

B3Series

REV 001A



March, 2023

WATER HEATER SERIES B3

B3 15 - 15 12V

B3 20 - 20 12V

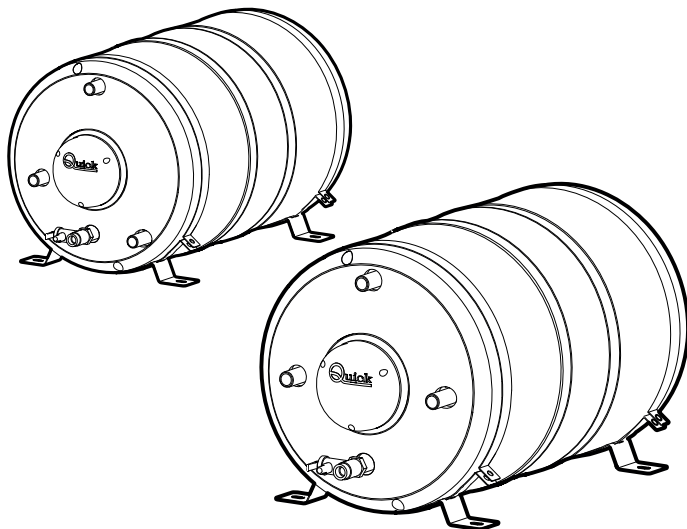
B3 25

B3 30

B3 40

B3 60

B3 80



EN* INSTALLATION AND USE MANUAL

*Other languages available by scanning the QR code on the back of this manual or on the label on the product.

IT *Altre lingue disponibili scansionando il codice QR presente sul retro del seguente manuale o sull'etichetta alloggiata sul prodotto.

ES *Otros idiomas disponibles escaneando el código QR en la parte posterior de este manual o en la etiqueta del producto.

FR *Autres langues disponibles en scannant le code QR au dos de ce manuel ou sur l'étiquette du produit.

DE *Andere Sprachen sind durch Scannen des QR-Codes auf der Rückseite dieser Betriebsanleitung oder auf dem Aufkleber am Produkt verfügbar.

PT *Outros idiomas disponíveis, digitalizando o código QR no verso deste manual ou no rótulo do produto.

Quick[®]
Nautical Equipment

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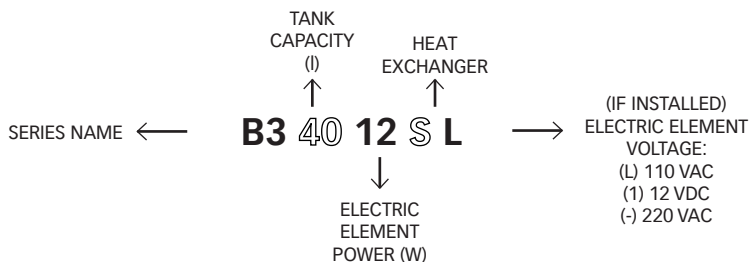
NAUTIC WATER HEATER

Our long experience in the nautical sector has enabled us to develop a series of water heaters with innovative features compared to the market standard. The advantages that Quick® nautic water heaters offer are:

- High-quality materials ensuring durability and resistance over time.
- Heat exchanger with a large exchanging surface.
- Possibility of producing hot water even with the electric element, complete with adjustable and safety thermostat.
- Relief/non-return valve that allows the water heater to drain the water when not in use.
- Easy installation on a flat area.

	12V	110/220V
Functional temperature	60°C	adjustable 40°C - 80°C
Safety temperature	90°C	87°C

1.0 - Model code



MODELS		B3 15				B3 20			
TANK CAPACITY	Litres	15				20			
	US gallon	3.96				5.28			
Tank material		AISI 316				AISI 316			
Thermal insulation material		Polyurethane foam				Polyurethane foam			
External cladding material		COMPOSITE				COMPOSITE			
Tank pressure during testing		800 kPa ⁽¹⁾				800 kPa ⁽¹⁾			
Maximum working pressure		600 kPa ⁽¹⁾				600 kPa ⁽¹⁾			
Electric element voltage rating		12 VDC	220 VAC	110 VAC	110 VAC 220 VAC	12 VDC	220 VAC	110 VAC	110 VAC 220 VAC
Electric element power rating		300 W	500 W	600 W	1200 W	300 W	500 W	600 W	1200 W
Fittings diameter		1/2"				1/2"			
Weight ⁽²⁾	Kg	7				8,1			
	Lb	15.4				17.8			

(1) 1 Bar = 100 kPa • (2) with equipment vacuum



1 - Information about the product

MODELS		B3 25			B3 30			B3 40		
TANK CAPACITY	Litres	25			30			40		
	US gallon	6.6			7.92			10.56		
Tank material		AISI 316			AISI 316			AISI 316		
Thermal insulation material		Polyurethane foam			Polyurethane foam			Polyurethane foam		
External cladding material		COMPOSITE			COMPOSITE			COMPOSITE		
Tank pressure during testing		800 kPa ⁽¹⁾			800 kPa ⁽¹⁾			800 kPa ⁽¹⁾		
Maximum working pressure		600 kPa ⁽¹⁾			600 kPa ⁽¹⁾			600 kPa ⁽¹⁾		
Electric element voltage rating		220 VAC	110 VAC	110 VAC 220 VAC	220 VAC	110 VAC	110 VAC 220 VAC	220 VAC	110 VAC	110 VAC 220 VAC
Electric element power rating		500 W	600 W	1200 W	500 W	600 W	1200 W	500 W	600 W	1200 W
Fittings diameter		1/2"			1/2"			1/2"		
Weight ⁽²⁾	Kg	8,5			10,5			11.7		
	Lb	18.7			23.1			25.8		

(1) 1 Bar = 100 kPa • (2) with equipment vacuum

MODELS		B3 60			B3 80		
TANK CAPACITY	Litres	60			80		
	US gallon	15.8			17.59		
Tank material		AISI 316			AISI 316		
Thermal insulation material		Polyurethane foam			Polyurethane foam		
External cladding material		COMPOSITE			COMPOSITE		
Tank pressure during testing		800 kPa ⁽¹⁾			800 kPa ⁽¹⁾		
Maximum working pressure		600 kPa ⁽¹⁾			600 kPa ⁽¹⁾		
Electric element voltage rating		220 VAC	110 VAC	110 VAC 220 VAC	110 VAC 220 VAC		
Electric element power rating		500 W	600 W	1200 W	1200 W		
Fittings diameter		1/2"			1/2"		
Weight ⁽²⁾	Kg	14,6			17,8		
	Lb	32.2			39.2		

(1) 1 Bar = 100 kPa • (2) with equipment vacuum



2.0 - Standard supply and material included in the package

- Water heater
- Floor or wall-mounting brackets
- Various screws and hardware (for assembly)
- User's manual
- Conditions of warranty.

3 - Introduction

BEFORE USING THE PRODUCT, PLEASE READ THIS USER'S MANUAL CAREFULLY. IF IN DOUBT, PLEASE CONSULT YOUR QUICK® DEALER.

3.0 - Important notes

This manual features Warning and/or Caution symbols that are important for safety. Stick to the given instructions.



Warning symbol for dangerous situations.



Caution symbol to prevent direct or indirect damage to the product.

This document provides boat manufacturers and nautical equipment installers with instructions on how to assemble the water heater and operate it correctly.

3.1 - Precautions



- Use the product only for the applications described in this manual.
- Do not use these products for any other type of operation.
- Quick® shall not be held liable for direct or indirect damage caused by improper use of the product.
- Before connecting the equipment, make sure that cables are not live.
- This equipment is not intended for use by people (including children) with reduced physical, sensory or mental capabilities. Quick® SpA shall not be held liable for direct or indirect damage caused by improper use of the equipment.
- Never switch on the electric element if the product is not filled with water, otherwise the heating element could be irreversibly damaged.

3.2 - Precautions for the installer



CARRY OUT THE INSTALLATION IN GOOD LIGHTING CONDITIONS.

It is advisable to wear suitable clothing and personal protective equipment (PPE).

The water heater is not suitable for installation in potentially explosive environments and/or atmospheres. Installation and subsequent inspection or repair work must only be carried out by qualified personnel.



CARRY OUT INSTALLATION/MAINTENANCE WORK MAKING SURE THAT THE PRODUCT IS DISCONNECTED FROM THE ELECTRICAL SYSTEM.

Quick accepts no responsibility for inadequate connection of users to the electrical system and inadequate safety of the electrical system.



4.0 - Installation requirements

The water heater must be installed in a dry and well-ventilated place. This precaution is necessary, even if the water heater is made of materials resistant to the marine environment, due to the presence of electrical devices (in models equipped with them). In addition, installation in an unventilated place may cause condensation; condensation may be mistaken for a false leak.



WARNING: do not install the water heater in environments with the presence of gas or potentially flammable materials.

4.1 - Installation procedure

A - Apply the brackets to the tank.



WARNING: the weight of the water heater indicated in the technical specifications refers to empty equipment. For the weight when fully loaded, add the weight of the mass of water filled in the equipment to the weight when empty (1 litre of water corresponds to approximately 1 kg. / 2.2 lb).

B - Fix the water heater to a flat surface as shown in figure 1 (page 9) using supports suitable for the weight of the water heater and the type of surface available for installation.

C - Make the hydraulic connections for the tap hot water input and output and the engine cooling circuit to the heat exchanger (in models featuring it) as shown in figure 2 (page 9). The connection between the engine cooling circuit and the water heater exchanger should be as short as possible.



WARNING: follow the engine manufacturer's instructions to withdraw the coolant to be sent to the water heater exchanger.



WARNING: the overpressure release pipe must be positioned on a continuous downward slope and in a place protected from ice formation.

WARNING: water may drip from the overpressure stub pipe; leave this pipe open so that it can drain the water in the atmosphere.

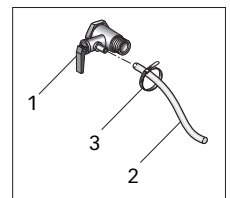
WARNING: use Loctite 243, 577 or Teflon when installing the fittings. Check that there are no water leaks.

4.2 - Use



WARNING: follow the engine manufacturer's instructions to withdraw the coolant to be sent to the water heater exchanger.

- Position the stub pipe (2) of the valve (1) securing it with the clamp (3). Position it in such a way that any spillage of water will not damage other objects.
- Open the hot water taps of the washbasins and start the water pump. This allows the air in the water heater and in the pipes to flow out. Close the taps as soon as only water starts to flow out.
- Check that there is no leakage from the fittings.



4.2.0 - Cautions for use



Before connecting the equipment, make sure that cables are not live.

Never switch on the electric element if the water heater is NOT filled with water, otherwise the heating element could be irreversibly damaged and the protection devices will not work properly.



WARNING: if the power cable is damaged, have it replaced at a Quick® service centre. To avoid accidents, the equipment must only be opened by authorised personnel. The warranty will be void if the equipment is opened by unauthorised personnel.

4.2.1 - DC power supply of the equipment

The equipment is provided with a box for DC network connections. For connections to the DC network, see fig. 3. Before supplying power to the water heater, make sure that its operating voltage corresponds to that supplied by the DC network.

An equipment ON/OFF switch and a 30A fuse must be installed in the electrical system. The insulation material between the contacts of the connections to the DC network must be at least 3 mm. Connections to the DC network must be made in accordance with the national standards on electrical systems.

4.2.2 - AC power supply of the equipment

The equipment is already provided with a power cable for the AC network. For connections to the AC network, see figure 3. Before supplying power to the water heater, make sure that its operating voltage corresponds to that supplied by the AC network.

A double pole switch must be installed in the electrical system to turn the equipment on and off and a fuse suitable for its absorption. The insulation material between the contacts of the connections to the AC network must be at least 3 mm. Connections to the AC network must be made in accordance with the national standards on electrical systems.

4.2.3 - AC thermostat setting

The thermostat factory-set temperature value is 60°C. If you wish to change this value, follow the procedure below:

- interrupt the power supply.
- Remove the protection cover to reach the thermostat.
- Use a screwdriver to turn the thermostat knob and set the desired temperature value.
- Refit the protection cover.
- Restore the power supply.



The thermostat regulates the water temperature only when operating with electric element.

5 - Wiring diagram

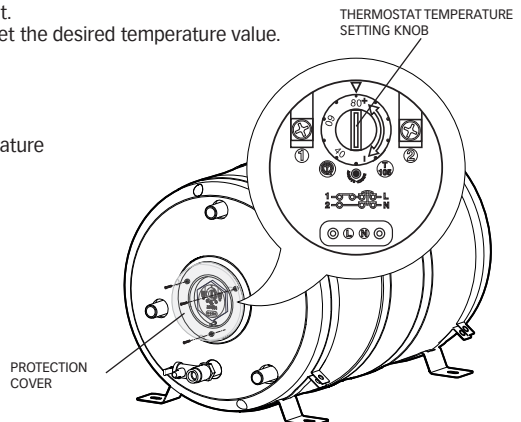
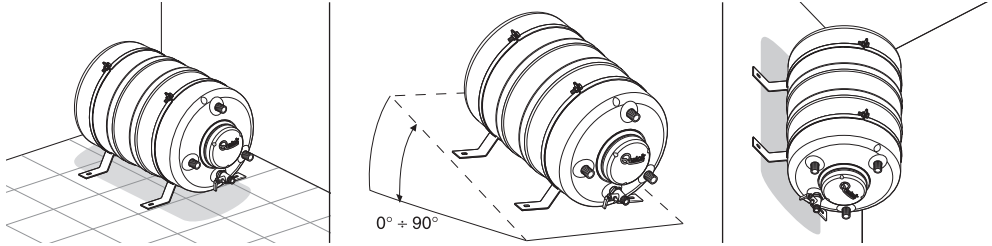


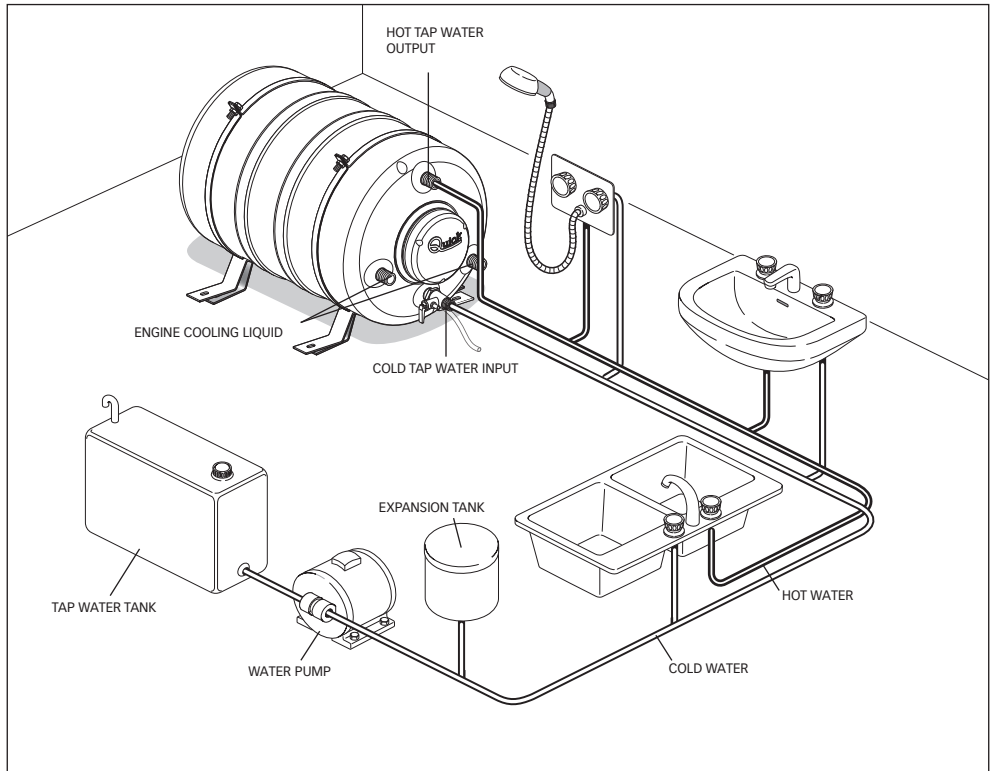


FIG.1

FIG.2



5.1 - Hydraulic connection diagram, 12 V



5.2 - AC connection diagram

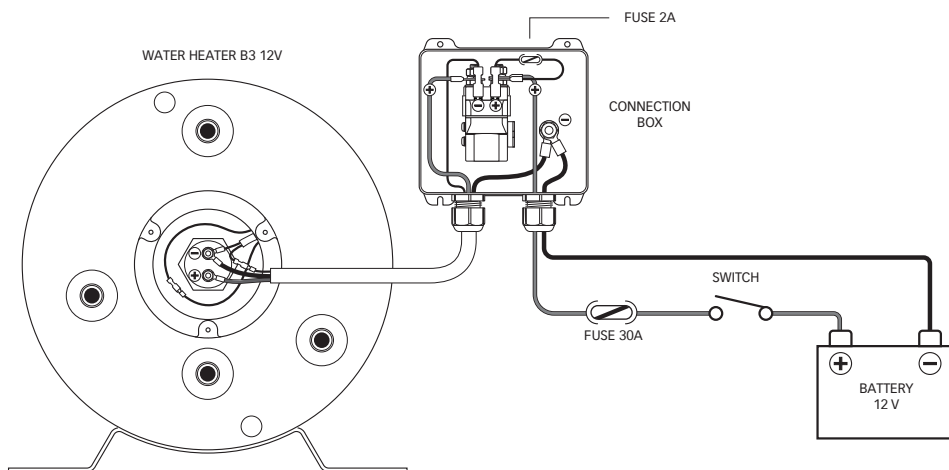
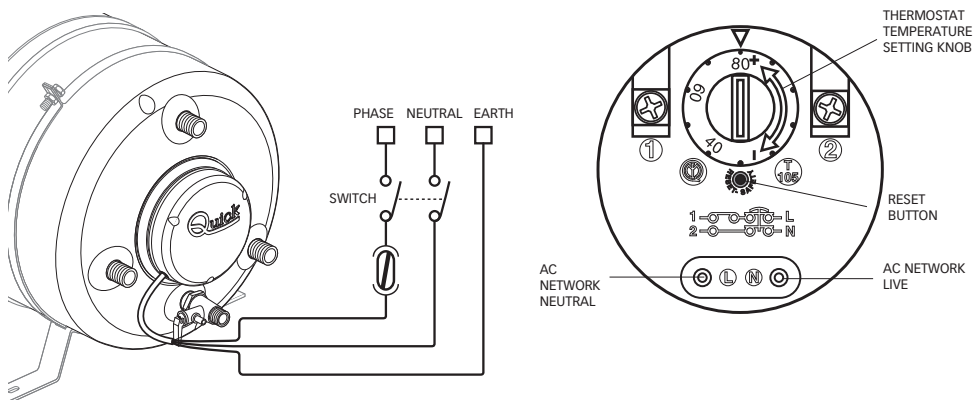


FIG.3

FIG.4





6.0 - B3Series maintenance



WARNING: if the overtemperature safety device is triggered repeatedly during the use of the water heater, contact a Quick® service centre.

WARNING: if the power cable is damaged, have it replaced at a Quick® service centre. To avoid accidents, the equipment must only be opened by authorised personnel. The warranty will be void if the equipment is opened by unauthorised personnel.

- During the cold season, if the water heater is not in use, it is advisable to empty it using the valve lever (fig. 1 page 7). This is to avoid damage caused by frost.
- Periodically check the hydraulic system fittings for leaks; check the tightness of the fastening screws and replace them if they are worn out or corroded.
- Periodically check the efficiency of the electrical system.

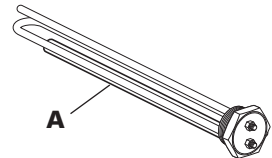
6.1 - B3Series AC maintenance



WARNING: Quick® water heaters (only **AC** model) are equipped with a double thermostat with manual reset that cuts off the power supply in the event of too high water temperature. If this condition occurs, proceed as follows:

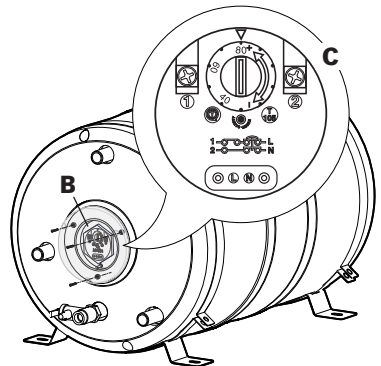


It is advisable to check the magnesium anode every 12 months. Replace it if deteriorated. This simple preventive maintenance guarantees a long equipment life over time.



PROCEDURE for SINGLE-PHASE manual reset (only for AC model):

- Interrupt the power supply
- Remove the protection cover (B) to reach the thermostat (C).
- Use a screwdriver to turn the thermostat knob (fig. 4 page 10) and set the maximum temperature value.
- Press the reset button on the double thermostat (fig. 4 page 10).
- Use a screwdriver to turn the thermostat (C) knob and set the desired temperature value.
- Refit the protection cover (B).
- Restore the power supply.





As with installation, at the end of this product life, dismantling must be carried out by qualified personnel.

This product is made up of various materials, some can be recycled and others must be suitably disposed of; enquire about the recycling or disposal systems provided for by local regulations for this product category.

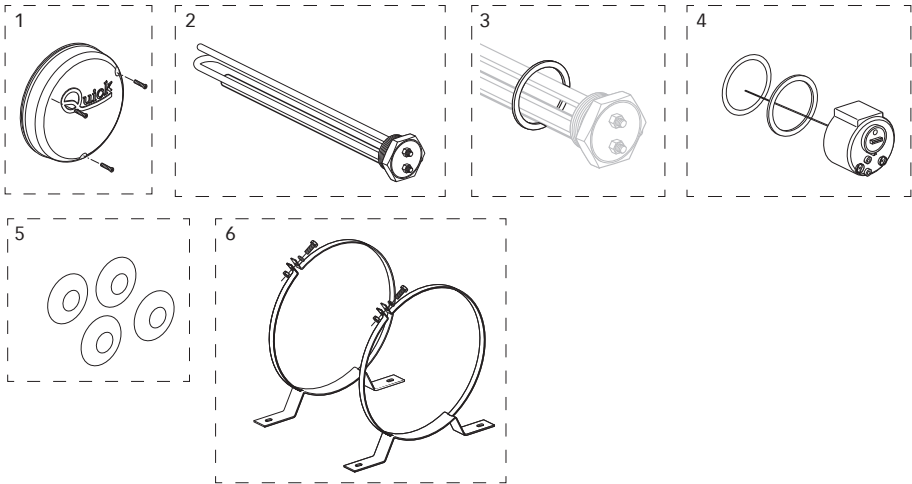
Some parts of the product may contain pollutants or hazardous substances that, if dispersed, may be harmful to the environment and human health.



As indicated by the symbol on the side, it is forbidden to dispose of this product as domestic waste. Separate the products for disposal in accordance with the regulations in force in your area or return the product to the seller when purchasing a new equivalent product.

Local regulations may impose severe penalties for the improper disposal of this product.

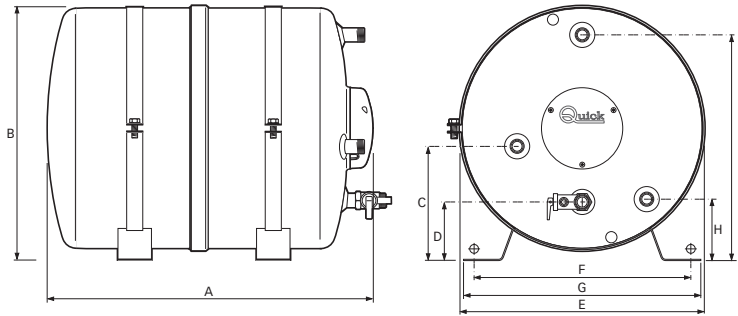




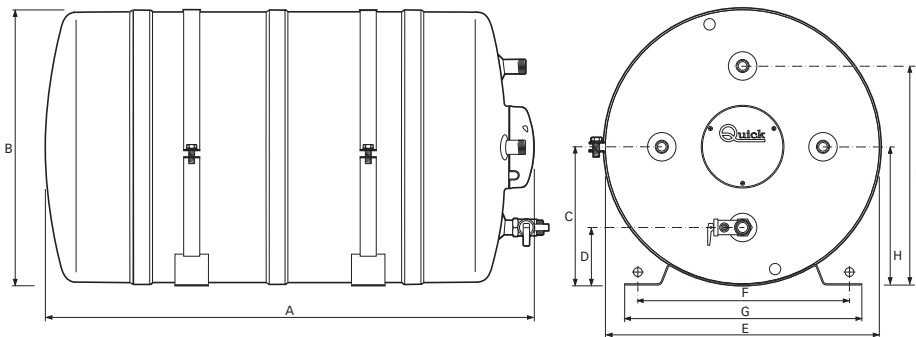
POS.	DESCRIPTION	CODE		
1 A	OSP ELECTRIC ELEMENT COVER B3 110V	FVSLCR110V00A00	2F	OSP ELECTRIC ELEMENT KIT 1200W 110V FVSLRSB12110A00
1B	OSP ELECTRIC ELEMENT COVER B3 220V	FVSLCR220V00A00	2G	OSP ELECTRIC ELEMENT KIT 1200W 220V FVSLRSB12220A00
2 A	OSP ELECTRIC ELEMENT KIT 300W 12V	FVSLRSB03012A00	3	OSP ELECTRIC ELEMENT SEAL B3 FVSLGRB03X00A00
2B	OSP ELECTRIC ELEMENT KIT 600W 110V	FVSLRSB05110A00	4	OSP DOUBLE THERMOSTAT KIT 15A 270MM B3 FVSLTB152700A00
2C	OSP ELECTRIC ELEMENT KIT 500W 220V	FVSLRSB05220A00	5	OSP PIPE END WASHERS B3 FVSLRCTBRB00A00
2D	OSP ELECTRIC ELEMENT KIT 800W 110V	FVSLRSB0811SA00	6 A	OSP FIXING KIT B3 15-20-25 FVSLPNXB3300A00
2E	OSP ELECTRIC ELEMENT KIT 800W 220V	FVSLRSB0822SA00	6B	OSP FIXING KIT B3 30-40 FVSLPNXB3360A00
			6C	OSP FIXING KIT B3 60-80 FVSLPNXB3400A00

B3 30L 8 GAL - B3 40L 10.5 GAL

B3 15L 4 GAL - B3 20L 5.3 GAL - B3 25L 6.6 GAL





B3 60L 15.8 GAL - B3 80L 21.1 GAL






9 - Dimensions

	15L 3.9 gal	20L 5.3 gal	25L 6.6 gal
A	405 (15 61/64)	500 (19 11/16)	605 (23 13/16)
B	316 (12" 7/16)		
C	123 (4" 27/32)		
D	59 (2" 21/64)		
E	Ø 306 (12" 3/64)		
F	304 ÷ 318 (11" 31/32 ÷ 12" 1/2)		
G	320 (12" 19/32)		
H	87 (3" 27/64)		
I	259 (10" 13/64)		

	30L 7.9 gal	40L 10.5 gal
A	495 (19 31/64)	623 (24 13/32)
B	366 (14" 13/32)	
C	158 (6" 7/32)	
D	75 (2 61/64)	
E	Ø 366 (14" 13/32)	
F	304 ÷ 318 (11" 31/32 ÷ 12" 1/2)	
G	320 (14" 3/16)	
H	79 (3" 7/64)	
I	325 (12" 51/64)	

	60L 15.8 gal	80L 21.1 gal
A	721 (28 3/8)	921 (36 1/2)
B	404 (15" 29/32)	
C	204 (8" 1/32)	
D	85 (3" 11/32)	
E	Ø 400 (15 3/4)	
F	270 ÷ 285 (10" 5/8 ÷ 11" 7/32)	
G	320 (12" 19/32)	
H	204 (8" 1/32)	
I	323 (12" 23/32)	

B3Series

REV 001A



WATER HEATER SERIES B3

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B3 20 - 20 12V

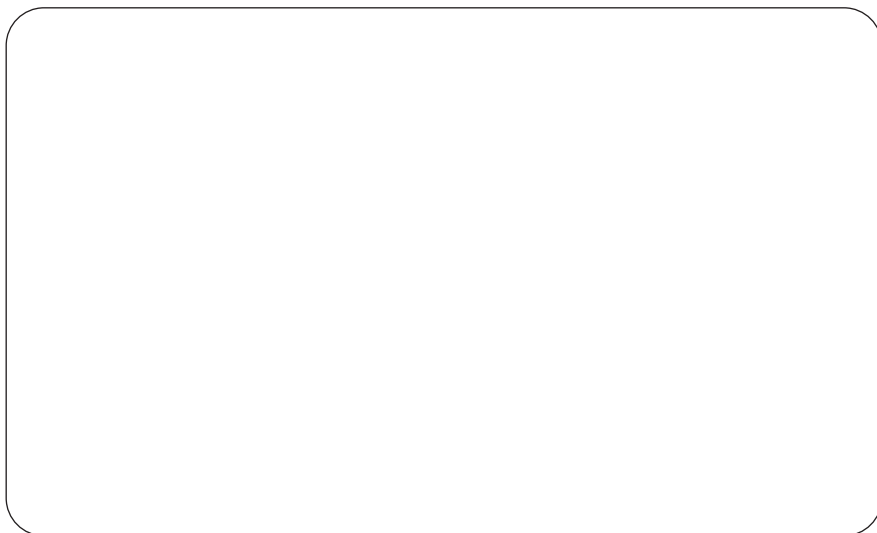
B3 25

B3 30

B3 40

B3 60

B3 80



Product serial number



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