

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3559-E-G

3HP, 3470RPM, 3PH, 60HZ, 56C, 3546M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV UR NEMA_PREMIUM NEMA PREMIUM
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	3.600 A @ 460.0 V 7.200 A @ 230.0 V 7.700 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGR930
Layout	35LY-000-654
Eff. date	01-29-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	10-01-2021

High Voltage Full Load Amps	3.6 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	P
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3546M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.21 IN
Power Factor	90
Product Family	WD All SS Encapsulated
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3470 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

NP4292A01											
CAT.NO.	VFSWDM3559-E-G										
SPEC.	35-0000-1318										
HP	3										
VOLTS	230/460										
AMP	7.2/3.6										
RPM	3470										
FRAME	56C			HZ	60			PH	3		
SER.F.	1.15		CODE	P	DES	A		CLASS	H		
NEMA-NOM-EFF	86.5			PF	90						
RATING	40C AMB-CONT										
CC	010A				USABLE AT 208V			N/A			
DE	6205			ODE	6205						
ENCL	TEFC		SN								
	4:1CT, 10:1VT, IP69										

AC Induction Motor Performance Data

Record # 55293

Typical performance - not guaranteed values

Winding: 35WGR930-R011			Type: 3546M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		3	Full Load Torque			4.5 LB-FT
Volts		230/460	Start Configuration			direct on line
Full Load Amps		7.2/3.6	Breakdown Torque			17.2 LB-FT
R.P.M.		3470	Pull-up Torque			10.5 LB-FT
Hz	60	Phase	Locked-rotor Torque			17 LB-FT
NEMA Design Code	A	KVA Code	Starting Current			48.3 A
Service Factor (S.F.)		1.15	No-load Current			1.25 A
NEMA Nom. Eff.	86.5	Power Factor	Line-line Res. @ 25°C			3.47 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load			63°C
S.F. Amps			Temp. Rise @ S.F. Load			74°C
			Locked-rotor Power Factor			42.3
			Rotor inertia			0.127 LB-FT2

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	79	87	90	91	90	91
Efficiency	80.1	86.4	87.3	86.9	85.7	83.9	86.2
Speed	3567	3541	3510	3479	3443	3403	3457
Line amperes	1.53	2.07	2.78	3.55	4.42	5.4	4.07

ABB Motors and Mechanical Inc.

WINDING # 35WGR930

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3470 RPM 460 V 3546M

TORQUES (LB-FT): PO=17.2 PU=10.5 LR=17 LRA=48.3





