

ABB BALDOR RELIANCE III

Customer information packet

ZDVSM3770T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 0738M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UR
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	19.000 A @ 230.0 V 20.000 A @ 208.0 V 9.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Shaft Indicator	No Key Or Flat
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a

Part Detail

Revision	A
Type	AC
Mech. spec.	07M292
Base	
Status	PRD/A
Elec. spec.	07WGT510
Layout	07LYM292
Eff. date	09-30-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-28-2021

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.59 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-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

NP4357L										
CAT NO	ZDVSM3770T									
SPEC.	07M292T510Z1									
FRAME	213TC			HP	7.5 TE					
VOLTS	230/460									
MAG CUR	8.6/4.3			FLA			19/9.5			
RPM	1770		RPM MAX			4000				
HZ	60	PH	3	CLASS			F			
SER.F.	1.00			SL HZ			1			
NEMA-NOM-EFF	91.7		WK2		0.934					
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
SA390709	SA 07M292T510Z1	1.000 ea
RA381167	RA 07M292T510Z1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	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
07EP1901A36	FRONT 206 BRG,GRSR,REL,#18 DRAIN	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
07FH1002A24	C-FACE FH W/ 206 BRG. GRSR, REL & STD DR	1.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
10XN3118A52	5/16-18 X 3-1/4 HEX HEAD CAP SCR,GR.5,Z/	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
HA1103A13	#4 X 4 SCREEN FOR FAN CVR 07FH1002 (MR21	1.000 ea
13XT0832A07	8-32X7/16 TYP 23 PAN HD SLT DX	4.000 ea
HA6059A05	ADAPTER FOR 8.50" RABBET TO 4.50" RABBET	1.000 ea
84XN5013J16S	1/2-13 X 1 LOW HEAD HEX SOC HD	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
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 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
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

NP VOLTS	230/460					WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
NP AMPS	19/9.5	Base Volt	460	R1	0.784	X1 2.650
HP	7.5	NL AMPS	4.07	R2	0.464	X2 2.040
BASE SPEED	1769	Slip (HZ)	1.03			XM 62.900
PHASE/HZ	3/60	WK ² (lb-ft ²)	0.934			

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1769	7.5	22.3	460	60	9.4
Max Speed	2653	7.5	14.9	460	90	8.9
CT Min Speed	1.769	0.008	22.3	0.46	0.06	9.4

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	4.1
1/4	1792	1.9	5.5	460	60	4.6
1/2	1785	3.7	11.0	460	60	5.8
3/4	1777	5.6	16.6	460	60	7.5
Full Load	1769	7.5	22.3	460	60	9.4
O/L	1734	15.0	45.4	460	60	18.7

Blower Data	Volts	Ph/HZ	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data

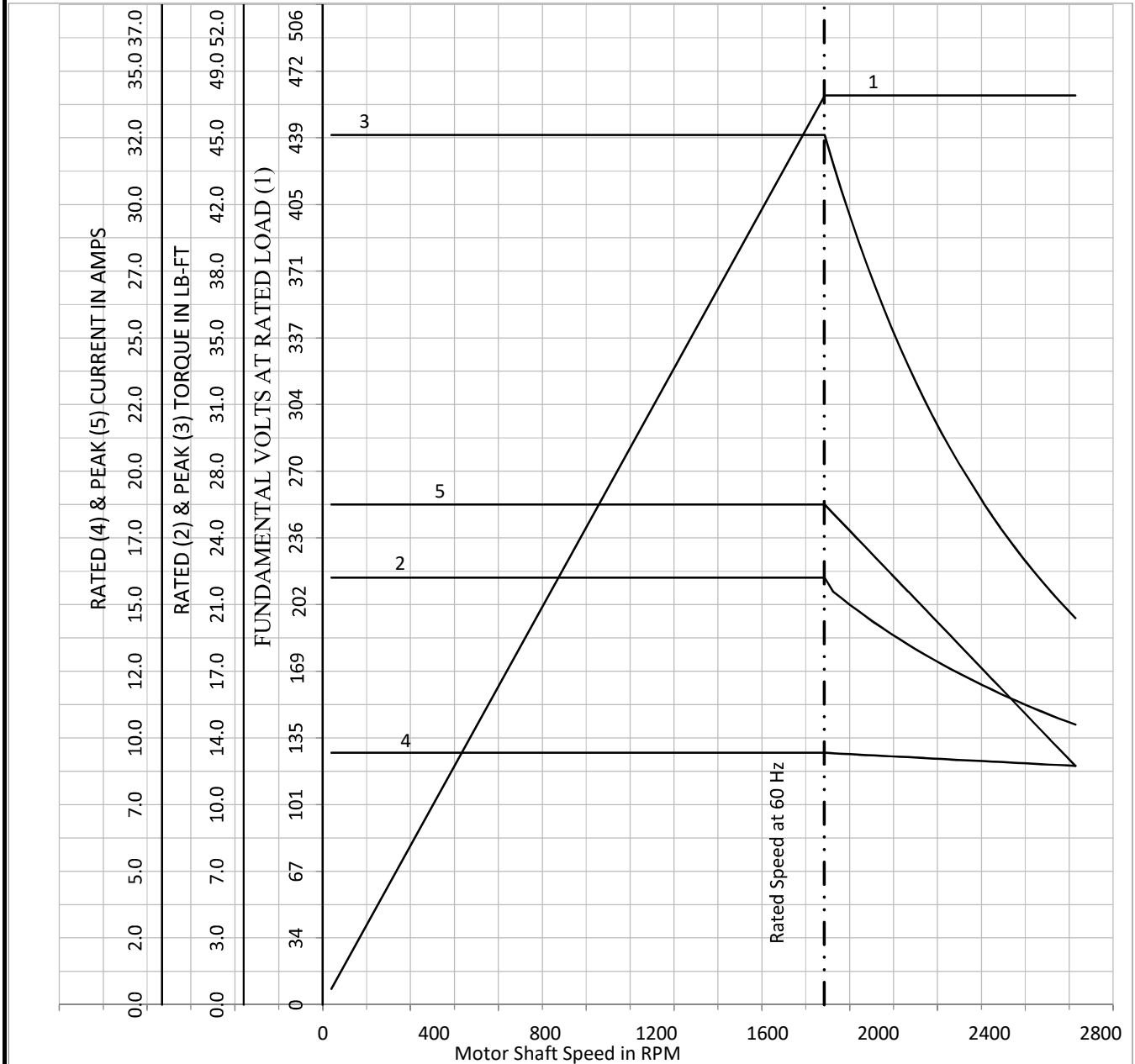
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DATE 3/21/2025
**A-C MOTOR
PERFORMANCE
CURVES**
07WGT510

Record: 86626

NP VOLTS	230/460	Base Volt	460	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	19/9.5	NL AMPS	4.07	R1	0.784	X1	2.650
HP	7.5	Slip (HZ)	1.03	R2	0.464	X2	2.040
BASE SPEED	1769	WK ² (lb-ft ²)	0.934			XM	62.900
PHASE/HZ	3/60						

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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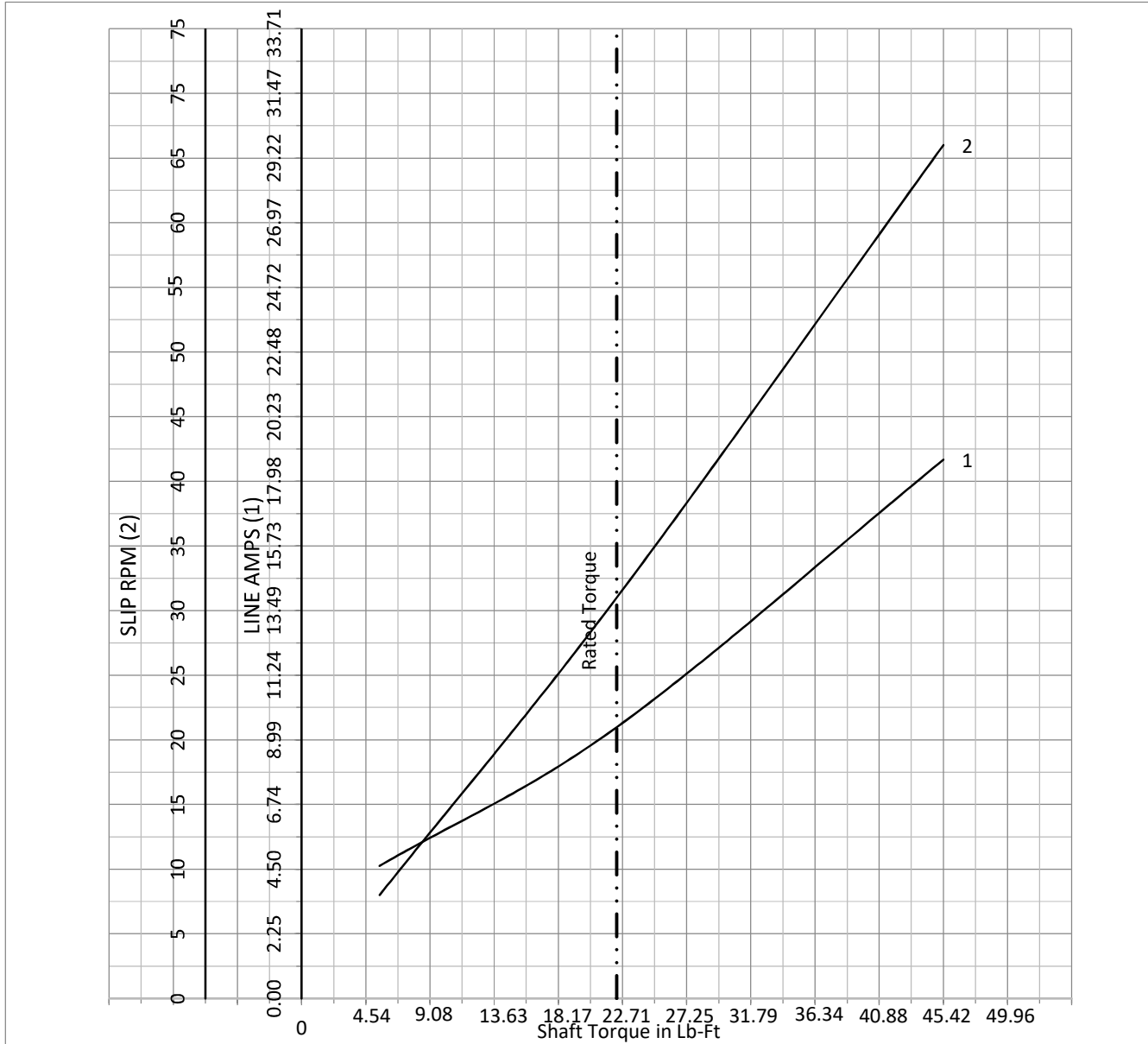
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 DATE 3/21/2025
**A-C MOTOR
PERFORMANCE
CURVES**
07WGT510

Record: 86626

NP VOLTS	230/460	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	19/9.5	Base Volt	460	R1	0.784	X1	2.650
HP	7.5	NL AMPS	4.07	R2	0.464	X2	2.040
BASE SPEED	1769	Slip (HZ)	1.03			XM	62.900
PHASE/HZ	3/60	WK2 (lb-ft2)	0.934				

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
CURVES**

07WGT510

Record: 86626

