

ABB BALDOR RELIANCE III

Customer information packet

CFSWDM3538-E

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.900 A @ 208.0 V 1.800 A @ 230.0 V .900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	E
Type	AC
Mech. spec.	35E4735
Base	
Status	PRD/A
Elec. spec.	35WGZ944
Layout	35LYE4735
Eff. date	12-06-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	11-23-2021

High Voltage Full Load Amps	0.9 a
Insulation Class	H
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.78 IN
Power Factor	65
Product Family	WD All SD Non-Encapsulated
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	1770 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

AC Induction Motor Performance Data

Record # 91508

Typical performance - not guaranteed values

Winding: 35WGZ944-R002			Type: 3512M		Enclosure: TENV		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.49 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		1.9-1.8/.9	Breakdown Torque		6.28 LB-FT		
R.P.M.		1770	Pull-up Torque		3.26 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		4.04 LB-FT		
NEMA Design Code		B	KVA Code		M	Starting Current	6.71 A
Service Factor (S.F.)		1.15	No-load Current		0.792 A		
NEMA Nom. Eff.		80	Power Factor		65	Line-line Res. @ 25°C	43.2 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		58°C		
S.F. Amps		2.1-1.9/0.95	Temp. Rise @ S.F. Load		64°C		
			Locked-rotor Power Factor		70.7767		
			Rotor inertia		0.0866 lb-ft²		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	41	52	62	69	75	66
Efficiency	56.5	70.7	76.5	78.9	80	80	79.6
Speed	1792	1786	1779	1771	1763	1755	1766
Line amperes	0.795	0.827	0.889	0.966	1.06	1.18	1.02

ABB Motors and Mechanical Inc.

WINDING # 35WGZ944

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1770 RPM 460 V 3512M

TORQUES (LB-FT): PO=6.28 PU=3.26 LR=4.04 LRA=6.71





