

ABB BALDOR RELIANCE III

Customer information packet

IDVSNM2237T-5

7.5HP, 1770RPM, 3PH, 60HZ, 0748M, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	213TC
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	575.0 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	7.800 A @ 575.0 V
Design Code	B
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	No Key Or Flat
Heater Indicator	No Heater
High Voltage Full Load Amps	7.8 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	H

Part Detail

Revision	-
Type	AC
Mech. spec.	07M290
Base	
Status	PRD/A
Elec. spec.	07WGY729
Layout	07LYM290
Eff. date	11-20-2020
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	11-19-2020

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 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	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP3301L									
CAT NO	IDVSNM2237T-5								
SPEC.	07M290Y729G1								
FRAME	213TC		HP		7.5	TE			
VOLTS	575								
MAG CUR	4				FLA		7.8		
RPM	1770			RPM MAX		2700			
HZ	60		PH	3		CLASS		H	
SER.F.	1.00			SL HZ		1			
NEMA-NOM-EFF	91.7		WK2	1.18					
RATING	40C AMB-CONT								
DE BRG	6307			ODE BRG		6206			
CC			SN						
	1.5:1 CHP PWM								

Parts List

Part number	Description	Quantity
SA387995	SA 07M290Y729G1	1.000 ea
RA378339	RA 07M290Y729G1	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
MG1000N49	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.036 ga
LC0006	CONNECTION LABEL	1.000 ea
NP3301L	SS INV UL CSA CC (W/OUT DESIGN FIELD)	1.000 ea

07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

NP VOLTS	575					WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
NP AMPS	7.8	Base Volt	575	R1	0.887	X1 3.360
HP	7.5	NL AMPS	4.00	R2	0.581	X2 2.710
BASE SPEED	1773	Slip (HZ)	0.90			XM 85.200
PHASE/HZ	3/60	WK ² (lb-ft ²)	1.180			

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1773	7.5	22.2	575	60	7.8
Max Speed	2659	7.5	14.8	575	90	7.3
CT Min Speed	1.773	0.007	22.2	0.58	0.06	7.8

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	575	60	4.0
1/4	1793	1.9	5.5	575	60	4.4
1/2	1787	3.7	10.9	575	60	5.2
3/4	1780	5.6	16.6	575	60	6.4
Full Load	1773	7.5	22.2	575	60	7.8
O/L	1748	15.0	44.9	575	60	14.7

Blower Data

Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data

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DR BY USBRRAN1
CK BY CD
APP BY USBRRAN1
DATE 11/1/2024
**A-C MOTOR
PERFORMANCE
CURVES**
07WGY729

Record: 85520

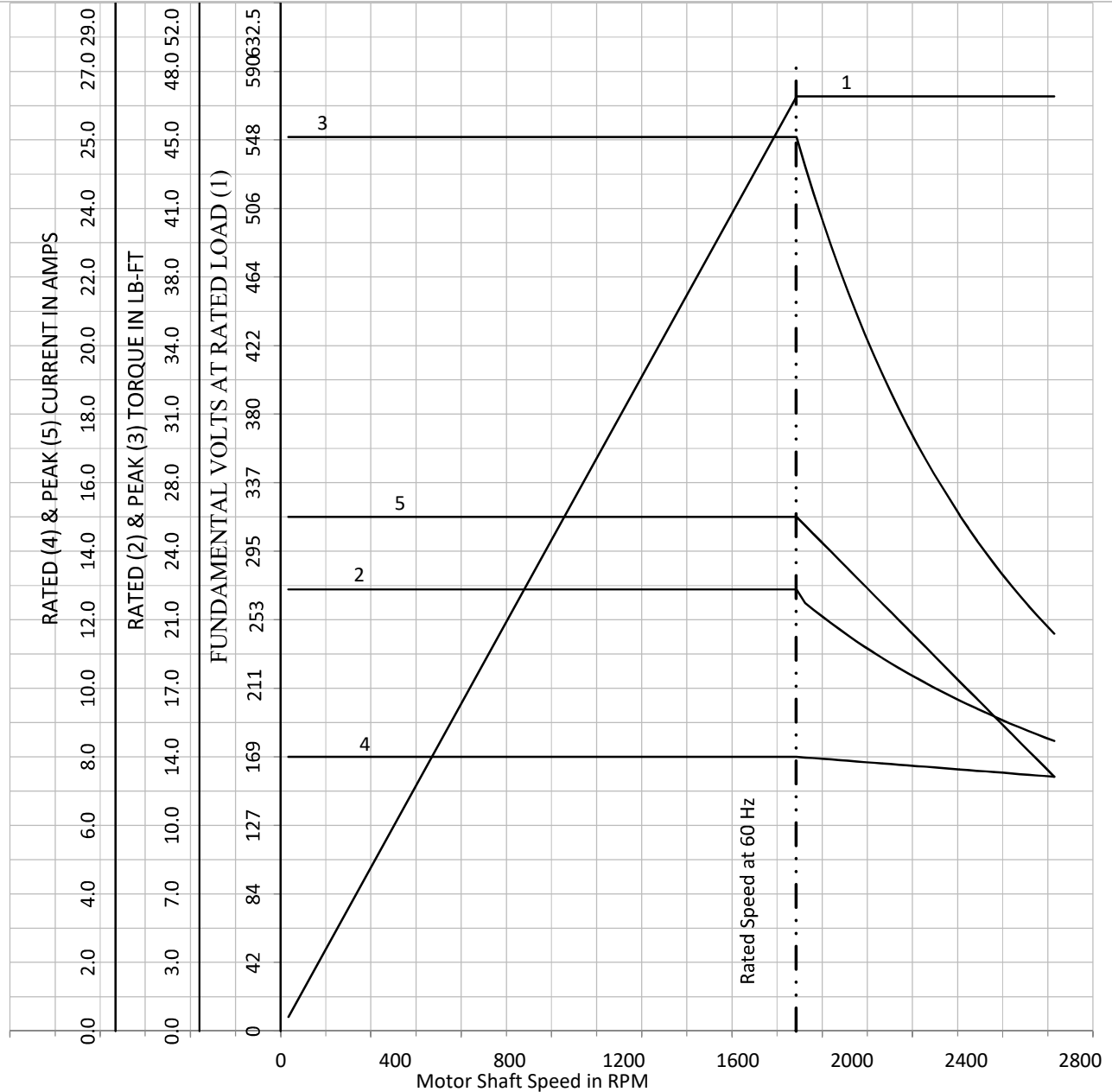
NP VOLTS 575
 NP AMPS 7.8
 HP 7.5
 BASE SPEED 1773
 PHASE/HZ 3/60

Base Volt 575
 NL AMPS 4.00
 Slip (HZ) 0.90
 WK² (lb-ft²) 1.180

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)

R1	0.887	X1	3.360
R2	0.581	X2	2.710
		XM	85.200

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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DR BY USBRRAN1
 CK BY CD
 APP BY USBRRAN1
 DATE 11/1/2024

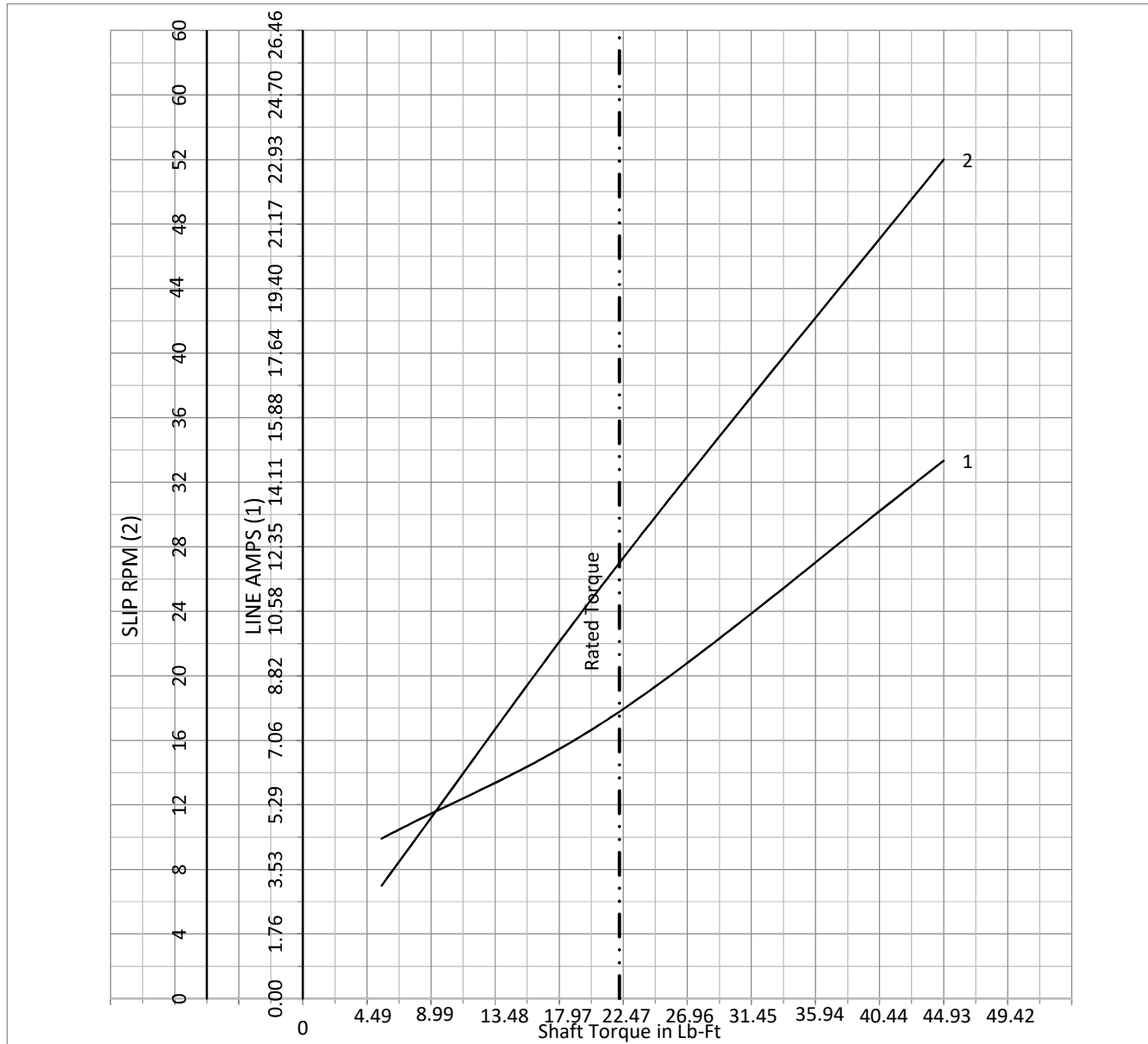
**A-C MOTOR
PERFORMANCE
CURVES**

07WGY729

Record: 85520

NP VOLTS	575	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	7.8	Base Volt	575	R1	0.887	X1	3.360
HP	7.5	NL AMPS	4.00	R2	0.581	X2	2.710
BASE SPEED	1773	Slip (HZ)	0.90			XM	85.200
PHASE/HZ	3/60	WK2 (lb-ft2)	1.180				

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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DR BY USBRRAN1

CK BY CD

APP BY USBRRAN1

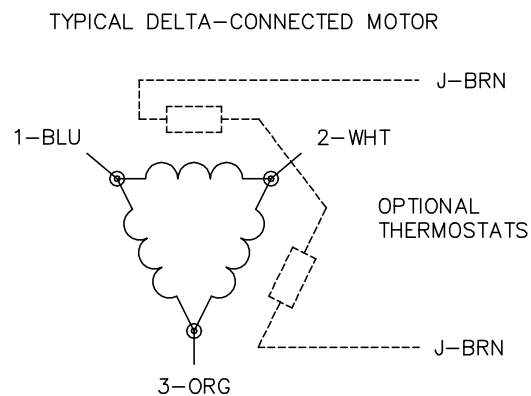
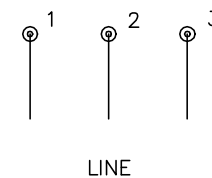
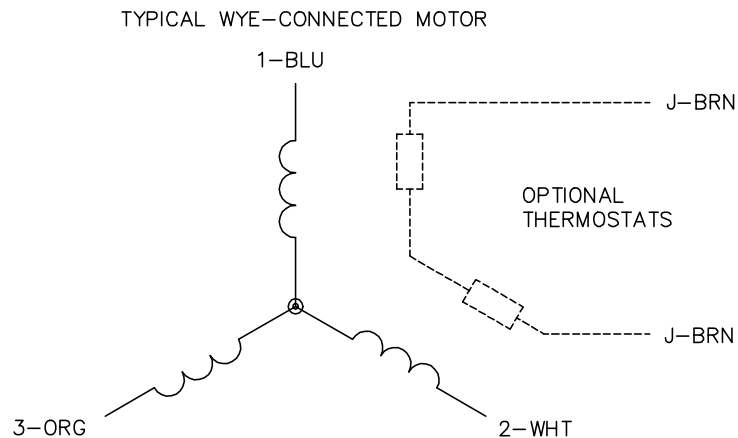
DATE 11/1/2024

**A-C MOTOR
PERFORMANCE
CURVES**

07WGY729

Record: 85520

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

SH 1 of 1