

ABB BALDOR RELIANCE III

Customer information packet

VNDM3542

.75HP, 1765RPM, 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	.750 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	UR CCSA US
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
Constant Torque Speed Range	6
Current @ Voltage	1.210 A @ 460.0 V 2.420 A @ 208.0 V 2.420 A @ 230.0 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
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	D
Type	AC
Mech. spec.	35E4329
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYE4329
Eff. date	06-28-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

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
Max Speed	2700 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	11.06 IN
Power Factor	74
Product Family	Dirty Duty Plus
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	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

NP3505											
CAT NO	VNDM3542										
SPEC.	35E4329G069G1					ENCL	TENV				
FRAME	56C	HP		.75							
VOLTS	230/460										
FLA	2.28/1.14			I.P.		56					
RPM	1765	RPM MAX			2700						
HZ	60	PH	3	CLASS		F					
SER.F.	1.15	DES	B	CC							
NEMA-NOM-EFF	82.5										
RATING	40C AMB-CONT										
DE BRG	6205	ODE BRG			6203						
GREASE	POLYREX EM										
INV.TYPE		C HP FR		60	C HP TO		90				
CT HZ FROM	6	CT HZ TO		60	VT HZ FROM		6	VT HZ TO		60	
SER.NO	SFA 2.52/1.26										

AC Induction Motor Performance Data

Record # 87326

Typical performance - not guaranteed values

Winding: 35WGG069-R011			Type: 3514M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.75	Full Load Torque		2.24 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		2.42/1.21	Breakdown Torque		8 LB-FT		
R.P.M.		1765	Pull-up Torque		4.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.1 LB-FT	
NEMA Design Code		B	KVA Code	K		Starting Current	8.4 A
Service Factor (S.F.)		1.15	No-load Current		0.85 A		
NEMA Nom. Eff.		82.5	Power Factor	74	Line-line Res. @ 25°C		30.3 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		75°C
S.F. Amps		2.64/1.32	Temp. Rise @ S.F. Load		85°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	30	48	61	70	77	81	78
Efficiency	68.4	79.2	82.1	82.9	82.4	81.1	83.1
Speed	1791	1783	1775	1766	1757	1745	1757
Line amperes	0.87	0.95	1.06	1.21	1.4	1.61	1.26

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

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

Typical performance - not guaranteed values.

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





