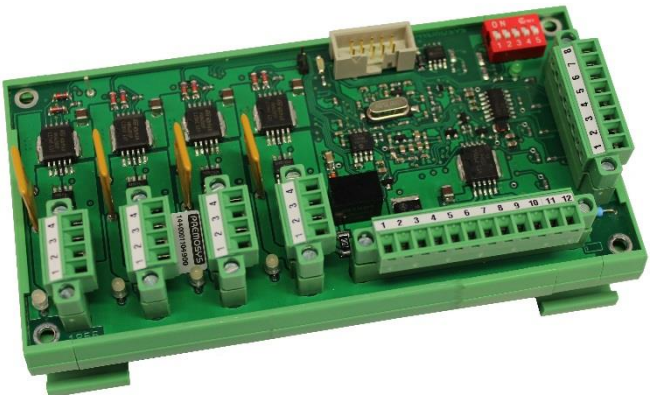


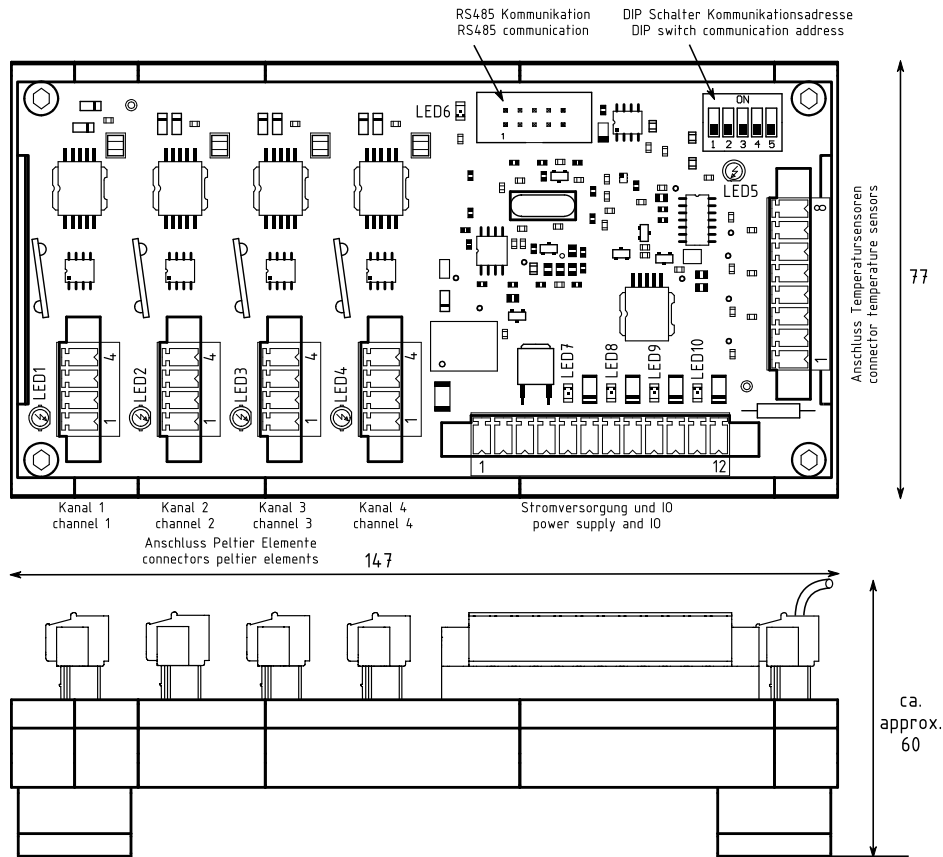


| | |
|--|---|
| <p>4 Kanal Temperaturregler / 4 Channel Temperature Controller</p> <p>Artikel-Nr. / Article-No: 50383</p> <p>DE Einbauanweisung für den Elektroinstallateur EN Installation notes for the electrician</p> |  |
| <p> Sicherheits- und Warnhinweise</p> <p>Beachten Sie die notwendigen Vorsichtsmaßnahmen bei der Handhabung elektrostatisch entladungsgefährdeter Bauelemente! (EN 61340-5-1, EN 61340-5-2)! Die Montage oder der Austausch des Moduls darf nur durch ausgebildetes, qualifiziertes Personal erfolgen! Es sind die geltenden Normen und Vorschriften einzuhalten.</p> | <p> Safety and warning instructions</p> <p>Observe the required safety precautions when handling with ESD-sensitive components (EN 61340-5-1, EN 61340-5-2)! The module may only be installed or replaced by skilled staff! The valid engineering standards and regulations must be taken into account!</p> |
| <p>Montageanleitung</p> <p>Die Montage und Anschluss ist nur in spannungslosem Zustand zulässig. Sorgen Sie für genügend Abstand zu anderen Baugruppen oder Abdeckungen, damit die entstehende Wärme abgeführt werden kann.</p> <p>Elektrischer Anschluss: Die Versorgungsspannung muss für die Steuerung, für jeden Peltierkanal und die IO getrennt eingespeist werden. Beachten Sie die Polarität der Versorgungsspannung und die zulässigen Spannungsbereiche. Alle 0V Anschlüsse mit Ausnahme des RS485 Kommunikationsanschlusses sind intern miteinander verbunden.</p> <p>Schließen Sie die Kommunikation zur übergeordneten Steuerung über den Flachkabelstecker an. An diesem Stecker muss auch die Stromversorgung für den Kommunikationsteil eingespeist werden.</p> <p>Die Parametrierung erfolgt durch die übergeordnete Steuerung.</p> <p>Das Modul verfügt über keinerlei Berührungsschutz, die elektrische Sicherheit ist durch Einbau und Netzteilwahl herzustellen.</p> | <p>Installation instruction</p> <p>The mounting and wiring of the controller is permissible only if the power supply is switched off. Provide for sufficient distance to other modules or covers so that there is enough space for heat dissipation.</p> <p>Electrical Wiring: The power supply for controller, for every single peltier channel and the IO must be feed in separately. Please observe the polarity of the power supply and the allowed voltages. All 0V connections except the one for the RS485 communication are internally connected on the module.</p> <p>The communication to the superordinate control system is operated via the flat cable connector. This connector must be used for the power supply of the communication part as well.</p> <p>The parameterization of the module is carried out via the superordinate control system.</p> <p>The module does not provide protection against contact. Safety has to be provided by the kind of mounting and supply selection.</p> |

| Technische Daten | | Technical Data | |
|--|--|--------------------------------------|---|
| Versorgung Logik | 20V-28VDC / 50mA max. | Power supply logic | 20V-28VDC / 50mA max. |
| Versorgung Peltierelemente | 12V-24VDC | Power supply peltier elements | 12V-24VDC |
| Anzahl Peltierkanäle | 4 | Number of peltier channels | 4 |
| Strom Peltierelemente je Kanal | max. 4A bei 25°C max. 3,8A bei 60°C | Current peltier elements per channel | max. 4A at 25°C max. 3,8A at 60°C |
| Versorgung IO | 12V-24VDC | Power supply IO | 12V-24VDC |
| Anzahl IO | 4 wahlweise Eingang oder Ausgang | Number of IO | 4 alternatively input or output |
| IO Strom | max. 0,7A pro Ausgang, max. 1A insgesamt | IO current | max. 0,7A per output, max. 1A overall |
| Verwendbare Temperaturfühler | PT100 | Useable temperature sensors | PT100 |
| Erfassungsbereich | -100 bis 150 Grad Celsius | Range | -100 to 150 degree Celsius |
| Serielle Schnittstelle | RS485, 4 Draht, galvanisch getrennt | Serial Interface | RS485, 4 wires, galvanically isolated |
| Versorgungsspannung serielle Schnittstelle | 5V bis 15V DC, max. 40mA | Power supply serial interface | 5V to 15V DC, 40mA max. |
| Parametrierung | über serielle Schnittstelle von der übergeordneten Steuerung | Parameterization | via serial interface from superordinate control |
| Adressierung | Kodierschalter Adresse 1 bis 31 | Addressing | Coding switch address 1 to 31 |
| Schutzklasse | IP 00 | protection class | IP00 |
| Betriebstemperatur | 10 bis 50 Grad Celsius | operating temperature | 10 to 50 degree Celsius |
| Betriebsfeuchtigkeit | 35 bis 85% Relative Feuchtigkeit | humidity | 35 to 85% relative humidity |
| Lagertemperatur | -10 bis 60 Grad Celsius | storage temperature | -10 to 60 degree Celsius |
| Gewicht | ca. 190g | Weight | Approx. 190g |
| RoHS Konform | ja | RoHS compliant | yes |

DE Abmessungen
EN Dimensions



Anschlussbelegung Logikversorgung und IO

Belegung des 12-poligen Anschlusssteckers

Hinweis: 0V Pins sind intern verbunden

| | |
|--------|--------------------------------|
| Kl. 1 | 24V Einspeisung Steuerungsteil |
| Kl. 2 | 0V |
| Kl. 3 | 24V Einspeisung IO |
| Kl. 4 | 0V |
| Kl. 5 | IO1 |
| Kl. 6 | 0V |
| Kl. 7 | IO2 |
| Kl. 8 | 0V |
| Kl. 9 | IO3 |
| Kl. 10 | 0V |
| Kl. 11 | IO4 |
| Kl. 12 | 0V |

Pin assignment logic supply and IO

Assignment 12-pole connector

Note: 0V pins are internally connected

| | |
|--------|----------------------------------|
| Cl. 1 | 24V power supply control circuit |
| Cl. 2 | 0V |
| Cl. 3 | 24V power supply IO |
| Cl. 4 | 0V |
| Cl. 5 | IO1 |
| Cl. 6 | 0V |
| Cl. 7 | IO2 |
| Cl. 8 | 0V |
| Cl. 9 | IO3 |
| Cl. 10 | 0V |
| Cl. 11 | IO4 |
| Cl. 12 | 0V |

Anschlussbelegung Peltier Elemente

Belegung der 4-poligen Anschlussstecker

Heizen: Kl. 3 +, Kl.4 -

Kühlen: Kl. 3 -, Kl. 4 +

| | |
|-------|-------------------|
| Kl. 1 | Einspeisung 24V |
| Kl. 2 | 0V |
| Kl. 3 | Peltier Element + |
| Kl. 4 | Peltier Element - |

Pin assignment peltier elements

Assignment 4-pole connectors

Heating: Cl. 3 +, Cl. 4 -

Cooling: Cl. 3 -, Cl. 4 +

| | |
|-------|-------------------|
| Cl. 1 | power supply 24V |
| Cl. 2 | 0V |
| Cl. 3 | peltier element + |
| Cl. 4 | peltier element - |

| <p>Anschlussbelegung Temperatursensoren</p> <p>Pin-Belegung des 8-poligen Anschlusssteckers</p> <p>Kl. 1 Kanal 1 Kl. 2 Kanal 1 Kl. 3 Kanal 2 Kl. 4 Kanal 2 Kl. 5 Kanal 3 Kl. 6 Kanal 3 Kl. 7 Kanal 4 Kl. 8 Kanal 4</p> | <p>Pin assignment temperature sensors</p> <p>Assignment 8-pole connector</p> <p>Cl. 1 channel 1 Cl. 2 channel 1 Cl. 3 channel 2 Cl. 4 channel 2 Cl. 5 channel 3 Cl. 6 channel 3 Cl. 7 channel 4 Cl. 8 channel 4</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|------------------------------------|--------------|------|-----|---------------------|------|--------------------------------|------|--------------------------------|------|-----|---------------------|------|--------------------------------|------|--------------------------------|------|-----|---------------------|------|--------------------------------|------|--------------------------------|------|-----|---------------------|------|--------------------------------|------|--------------------------------|------|-----|--------------------------------|------|--------------------------|------|-----|------------------------------|----------------|------------------------------|------|------|-----------|------|------|-----------|------|------|-----------|-------|------|-----------|---|-----|-------|-------------|------|-----|-----------------------|--------|------------------------------------|-------|------------------------------------|------|-----|-----------------------|--------|------------------------------------|-------|------------------------------------|------|-----|-----------------------|--------|------------------------------------|-------|------------------------------------|------|-----|-----------------------|--------|------------------------------------|-------|------------------------------------|------|-----|---------------------|-------|-------------------|------|-----|-------------------------|------------------|-----------------------------|------|--------|------------|------|--------|------------|------|--------|------------|-------|--------|------------|
| <p>Serielle Schnittstelle</p> <p>Pin-Belegung des 10-poligen Flachkabelsteckers</p> <p>1 TxD-, Ausgang 2 TxD+, Ausgang 3 GND, Stromversorgung 4 GND, Stromversorgung 5 RxD-, Eingang 6 RxD+, Eingang 7 GND, Stromversorgung 8 5V, Stromversorgung 9 5V, Stromversorgung 10 5V, Stromversorgung</p> | <p>Serial Interface</p> <p>Pin-assignment of the 10-pin flat cable connector</p> <p>1 TxD-, Output 2 TxD+, Output 3 GND, Power supply 4 GND, Power supply 5 RxD-, Input 6 RxD+, Input 7 GND, Power supply 8 5V, Power supply 9 5V, Power supply 10 5V, Power supply</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>LED Anzeige</p> <table border="1"> <thead> <tr> <th>LED</th> <th>Zustand</th> <th>Beschreibung</th> </tr> </thead> <tbody> <tr> <td rowspan="3">LED1</td> <td>aus</td> <td>Peltier Kanal 1 aus</td> </tr> <tr> <td>gelb</td> <td>Peltier Kanal 1 Kl 3 +, Kl 4 -</td> </tr> <tr> <td>grün</td> <td>Peltier Kanal 1 Kl 3 -, Kl 4 +</td> </tr> <tr> <td rowspan="3">LED2</td> <td>aus</td> <td>Peltier Kanal 2 aus</td> </tr> <tr> <td>gelb</td> <td>Peltier Kanal 2 Kl 3 +, Kl 4 -</td> </tr> <tr> <td>grün</td> <td>Peltier Kanal 2 Kl 3 -, Kl 4 +</td> </tr> <tr> <td rowspan="3">LED3</td> <td>aus</td> <td>Peltier Kanal 3 aus</td> </tr> <tr> <td>gelb</td> <td>Peltier Kanal 3 Kl 3 +, Kl 4 -</td> </tr> <tr> <td>grün</td> <td>Peltier Kanal 3 Kl 3 -, Kl 4 +</td> </tr> <tr> <td rowspan="3">LED4</td> <td>aus</td> <td>Peltier Kanal 4 aus</td> </tr> <tr> <td>gelb</td> <td>Peltier Kanal 4 Kl 3 +, Kl 4 -</td> </tr> <tr> <td>grün</td> <td>Peltier Kanal 4 Kl 3 -, Kl 4 +</td> </tr> <tr> <td rowspan="2">LED5</td> <td>aus</td> <td>Gerät ist nicht betriebsbereit</td> </tr> <tr> <td>grün</td> <td>Gerät ist betriebsbereit</td> </tr> <tr> <td rowspan="2">LED6</td> <td>aus</td> <td>keine serielle Kommunikation</td> </tr> <tr> <td>gelb, blinkend</td> <td>serielle Kommunikation aktiv</td> </tr> <tr> <td>LED7</td> <td>gelb</td> <td>IO1 aktiv</td> </tr> <tr> <td>LED8</td> <td>gelb</td> <td>IO2 aktiv</td> </tr> <tr> <td>LED9</td> <td>gelb</td> <td>IO3 aktiv</td> </tr> <tr> <td>LED10</td> <td>gelb</td> <td>IO4 aktiv</td> </tr> </tbody> </table> | LED | Zustand | Beschreibung | LED1 | aus | Peltier Kanal 1 aus | gelb | Peltier Kanal 1 Kl 3 +, Kl 4 - | grün | Peltier Kanal 1 Kl 3 -, Kl 4 + | LED2 | aus | Peltier Kanal 2 aus | gelb | Peltier Kanal 2 Kl 3 +, Kl 4 - | grün | Peltier Kanal 2 Kl 3 -, Kl 4 + | LED3 | aus | Peltier Kanal 3 aus | gelb | Peltier Kanal 3 Kl 3 +, Kl 4 - | grün | Peltier Kanal 3 Kl 3 -, Kl 4 + | LED4 | aus | Peltier Kanal 4 aus | gelb | Peltier Kanal 4 Kl 3 +, Kl 4 - | grün | Peltier Kanal 4 Kl 3 -, Kl 4 + | LED5 | aus | Gerät ist nicht betriebsbereit | grün | Gerät ist betriebsbereit | LED6 | aus | keine serielle Kommunikation | gelb, blinkend | serielle Kommunikation aktiv | LED7 | gelb | IO1 aktiv | LED8 | gelb | IO2 aktiv | LED9 | gelb | IO3 aktiv | LED10 | gelb | IO4 aktiv | <p>LED Indicator</p> <table border="1"> <thead> <tr> <th>LED</th> <th>State</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td rowspan="3">LED1</td> <td>off</td> <td>peltier channel 1 off</td> </tr> <tr> <td>yellow</td> <td>peltier channel 1 Cl. 3 +, Cl. 4 -</td> </tr> <tr> <td>green</td> <td>peltier channel 1 Cl. 3 -, Cl. 4 +</td> </tr> <tr> <td rowspan="3">LED2</td> <td>off</td> <td>peltier channel 2 off</td> </tr> <tr> <td>yellow</td> <td>peltier channel 2 Cl. 3 +, Cl. 4 -</td> </tr> <tr> <td>green</td> <td>peltier channel 2 Cl. 3 -, Cl. 4 +</td> </tr> <tr> <td rowspan="3">LED3</td> <td>off</td> <td>peltier channel 3 off</td> </tr> <tr> <td>yellow</td> <td>peltier channel 3 Cl. 3 +, Cl. 4 -</td> </tr> <tr> <td>green</td> <td>peltier channel 3 Cl. 3 -, Cl. 4 +</td> </tr> <tr> <td rowspan="3">LED4</td> <td>off</td> <td>peltier channel 4 off</td> </tr> <tr> <td>yellow</td> <td>peltier channel 4 Cl. 3 +, Cl. 4 -</td> </tr> <tr> <td>green</td> <td>peltier channel 4 Cl. 3 -, Cl. 4 +</td> </tr> <tr> <td rowspan="2">LED5</td> <td>off</td> <td>device is not ready</td> </tr> <tr> <td>green</td> <td>device is running</td> </tr> <tr> <td rowspan="2">LED6</td> <td>off</td> <td>no serial communication</td> </tr> <tr> <td>yellow, flashing</td> <td>serial communication active</td> </tr> <tr> <td>LED7</td> <td>yellow</td> <td>IO1 active</td> </tr> <tr> <td>LED8</td> <td>yellow</td> <td>IO2 active</td> </tr> <tr> <td>LED9</td> <td>yellow</td> <td>IO3 active</td> </tr> <tr> <td>LED10</td> <td>yellow</td> <td>IO4 active</td> </tr> </tbody> </table> | LED | State | Description | LED1 | off | peltier channel 1 off | yellow | peltier channel 1 Cl. 3 +, Cl. 4 - | green | peltier channel 1 Cl. 3 -, Cl. 4 + | LED2 | off | peltier channel 2 off | yellow | peltier channel 2 Cl. 3 +, Cl. 4 - | green | peltier channel 2 Cl. 3 -, Cl. 4 + | LED3 | off | peltier channel 3 off | yellow | peltier channel 3 Cl. 3 +, Cl. 4 - | green | peltier channel 3 Cl. 3 -, Cl. 4 + | LED4 | off | peltier channel 4 off | yellow | peltier channel 4 Cl. 3 +, Cl. 4 - | green | peltier channel 4 Cl. 3 -, Cl. 4 + | LED5 | off | device is not ready | green | device is running | LED6 | off | no serial communication | yellow, flashing | serial communication active | LED7 | yellow | IO1 active | LED8 | yellow | IO2 active | LED9 | yellow | IO3 active | LED10 | yellow | IO4 active |
| LED | Zustand | Beschreibung | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED1 | aus | Peltier Kanal 1 aus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | gelb | Peltier Kanal 1 Kl 3 +, Kl 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | grün | Peltier Kanal 1 Kl 3 -, Kl 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED2 | aus | Peltier Kanal 2 aus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | gelb | Peltier Kanal 2 Kl 3 +, Kl 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | grün | Peltier Kanal 2 Kl 3 -, Kl 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED3 | aus | Peltier Kanal 3 aus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | gelb | Peltier Kanal 3 Kl 3 +, Kl 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | grün | Peltier Kanal 3 Kl 3 -, Kl 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED4 | aus | Peltier Kanal 4 aus | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | gelb | Peltier Kanal 4 Kl 3 +, Kl 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | grün | Peltier Kanal 4 Kl 3 -, Kl 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED5 | aus | Gerät ist nicht betriebsbereit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | grün | Gerät ist betriebsbereit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED6 | aus | keine serielle Kommunikation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | gelb, blinkend | serielle Kommunikation aktiv | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED7 | gelb | IO1 aktiv | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED8 | gelb | IO2 aktiv | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED9 | gelb | IO3 aktiv | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED10 | gelb | IO4 aktiv | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED | State | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED1 | off | peltier channel 1 off | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | yellow | peltier channel 1 Cl. 3 +, Cl. 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | green | peltier channel 1 Cl. 3 -, Cl. 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED2 | off | peltier channel 2 off | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | yellow | peltier channel 2 Cl. 3 +, Cl. 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | green | peltier channel 2 Cl. 3 -, Cl. 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED3 | off | peltier channel 3 off | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | yellow | peltier channel 3 Cl. 3 +, Cl. 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | green | peltier channel 3 Cl. 3 -, Cl. 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED4 | off | peltier channel 4 off | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | yellow | peltier channel 4 Cl. 3 +, Cl. 4 - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | green | peltier channel 4 Cl. 3 -, Cl. 4 + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED5 | off | device is not ready | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | green | device is running | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED6 | off | no serial communication | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | yellow, flashing | serial communication active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED7 | yellow | IO1 active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED8 | yellow | IO2 active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED9 | yellow | IO3 active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED10 | yellow | IO4 active | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Kommunikationsadresse

Einstellung über DIP Schalter

| Adresse | S1 | S2 | S3 | S4 | S5 |
|---------|-----|-----|-----|-----|-----|
| 1 | off | off | off | off | on |
| 2 | off | off | off | on | off |
| 3 | | | | on | on |
| 4 | | | on | | |
| 5 | | | on | | on |
| 6 | | | on | on | |
| 7 | | | on | on | on |
| 8 | | on | | | |
| 9 | | on | | | on |
| 10 | | on | | on | |
| 11 | | on | | on | on |
| 12 | | on | on | | |
| 13 | | on | on | | on |
| 14 | | on | on | on | |
| 15 | | on | on | on | on |
| 16 | on | | | | |
| 17 | on | | | | on |
| 18 | on | | | on | |
| 19 | on | | | on | on |
| 20 | on | | on | | |
| 21 | on | | on | | on |
| 22 | on | | on | on | |
| 23 | on | | on | on | on |
| 24 | on | on | | | |
| 25 | on | on | | | on |
| 26 | on | on | | on | |
| 27 | on | on | | on | on |
| 28 | on | on | on | | |
| 29 | on | on | on | | on |
| 30 | on | on | on | on | |
| 31 | on | on | on | on | on |

Communication address

Setup via DIP switch

| Address | S1 | S2 | S3 | S4 | S5 |
|---------|-----|-----|-----|-----|-----|
| 1 | off | off | off | off | on |
| 2 | off | off | off | on | off |
| 3 | | | | on | on |
| 4 | | | on | | |
| 5 | | | on | | on |
| 6 | | | on | on | |
| 7 | | | on | on | on |
| 8 | | on | | | |
| 9 | | on | | | on |
| 10 | | on | | on | |
| 11 | | on | | on | on |
| 12 | | on | on | | |
| 13 | | on | on | | on |
| 14 | | on | on | on | |
| 15 | | on | on | on | on |
| 16 | on | | | | |
| 17 | on | | | | on |
| 18 | on | | | on | |
| 19 | on | | | on | on |
| 20 | on | | on | | |
| 21 | on | | on | | on |
| 22 | on | | on | on | |
| 23 | on | | on | on | on |
| 24 | on | on | | | |
| 25 | on | on | | | on |
| 26 | on | on | | on | |
| 27 | on | on | | on | on |
| 28 | on | on | on | | |
| 29 | on | on | on | | on |
| 30 | on | on | on | on | |
| 31 | on | on | on | on | on |