CONVERTER PWM/0-10VDC

USER MANUAL

Manufacturer: SOLAR controls s.r.o.

PURPOSE

The converter can be used wherever it is necessary to connect the output modulated by PWM signal to 0-10V input. Within the product range of the manufacturer it is used to connect controllers such as WATTrouter M or Heating Control to the 0-10V control input of an outdoor heat pump unit. Then you can directly control the output power of this unit.

CONNECTION

Connect the PWM converter to the PWM output of the control device according to the specifications of the relevant product (e.g. EXT1 on Heating Control). Observe PWM signal polarity. Connect an external 12 VDC power supply to terminals GND (negative) and + 12V (positive). Connect the analog signal 0-10V to the input with the same name which is available on controlled product (e.g. heat pump control unit).

SPECIFICATION

Parameter	Value, note
Power supply	12 VDC / 10 mA
Current consumption	Max. 10 mA
Power supply – reverse polarity protection	Yes
Input – PWM base frequency	50 Hz – 500 Hz
Input – voltage	Max. 6 VDC (between PWM+ and PWM-)
Input – reverse polarity protection	Yes
Output – voltage	0-10 VDC, load max. 5 mA
Adjustable conversion linearity	Yes, after lifting the lid appropriate converter range can be adjusted with a small screwdriver
Galvanic isolation input (terminals PWM + and PWM -) / output (terminals GND, 0-10V, +12V)	Yes

Note: DC supply power may be in the range 6-12 V. Then, the converter operates roughly in the range of supply voltage minus 1 V.