

ABB BALDOR RELIANCE III

Customer information packet

CESSWDM41906T

20HP, 3525RPM, 3PH, 60HZ, 256TC, 3960M, TEFC, F

Class -

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
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
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	43.000 A @ 230.0 V 21.500 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
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	21.5 a
Insulation Class	F

Part Detail

Revision	AV
Type	AC
Mech. spec.	39E119
Base	
Status	PRD/A
Elec. spec.	39WGX632
Layout	39LYE119
Eff. date	04-07-2026
CD Diagram	CD0005
Poles	02
Leads	9#10
Proprietary	False
Created date	03-18-2008

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3960M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	24.67 IN
Power Factor	93
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3525 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

NP1953D01											
CAT.NO.	CESSWDM41906T										
SPEC.	39E119X632G1										
HP	20										
VOLTS	230/460										
AMP	43/21.5										
RPM	3525										
FRAME	256TC			HZ	60				PH	3	
SER.F.	1.00		CODE	G	DES	A		CLASS	F		
NEMA-NOM-EFF	91			PF	93						
RATING	40C AMB-CONT										
CC	010A				USABLE AT 208V				N/A		
DE	6309			ODE	6208						
ENCL	TEFC		SN								
	2:1 CT/10:1 VT										

AC Induction Motor Performance Data

Record # 26903

Typical performance - not guaranteed values

Winding: 39WGX632-R001			Type: 3960M		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		43/21.5	Breakdown Torque		114 LB-FT	
R.P.M.		3525	Pull-up Torque		35.3 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		51 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		152 A	
Service Factor (S.F.)		1.15	No-load Current		4.75 A	
NEMA Nom. Eff.		91 Power Factor	Line-line Res. @ 25°C		0.437 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		75°C	
S.F. Amps			Temp. Rise @ S.F. Load		97°C	
			Locked-rotor Power Factor		27	
			Rotor inertia		1.53 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	71	88	92	93	93	92	93
Efficiency	91	93.5	93.3	92.5	91.2	89.7	91.7
Speed	3581	3562	3541	3519	3492	3465	3503
Line amperes	6.84	11.2	16.2	21.5	27.6	33.8	25.2

ABB Motors and Mechanical Inc.

WINDING # 39WGX632

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3525 RPM 460 V 3960M

TORQUES (LB-FT): PO=114 PU=35.3 LR=51 LRA=152





