

ABB BALDOR RELIANCE III

Customer information packet

EWDM41906T

20HP, 3520RPM, 3PH, 60HZ, 256T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256T
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	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	NEMA PREMIUM UR CSA EEV
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	23.000 A @ 460.0 V 46.000 A @ 230.0 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	F

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	39WGX191
Layout	39LYS015
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	08-13-2019

Inverter Code	Inverter Ready
IP Rating	IP55
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3940M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.57 IN
Power Factor	90
Product Family	Wash Down
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3520 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

NP1669L									
CAT.NO.	EWDM41906T								
SPEC.	39-0000-0185								
HP	20								
VOLTS	230/460								
AMP	46/23								
RPM	3520								
FRAME	256T		HZ	60			PH	3	
SER.F.	1.00	CODE	H	DES	A	CLASS		F	
NEMA-NOM-EFF	91	PF	90						
RATING	40C AMB-CONT								
CC	010A								
DE	6309		ODE	6208					
ENCL	TEFC	SN							
BLANK	20:1 CT/VT								

AC Induction Motor Performance Data

Record # 41946

Typical performance - not guaranteed values

Winding: 39WGX191-R001			Type: 3940M	Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		20	Full Load Torque		29.6 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		46/23	Breakdown Torque		108 LB-FT		
R.P.M.		3520	Pull-up Torque		40.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		51.6 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		168 A
Service Factor (S.F.)		1.15		No-load Current		6.78 A	
NEMA Nom. Eff.		91	Power Factor	90	Line-line Res. @ 25°C		0.446 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		77°C	
S.F. Amps				Temp. Rise @ S.F. Load		94°C	
				Locked-rotor Power Factor		28.4	
				Rotor inertia		1.02 lb-ft²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	80	87	90	91	91	91
Efficiency	85.1	90.4	91.3	91.1	90.3	89.2	90.6
Speed	3580.6	3561.9	3542.4	3521.2	3498.6	3473.5	3508
Line amperes	8.79	12.7	17.5	22.6	28.5	34.3	26.1

ABB Motors and Mechanical Inc.

WINDING # 39WGX191

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3520 RPM 460 V 3940M

TORQUES (LB-FT): PO=108 PU=40.8 LR=51.6 LRA=168





