

BALDOR® • RELIANCE 

Product Information Packet

CFSWDM23934T-E

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

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	39WGY400	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	39E646	Layout:	39LYE646	Poles:	04	Created Date:	01-30-2018
Base:	RG	Eff. Date:	05-21-2020	Leads:	9#12		

Specs			
Catalog Number:	CFSWDM23934T-E	Insulation Class:	H
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	256TC	KVA Code:	J
Frame Material:	Stainless Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	20.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 12 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3960M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	84
	CSA	Product Family:	WD All SS Encapsulated
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Sealed Bearing
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	24.000 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding

	48.000 A @ 230.0 V	Shaft Rotation:	Reversible
Design Code:	A	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP1953A02											
CAT.NO.	CFSWDM23934T-E										
SPEC.	39E646Y400G2										
HP	20										
VOLTS	230/460										
AMP	48/24										
RPM	1765										
FRAME	256TC				HZ	60					
SER.F.	1.00			CODE	J	DES	A		CLASS	H	
NEMA-NOM-EFF	93			PF	84					PH	3
RATING	40C AMB-CONT										
CC	010A				USABLE AT 208V						
DE	6309			ODE	6309						
ENCL	TEFC		SN								
	2:1 CT/10:1 VT										

Parts List		
Part Number	Description	Quantity
SA351074	SA 39E646Y400G2	1.000 EA
RA339744	RA 39E646Y400G2	1.000 EA
09FN3001D01SP	EXTERNAL FAN, PLASTIC	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
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	3.000 EA
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 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
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 EA
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	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

Parts List (continued)		
Part Number	Description	Quantity
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
HA5027A07	85XU1208S08 FACE DRAIN PINS BAGGED	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	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 (1200/bx) 3/19	1.000 EA
FE-0000013	ZRTG FE ASSEMBLY	1.000 EA
PE-0000003	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 69070 - Typical performance - not guaranteed values

Winding: 39WGY400-R001	Type: 3960M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20			Full Load Torque	59.38 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	48/24			Breakdown Torque	226 LB-FT
R.P.M.	1765			Pull-up Torque	109 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	139 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	188 A
Service Factor (S.F.)	1			No-load Current	9.7 A
NEMA Nom. Eff.	93	Power Factor	84	Line-line Res. @ 25°C	0.371 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	92°C
				Locked-rotor Power Factor	30.4

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	47	69	79	84	86	87
Efficiency	89.8	93.1	93.5	93.1	92.4	91.3
Speed	1792	1784.5	1776.1	1767.4	1758.1	1747.4
Line amperes	11.2	14.5	18.9	23.9	29.3	35.2

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

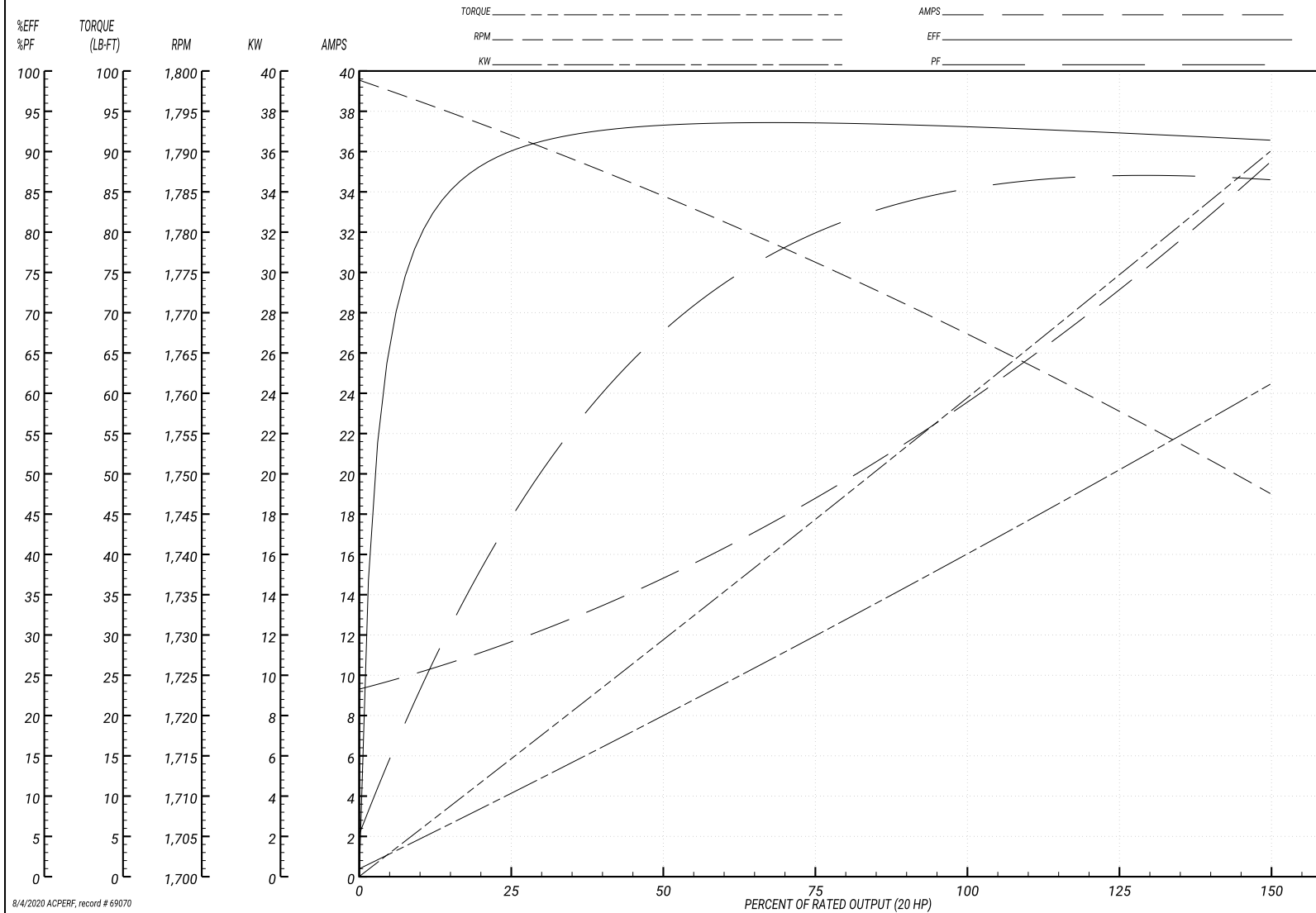
ABB Motors and Mechanical Inc.

WINDING # 39WGY400

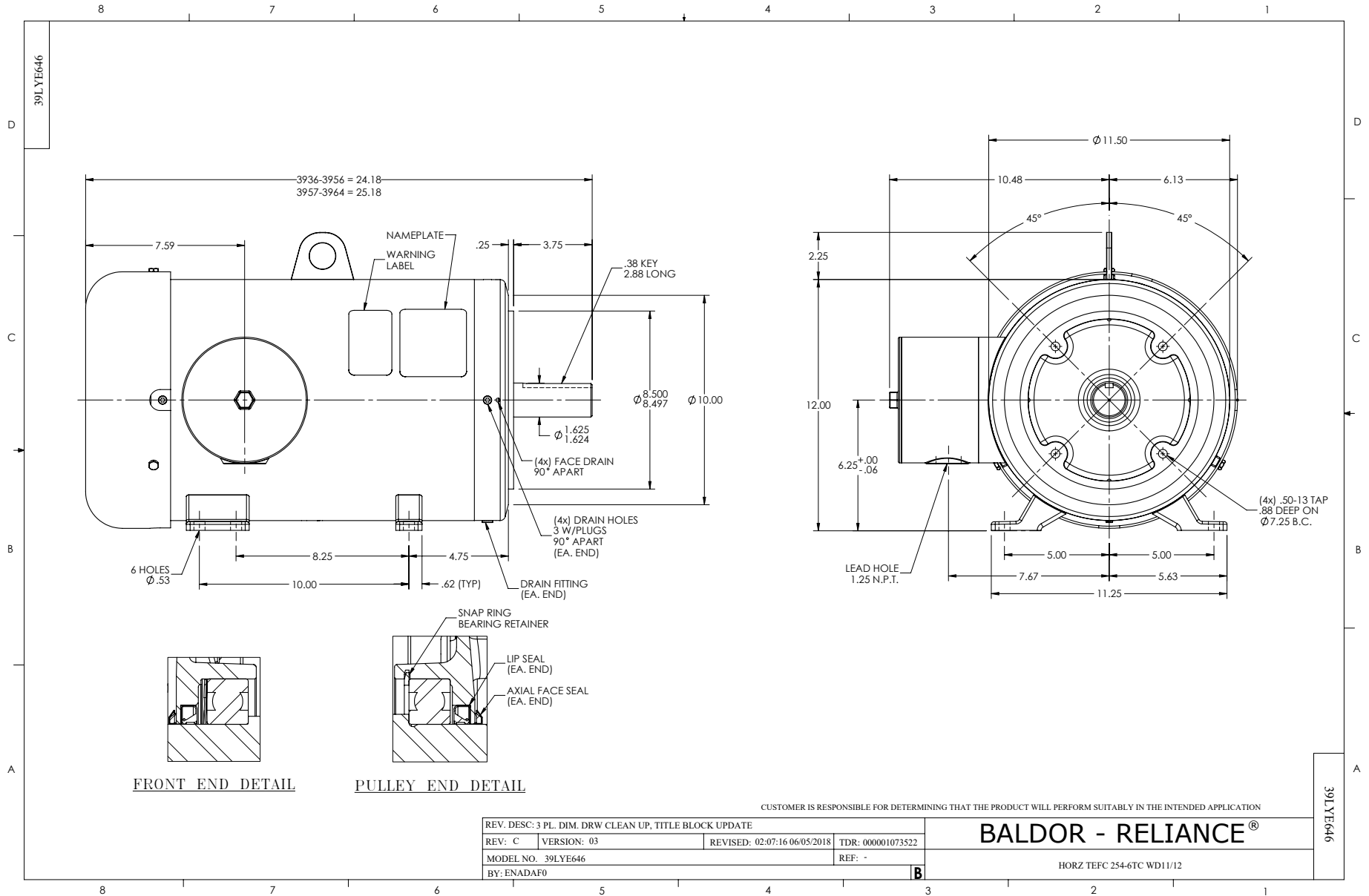
Typical performance - not guaranteed values.

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

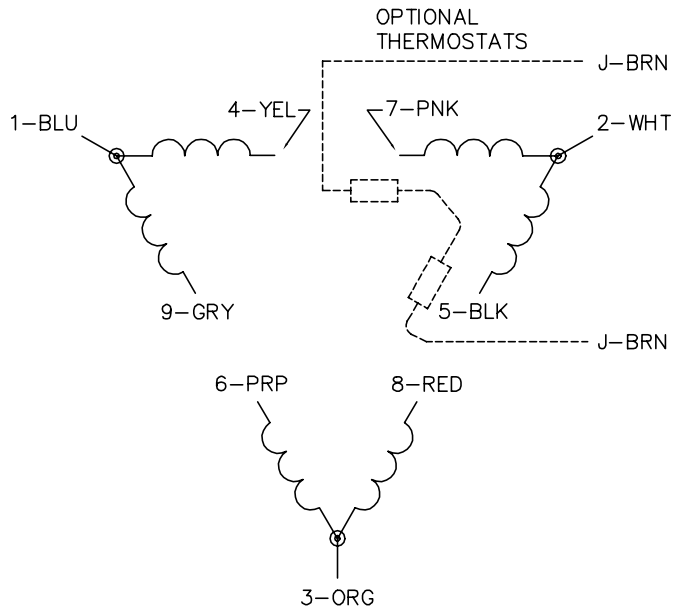
TORQUES(LB-FT): PO=226 PU=109 LR=139 LRA=188



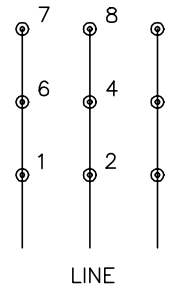
8/4/2020 ACPERE, record # 69070



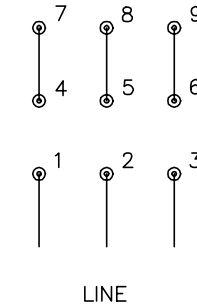
CD0180



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: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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