

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				

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

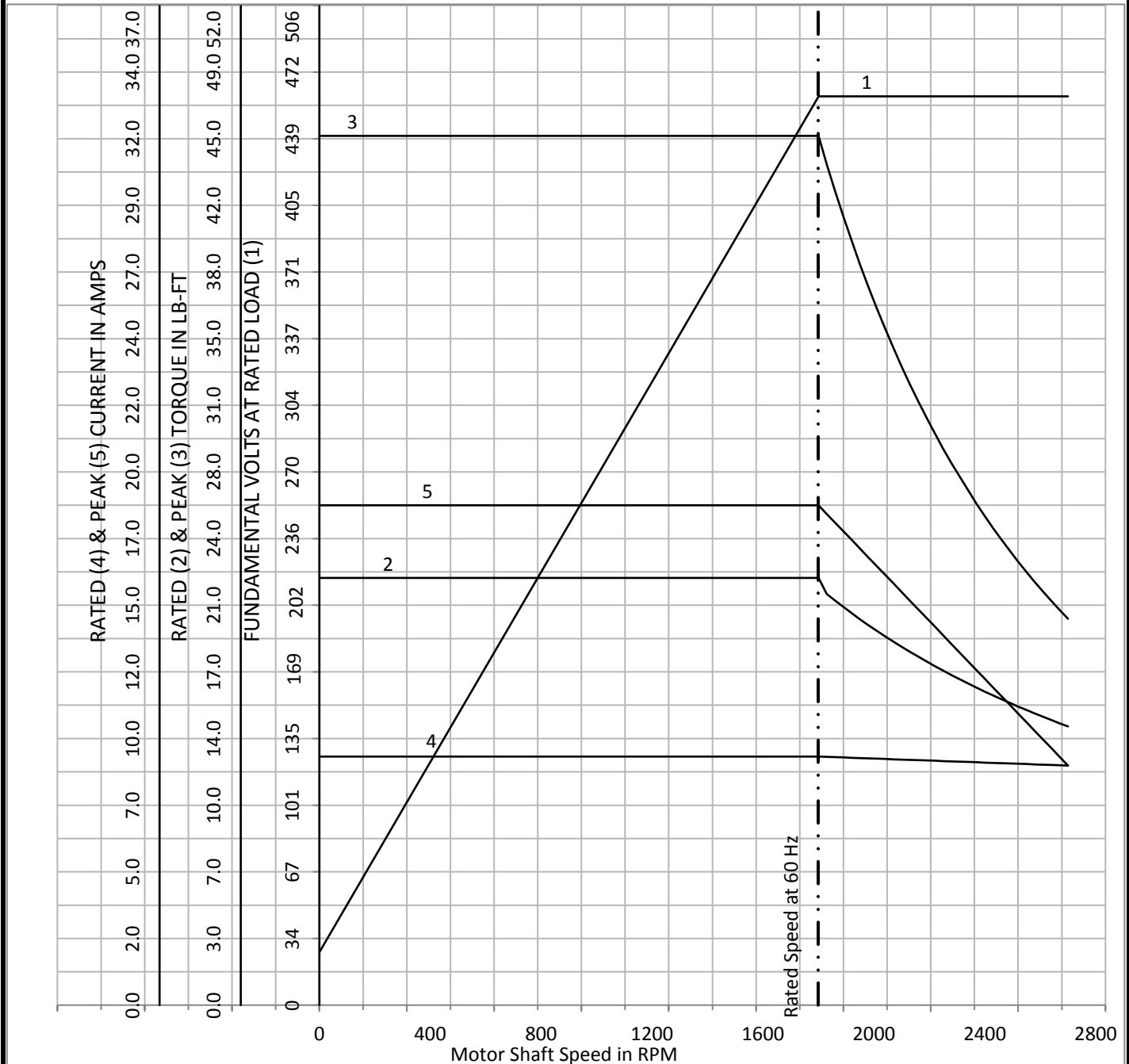


DR BY HDO
CK BY
APP BY HDO
DATE 3/17/2015

**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

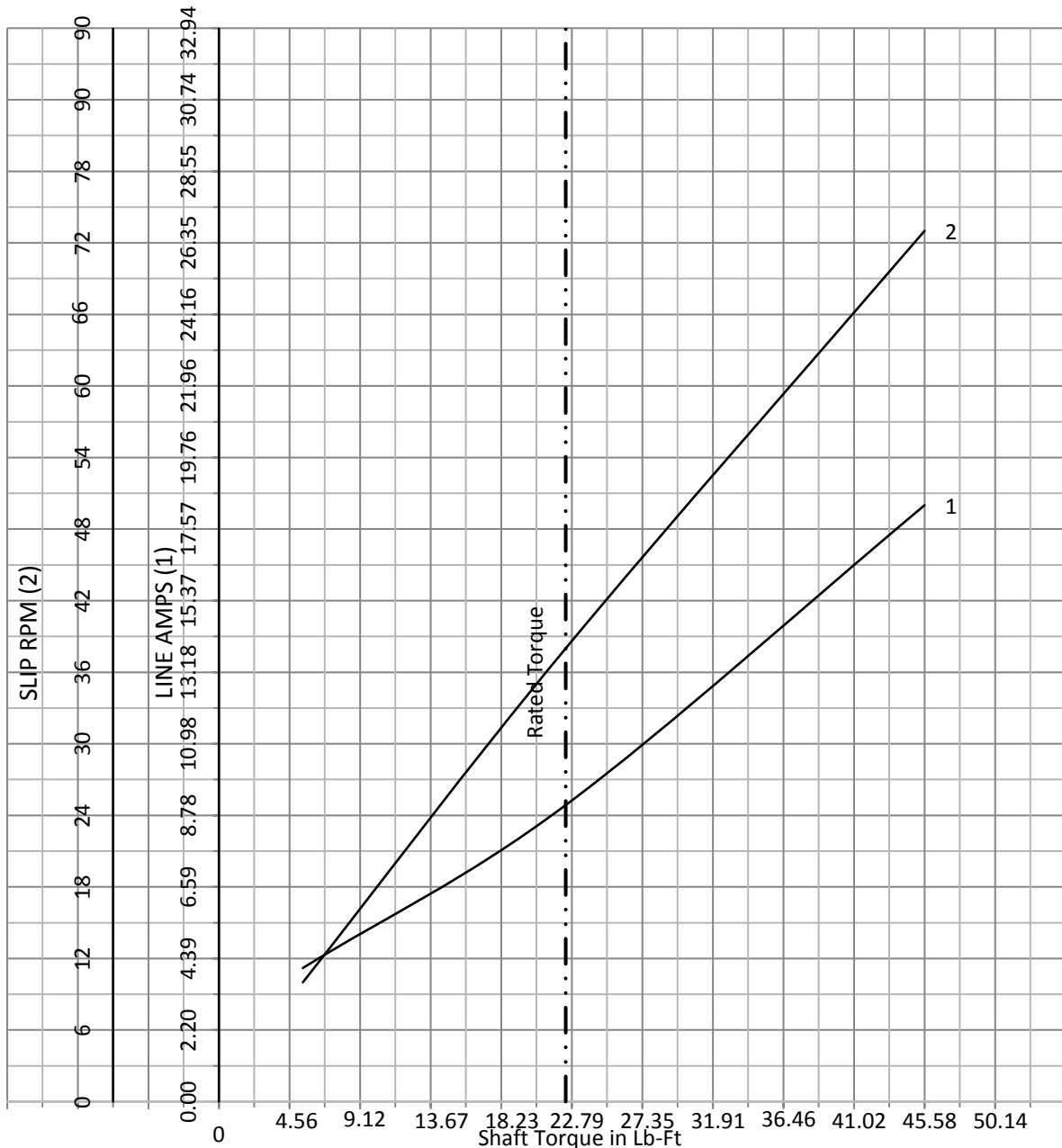


DR BY HDO
CK BY HDO
APP BY HDO
DATE 3/17/2015

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

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	2.174
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				

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only



DR BY HDO
CK BY
APP BY HDO
DATE 3/17/2015

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

