

ABB BALDOR RELIANCE III

Customer information packet

VFDM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, 3416M, 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	UR CSA
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	1.000 A @ 460.0 V 1.900 A @ 208.0 V 2.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	D
Type	AC
Mech. spec.	34N103
Base	
Status	PRD/A
Elec. spec.	34WG3649
Layout	34LYN103
Eff. date	01-02-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	08-11-2017

High Voltage Full Load Amps	1.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3416M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.35 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	1.00
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1725 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

NP1279L									
CAT.NO.	VFDM3538								
SPEC.	34N103-3649G1								
HP	.5								
VOLTS	230/460								
AMP	2/1								
RPM	1725								
FRAME	56C		HZ	60		PH		3	
SER.F.	1.00		CODE	L		DES	B		CL F
NEMA-NOM-EFF	74		PF	63					
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	TEFC		SN						

AC Induction Motor Performance Data

Record # 66302

Typical performance - not guaranteed values

Winding: 34WG3649-R035			Type: 3416M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		2/1	Breakdown Torque		7 LB-FT	
R.P.M.		1725	Pull-up Torque		4.5 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		5.3 LB-FT
NEMA Design Code		B	KVA Code		L	
Service Factor (S.F.)		1	No-load Current		0.8 A	
NEMA Nom. Eff.		74	Power Factor		63	
Rating - Duty		40C	AMB-CONT			
				Line-line Res. @ 25°C		33.3 Ω
				Temp. Rise @ Rated Load		65°C
				Locked-rotor Power Factor		66.1
				Rotor inertia		0.0381 LB-FT2

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	28	42	53	61	67	73
Efficiency	53.3	66.3	72.7	74.5	75.4	75.1
Speed	1782	1769	1754	1739	1724	1706
Line amperes	0.8	0.85	0.92	1.03	1.15	1.25

ABB Motors and Mechanical Inc.

WINDING # 34WG3649

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3416M

TORQUES (LB-FT) : PO=7 PU=4.5 LR=5.3 LRA=6.5





