

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

Nameplate

NP4427AAA05												
CAT #	CFSWDM41902T					LBS						
SPEC	40E429X348G1					ENCL	TEFC					
SER #						CC	010A	IP	69			
HP	20					MAG CUR	24.6/12.3					
VOLTS	230/460							NEMA NOM. EFF	91.7			
AMPS	52/26							PF	78			
RATING	40C AMB-CONT											
RPM	1180					MAX RPM		1800				
FRAME	284TC		HZ	60		CODE	H	CLASS			H	
SER.F.	1.15		SF AMP					PH	3	DES	A	
DE	6311			ODE		6311						
LUBRICATION	POLYREX EM											
ID LOGO	VPWM	CHP	60	TO	90	1.5:1						
ID LOGO	WK2	8.82	CT	30	TO	60	2:1					
ID LOGO	SL HZ	1	VT	6	TO	60	10:1					

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		H		Starting Current		174 A
Service Factor (S.F.)		1.15		No-load Current		12.3 A		
NEMA Nom. Eff.		91.7 Power Factor		78		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

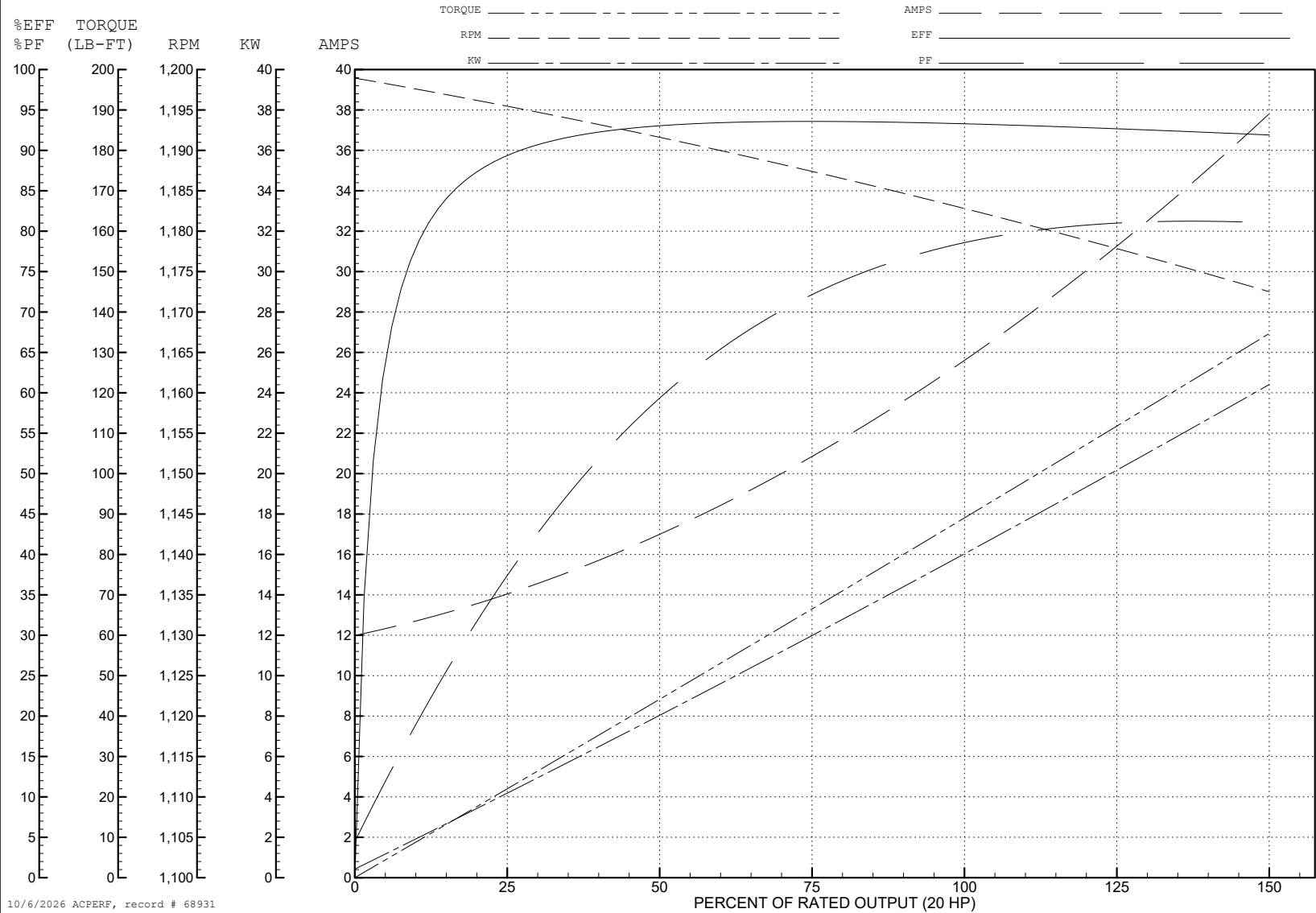
ABB Motors and Mechanical Inc.

WINDING # 40WGX348

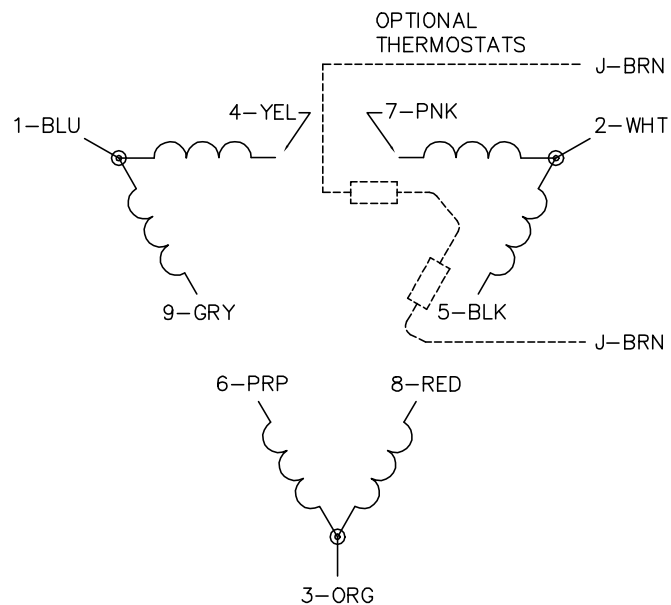
Typical performance - not guaranteed values.

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

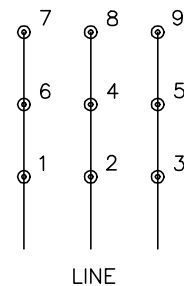
TORQUES (LB-FT): PO=269 PU=128 LR=165 LRA=174



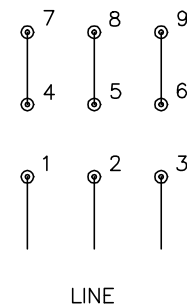
CD0180



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

SH 1 of 1