

PV diverter installation instructions

MDC0007-03

For Mixergy embedded diverters



mixergy

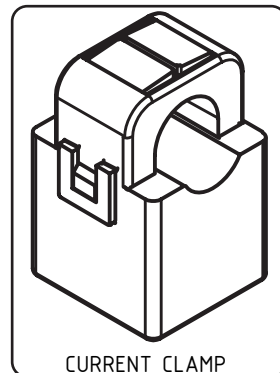
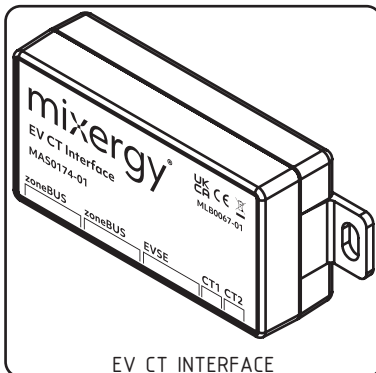
System details

The Mixergy solar diverter is a device which allows your hot water cylinder to redirect and absorb excess solar energy from local PV panels in the form of hot water. This absorbed energy offsets primary energy demand of the hot water system, reducing running costs and lowering the carbon footprint of your water heating.

Thermostat cut-out temperature	80 °C
Immersion heater(s) rating	230-240 V~ 2.7-3.0 kW
Immersion heater(s) specification	EN 60335-2-73
Immersion heater(s) type	356 mm Incoloy/Ti
Modulation range	30W - 3000W
Immersion heater(s) type	100W

Included parts

- Solar diverter (pre-fitted to cylinder)
- EV CT interface
- Current clamp x 2
- Mounting hardware (VHB pad, screws x 2, wall plugs x 2)
- 1 m ethernet cable x1, 3m ethernet cable x1



Contents

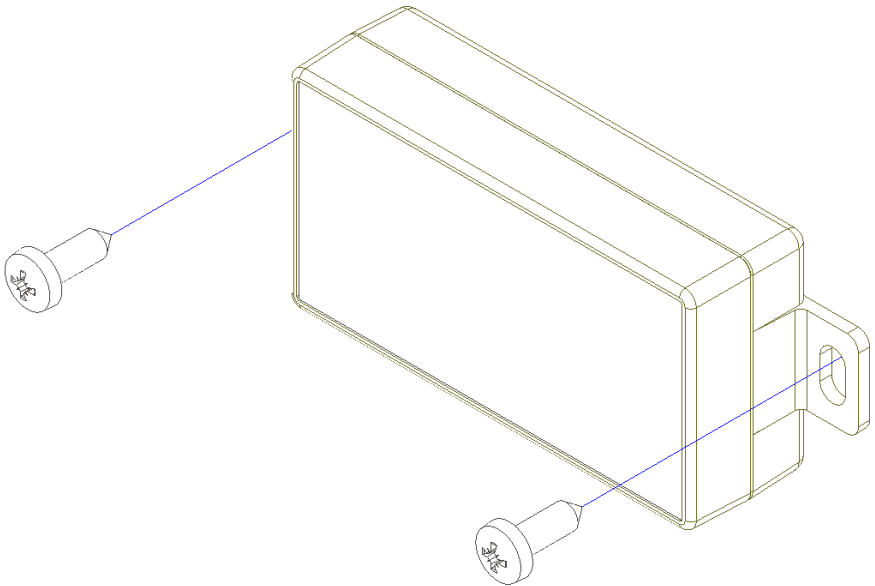
System details	2
Included parts	2
Contents	3
Installing the current reader	4
Connecting to the diverter	5
Software setup	6
Commissioning checklist	7
Troubleshooting	8
Spare parts	8

Installing the current reader

Positioning the EV CT interface

The EV CT device must be placed within 200mm of the household's incoming mains supply cabling and (optionally) the solar inverter's primary feed.

The EV CT should then be fixed to the wall using the two provided self-tapping screws, fixing the device using the provided mounting holes as pictured below.

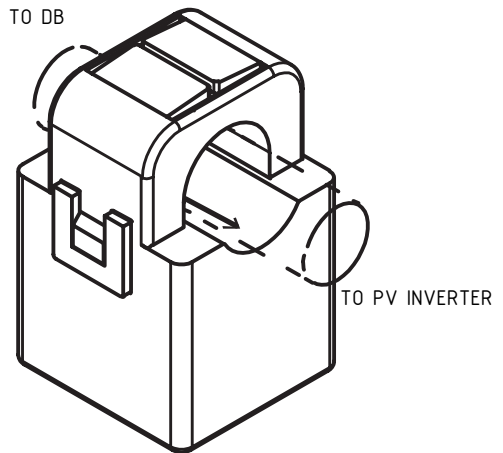
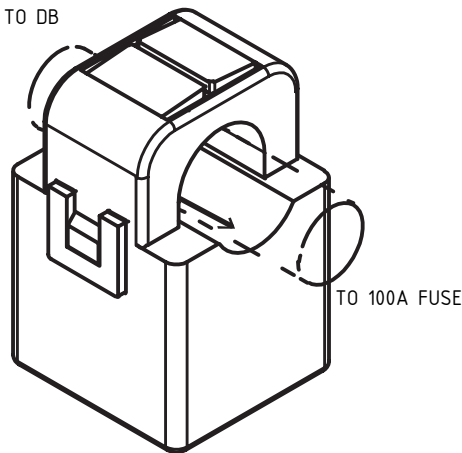


Installing the current reader

Installation of the current clamps

Current clamp CT1 must be attached around the neutral (blue/black) cable on the incoming mains supply with the arrow pointing towards the incoming supply 80/100A main fuse. The current clamp must then be plugged into the terminal on the EV CT labelled CT1.

Current clamp CT2 must be attached around the neutral (blue) cable of the solar inverter's primary feed, the current clamp can be oriented in either direction. Current clamp CT2 must then be plugged into the terminal on the EV CT labelled CT2.

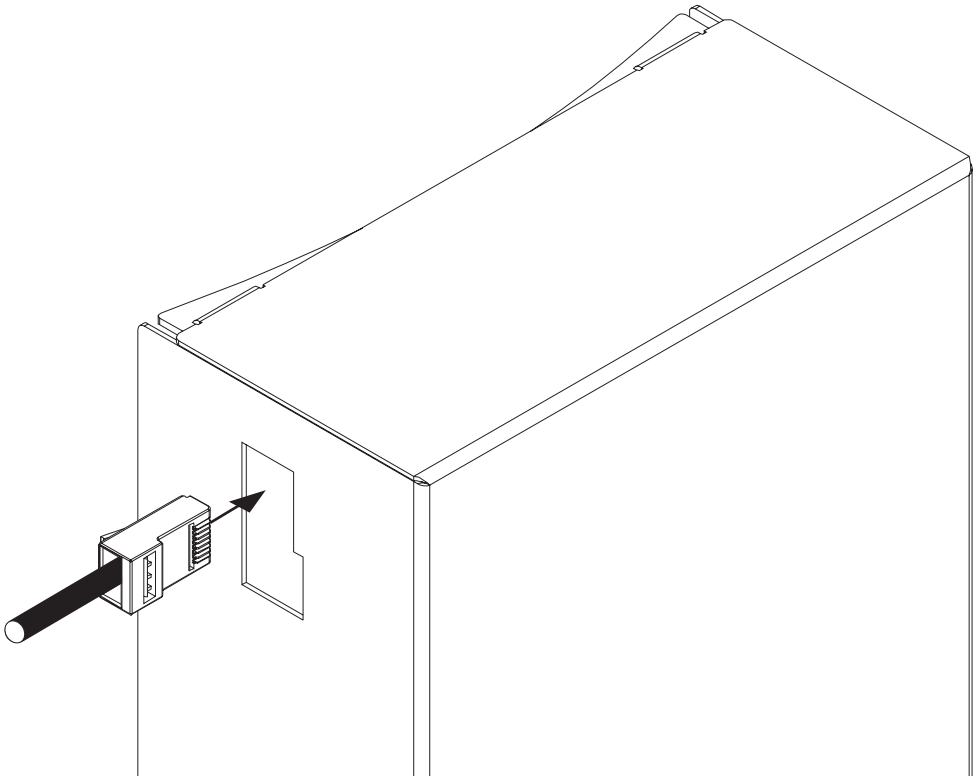


Connecting to the diverter

Connection of the EV CT to the diverter

The EV CT must be connected to the diverter using either cat5e or cat6 ethernet cable and standard RJ-45 connectors using the TIA/EIA-568-B.1-2001 T568B wiring scheme. Ensure that the cable used contains all 4 twisted pairs (8 conductors). Connection should be made between one of the 'zoneBUS' ports labelled on the EV CT device and the RJ-45 port located on the left side of the PV diverter enclosure as pictured below.

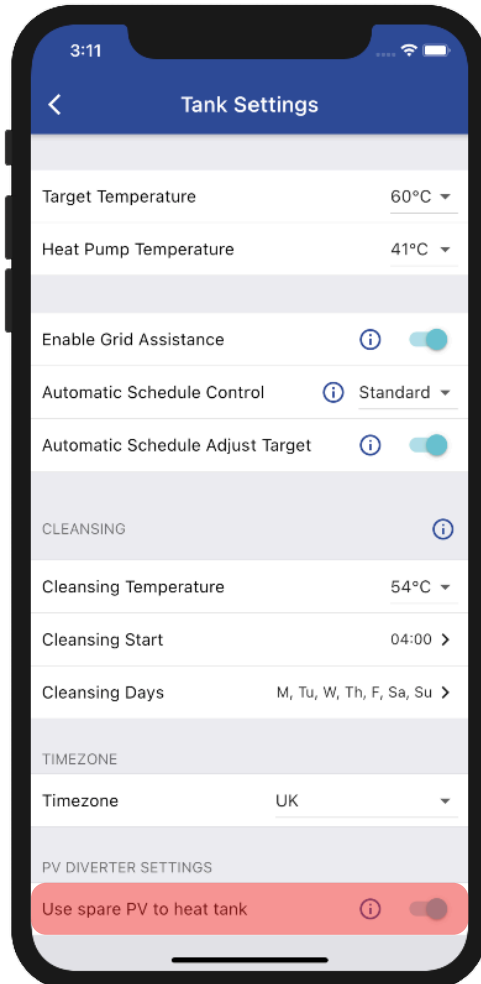
NOTE: While ethernet cable is used for this connection, the communication protocols used are not compatible with standard networking hardware and the connection between the diverter and clamp must be direct (i.e. no network switches or routing equipment is to be fitted in between)



Software setup

To enable diverter functionality, ensure the check-box 'Use spare PV to heat tank' is selected. This option can be found in the tank settings page on the phone app/mixcloud.

Use spare PV to heat tank ?



Commissioning checklist

Have the solar panels been correctly installed and commissioned on site?

Has a solar inverter been installed and properly commissioned according to manufacturer's instructions?

Has the smart cylinder and diverter been installed and properly commissioned according to manufacturer's instructions (MDC0001/MDC0007)?

Has the current measurement device (clamp + reader) of the diverter been installed correctly according to manufacturer's instructions?

Commissioning engineer's signature

Customer's signature

Date

/ /

Troubleshooting

If the cylinder is unable to detect the presence of the current reader, this will be indicated by a rapidly flashing red light on the front of the cylinder controller. If this is the case, double check the wiring between the cylinder controller, diverter and current clamp. If the problem persists please contact Mixergy directly.

If the cylinder switches the immersion on to full power at all times when diverting, this likely indicates that the current clamp has been installed with the arrow pointing in the wrong direction. Double check the arrow direction is facing as described on page 4. If the problem persists please contact Mixergy directly.

Spare parts

Do not attempt to repair or replace any parts of the Mixergy diverter unless you are a trained operative. If you suspect a fault or a replacement part is needed, please contact Mixergy directly.

To determine the correct parts for your system, please ensure you have your cylinder MX number which can be found on the nameplate located at the front of the cylinder.

Part description	Part no.
Enclosure cover	MME0074
Diverter PCB	MAS0056
Current reader	MAS0061
High-limit stat	GTLHR070

For more information on our
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