

ABB BALDOR RELIANCE III

Customer information packet

VNDM3538

.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	CCSA US UR
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	1.010 A @ 460.0 V 2.020 A @ 230.0 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
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a

Part Detail

Revision	-
Type	AC
Mech. spec.	35E4329
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYE4329
Eff. date	10-05-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	P
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	11.06 IN
Power Factor	58
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	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

NP3505												
CAT NO	VNDM3538											
SPEC.	35E4329G069G2					ENCL	TENV					
FRAME	56C	HP		.5								
VOLTS	230/460											
FLA	2.02/1.01			I.P.		56						
RPM	1775	RPM MAX										
HZ	60	PH	3	CLASS		F						
SER.F.	1.15	DES	B	CC								
NEMA-NOM-EFF	81.5											
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	2.2/1.1											

AC Induction Motor Performance Data

Record # 102249

Typical performance - not guaranteed values

Winding: 35WGG069-R082			Type: 3514M		Enclosure: TENV	
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	P	Starting Current	
Service Factor (S.F.)		1.15		No-load Current		0.85 A
NEMA Nom. Eff.		81.5	Power Factor	58	Line-line Res. @ 25°C	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load
S.F. Amps						Temp. Rise @ S.F. Load
						Locked-rotor Power Factor
						Rotor inertia

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	62
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.2
Speed	1793	1788	1782	1776	1771	1763	1773
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.07

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





