

# ABB BALDOR RELIANCE III

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## Customer information packet

### CFSWDM23934T-E

20HP, 1765RPM, 3PH, 60HZ, 256TC, 3960M, TEFC, F

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	256TC
<b>Frame Material</b>	Stainless Steel
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	None
<b>Haz Area Division</b>	Not Applicable
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	20.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	230.0 V @ 60 HZ 460.0 V @ 60 HZ
<b>Agency Approvals</b>	UR CSA NEMA PREMIUM
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Auxiliary Box Lead Termination</b>	None
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Blower</b>	None
<b>Current @ Voltage</b>	48.000 A @ 230.0 V 24.000 A @ 460.0 V
<b>Design Code</b>	A
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	93.0 %
<b>Electrically Isolated Bearing</b>	Not Electrically Isolated
<b>Feedback Device</b>	NO FEEDBACK
<b>Front Face Code</b>	Standard
<b>Front Shaft Indicator</b>	None
<b>Heater Indicator</b>	No Heater

**Part Detail**

<b>Revision</b>	S
<b>Type</b>	AC
<b>Mech. spec.</b>	39E646
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	39WGY400
<b>Layout</b>	39LYE646
<b>Eff. date</b>	02-10-2025
<b>CD Diagram</b>	CD0180
<b>Poles</b>	04
<b>Leads</b>	9#12
<b>Proprietary</b>	False
<b>Created date</b>	01-30-2018

<b>High Voltage Full Load Amps</b>	24.0 a
<b>Insulation Class</b>	H
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	J
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	9 @ 12 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3960M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	25.18 IN
<b>Power Factor</b>	84
<b>Product Family</b>	WD All SS Encapsulated
<b>Pulley End Bearing Type</b>	Sealed Bearing
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	1.625 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1765 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP4427AAA05</b>											
<b>CAT #</b>	CFSWDM23934T-E				<b>WGT</b>		<b>LBS</b>				
<b>SPEC</b>	39E646Y400G2				<b>ENCL</b>	TEFC					
<b>SER #</b>		<b>CC</b>	010A	<b>IP</b>	69						
<b>HP</b>	20	<b>MAG CUR</b>	19.4/9.7								
<b>VOLTS</b>	230/460				<b>NEMA NOM. EFF</b>	93					
<b>AMPS</b>	48/24				<b>PF</b>	84					
<b>RATING</b>	40C AMB-CONT										
<b>RPM</b>	1765				<b>MAX RPM</b>	2700					
<b>FRAME</b>	256TC	<b>HZ</b>	60	<b>CODE</b>	J	<b>CLASS</b>	H				
<b>SER.F.</b>	1.00	<b>SF AMP</b>		<b>PH</b>	3	<b>DES</b>	A				
<b>DE</b>	6309		<b>ODE</b>	6309							
<b>LUBRICATION</b>	POLYREX EM										
<b>ID LOGO</b>	<b>INV TYPE:</b>	<b>VPWM</b>	<b>CHP</b>	60	<b>TO</b>	90	1.5:1				
<b>ID LOGO</b>	<b>WK2</b>	2.52	<b>CT</b>	30	<b>TO</b>	60	2:1				
<b>ID LOGO</b>	<b>SL HZ</b>	1.2	<b>VT</b>	6	<b>TO</b>	60	10:1				
<b>YR</b>								<b>QR</b>			

**Parts List**

<b>Part number</b>	<b>Description</b>	<b>Quantity</b>
SA351074	SA 39E646Y400G2	1.000 ea
RA339744	RA 39E646Y400G2	1.000 ea
09FN3001D01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
39CB1001A01	39 MID-SECTION, - 3PC. BOX W/5.75-12 THD	1.000 ea
RM1070A79	O-RING, -051 VITON/FKM .070CS X 5.489ID	1.000 ea
10XN2520S10	1/4-20X 5/8 HEX HD CAP SS	4.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520S08	SCREW, 1/4-20 X 1/2 HHCS SS	1.000 ea
39EP1904A02	FREP ENCL 309 BRG (STAINLESS) POLISHED	1.000 ea
RM1070A80	O-RING, VITON/FKM .070CS X 10.800ID	1.000 ea
HW4600F81	45 X 68 X 10 LIP SEAL, GRAPHITE INFUSED	1.000 ea
HW4600F80	45 X 62 X 4.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
39EP1905A01	PUEP ENCL 309 BRG (STAINLESS) POLISHED	1.000 ea
RM1070A80	O-RING, VITON/FKM .070CS X 10.800ID	1.000 ea
HW4600F81	45 X 68 X 10 LIP SEAL, GRAPHITE INFUSED	1.000 ea
HW4600F80	45 X 62 X 4.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
RM1070A78	O-RING, -012 VITON/FKM .070CS X .364ID	4.000 ea
39FH4004A01	304 SS FANCOVER SPUN W/SLOTS & MTG(POLIS	1.000 ea
10XN2520FS08	HEX HD CAP SCREW 1/4-20 X 1/2 SS FOOD SA	3.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	3.000 ea
39CB1500A01	39 LID, 3 PC. BOX STAINLESS (POLISHED)	1.000 ea
RM1070A79	O-RING, -051 VITON/FKM .070CS X 5.489ID	1.000 ea
HW2502G25	#303 SS,SQ KEY 3/8 X 2.880	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.005 qt
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb

HA3105FS14	THRUBOLT, 3/8-16 X 17.250 SS FOOD SAFE	4.000 ea
HW2502F08	KEY, 5/16 SQ X .875 303 SS	1.000 ea
51XB1214S20	12-14X1.25 HXWSSLD SERTYB, SS	1.000 ea
WD5603A01	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000013	ZRTG FE ASSEMBLY	1.000 ea
HA1025A03	FELT WSH 2.1875 OD X 1.170 ID X .25 #321	8.000 ea
PE-0000003	ZRTG PE ASSEMBLY	1.000 ea

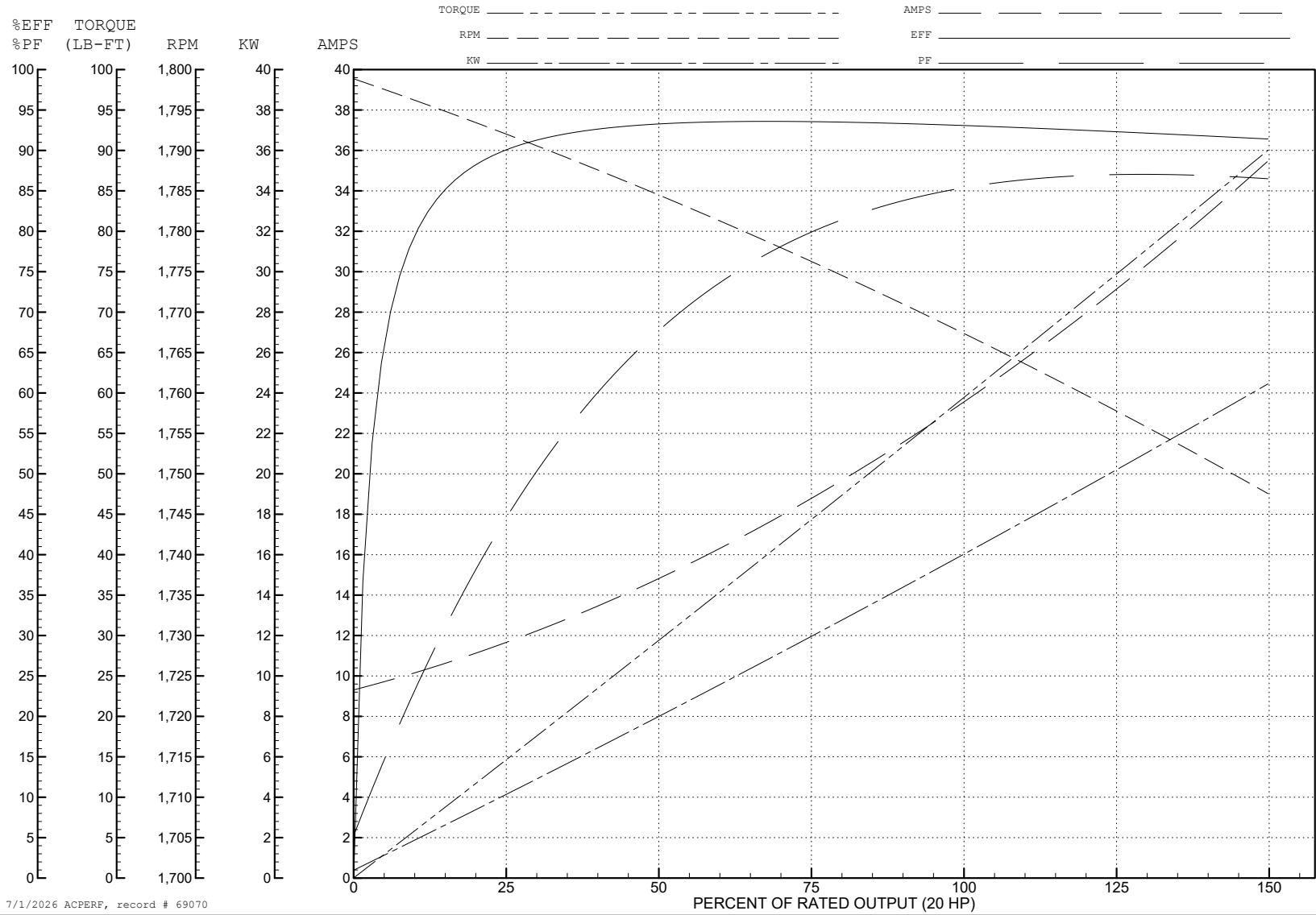
ABB Motors and Mechanical Inc.

WINDING # 39WGY400

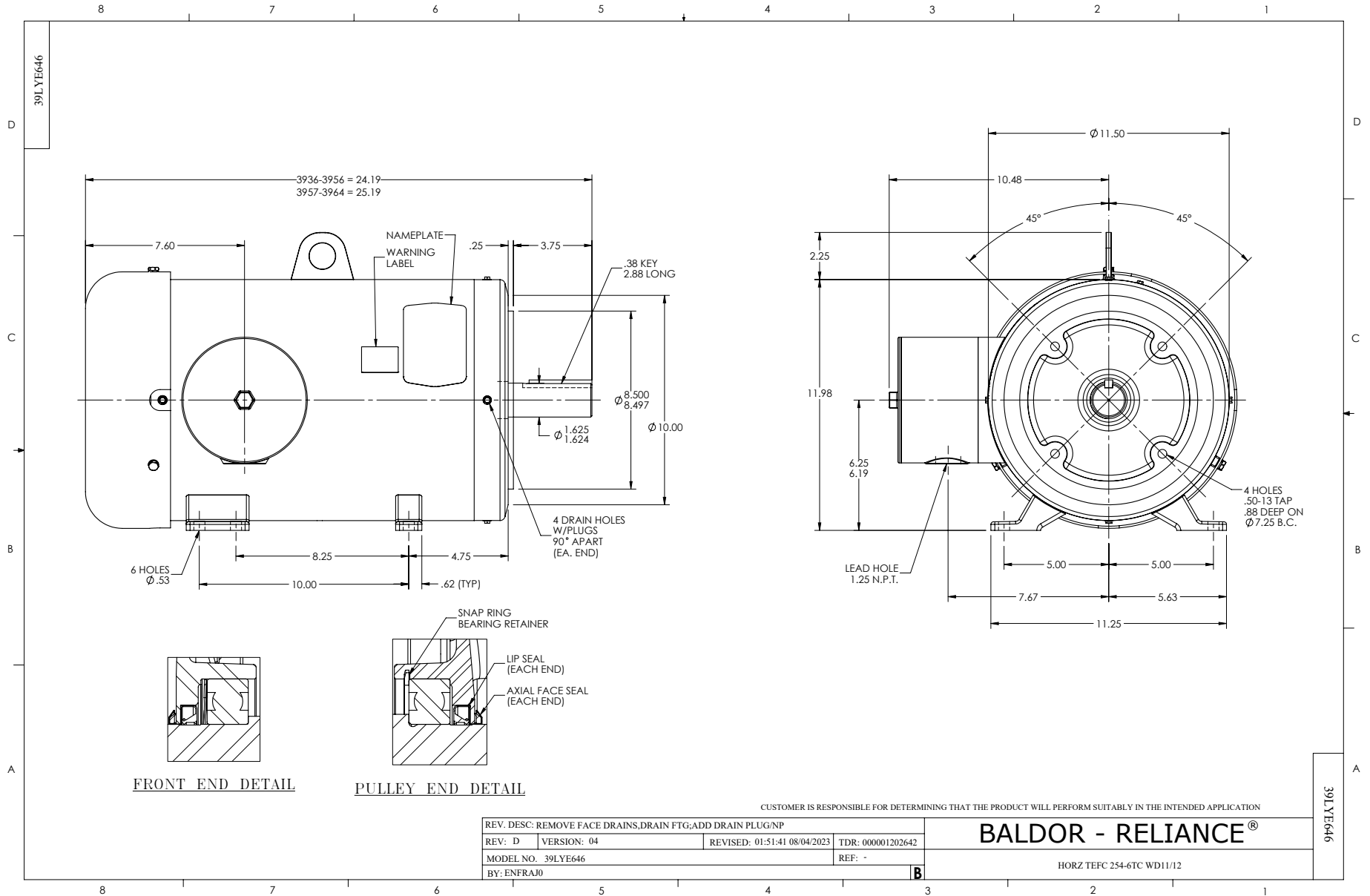
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 460 V 3960M

TORQUES (LB-FT): PO=226 PU=109 LR=139 LRA=188



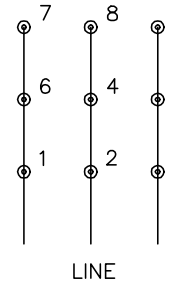
7/1/2026 ACPERF, record # 69070



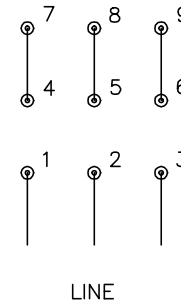
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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