

VWACW 240 Volt Mains Hook Up kit – Deluxe

Mode of Operation:

The kit you have purchased will allow you to safely connect your camper to a camping site hook up bollard. The integral RCD and twin MCD consumer unit is IP55 insulated, and houses a 25 Amp 30ma breaker together with a 10 Amp and 6 Amp MCB. The 10 Amp MCB should be used to wire in two of the twin sockets that can be used for the majority of appliances, these should be designed for motorhome use. The 6 Amp MCB should be used to wire in one twin socket (for use with the fridge and the water pump) and the single socket (for connecting a battery charger to charge Leisure battery when hooked up).

Installation of the 240 Volt Mains Hook Up Kit:

The kit includes all the connections and fixings required to install a 240 Mains hook up into your camper. The kit contains a surface mounted socket that connects via the Yellow 2.5mm Artic cable to the consumer unit RCD. The 1.5mm flexible white cable is then fed from the 10 Amp and 6 Amp MCB to the sockets to provide connection points for the fixed and portable appliances.

Safety is paramount when working with mains electric and if you have any doubts you should consult a technical person for guidance. The components of the kit as a minimum specification meet requirements of the current regulations for this type of installation. Carefully follow the recommended installation procedure and ensure that vehicle is fully earthed and all sockets have been tested with a plug in socket tester (these can be purchased for a few pounds).

1. Locate the surface mounted external socket in a suitable location, usually under the camper, near the rear jacking point or if preferred in the engine bay. Using the 4 self-drilling screws test fix the socket to the vehicle, will be removed for wiring and fitting the chassis earth.
2. Locate a suitable position for the consumer unit, usually in the rear wardrobe area or under the rock and roll bed depending on the configuration of your vehicle. Fit the consumer unit to the surface of the area you have chosen with appropriate fixings (not provided).
3. Run the yellow 2.5mm Artic cable from the surface mount socket to the consumer unit. If you drill through the floor ensure that a grommet is placed in the hole to prevent rubbing of the cable. Cable should be secured with the larger p-clips.
4. Connect the cable to the socket end, following the correct colour coding as given.
5. Connect the artic cable to the consumer unit. The Brown (L) and Blue (N) are connected into the LINE side of the RCD and the earth wire connects onto the earth buzz bar. Line 1 = Live, Line 3 = Neutral.
6. Using the earth wire provided make a small loop from the earth pin of the surface mount socket and put a ring terminal on the other end. The ring can be affixed to the chassis using one of the surface mount screws, put the ring between the chassis and the underside of the surface mount body and pass the screw through it. Ensure that the chassis surface is cleaned back to give a good earth. The remaining earth cable should be used to run an earth from the earth buzz bar in the consumer unit to the chassis again using the ring and small self-tapping screw provided. See picture below:



7. This completes the mains 'line in' part of the installation. The supply of power to the sockets will vary in terms of camper layout and personal preference so the following are basic outlines.

Locating and wiring in of the sockets into the MCB:

1. The kit comes with 3 twin sockets and a single socket plus pattress boxes that can either be used to surface mount the sockets or as back boxes if flush mounted. The single socket is recommended for connection of a trickle charger that is connected to the Leisure battery, so charging it when camper is hooked up to mains supply. One of the twin sockets is recommended for running the fridge and other low power consumption appliances. Both of these sockets should be connected to the 6 Amp MCB. The 10 Amp should be used to feed the other two twin sockets.
2. After locating the sockets run cabling between them and the consumer unit. Wire in the cable to the socket following the connections marked on the sockets. In the consumer unit the Brown wire (L) should be connected to either the 10 Amp or 6 Amp MCB depending on the load that will be connected. The Blue wire (N) goes onto the common Neutral bar. The earth (Y/Gr) goes onto the common earth bar. If in doubt seek technical assistance.
3. Once connected the cables should now be secured to the floor or units using the p-clips taking care that the cable will not snag on the bed mechanism or similar moving objects.
4. Prior to connecting the mains socket to the supply all casings and sockets should be securely fastened to prevent risk of electrical shock.
5. The first time the socket is connected to the 240 Volt supply the RCD should be tested to ensure that it trips. This should be tested at least monthly, if at any time the RCD fails to operate the electricians should not be used until the fault is rectified. When using appliances ensure that this are low consumption as a guideline:

Appliance	Power (W)	Current (A)
Domestic kettle	2,000	8.7
Hi speed kettle	3,000	13.0
Iron	1,300	5.8
Camping kettle	750	3.3
Microwave oven (800W cooking power)	1,000	4.4
Domestic fan heater	1,000	4.4
1-2kw	2,000	8.7
Truma water heater	850 or 1,300	3.7 5.8
Camping fan heater	750	3.3
LCD TV	45	0.2
Refrigerator	135	0.6
Battery Charger	100 300	0.4 1.3
Toaster	900	3.9
Hair dryer	600 1,200	2.6 5.2