

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										

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	Starting Current		74.95 A
Service Factor (S.F.)		1.15		No-load Current		4.4 A	
NEMA Nom. Eff.		91.7	Power Factor	81	Line-line Res. @ 25°C		1.27 Ω
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





