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Power supply and relay module for GIA20EB, GIA10N GNR 10

Specification:

Input voltage: 220 - 240 V AC / 50 - 60 Hz

Output voltage:

Device supply: 11 V DC non-stabilised

Transmitter supply: 18 V DC / max. 25 mA, electrically insulated

Relay drive: The relay will drive be switching the drive-contact to GND

Switching current: approx. 50 mA each relay

Relay output: 2 volt-free changeover contacts

max. current switched: 10 A

Switching capacity: For alternating voltage: max. 2400VA (240V, 10A, ohmic load); (cos φ = 0.95)

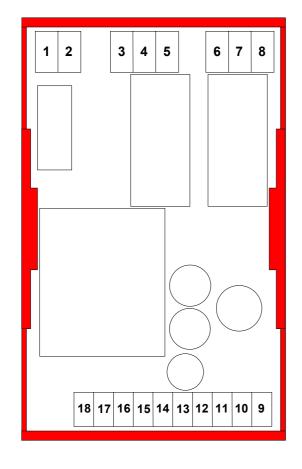
For direct voltage: max. 240W (24V, 10A, ohmic load)

Working temperature: 0 to 50°C

Dimensions: $61 \times 96 \text{ mm} \text{ (W x H)}$

Mounting: universal foot base can be snapped on to all commercial DIN EN support rails.

Terminal assignment:



+Uv	S+	S-	-Uv	S-	S+	+Ub	GND	Rel1	Rel2
Transmitter				Device					

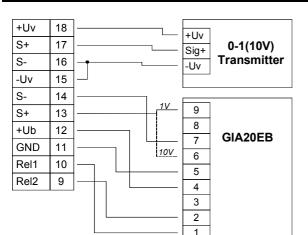
Terminal number	max. terminal area	Assignment			
1 2	2.5 mm²	Supply voltage: 230V AC / 50Hz			
3 4 5	2.5 mm²	Relay 1: normally closed contact Relay 1: input Relay 1: normally open contact			
6 7 8	2.5 mm²	Relay 2: normally closed contact Relay 2: input Relay 2: normally open contact			
9 10 11 12 13 14	1.0 mm²	Drive-contact relay 2 Drive-contact relay 1 Device-supply voltage - (GND) Device-supply voltage + Signal + Signal -			
15 16 17 18	1.0 mm²	Transmitter supply -Uv Signal - Signal + Transmitter supply +Uv			



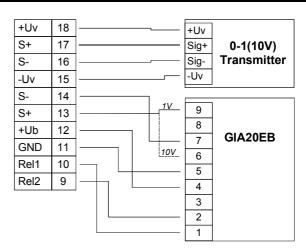
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Examples for connections to an GIA20EB:

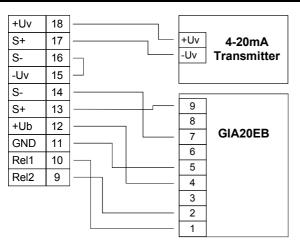
Connection of a 0-1(10)V transmitter (3-wire):



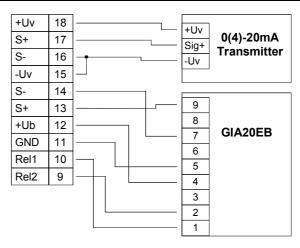
Connection of a 0-1(10)V transmitter (4-wire):



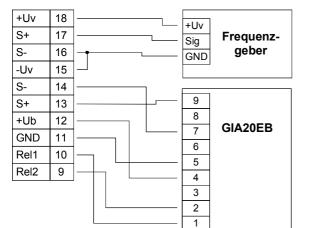
Connection of a 4-20mA transmitter (2-wire):



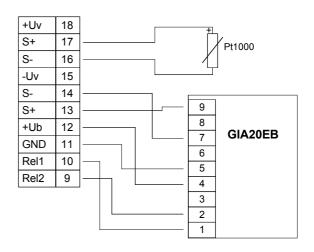
Connection of a 0(4)-20mA transmitter (3-wire):



Connection of a frequency generator (counter etc.):



Connection of a resistance sensor (2-wire):



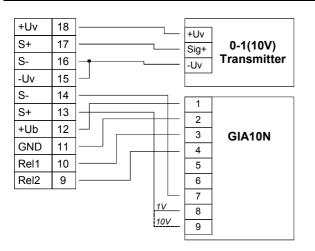
Notes for relay connection:

Please note: in the output configuration of the GIA 20 EB the "kind of the alarm-output" must be set to nPn (Low-Side).

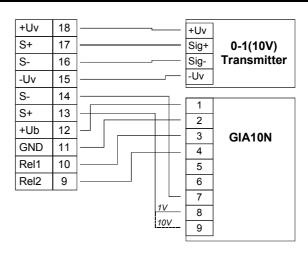
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Examples for connections to an GIA10N:

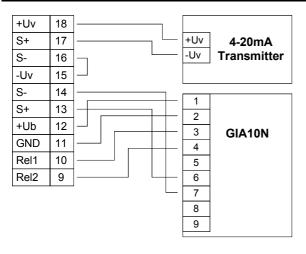
Connection of a 0-1(10)V transmitter (3-wire):



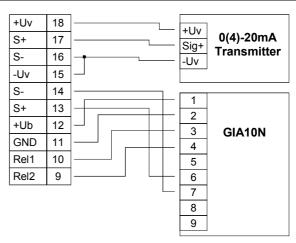
Connection of a 0-1(10)V transmitter (4-wire):



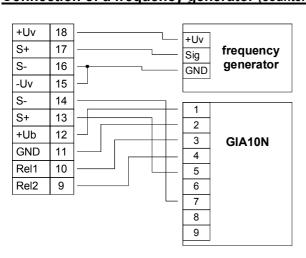
Connection of a 4-20mA transmitter (2-wire):



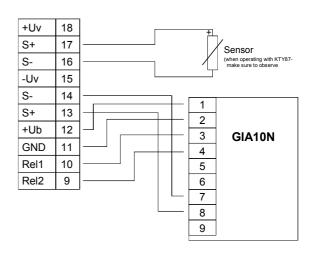
Connection of a 0(4)-20mA transmitter (3-wire):



Connection of a frequency generator (counter etc.):



Connection of a resistance sensor:



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Safety instructions:

This device has been designed and tested in accordance with the safety regulations for electronic devices. However, its trouble-free operation and reliability cannot be guaranteed unless the standard safety measures and special safety advises given in this manual will be adhered to when using the device.

- 1. Trouble-free operation and reliability of the device can only be guaranteed if the device is not subjected to any other climatic conditions than those stated under "Specification". If the device is transported from a cold to a warm environment condensation may cause in a failure of the function. In such a case make sure the device temperature has adjusted to the ambient temperature before trying a new start-up.
- 2. General instructions and safety regulations for electric, light and heavy current plants, including domestic safety regulations (e.g. VDE), have to be observed.
- 3. Electric connection and commissioning of the device must be carried out of trained and skilled personnel. Wrong connection may lead to the destruction of the device, in which case we cannot assume any warranty.
- 4. If device is to be connected to other devices (e.g. via PC) the circuitry has to be designed most carefully. Internal connection in third party devices (e.g. connection GND and earth) may result in not-permissible voltages impairing or destroying the device or another device connected.
- 5. If there is a risk whatsoever involved in running it, the device has to be switched off immediately and to be marked accordingly to avoid re-starting.

Operator safety may be a risk if:

- there is visible damage to the device
- the device is not working as specified
- the device has been stored under unsuitable conditions for a longer time.

In case of doubt, please return device to manufacturer for repair or maintenance.

6. Warning:

Do not use this product as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury or material damage.

Failure to comply with these instructions could result in death or serious injury and material damage.

Disposal instructions:

The device must not be disposed in the regular domestic waste.

Send the device directly to us (sufficiently stamped), if it should be disposed. We will dispose the device appropriate and environmentally sound.