

ABB BALDOR RELIANCE III

Customer information packet

ZDM4115T

50HP, 1775RPM, 3PH, 60HZ, 326T, 1272M, TEBC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEBC
Frame	326T
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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	BLOWER
Current @ Voltage	116.000 A @ 230.0 V 58.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	58.0 a
Insulation Class	H

Part Detail

Revision	F
Type	AC
Mech. spec.	12T107
Base	
Status	PRD/A
Elec. spec.	12WGZ279
Layout	12LYT107
Eff. date	08-18-2025
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	02-03-2021

Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	3900 rpm
Motor Lead Quantity/Wire Size	9 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	36.92 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1168L									
CAT NO	ZDM4115T								
SPEC.	12T107Z279Z1								
FRAME	326T	HP		50 TE					
VOLTS	230/460								
MAG CUR	40/20	FLA			116/58				
RPM	1775	RPM MAX			3900				
HZ	60	PH	3	CLASS			H		
SER.F.	1.00	DES	A	SL HZ			0.83		
NEMA-NOM-EFF	94.5	WK2		9.59					
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6312	ODE BRG			6311				
CC	010A	SER.NO							
	1000:1 CT, 1000:1 VT								

Parts List

Part number	Description	Quantity
SA390446	SA 12T107Z279Z1	1.000 ea
RA380895	RA 12T107Z279Z1	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 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
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
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
12EP1106A01	PU ENDPLATE, MACH	1.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HA1005A06	SLINGER, OD 3.62, ID 2.15	1.000 ea
12EP1107A55	FR ENDPLATE, W/THRU SHAFT ENCODER DESIGN	1.000 ea
10XN5013K32	1/2-13 X 2.00" HEX HD GRD 5 (20051)	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HA1005A26	SLINGER, OD 3.00, ID 1.75, 309 BRG	1.000 ea
10XN2520K12	1/4-20 X.75 GRD 5	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
HW5100A13	W4627-047 WVY WSHR	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10XN3118K40	5/16-18 X 2.75" HEX HD, GRADE 5	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
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	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	0.200 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
BLWM12-F	312 BLOWER ASSY. (12FH4010 & EF5102)	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
ENC02BC-B2	ENCDR KIT TEBC W/OEHS35A09 W/BLIND SHAFT	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP1168L	ALUM VEC UL CSA CC	1.000 ea
10PA1010	PACKAGING GROUP, PRINT PK1151A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7026F09	LEAD SET, 8 AWG, 9 LEAD, 26" LONG LEADS	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	116/58	Base Volt	460	R1	0.057	X1	0.352
HP	50HP	NL AMPS	20.8	R2	0.050	X2	0.440
BASE SPEED	1800	Slips (Hz)	0.80			XM	11.900
PHASE/HZ	3/60	WK ² (lb-ft ²)	9.59				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1776	50.1	148.0	460	60	57.9
Max Speed	2663	50.0	98.5	460	90	55.9
Min Speed	0	0.0	148.0	18.38	0.80	57.9

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	20.8
1/4	1794	12.5	36.5	460	60	24.8
1/2	1788	25.0	73.5	460	60	33.9
3/4	1782	37.7	111.0	460	60	45.3
Full Load	1776	50.1	148.0	460	60	57.9
O/L	1753	99.8	299.0	460	60	116.0

Blower Data

Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

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 DR BY BR

CK BY

 APP BY BR

 DATE 11/28/2023

**A-C MOTOR
PERFORMANCE
CURVES**

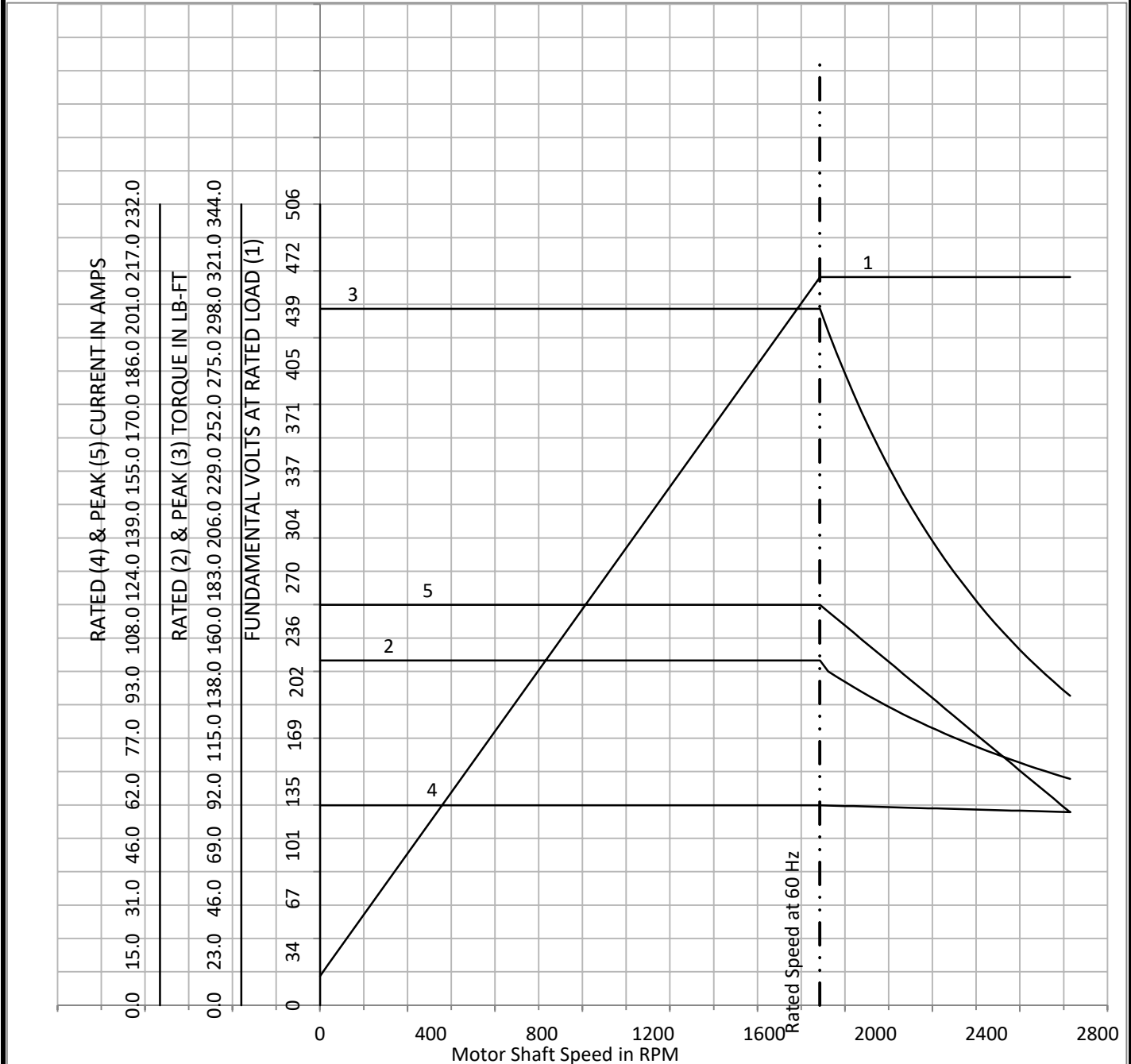
12WGZ279

NP VOLTS 230/460
 NP AMPS 116/58
 HP 50HP
 BASE SPEED 1800
 PHASE/HZ 3/60

MAX SAFE RPM 2700
 Base Volt 460
 NL AMPS 20.8
 Slips (Hz) 0.80
 WK2 (lb-ft2) 9.59

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
 R1 0.057 X1 0.352
 R2 0.050 X2 0.440
 XM 11.900

Vector PWM Inverter Duty
 Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

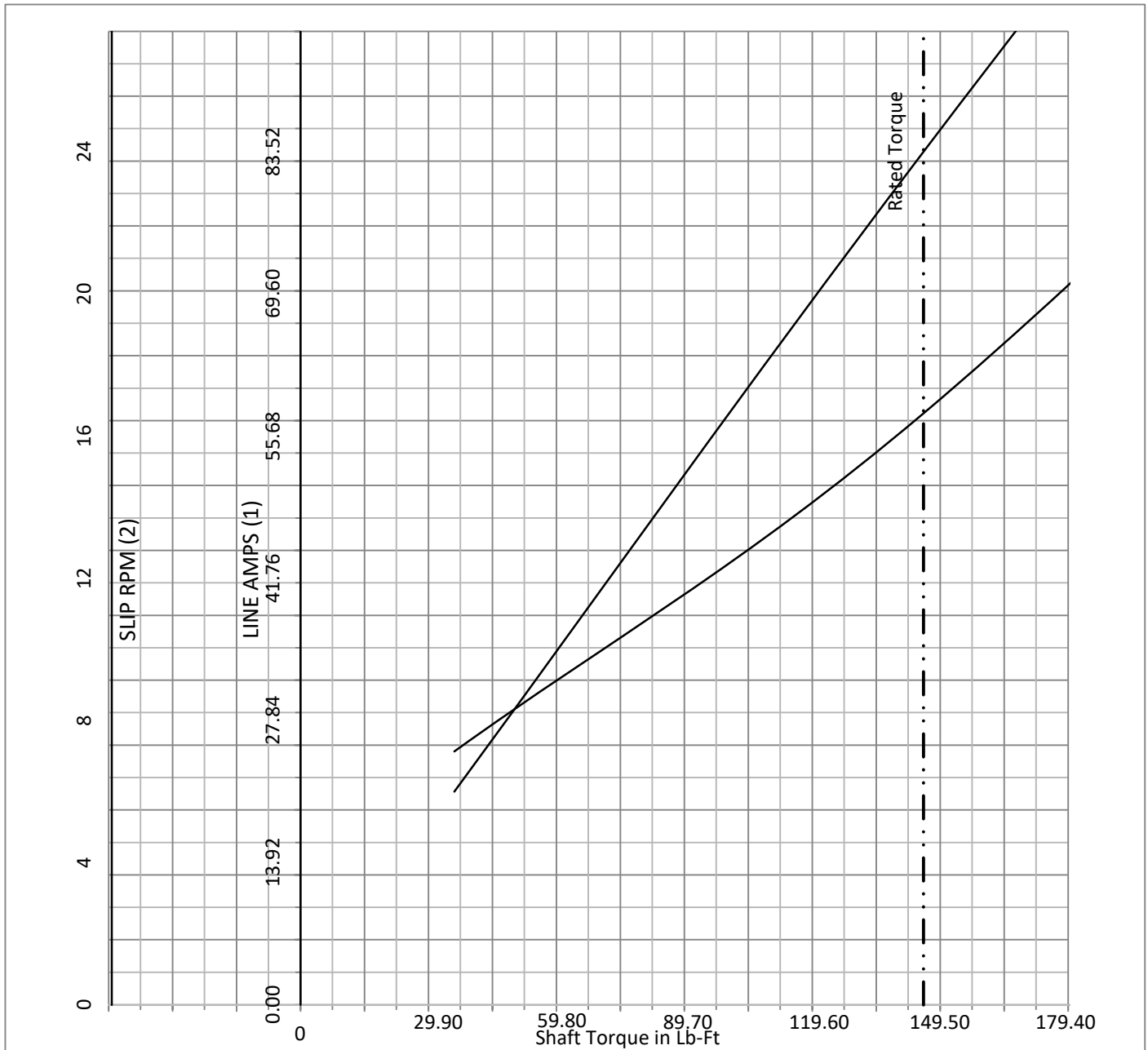
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**A-C MOTOR
PERFORMANCE
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12WGZ279

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Vector PWM Inverter Duty
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**A-C MOTOR
PERFORMANCE
CURVES**
12WGZ279



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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