

ABB BALDOR RELIANCE III

Customer information packet

VNEDM3554

1.5HP, 1755RPM, 3PH, 60HZ, 56C, 3534M, 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	1.500 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 EEV NEMA PREMIUM NEMA_PREMIUM 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	4.200 A @ 230.0 V 2.100 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	H
Type	AC
Mech. spec.	35E4329
Base	
Status	NLA/A
Elec. spec.	35WGM613
Layout	35LYE4329
Eff. date	01-18-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	04-21-2016

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.1 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3534M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.93 IN
Power Factor	76
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1755 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

NP3504E											
CAT NO	VNEDM3554										
SPEC.	35E4329M613G1						ENCL	TENV			
FRAME	56C	HP		1.5							
VOLTS	230/460										
FLA	4.2/2.1					I.P.	56				
RPM	1755	RPM MAX				2700					
HZ	60	PH	3			CLASS	F				
SER.F.	1.15	DES	B			CC	010A				
NEMA-NOM-EFF	86.5										
RATING	40C AMB-CONT										
DE BRG	6205	ODE BRG				6203					
GREASE	POLYREX EM										
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	50C AT 1.0 SF										

AC Induction Motor Performance Data

Record # 56528

Typical performance - not guaranteed values

Winding: 35WGM613-R025			Type: 3534M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		4.49 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		4.2/2.1	Breakdown Torque		19.9 LB-FT		
R.P.M.		1755	Pull-up Torque		10.98 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		14.87 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		19.8 A
Service Factor (S.F.)		1.15	No-load Current		1.18 A		
NEMA Nom. Eff.		86.5	Power Factor	76	Line-line Res. @ 25°C		8.98 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		88°C
S.F. Amps					Temp. Rise @ S.F. Load		104°C
					Locked-rotor Power Factor		48.1
					Rotor inertia		0.201 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	56	69	77	82	85	79
Efficiency	78.6	85.5	87.4	87.1	86.3	84.8	88.5
Speed	1794	1784	1772	1760	1747	1733	1757
Line amperes	1.28	1.48	1.76	2.1	2.5	2.94	2.3

ABB Motors and Mechanical Inc.

WINDING # 35WGM613

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1755 RPM 460 V 3534M

TORQUES (LB-FT): PO=19.9 PU=10.98 LR=14.87 LRA=19.8





