

**WD1160, WD4060, WD4190  
GW0160, GW1160, GW4060, GW4190**

**- POWER CONNECTION CONVERSION INSTRUCTIONS -**  
*- Technical Procedure -*



19 561 0144 00 - EN	26/05/2017
Rev.	Date



**WARNING**

*This document is intended for authorised Smeg technical staff and must be used in combination with the technical documentation; it describes the power connection conversion procedure.*

**Only “standard” 400V three-phase units with neutral (400V 3N~ 7.0kW) can be converted on site to the corresponding 230V single-phase version (230V~ 2.8kW).**

*The technical data plates of these devices state the two possible electrical connections and the standard configuration (400V 3N~) is marked with an asterisk.*







*After the power conversion, tests must be performed to check the appliance's electrical safety and the operation of its inputs and outputs; the complete “in -service test record” checklist must also compiled (in accordance with the SR quality procedure).*

*The illustrations and photographs below are guideline. Always refer to the latest electrical wiring diagram, available at [www.smegtech.com](http://www.smegtech.com).*

## 1 POWER CONFIGURATION

MODELS	VARIANTS	POWER CONNECTION DESCRIPTION	ELECTRICITY SUPPLY	PROTECTIVE DEVICES INCORPORATED IN THE APPLIANCE
WD1160 WD4060 WD4190 GW0160 GW1160 GW4060 GW4190	Standard (400V three-phase variants with neutral)	400V three-phase configurable	400V 3N~ / 50Hz / 12A / 7000W * 230V ~ / 50Hz / 12A / 2800W	FUSES <b>10.3x38 16 A</b> ON POWER SUPPLY [L1, L2, L3]

In the table: the characteristics of the power supply cable supplied with the configurable appliances, product technical data plate and data plate which confirms the electrical configuration actually set up during installation.

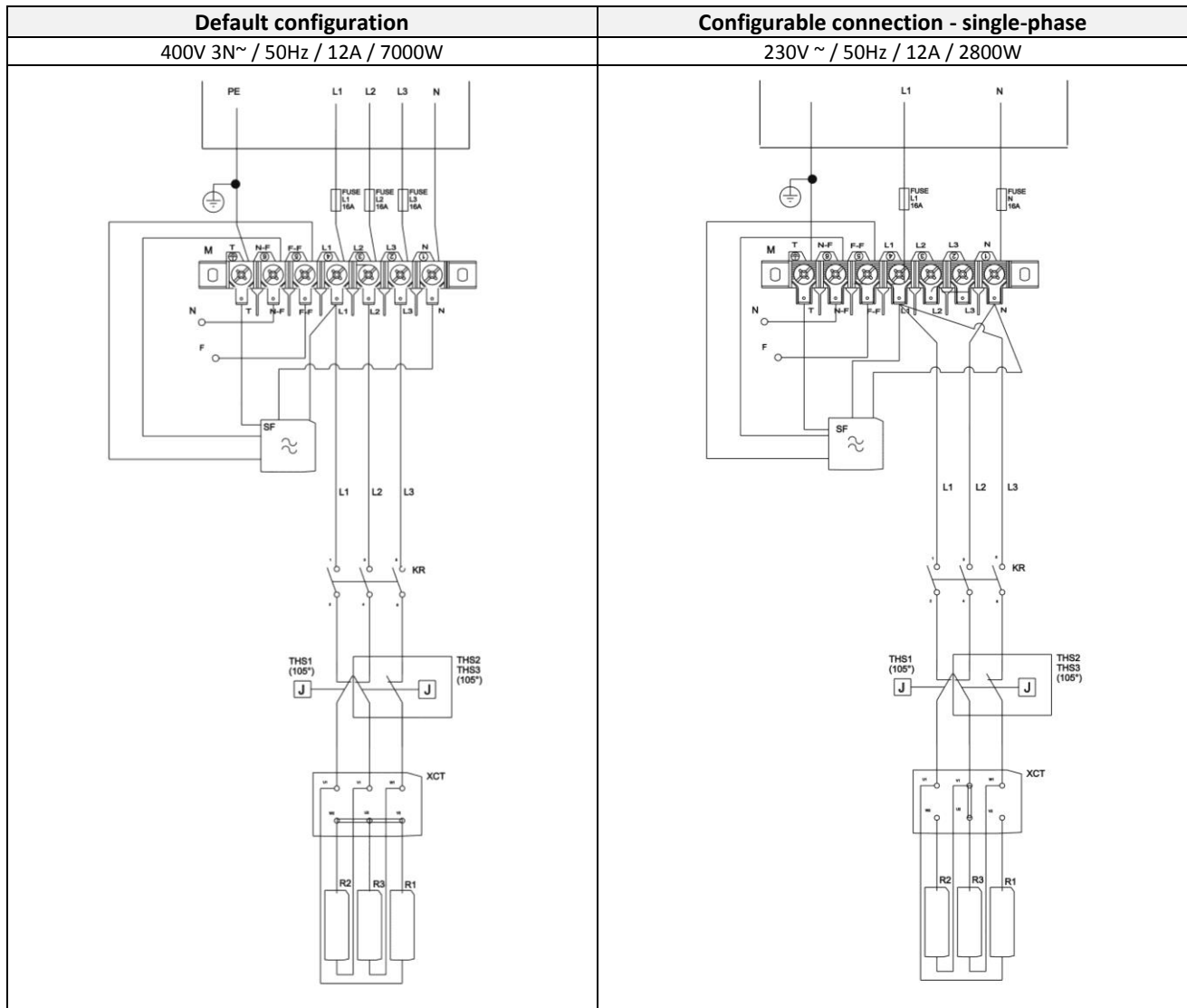
POWER SUPPLY CABLE TECHNICAL DATA	
FROR 5 x 2.5 mm <sup>2</sup> (5G2,5), 450/750 V, IMQ mark	
FACSIMILE OF CONFIGURABLE PRODUCT TECHNICAL DATA PLATE	
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  <p><b>WASHER DISINFECTOR - Made in Italy</b>            400 V 3N~ / PE / 50Hz / 12 A / 7000 W *            230 V ~ / PE / 50 Hz / 12 A / 2800 W            Water pressure min/max: 200 - 500 kPa            Cold water temperature: 8 - 35 °C            Demi water temperature: 8 - 50 °C</p> <p>[*: default connection ]</p> <div style="display: flex; justify-content: center; gap: 20px;">     </div> <p>Model WD4060    Type 1B1A    S/N ZZZZ XXXX Y            Cod. 860306    Year 2017    FULL S/N Y 860306 ZZZZ XXXX 0312</p> </div> <div style="text-align: right;"> <p>SMEG S.p.A. via Leonardo da Vinci, 4 42016 Guastalla (RE) - Italy</p> </div> </div>	
DATA PLATE FOR USE BY AUTHORISED ELECTRICIAN TO CONFIRM ACTUAL CONFIGURATION	
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="flex-grow: 1;"> <p><b>CONFIGURABLE DEVICE</b>  <b>ACTUAL ELECTRICAL CONNECTION</b>            DISPOSITIVO CONVERTIBILE            ALLACCIAMENTO ELETTRICO EFFETTIVO</p> <p><input type="checkbox"/> 400V 3N~ / PE / 50Hz / 12A / 7000W  <input type="checkbox"/> 230V ~ / PE / 50Hz / 12A / 2800W</p> <p>Date _____ Tech. _____</p> </div> <div style="text-align: right;">  </div> </div> <p style="text-align: right; font-size: small;">19 500 0119</p>	

## 2 ELECTRICAL WIRING DIAGRAM

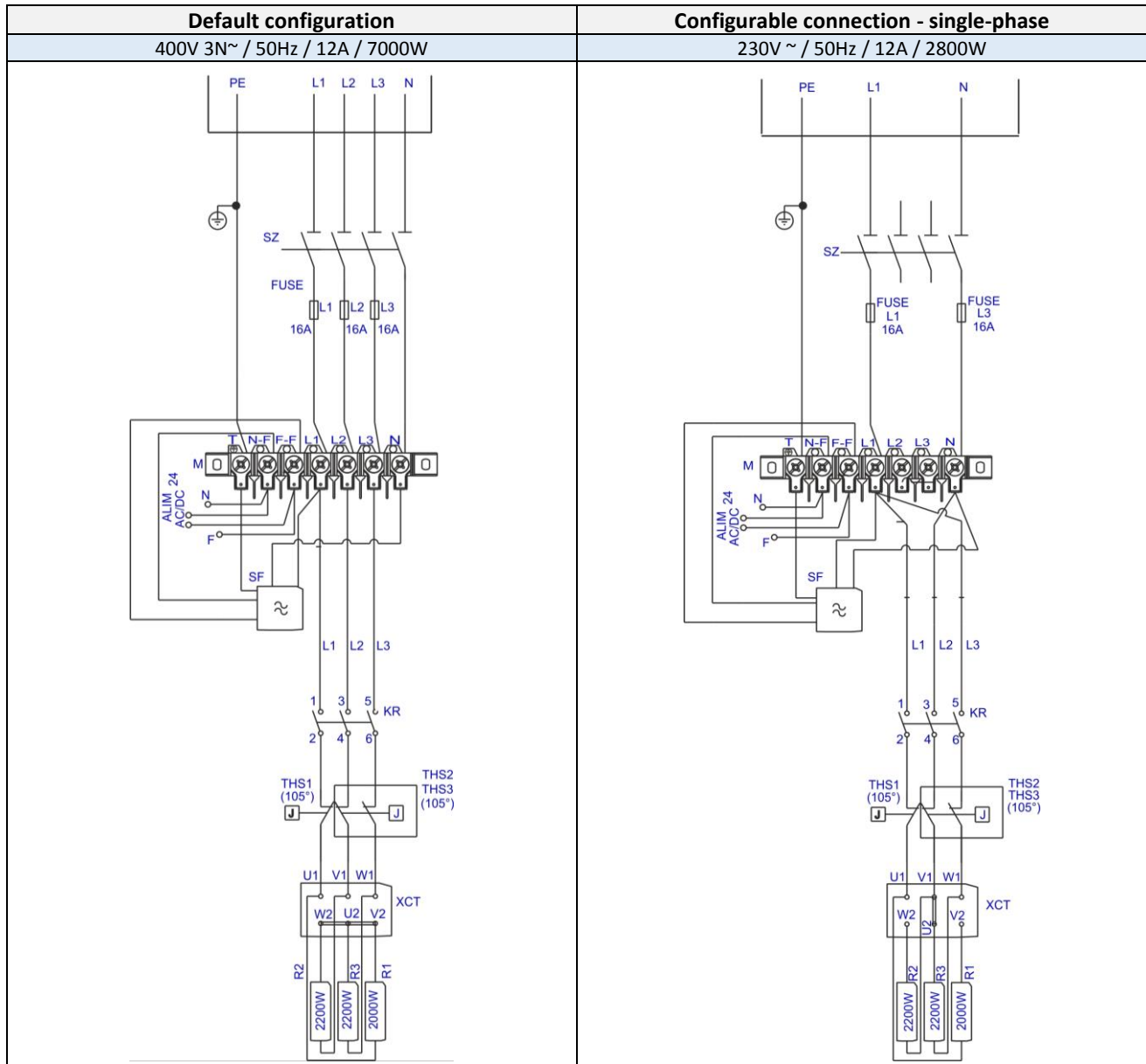
Refer to the latest electrical wiring diagram at [www.smegtech.com](http://www.smegtech.com).

The section of the diagram involved in this procedure is shown below.

### 2.1 POWER SUPPLY 0160, 1160, 4060



## 2.2 POWER SUPPLY 4190



### 3 CONVERSION PROCEDURE


**WARNING**

Before performing any operation, disconnect the device from the electricity and water supplies and make sure that there is enough space in front of the device - at least 1m<sup>2</sup>.


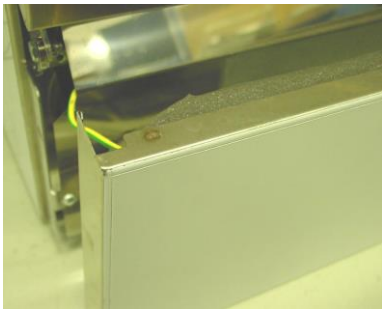

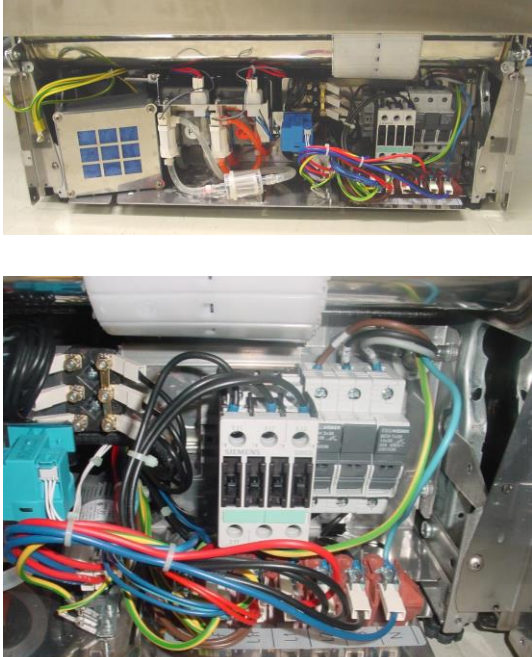
ILLUSTRATION	PROCEDURE
	<p>1. Remove the bottom door (or "bottom plinth"). Undo the screws at the sides which secure the bottom door.</p>
	<p>2. Disconnect the earth wire fixed to the left-hand corner of the part and pull the door outward.</p>
	<p>3. Remove the "drip guard".</p> <ul style="list-style-type: none"> <li>. Undo the fixing screws at the sides</li> <li>. Lift up the bottom edge of the guard and pull it outward</li> </ul>
	<p>4. This gives access to the components on the front cross-bar;</p> <p>in particular, you will need to work on:</p> <ul style="list-style-type: none"> <li>. power cable</li> <li>. fuse terminal clamps (for 1160 and 4060)</li> <li>. wires connecting the fuse terminal clamps to the power supply terminal board</li> <li>. power supply terminal board connections</li> <li>. jumpers on voltage change terminal board</li> </ul>

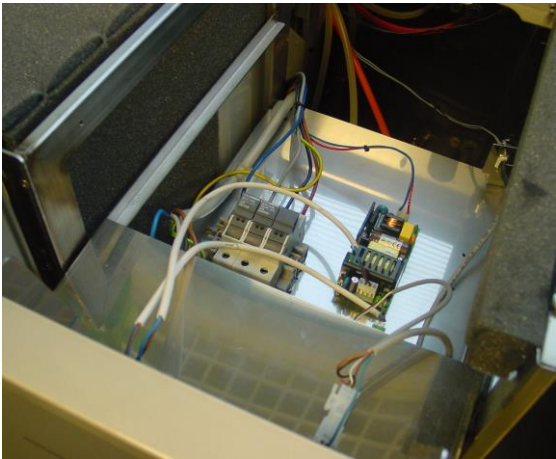

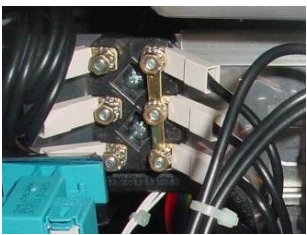
ILLUSTRATION	PROCEDURE
	<p>5. On WD4190 and GW4190 you must remove the top of the device, to access:</p> <ul style="list-style-type: none"> <li>.to fuses</li> <li>.to the mains switch (SZ)</li> </ul> <p>placed in the right-hand side cabinet.</p> <p>The top is fixed to the machine at the rear by means of two screws, crosshead.</p>
6. key to main components:	
	<ul style="list-style-type: none"> <li>. fuse terminal clamps</li> </ul>
	<ul style="list-style-type: none"> <li>. power supply terminal board</li> </ul>
	<ul style="list-style-type: none"> <li>. voltage change terminal board "XCT" (configuration shown is 400 V 3N~)</li> </ul>
	<p>7. The first component to be replaced (or adapted by cutting the unused wires) is the power cable.</p> <p>(PAY ATTENTION: on WD4190 and GW4190 the power cord is placed in the side cabinet).</p> <p>If replacement is necessary, proceed as follows:</p> <ul style="list-style-type: none"> <li>. Unscrew the fixing screws which secure the terminals at the end of the cable and release the terminals;</li> <li>. Connect the new power cable to the old one (still in place) using adhesive tape;</li> </ul>
0160, 1160, 4060, 4190	Power Connection Conversion instruction




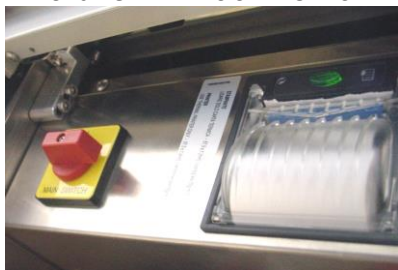
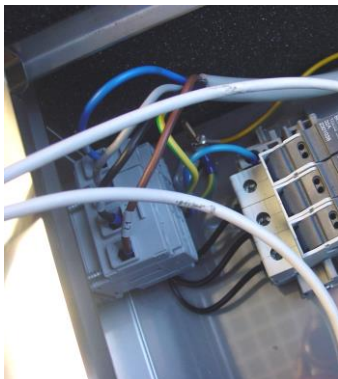
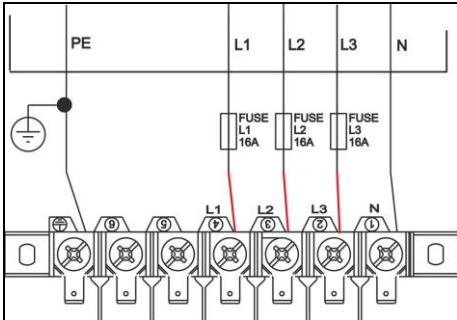
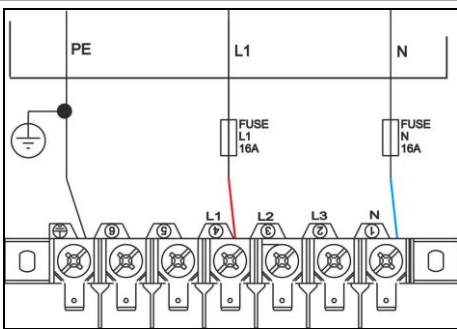
ILLUSTRATION	PROCEDURE	
	<ul style="list-style-type: none"><li>. Loosen the cable gland on the rear cross-bar and pull the whole of the old cable out of the back of the appliance;</li><li>. Leave about 30 cm of the new cable (including the stripped part) on the front cross-bar to allow the contacts to be restored;</li><li>. Connect the terminals of the new power cable to the fuse terminal clamps and connect the earth wire to the power supply terminal board (check that if the cable is pulled, the earth wire is always the last one to become taut).</li></ul>	
<p>Front view MAINS SWITCH "SZ"</p> 	<p>8. On WD4190 and GW4190 only, the power cord is housed in the side cabinet and ends within the terminals of the mains switch "SZ".</p> <p>Apply the same prescriptions as above.</p>	
<p>Rear view</p> 	<p>9. On WD4190 and GW4190: it is necessary to act on the mains switch TERMINALS ("Mains Switch"):</p> <p><b>maintaining</b>, in the case of single-phase, <b>only the phase L1 and the neutral N</b>.</p> <p>The adjacent images: front and rear view of the mains switch. On 0160, 1160, 4060 models, the electric switch is not installed.</p>	
<p>10. Use the <b>fuse holder - power supply terminal board connection wires</b> to create the configuration required, checking it using the electrical wiring diagram and a tester.</p>		
	<p>. <b>400V 3N~ - three-phase 400V with neutral</b></p> <p>. FUSES 16 A</p> <p>In this configuration, the neutral is connected directly to the terminal board and not to the fuse holder.</p>	
	<p>. <b>230V 1N~ - single-phase 230V</b></p> <p>. FUSES 16 A</p> <p>In this configuration, the neutral is connected to the fuse holder.</p>	
<p>11. Modify the <b>power supply terminal board</b> to create the electrical configuration required, as shown in the</p>		
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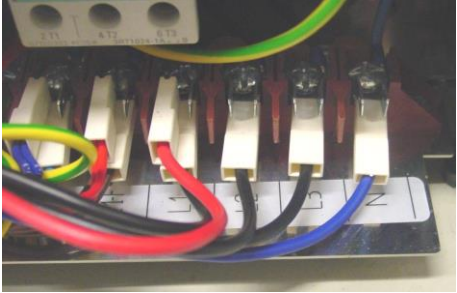


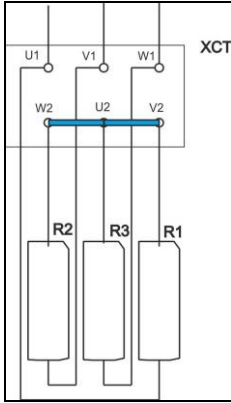
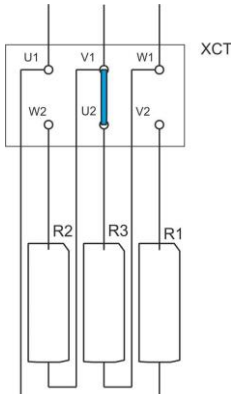

ILLUSTRATION	PROCEDURE
electrical wiring diagram.	
	<p><b>400V 3N~ - three-phase 400V with neutral</b></p> <p>wiring side:</p> <ul style="list-style-type: none"> <li>. connection of L1, L2, L3, N as shown on connection data plate.</li> </ul>
	<p><b>230V 1N~ - single-phase 230V</b></p> <p>wiring side:</p> <ul style="list-style-type: none"> <li>. L1 and L3 connected to the same terminal clamp: <b>L1</b></li> <li>. L2 and N connect to the same terminal clamp</li> </ul>
<p>12. Move the jumpers on the <b>voltage change terminal board</b> ("XCT" in the diagram) to create the power connection required.</p>	
 	<p>a. 400V 3N~ - three-phase 400V with neutral</p> <p>The tank heating elements are star-connected (the jumpers form the centre of the star).</p>
	<p>b. 230V 1N~ - single-phase 230V</p>



ILLUSTRATION	PROCEDURE
<p><b>13. Final check on connections</b></p> <ul style="list-style-type: none"> <li>. Check that the connections made are mechanically and electrically secure.</li> <li>. Use the tester to check the connections made and that they correspond to the electrical wiring diagram.</li> </ul>	
	<p><b>14. Close the appliance:</b></p> <ul style="list-style-type: none"> <li>. Perform the tests to check the appliance's safety following the company procedure.</li> <li>. Supply electricity to the appliance.</li> <li>. Use the technical application to check that the device's inputs and outputs function correctly.</li> <li>. Set the type of connection (3=three-phase, 1=single-phase) in the <b>SET-UP</b> menu, following the procedure provided in the user manual.</li> <li>. Perform a complete wash cycle including operation of the heating elements, to check that the appliance functions correctly.</li> </ul>

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