

ABB BALDOR RELIANCE III

Customer information packet

EM3710T-9

7.5HP, 1765RPM, 3PH, 60HZ, 213T, 3744M, 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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM 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)
Blower	None
Current @ Voltage	21.500 A @ 208.0 V 20.200 A @ 230.0 V 10.100 A @ 460.0 V
Design Code	C
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	M
Type	AC
Mech. spec.	37N527
Base	
Status	PRD/A
Elec. spec.	37WGR648
Layout	37LYN527
Eff. date	03-09-2026
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	10-28-2015

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	10.1 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3744M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.02 IN
Power Factor	76
Product Family	WP Below Decks Marine Duty
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 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

NP1267L									
CAT.NO.	EM3710T-9								
SPEC.	37N527R648G1								
HP	7.5								
VOLTS	230/460								
AMP	20.2/10.1								
RPM	1765								
FRAME	213T		HZ	60			PH	3	
SER.F.	1.15	CODE	H	DES	C	CL	F		
NEMA-NOM-EFF	91.7	PF	76						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6206					
ENCL	TEFC	SN							

Parts List

Part number	Description	Quantity
SA310036	SA 37N527R648G1	1.000 ea
RA297410	RA 37N527R648G1	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
37CB3005A04	37 CB .75 NPT @ 6:00	1.000 ea
37GS1002	1/8" NEOPRENE GASKET, CONDUIT BOX	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
37EP3101C12	FREP TEFC L&M W/GRSR,REL,SLINGER, DRAIN	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3100B12	PUEP 307 BRG W/GREASER,RELIEF,.125	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
07FH4007SP	PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
37GS1008A01	37 GS FOR CB LID - BLACK NEOPRENE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.380 X .24 VITON	1.000 ea
HW4600B31SP	V-RING SLINGER 1.438 X 1.758 X .24 VITON	1.000 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
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea

MG1500Y02	WILKOPON PRIMER YELLOW	0.028 ga
MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN 8	0.028 ga
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1267L	SS SUPER-E UL EEV CC NEMA PREM LASER ETC	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

AC Induction Motor Performance Data

Record # 46685

Typical performance - not guaranteed values

Winding: 37WGR648-R001				Type: 3744M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5		Full Load Torque		22.45 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		20.2-10.1		Breakdown Torque		61.2 LB-FT	
R.P.M.		1765		Pull-up Torque		49.9 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		62.06 LB-FT	
NEMA Design Code		C	KVA Code	H	Starting Current		61.95 A
Service Factor (S.F.)		1.15		No-load Current		4.69 A	
NEMA Nom. Eff.		91.7	Power Factor	76	Line-line Res. @ 25°C		1.15 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		62°C	
S.F. Amps				Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		40.2	
				Rotor inertia		1.08 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	72	77	80	81	78
Efficiency	87.3	91.6	92.1	91.7	90.9	89.7	91.3
Speed	1792	1784	1775	1765	1753	1741	1759
Line amperes	5.22	6.43	8.07	9.97	12.2	14.53	11.4

ABB Motors and Mechanical Inc.

WINDING # 37WGR648

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1765 RPM 460 V 3744M

TORQUES (LB-FT): PO=61.2 PU=49.9 LR=62.06 LRA=61.95





