

ABB BALDOR RELIANCE III

Customer information packet

ZDVSNM2237T

7.5HP, 1760RPM, 3PH, 60HZ, 215TC, 0748M, TENV

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	215TC
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	7.500 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	None
Current @ Voltage	17.800 A @ 230.0 V 8.900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	No Key Or Flat
Heater Indicator	No Heater
High Voltage Full Load Amps	8.9 a

Part Detail

Revision	H
Type	AC
Mech. spec.	07M293
Base	
Status	PRD/A
Elec. spec.	07WGX647
Layout	07LYM293
Eff. date	09-30-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	11-14-2014

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.86 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 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

NP4357L					
CAT NO	ZDVSNM2237T				
SPEC.	07M293X647G1				
FRAME	215TC	HP	7.5 TE		
VOLTS	230/460				
MAG CUR	7.2/3.6	FLA	17.8/8.9		
RPM	1760	RPM MAX	6000		
HZ	60	PH	3	CLASS	F
SER.F.	1.00	SL HZ	1.33		
NEMA-NOM-EFF	92.4	WK2	1.18		
RATING	40C AMB-CONT				
DE BRG	6307	ODE BRG	6206		
CC	010A	SN			
	1.5:1 CHP PWM				
	1000:1 CT/VT				

Parts List

Part number	Description	Quantity
SA289951	SA 07M293X647G1	1.000 ea
RA276112	RA 07M293X647G1	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
37EP1104A71	FRONT TENV 206 BRG 37M W/GRSR, REL & #18	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37PE1300A10	PUEP ASSEMBLY FOR ROUTING	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
HA6881	BEI HS35 THRU SHAFT ENCODER PROTECTIVE C	1.000 ea
10XN3816A10	3/8-16 X 5/8 HEX HD CAP SCREW	3.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea
OE5001A80SP	ENCDR KIT TENV W/OEHS35A10 W/BLIND SHAFT	1.000 ea
MG1000N49	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.036 ga
LC0145B01	CONNECTION LABEL	1.000 ea

NP4357L	SS VEC UL CSA-EEV PREM CC (W/OUT DESIGN	1.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

Catalog	ZDVSNM2237T	NP VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
FRAME	215TC	NP AMPS	17.8/8.9	MAX SAFE RPM	2700	R1	0.712	X1	2.675
HP	7.5	DUTY	Cont	NL AMPS	3.53	R2	0.463	X2	2.17
BASE SPEED	1760	S.F.	1.00	P.F. @NL/FL	0/82			XM	70.294
PHASE/HZ	3/60	AMB ⁰ C/INSUL	40/F	WK ² (lb-ft ²)	1.18				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1762	7.5	22.4	460	60	9.1
Max Speed	2641	7.5	14.9	460	90	8.8
Min Speed	0	0.0	22.4	26.81	1.27	9.1

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	3.5
1/4	1790	1.8	5.4	460	60	4.1
1/2	1781	3.8	11.1	460	60	5.4
3/4	1771	5.6	16.7	460	60	7.1
Full Load	1762	7.5	22.4	460	60	9.1
O/L	1727	15.0	45.6	460	60	18.3

Blower Data

Volts	Ph/HZ	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

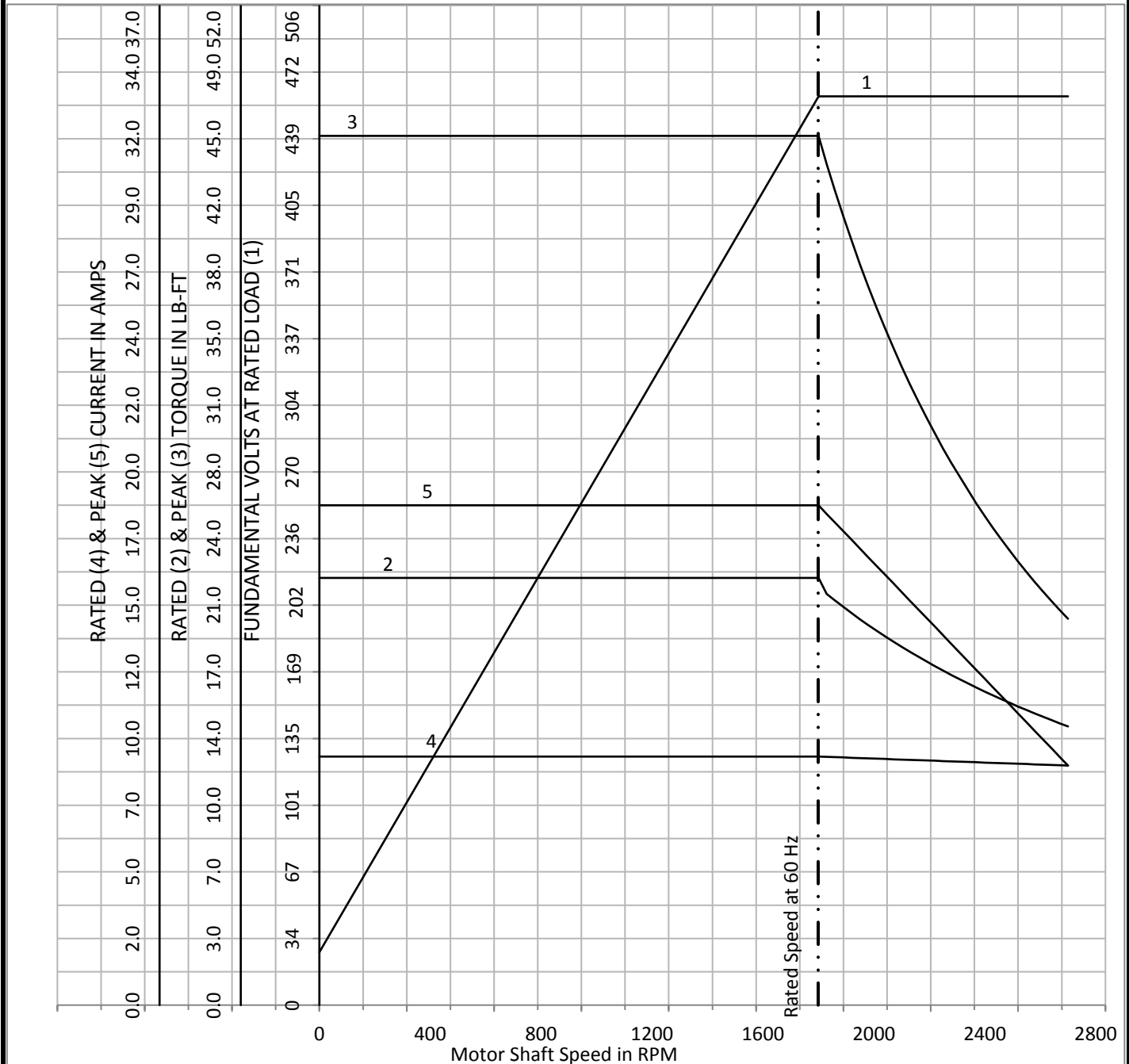


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**A-C MOTOR
PERFORMANCE
CURVES**
07M293X647G1
ISSUE DATE 3/17/2015

Catalog	ZDVSNM2237T	VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
FRAME	215TC	AMPS	17.8/8.9	MAX SAFE RPM	2700	R1	0.712	X1	2.675
HP	7.5	DUTY	Cont	In (AMPS)	3.53	R2	0.463	X2	2.174
BASE SPEED	1760	S.F.	1.00	P.F. @NL/FL	0/82			XM	70.294
PHASE/HZ	3/60	AMB ⁰ C/INS ¹	40/F	WK ² (lb-ft ²)	1.18				

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

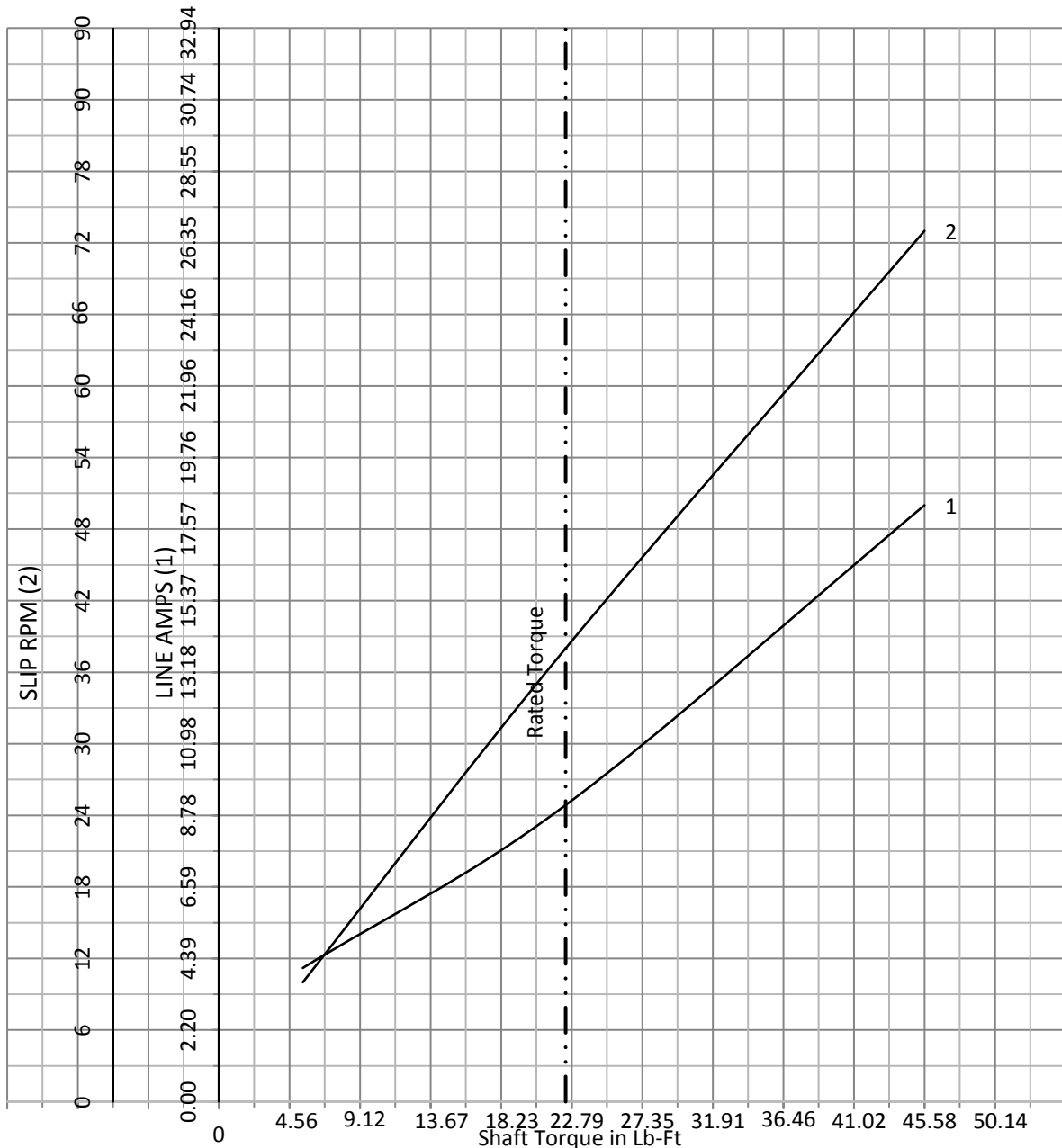


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Vector PWM Inverter Duty
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