

ABB BALDOR RELIANCE III

Customer information packet

CFSWDM41902T

20HP, 1180RPM, 3PH, 60HZ, 284TC, 4072M, TEFC, F

Specifications

Enclosure	TEFC
Frame	284TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA NEMA PREMIUM 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	26.000 A @ 460.0 V 52.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
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	26.0 a
Insulation Class	H

Part Detail

Revision	G
Type	AC
Mech. spec.	40E429
Base	
Status	PRD/A
Elec. spec.	40WGX348
Layout	40LYE429
Eff. date	09-22-2023
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	06-13-2017

Inverter Code	Inverter Ready
KVA Code	H
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	4072M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	28.14 IN
Power Factor	78
Product Family	WD All SD Non-Encapsulated
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 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

[illegible]

Parts List

Part number	Description	Quantity
SA348494	SA 40E429X348G1	1.000 ea
RA337060	RA 40E429X348G1	1.000 ea
09FN3001A02SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
40CB1001A01	40 MACH. MID SECTION - 3 PC. CONDUIT BOX	1.000 ea
10XN2520S12	BOLT 1/4 - 20X 3/4 HEX HEAD SS (F/S)	4.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	4.000 ea
RM1070A82	O-RING, -.055 VITON/FKM .070CS X 6.489 ID	1.000 ea
10XN2520G06	1/4 20X3/8 HX HD CAP, GREEN	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
40EP1901A02	FREP, MACH - 311 BRG WD11 SS	1.000 ea
RM1070A83	O-RING, VITON/FKM .070CS X 12.500 ID	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
HW4600H05	55 X 75 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW4600G75	55 X 75 X 5.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HW4600H05	55 X 75 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW4600G75	55 X 75 X 5.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
40EP1900A02	PUEP, MACH - 311 BRG WD11 SS	1.000 ea
RM1070A83	O-RING, VITON/FKM .070CS X 12.500 ID	1.000 ea
RM1070A78	O-RING, -.012 VITON/FKM .070CS X .364ID	4.000 ea
40CB1500A01	40 MACH. LID - 3 PC. SS CONDUIT BOX	1.000 ea
RM1070A82	O-RING, -.055 VITON/FKM .070CS X 6.489 ID	1.000 ea
51XB1214S20	12-14X1.25 HXWSSLD SERTYB, SS	1.000 ea
10FH4018A01	304 SS FAN HOUSING & BASE PLATE FOR HORZ	1.000 ea
10XN2520S08	SCREW, 1/4-20 X 1/2 HHCS SS	4.000 ea
HW2502H28	#303 SS,SQ KEY 1/2 X 3.250	1.000 ea
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ1000B13	PETROLATUM, OR PETROLEUM JELLY	0.010 oz
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	4.000 ea

MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW2502F10	KEY, 5/16 SQ X 1.000 303 STAINLESS STEEL	1.000 ea
HA3105FS16	THRUBOLT, 3/8-16 X 18.750 SS FOOD SAFE	4.000 ea
WD4006A11	WIRE JOINT, 6-14 AWG, SILICONE FILLED	6.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 68931

Typical performance - not guaranteed values

Winding: 40WGX348-R001				Type: 4072M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20		Full Load Torque		89.16 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		52/26		Breakdown Torque		269 LB-FT	
R.P.M.		1180		Pull-up Torque		128 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		165 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		174 A	
Service Factor (S.F.)		1.15		No-load Current		12.3 A	
NEMA Nom. Eff.		91.7	Power Factor	Line-line Res. @ 25°C		0.36764 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		65°C	
S.F. Amps				Temp. Rise @ S.F. Load		79°C	
				Locked-rotor Power Factor		29.8	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	72	78	80	81	79
Efficiency	89.2	92.9	93.5	93.3	92.7	91.8	92.9
Speed	1195.4	1191.8	1187.1	1182.8	1177.9	1172.5	1180
Line amperes	13.7	16.8	21	25.9	31.4	37.6	29.2

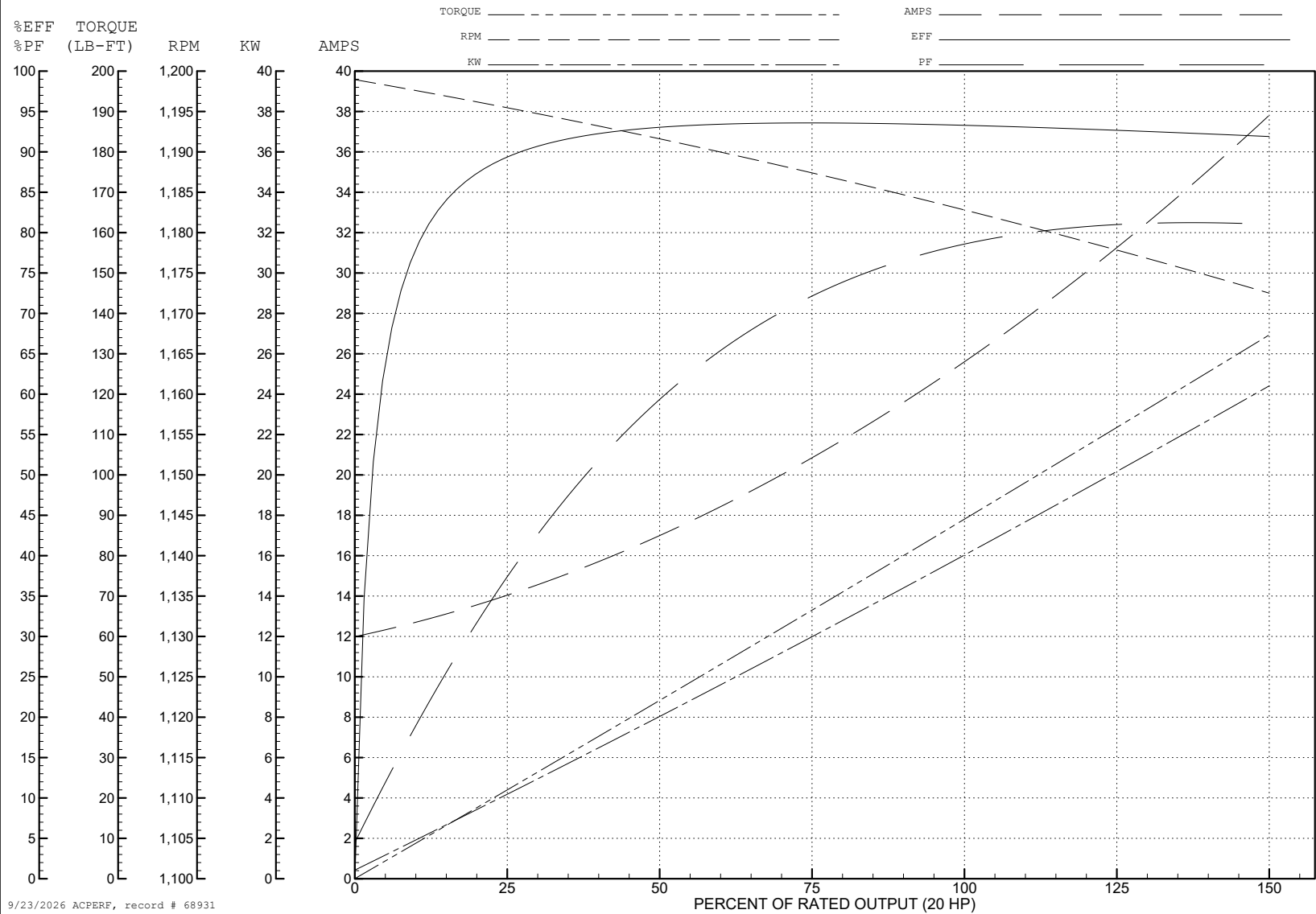
ABB Motors and Mechanical Inc.

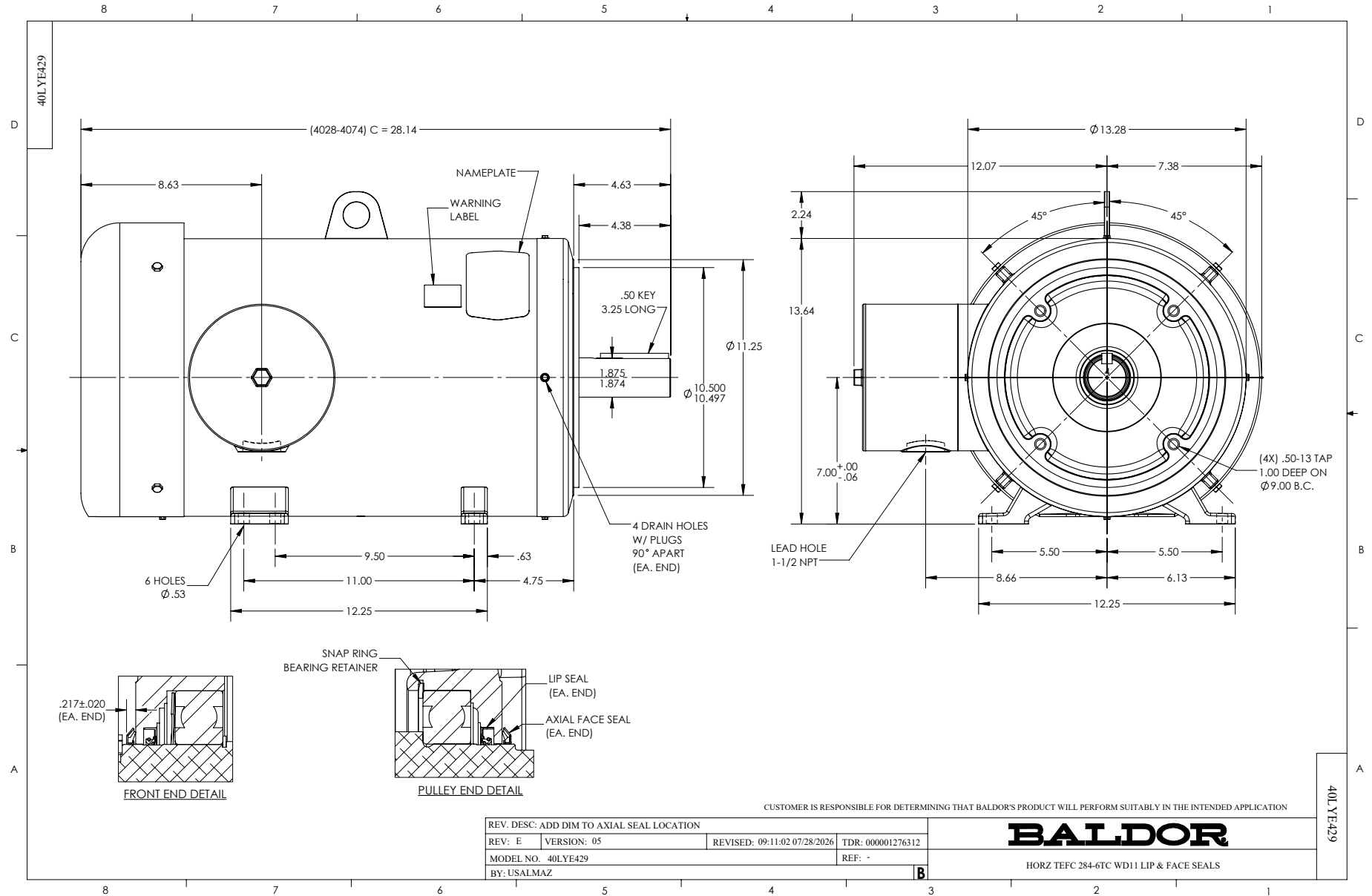
WINDING # 40WGX348

Typical performance - not guaranteed values.

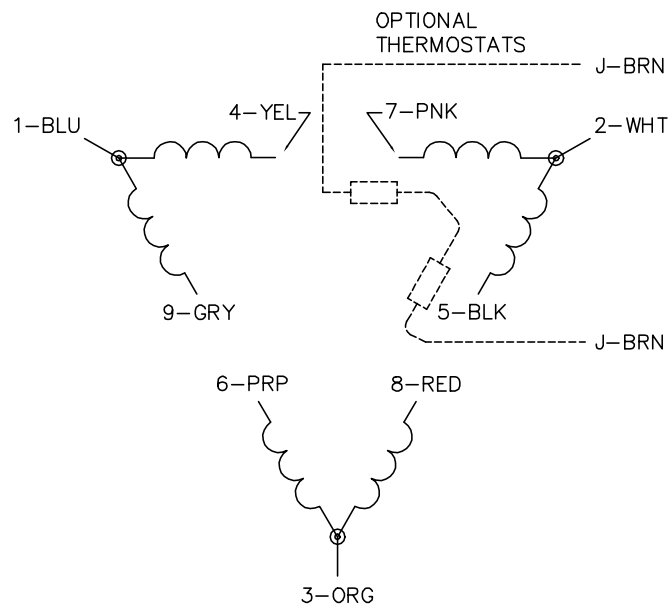
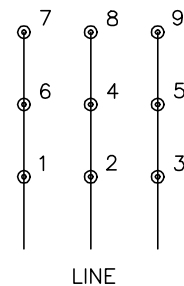
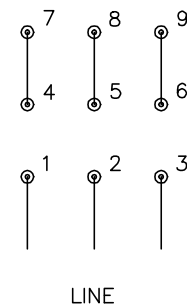
20 HP 3 PH 60 HZ 1180 RPM 460 V 4072M

TORQUES (LB-FT): PO=269 PU=128 LR=165 LRA=174





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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