

ABB BALDOR RELIANCE III

Customer information packet

CFSWDM22976T-E

7.5HP, 1180RPM, 3PH, 60HZ, 254TC, 3954M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	254TC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	22.500 A @ 208.0 V 21.400 A @ 230.0 V 10.700 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

Part Detail

Revision	X
Type	AC
Mech. spec.	39E646
Base	
Status	PRD/A
Elec. spec.	39WGX429
Layout	39LYE646
Eff. date	02-10-2025
CD Diagram	CD0005
Poles	06
Leads	9#12
Proprietary	False
Created date	08-08-2017

High Voltage Full Load Amps	10.7 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3954M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	24.18 IN
Power Factor	71
Product Family	WD All SS 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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1180 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

NP4427AAA01														
CAT #	CFSWDM22976T-E					WT	255	LBS						
SPEC	39E646X429G1					ENCL	TEFC							
SER #						CC	010A	IP	69					
HP	7.5					MAG CUR	11/5.5							
VOLTS	230/460					NEMA NOM. EFF				91				
AMPS	21.4/10.7					PF	71							
RATING	40C AMB-CONT													
RPM	1180					MAX RPM	1800							
FRAME	254TC	HZ	60			CODE	J	CLASS	H					
SER.F.	1.15	SF AMP					PH	3	DES	A				
DE	6309		ODE	6309										
LUBRICATION	POLYREX EM													
ID LOGO	INVERTER TYPE		VPWM		CHP	60	TO	90	1.5:1					
ID LOGO	WK2	4.34	CT	30	TO	60	2:1							
ID LOGO	SL HZ	1	VT	6	TO	60	10:1							
							QR							
YR														

AC Induction Motor Performance Data

Record # 54940

Typical performance - not guaranteed values

Winding: 39WGX429-R006			Type: 3954M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		7.5	Full Load Torque		33.3 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		21.4/10.7	Breakdown Torque		99.5 LB-FT		
R.P.M.		1180	Pull-up Torque		39.7 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		58.4 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		70.1 A
Service Factor (S.F.)		1.15	No-load Current		5.52 A		
NEMA Nom. Eff.		91	Power Factor	71	Line-line Res. @ 25°C		0.895 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		51°C
S.F. Amps					Temp. Rise @ S.F. Load		61°C
					Locked-rotor Power Factor		25.8
					Rotor inertia		4.34 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	65	71	74	75	73
Efficiency	84.9	90.6	91.8	91.5	91.4	90.5	91.6
Speed	1196	1192	1188	1183	1178	1173	1180
Line amperes	6.25	7.28	8.82	10.72	12.91	15.5	12.03

ABB Motors and Mechanical Inc.

WINDING # 39WGX429

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1180 RPM 460 V 3954M

TORQUES (LB-FT): PO=99.5 PU=39.7 LR=58.4 LRA=70.1





