

ABB BALDOR RELIANCE III

Customer information packet

GNEM4102T

20HP//15KW, 1180//980RPM, 3PH, 60//50HZ, 286

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ 15.000 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	WEEE UKCA NEMA PREMIUM (OLD LOGO) NEMA PREMIUM IE3 CURUSEEV CE
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	66.000 A @ 190.0 V 58.000 A @ 230.0 V

Part Detail

Revision	B
Type	AC
Mech. spec.	10C151
Base	
Status	PRD/A
Elec. spec.	10WGZ615
Layout	10LYC151
Eff. date	01-07-2026
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	09-20-2023

	58.000 A @ 208.0 V
	33.000 A @ 380.0 V
	29.000 A @ 460.0 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	29.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1064M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	27.76 IN
Power Factor	70
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding

Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1180 rpm
	980 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

NP4304L									
CAT.NO.	GNEM4102T								
SPEC.	10C151Z615G1								
HP	20HP//15KW					PH	3		
VOLTS	208-230/460//190/380								
AMPS	58/29//66/33								
R.P.M. (1/MIN)	1180//980					WT.	205KG		KG
FRAME	286T		HZ	60//50		I.P.	54		
SER.F.	1.15	CODE	K	DES.	A	CLASS	F		
NOM.EFF.	91.7//91.2		% (100%)						
P.F.	70	IC411, 10:1 VT							
RATING	40C AMB-S1 CONT				CC	010A			
DE	6311		ODE	6309					
ENCL	TEFC	SN							
	SFA 66/33//74/37								
	IE3-50HZ 90.9(75%), 89.6(50%)								
	IE3-60HZ 90.8(75%), 88.8(50%)								

AC Induction Motor Performance Data

Record # 101016

Typical performance - not guaranteed values

Winding: 10WGZ615-R003		Type: 1064M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20	Full Load Torque	89.83 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	58/29//66/33	Breakdown Torque	343 LB-FT
R.P.M.	1180//980	Pull-up Torque	141 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	203 LB-FT
NEMA Design Code	A KVA Code	Starting Current	205 A
Service Factor (S.F.)	1.15	No-load Current	17.15 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	0.318 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	63°C
S.F. Amps	66/33//74/37	Temp. Rise @ S.F. Load	77°C
		Locked-rotor Power Factor	30.2
		Rotor inertia	7.84 lb-ft ²

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	51	62	70	74	77	72
Efficiency	82.3	88.8	90.8	91.9	91.1	90.3	91.4
Speed	1195	1191	1186	1182	1176	1170	1178
Line amperes	18.2	21.05	24.99	29.44	34.71	40.68	32.6

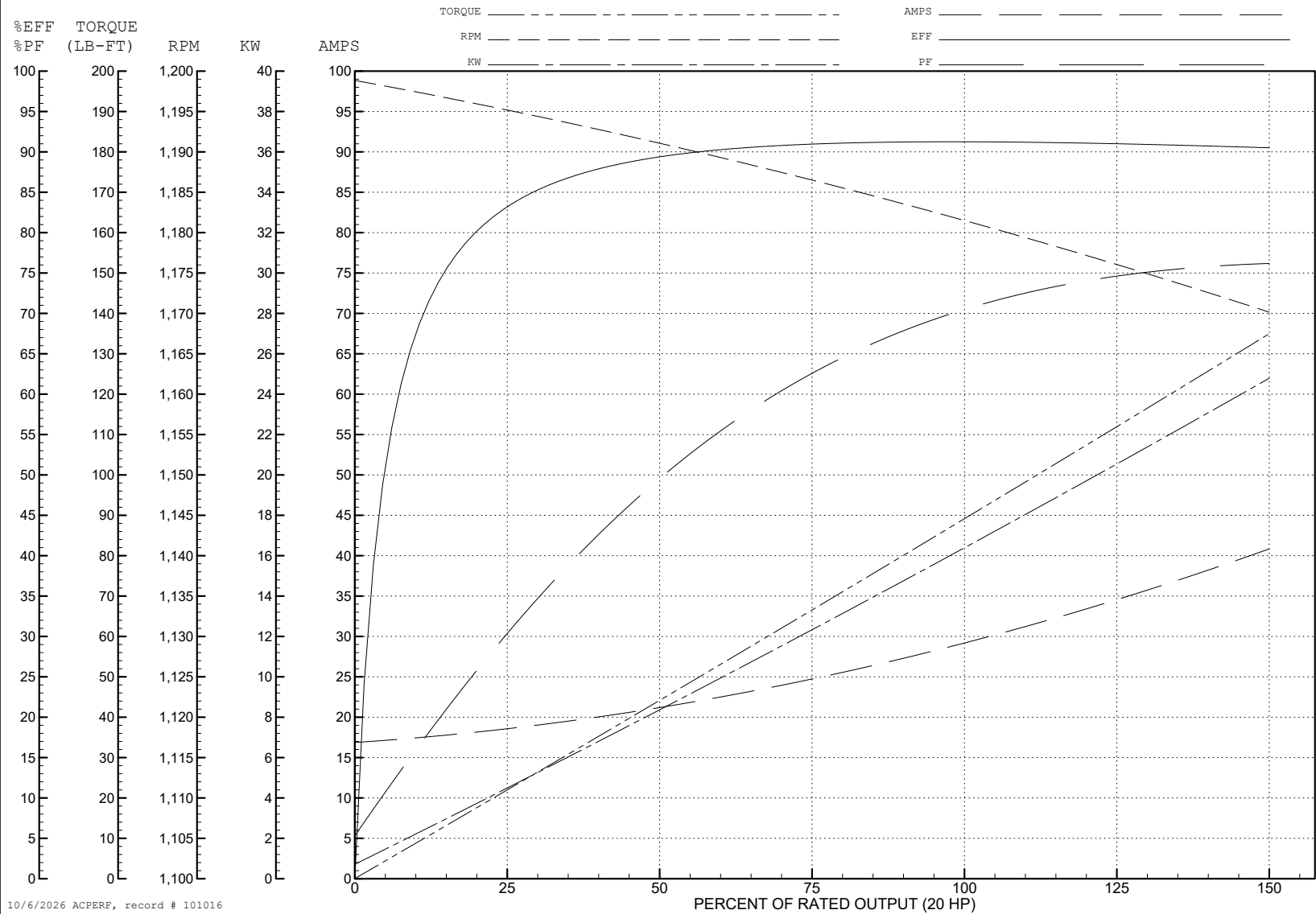
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WINDING # 10WGZ615

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1182 RPM 460 V 1064M

TORQUES (LB-FT): PO=343 PU=141 LR=203 LRA=205



AC Induction Motor Performance Data

Record # 101017

Typical performance - not guaranteed values

Winding: 10WGZ615-R003		Type: 1064M	Enclosure: TEFC
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	20	Full Load Torque	108 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	58/29//66/33	Breakdown Torque	330 LB-FT
R.P.M.	1180//980	Pull-up Torque	145 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	209 LB-FT
NEMA Design Code	A KVA Code	Starting Current	199 A
Service Factor (S.F.)	1.15	No-load Current	16.67 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	0.318 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	76°C
S.F. Amps	66/33//74/37	Temp. Rise @ S.F. Load	96°C
		Locked-rotor Power Factor	33.4
		Rotor inertia	7.84 LB-FT ²

Load Characteristics 380 V, 50 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	58	69	76	78	80	77
Efficiency	84.2	89.6	90.9	91.4	90.1	88.9	90.6
Speed	995	990	985	980	974	967	976
Line amperes	18.05	21.84	27.12	33.11	40.17	48.17	37.3

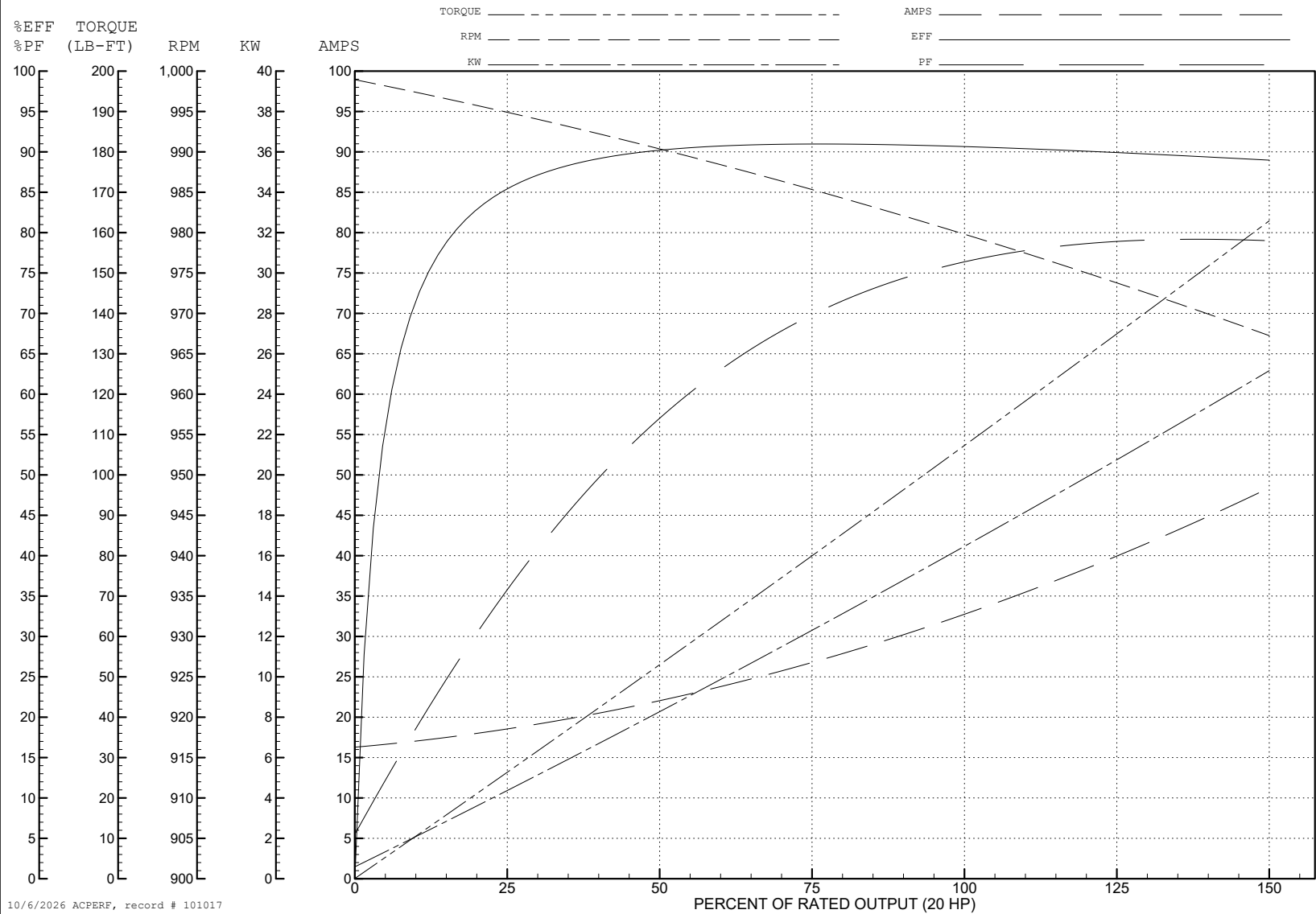
ABB Motors and Mechanical Inc.

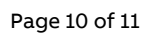
WINDING # 10WGZ615

Typical performance - not guaranteed values.

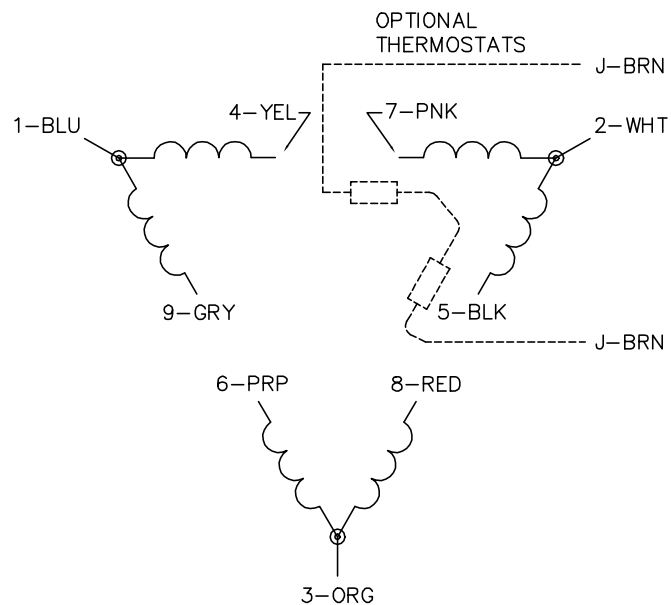
20 HP 3 PH 50 HZ 980 RPM 380 V 1064M

TORQUES (LB-FT): PO=330 PU=145 LR=209 LRA=199

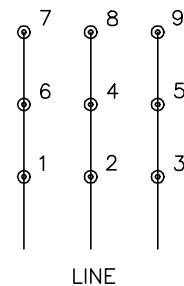




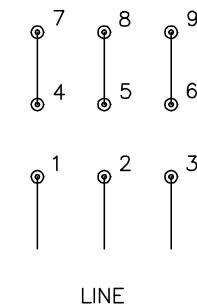
CD0180



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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