

ABB BALDOR RELIANCE III

Customer information packet

JMFSWDM41906T-E

20HP, 3540RPM, 3PH, 60HZ, 256JM, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256JM
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	20.000 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 UR NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	POLYREX SHC102 EM (-20F +356F)
Blower	None
Current @ Voltage	46.000 A @ 230.0 V 23.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	H

Part Detail

Revision	Q
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	39WGY419
Layout	39LYE754
Eff. date	10-23-2025
CD Diagram	CD0005
Poles	02
Leads	9#10
Proprietary	False
Created date	12-18-2019

Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3960M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.68 IN
Power Factor	90
Product Family	WD All SS Encapsulated
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.250 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3540 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

NP1953L01									
CAT.NO.	JMFSWDM41906T-E								
SPEC.	39-0000-0236								
HP	20								
VOLTS	230/460								
AMPS	46/23								
R.P.M.	3540								
FRAME	256JM			HZ	60		PH	3	
SER.F.	1.00	CODE	K	DES.	A	CLASS	H		
NEMA NOM. EFF.	91			P.F.	90				
RATING	40C AMB-CONT								
CC	010A		USABLE AT 208V				N/A		
DE	6309			ODE	6309				
ENCL	TEFC	SN							
	2:1 VT/10:1 VT								

AC Induction Motor Performance Data

Record # 80272

Typical performance - not guaranteed values

Winding: 39WGY419-R001			Type: 3960M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20		Full Load Torque		29.8 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		46/23		Breakdown Torque		161 LB-FT	
R.P.M.		3540		Pull-up Torque		64.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		78.2 LB-FT	
NEMA Design Code		A	KVA Code	K		Starting Current	221 A
Service Factor (S.F.)		1		No-load Current		6.9 A	
NEMA Nom. Eff.		91	Power Factor	90		Line-line Res. @ 25°C	0.30935 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		85°C	
				Locked-rotor Power Factor		26.5	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	61	80	87	90	92	92
Efficiency	86.5	91.3	92.5	92.6	92.2	91.5
Speed	3585.8	3572.3	3557.6	3541.8	3525.6	3508.1
Line amperes	8.97	12.8	17.5	22.5	27.8	33.4

ABB Motors and Mechanical Inc.

WINDING # 39WGY419

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3540 RPM 460 V 3960M

TORQUES (LB-FT): PO=161 PU=64.7 LR=78.2 LRA=221





