

ABB BALDOR RELIANCE III

Customer information packet

EM2528T-BG

20HP, 1180RPM, 3PH, 60HZ, 286T, 4056M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	286T
Frame Material	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 CSA EEV 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	56.000 A @ 208.0 V 54.000 A @ 230.0 V 27.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	27.0 a

Part Detail

Revision	H
Type	AC
Mech. spec.	40E332
Base	
Status	PRD/A
Elec. spec.	40WGX191
Layout	40LYE332
Eff. date	11-29-2023
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	08-01-2017

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4056M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	25.06 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	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

NP2138LUA												
CAT.NO.	EM2528T-BG			P/N					ENCLOSURE		OPSB	
SPEC.	40E332X191G1		CC	010A	FRAME		286T		S/N			
HP	20			CLASS		H	HZ		60			
RPM	1180			PH	3	DES		A				
VOLT	230/460			KVA-CODE			H		ODE BRG	6309	DE BRG	6311
AMP	54/27											
RATING	40C AMB-CONT			GREASE			POLYREX EM					
NEMA-NOM-EFF	92.4	PF	74	SER.F.	1.15							
	50HZ 20HP 190/380V 62/31A						SF1.0					
HTR-VOLTS	HTR-AMPS											

AC Induction Motor Performance Data

Record # 66082

Typical performance - not guaranteed values

Winding: 40WGX191-R002				Type: 4056M		Enclosure: OPSB					
Nameplate Data				460 V, 60 Hz: High Voltage Connection							
Rated Output (HP)		20		Full Load Torque		88.68 LB-FT					
Volts		230/460		Start Configuration		direct on line					
Full Load Amps		54/27		Breakdown Torque		291 LB-FT					
R.P.M.		1180		Pull-up Torque		110 LB-FT					
Hz		60 Phase		3		Locked-rotor Torque		160 LB-FT			
NEMA Design Code		A		KVA Code		H		Starting Current		177 A	
Service Factor (S.F.)		1.15		No-load Current		14.1 A					
NEMA Nom. Eff.		92.4		Power Factor		74		Line-line Res. @ 25°C		0.38967 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		29°C					
S.F. Amps				Temp. Rise @ S.F. Load		35°C					
				Locked-rotor Power Factor		31.3					

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	55	68	74	78	79	76
Efficiency	88.4	92.5	93.3	93.2	92.7	91.9	92.9
Speed	1195.7	1191.7	1187.5	1183.3	1178.5	1172.9	1180
Line amperes	15.4	18.3	22.2	27	32.4	38.5	30.2

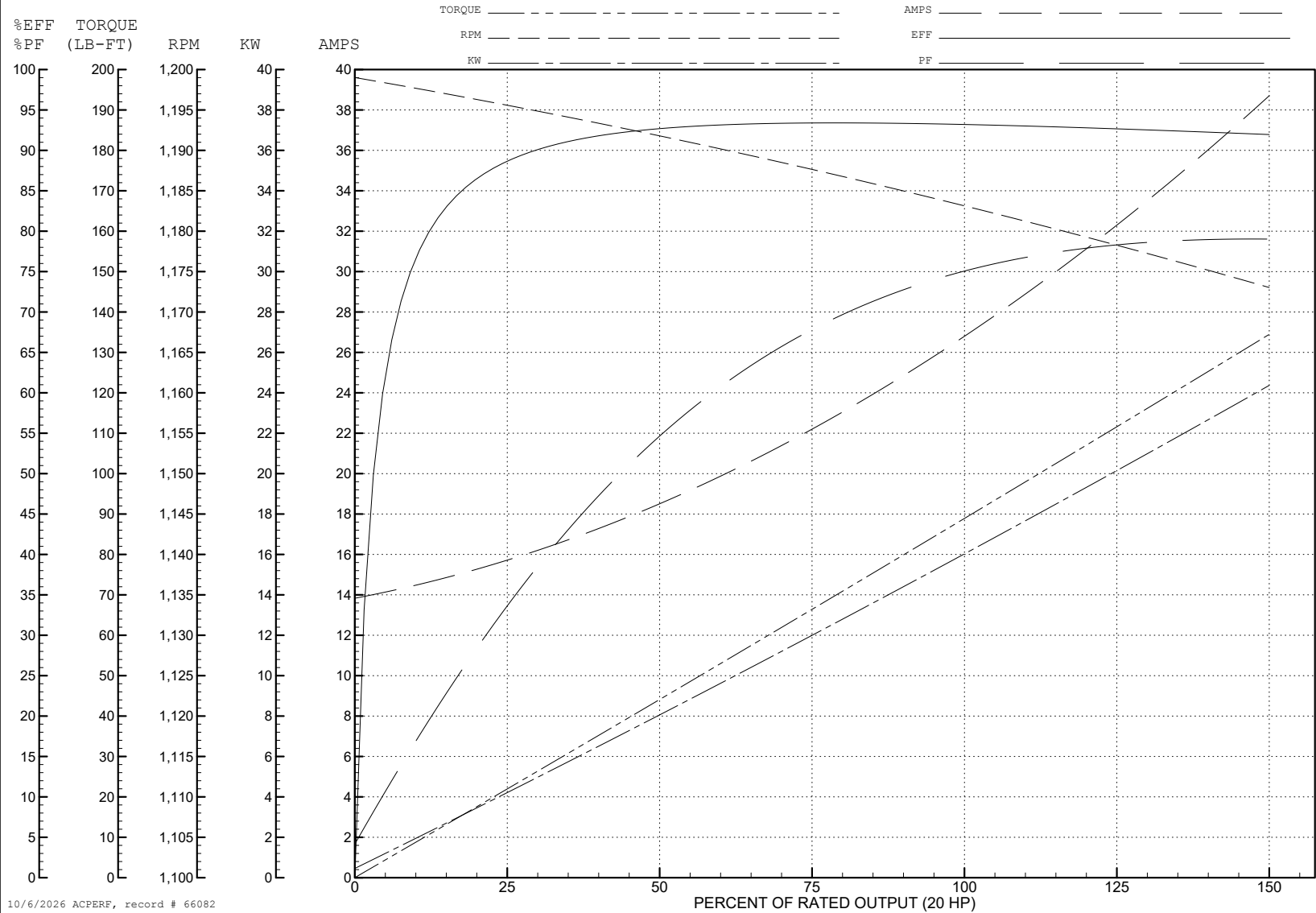
ABB Motors and Mechanical Inc.

WINDING # 40WGX191

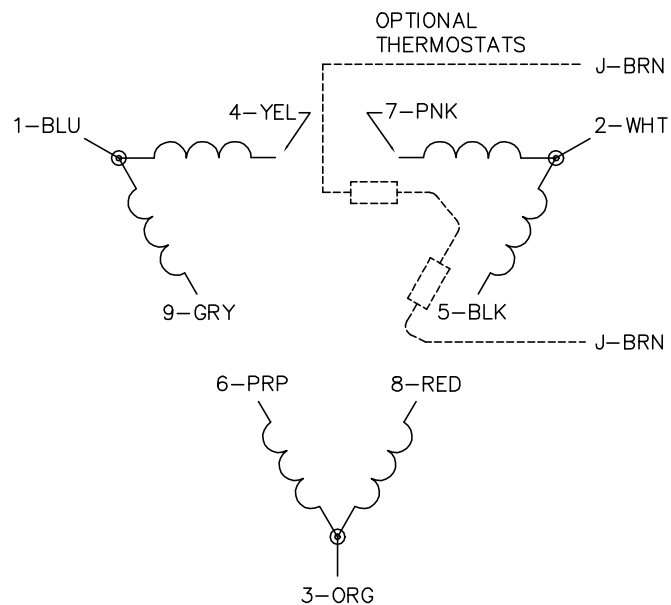
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1180 RPM 460 V 4056M

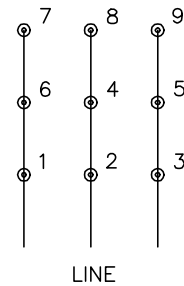
TORQUES (LB-FT): PO=291 PU=110 LR=160 LRA=177



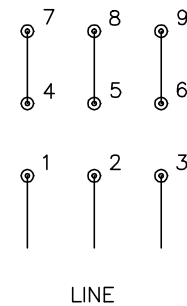
CD0180



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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