

ABB BALDOR RELIANCE III

Customer information packet

VESSWDM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3740M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Stainless Steel
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
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	19.000 A @ 230.0 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	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J

Part Detail

Revision	G
Type	AC
Mech. spec.	37L779
Base	
Status	PRD/A
Elec. spec.	37WGT864
Layout	37LYL779
Eff. date	02-10-2023
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	07-05-2018

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3740M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.16 IN
Power Factor	81
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
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 - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1953C01											
CAT.NO.	VESSWDM3710T										
SPEC.	37L779T864G4										
HP	7.5										
VOLTS	230/460										
AMP	19/9.5										
RPM	1770										
FRAME	213TC			HZ	60				PH	3	
SER.F.	1.15		CODE	J	DES	A		CLASS	F		
NEMA-NOM-EFF	91.7		PF	81							
RATING	40C AMB-CONT										
CC	010A			USABLE AT 208V					N/A		
DE	6307		ODE	6206							
ENCL	TEFC	SN									
	10:1CT 20:1VT										

Parts List

Part number	Description	Quantity
SA357950	SA 37L779T864G4	1.000 ea
RA346972	RA 37L779T864G4	1.000 ea
37FN3002B01	EXFN, PLASTIC, 7.50 OD, 1.155 ID	1.000 ea
HW3200S01	EYEBOLT 3/8-16 X3/4 S.S. TDR #35988	1.000 ea
37CB1004A01	CONDUIT BOX, MACH	1.000 ea
37GS3011	1/8"WHITE NEOPRENE BOX GS	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
37EP1907A01	FRONT TEFC 206 BRG NO GRSR S/P 9-2 (STAI	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW4606A03	JM CLIPPER/SEAL (LWE-1156-1875-AL44)	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP1908A02	PU EP FOR LOCKED 307 BRG	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HW4606A04	JM CLIPPER/SEAL (LWE-1376-2125-AL45)	1.000 ea
10XN2520S32	1/4-20 X 2 HEX HEAD SS	4.000 ea
XY3118S12	5/16-18 HEX NUT, STAINLESS STEEL	4.000 ea
37FH4000A45	STAINLESS FAN COVER, NO GREASER SLOT (FO	1.000 ea
10XN1032S06	HEX HD CAP SCREW, SS	3.000 ea
36CB4517	LIPPED CB LID #304 STAINLESS - CLEANED	1.000 ea
37GS3010SP	1/16"WHITE LID GASKET	1.000 ea
59XN0832S07	8/32 X 7/16 HX WS HD SER X	4.000 ea
HW2502F21	#303 SS,SQ KEY 5/16 X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
HA3104S30	T-BOLT, .31-18 X 13.875SSTD#100207	4.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea

PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000007	ZRTG FE ASSEMBLY	1.000 ea
PE-0000012	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 17300

Typical performance - not guaranteed values

Winding: 37WGT864-R001			Type: 3740M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5	Full Load Torque		22.36 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		19.0/9.5	Breakdown Torque		73.15 LB-FT	
R.P.M.		1770	Pull-up Torque		39.79 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		47.81 LB-FT
NEMA Design Code		A	KVA Code		J	
Service Factor (S.F.)		1.15	Starting Current		74.95 A	
NEMA Nom. Eff.		91.7	Power Factor		81	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		69°C
S.F. Amps				Temp. Rise @ S.F. Load		85°C
				Locked-rotor Power Factor		36.4
				Rotor inertia		0.984 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	81	83	85	82
Efficiency	86.6	90.9	92	91.9	90.8	89.7	91.4
Speed	1793	1786	1779	1771	1761	1751	1764
Line amperes	4.88	6.02	7.67	9.52	11.62	13.91	10.7

ABB Motors and Mechanical Inc.

WINDING # 37WGT864

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3740M

TORQUES (LB-FT) : PO=73.15 PU=39.79 LR=47.81 LRA=74.95





