-FT	
NEMA Design Code		B	KVA Code		K		
Service Factor (S.F.)		1.15	Starting Current		7.7 A		
NEMA Nom. Eff.		82.5	Power Factor		74		
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		24°C
S.F. Amps		2.72-2.64/1.32			Temp. Rise @ S.F. Load		29°C
					Locked-rotor Power Factor		66.8
					Rotor inertia		0.101 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	52	65	74	80	83	78
Efficiency	71.4	81	83.3	83.6	82.7	81.2	83.1
Speed	1790	1782	1773	1763	1753	1740	1757
Line amperes	0.761	0.849	0.976	1.14	1.34	1.57	1.26

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M

TORQUES (LB-FT): PO=7.38 PU=4.07 LR=4.7 LRA=7.7





