

ABB BALDOR RELIANCE III

Customer information packet

EM4103T-5G

25HP, 1770RPM, 3PH, 60HZ, 284T, 1056M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	284T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	UR CSA CSA EEV
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	24.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
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	24.0 a
Insulation Class	H

Part Detail

Revision	W
Type	AC
Mech. spec.	10H279
Base	
Status	PRD/A
Elec. spec.	10WGZ620
Layout	10LYH279
Eff. date	07-24-2026
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	01-26-2017

Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.76 IN
Power Factor	85
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 Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3443L													
CAT.NO.	EM4103T-5G				CUST. P/N						ENCL	TEFC	
SPEC.	10H279Z620G1		CC	010A	FRAME	284T		SER.NO.					
HP	25			CLASS	H	HZ	60						
R.P.M.	1770			PH	3	DES	B						
VOLTS	575			CODE		F		ODE BRG	6309	DE BRG	6311		
AMPS	24												
RATING	40C AMB-CONT			NEMA NOM. EFF.				93.6		GREASE	POLYREX EM		
P.F.	85	SER.F.		1.15		VPWM INVERTER READY							
HTR-VOLTS	HTR-AMPS		HTR-WATTS										

Parts List

Part number	Description	Quantity
SA333220	SA 10H279Z620G1	1.000 ea
RA321338	RA 10H279Z620G1	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
10EP1106A01	FR ENDPLATE, MACH	1.000 ea
10XN3816K32	BOLT, 3/8-16X2 HH YZ(5)	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
10XN2520K36	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
10EP1105A01	PU ENDPLATE	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10FH4000	310 FAN HOUSING STAMPED, PRIMED W/O P SU	1.000 ea
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea

HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3443L	SS SUPER-E,INV RED,CURUS EEV,NEMA PREM,C	1.000 ea
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A07	1.000 ea
LB1350	BAR CODE LABEL FOR YORK	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 # 62102

Typical performance - not guaranteed values

Winding: 10WGZ620-R003			Type: 1056M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		25	Full Load Torque		74.36 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		24	Breakdown Torque		196 LB-FT		
R.P.M.		1770	Pull-up Torque		90.75 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		114 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		137 A
Service Factor (S.F.)		1.15	No-load Current		8.24 A		
NEMA Nom. Eff.		93.6	Power Factor	85	Line-line Res. @ 25°C		0.463 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		54°C
S.F. Amps					Temp. Rise @ S.F. Load		67°C
					Locked-rotor Power Factor		30.4
					Rotor inertia		4.46 LB-FT2

Load Characteristics 575 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	82	85	86	86	86
Efficiency	91	93.8	94.1	93.7	92.8	92.1	93.1
Speed	1793	1785	1779	1771	1762	1751	1766
Line amperes	9.93	13.55	18.28	23.59	29.19	35.78	27

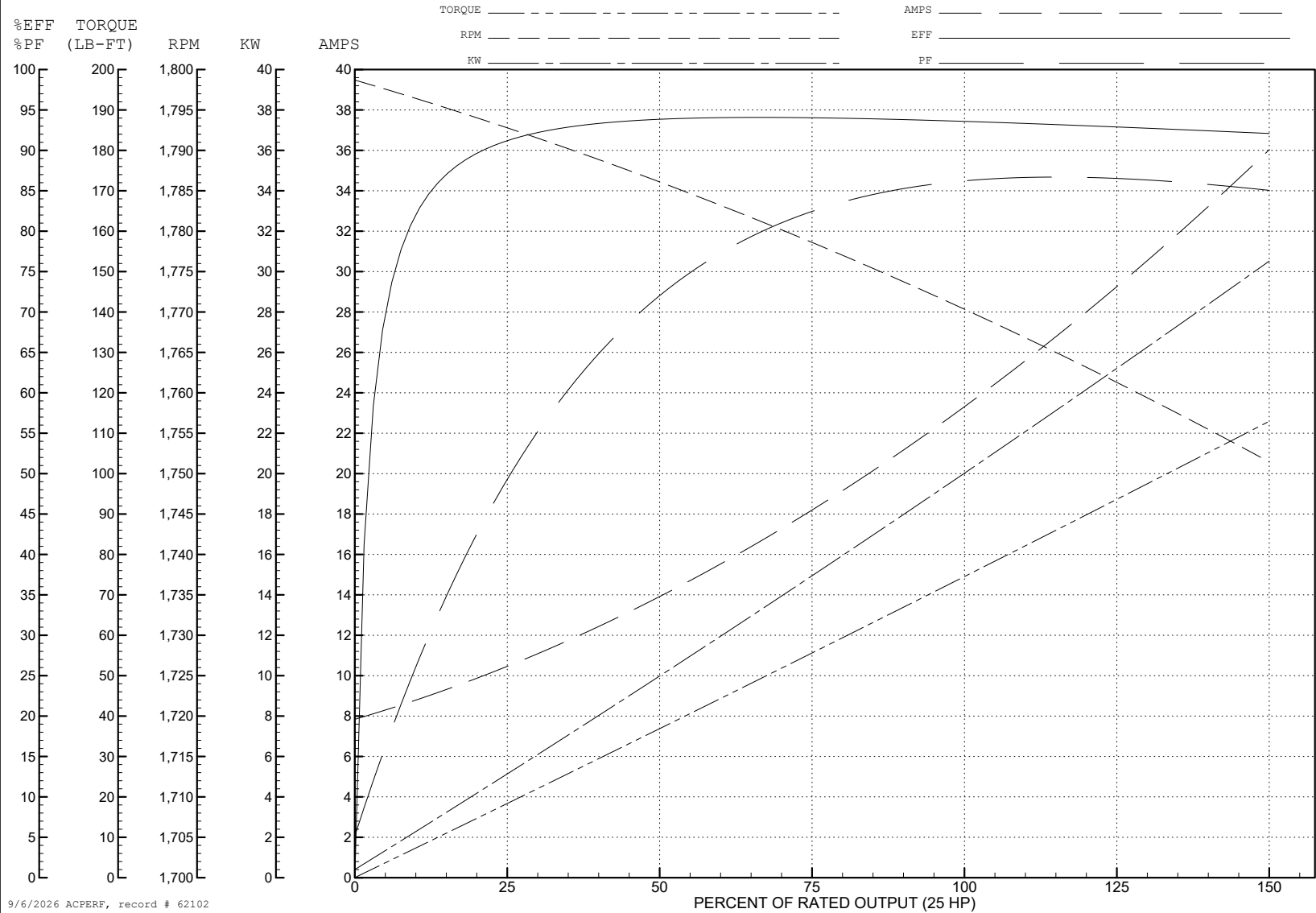
ABB Motors and Mechanical Inc.

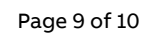
WINDING # 10WGZ620

Typical performance - not guaranteed values.

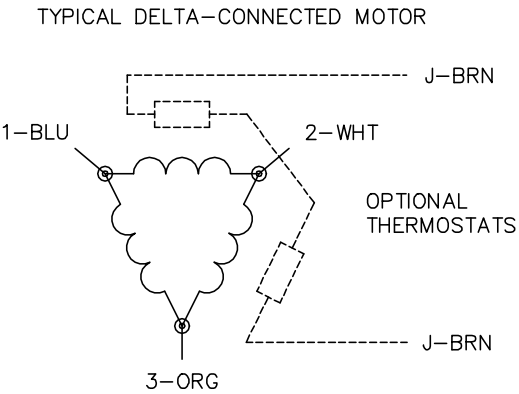
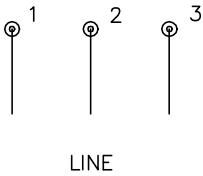
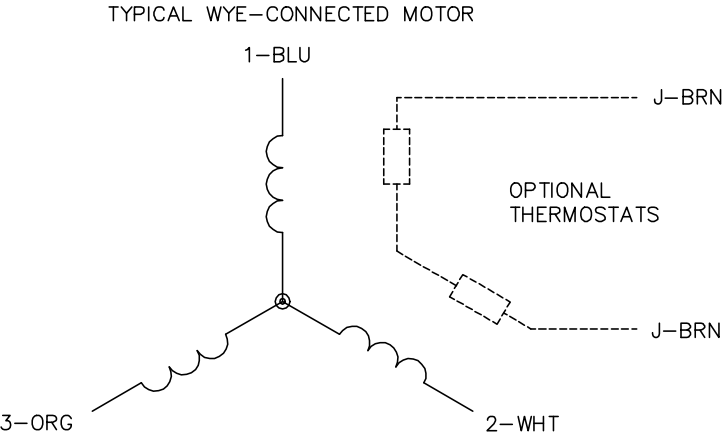
25 HP 3 PH 60 HZ 1770 RPM 575 V 1056M

TORQUES (LB-FT): PO=196 PU=90.75 LR=114 LRA=137





CD0006



- NOTES:
1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
 2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
 5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10: 24: 49 02/19/2019	BY: ENBRIRO
MTL: —		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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