

ABB BALDOR RELIANCE III

Customer information packet

EWDM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3738M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
Frame Material	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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM 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)
Current @ Voltage	20.000 A @ 208.0 V 9.500 A @ 460.0 V 19.000 A @ 230.0 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

Part Detail

Revision	A
Type	AC
Mech. spec.	37H872
Base	
Status	PRD/A
Elec. spec.	37WGL864
Layout	37LYH872
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-02-2021

High Voltage Full Load Amps	9.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.04 IN
Power Factor	80
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
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	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1669L									
CAT.NO.	EWDM3710T								
SPEC.	37H872L864G1								
HP	7.5								
VOLTS	230/460								
AMP	19/9.5								
RPM	1770								
FRAME	213T		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	A	CLASS		F	
NEMA-NOM-EFF	91.7	PF	80						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6206					
ENCL	TEFC	SN							
BLANK	20:1CT, 20:1VT								

Parts List

Part number	Description	Quantity
SA390593	SA 37H872L864G1	1.000 ea
RA381045	RA 37H872L864G1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
37CB3005A04W	CASTING W/.75 NPT@6(MACH WHITE)	1.000 ea
37GS1025	37 MOLDED GASKET W/LIP, LEAD SEAL	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HA5027A01	HA4066A01 T-DRAIN X2 BAGGED	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3101A94MW	FRONT TEFC L&M 206 BRG W/O GRSR (WHITE)	1.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3100A20MW	FRONT ENDPLATE, MACHINED W/WHITE EPOXY	1.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HW4600B51	SEAL 1.375 X 2.125 X 0.313 SINGLE LIP DB	1.000 ea
XY3118S12	5/16-18 HEX NUT, STAINLESS STEEL	4.000 ea
07FH4011	WASHDOWN IEC FH W/PRIMED	1.000 ea
11XW1032S06	SCREW, HXWSHR HD SLDTYF 410 SS	3.000 ea
37CB4512	CONDUIT BOX LID FOR WASHDOWN 37 FRAME	1.000 ea
37GS1008A02	37 GS FOR CB LID - WHITE NEOPRENE	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea
HW4600B74	V-RING SLINGER 1.125 X 1.445 X .24 VITON	1.000 ea
HW4600B31SP	V-RING SLINGER 1.438 X 1.758 X .24 VITON	1.000 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
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea

MG1025Z02	ACTIVATOR WILKOFAS 060.02HF 55 GALLON	0.010 ga
MG1025W01	WILKOFAS, 781.01, SIGNAL WHITE #9003	0.028 ga
HA3104S17	THRUBOLT 13.250LG SS	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1669L	SS WD SUPER-E UL PREM REV MTG	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

Accessories

Part number	Description	Multiplier
37-3301	C FACE KIT	P1

AC Induction Motor Performance Data

Record # 85467

Preliminary Data Sheet

Winding: 37WGL864-R001			Type: 3738M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		7.5		Full Load Torque		22.2 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		19.0/9.5		Breakdown Torque		69.8 LB-FT
R.P.M.		1770		Pull-up Torque		31.5 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		41 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		70.7 A
Service Factor (S.F.)		1.15		No-load Current		4.32 A
NEMA Nom. Eff.		91.7	Power Factor	Line-line Res. @ 25°C		1.48 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		64°C
S.F. Amps		21.4/10.7		Temp. Rise @ S.F. Load		84°C
				Locked-rotor Power Factor		41.9
				Rotor inertia		0.934 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	80	83	84	83
Efficiency	87.1	91.4	92	91.7	90.7	89.6	90.7
Speed	1793	1786	1778	1770	1760	1750	1761
Line amperes	4.83	6.03	7.64	9.5	11.6	13.9	10.7

ABB Motors and Mechanical Inc.

WINDING # 37WGL864

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

TORQUES (LB-FT): PO=69.8 PU=31.5 LR=41 LRA=70.7



