

ABB BALDOR RELIANCE III

Customer information packet

CFSWDM23994T-E

15HP, 3540RPM, 3PH, 60HZ, 254TC, 3952M, TEFC, F

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	15.000 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 NEMA PREMIUM (OLD LOGO) WEEE CURUSEEV
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	17.000 A @ 460.0 V 34.000 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
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	C
Type	AC
Mech. spec.	39E646
Base	
Status	PRD/A
Elec. spec.	39WGY436
Layout	39LYE646
Eff. date	03-04-2026
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	08-07-2023

High Voltage Full Load Amps	17.0 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3952M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	24.19 IN
Power Factor	90
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	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
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

NP4427AAA01														
CAT #	CFSWDM23994T-E					WT	260		LBS					
SPEC	39E646Y436G1					ENCL	TEFC							
SER #						CC	010A		IP	69				
HP	15		MAG CUR											
VOLTS	230/460					NEMA NOM. EFF					91			
AMPS	34/17					PF	90							
RATING	40C AMB-CONT													
RPM	3540					MAX RPM		5400						
FRAME	254TC		HZ	60		CODE	K	CLASS		H				
SER.F.	1.00	SF AMP						PH	3	DES	A			
DE	6309			ODE		6309								
LUBRICATION	POLYREX_SHC_102_EM													
ID LOGO	INVERTER TYPE				VPWM		CHP	60		TO	90		1.5:1	
ID LOGO	WK2	1.33	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 # 80274

Typical performance - not guaranteed values

Winding: 39WGY436-R001			Type: 3952M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		15	Full Load Torque		22.36 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		34/17	Breakdown Torque		110 LB-FT		
R.P.M.		3540	Pull-up Torque		44.53 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		53.82 LB-FT	
NEMA Design Code		A	KVA Code	K	Starting Current		153 A
Service Factor (S.F.)			1	No-load Current		4.89 A	
NEMA Nom. Eff.		91	Power Factor	90	Line-line Res. @ 25°C		0.447 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		68°C	
				Locked-rotor Power Factor		27.2	
				Rotor inertia		1.33 lb-ft²	

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	65	82	88	91	92	92
Efficiency	83.8	89.5	91.1	91.3	91	90.3
Speed	3584	3569	3553	3536	3518	3499
Line amperes	6.63	9.59	13.23	17	21.13	25.36

ABB Motors and Mechanical Inc.

WINDING # 39WGY436

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 3540 RPM 460 V 3952M

TORQUES (LB-FT): PO=110 PU=44.53 LR=53.82 LRA=153





