

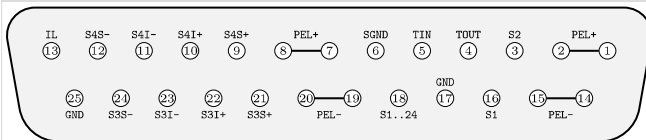
Tabletop Peltier Temperature Controller

type: ps11-pa07v48-t8543-v0-714



- TEC max : 7A, 48V
- Vin: 100~240VAC, 50/60Hz
- The controller has 4 universal Temp. Sensor Inputs, 2 of these inputs can be used with 4 wire option for PT100 f.e., additional it has 1- Thermocouple K-Type Input
- These Sensors can freely be related to the TEC stages
- The Analog Input maps the applied voltage in a range of 0..10V to a temperature range LTL..LTLU and sets the target temperature value TT of the control loop (LTEL is the laser temp. lower and LTEU is the upper range limit)
- The Analog Output maps the range LTEL..LTEU to 0..10V and gives the TA actual temperature back also mapped between the LTEL and LTLU edges
- With the LTXAR command the Analog Temperature Mapping can be activated and it's deactivated by LTXAS
- External Fan Support can. be configured freely between 1..24V max. 800mA

Peltier Connector



SubD25 female

| PIN.No | Abbr. | Function |
|-------------|--------|---|
| 1,2,7,8 | PEL+ | Peltier element (+) |
| 3 | S2 | 2. Temp. Sensor Input (vs. GND) |
| 4 | TOUT | Analog Temperature Output 0..10V (Actual Temperature) can also be used as Temp. OK Signal |
| 5 | TIN | Analog Temperature Input 0..10V (Temperature Target) |
| 6 | SGND | Supply Ground |
| 9 | S4S+ | 4. Temp. Sensor Supply (+) (for 4-wire option, if not used connect to pin 10) |
| 10 | S4I+ | 4. Temp. Sensor Input (+) |
| 11 | S4I- | 4. Temp. Sensor Input (-) |
| 12 | S4S- | 4. Temp. Sensor Supply (-) (for 4-wire option, if not used connect to pin 11) |
| 13 | IL | Interlock Input has to be bypassed to GND |
| 14,15,19,20 | PEL- | Peltier element (-) |
| 16 | S1 | 1. Temp. Sensor Input (vs. GND) |
| 17,25 | GND | Common Ground |
| 18 | S1..24 | Universal Supply 1..24V, max. 800mA (vs. SGND) supports fan etc. |
| 21 | S3S+ | 3. Temp. Sensor Supply (+) (for 4-wire option, if not used connect to pin 22) |
| 22 | S3I+ | 3. Temp. Sensor Input (+) |
| 23 | S3I- | 3. Temp. Sensor Input (-) |
| 24 | S3S- | 3. Temp. Sensor Supply (-) (for 4-wire option, if not used connect to pin 23) |

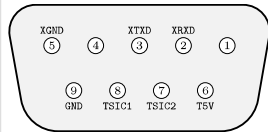
Thermocouple connector Type-K



NKU 1200 O from Greisinger (+NiCr -NiAl)

Tabletop Peltier Temperature Controller

RS232 Connector

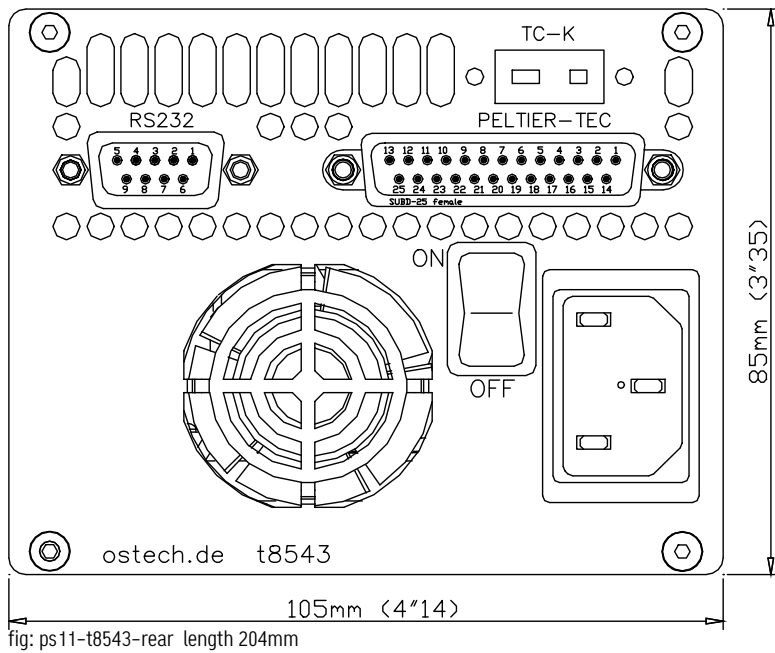


SubD-9 female

Standard RS232-connector, No Null-Modem Cable ! 9600-Baud-8N1

¹⁾ Optional in Version "v99" pin 6,7,8,9 only. For 2 additional TSiC-sensors!

| PIN.No | Abbr. |
|--------|-----------------------------------|
| 2 | RXD |
| 3 | TXD |
| 5 | GND |
| 6 | T5V Supply for TSiC ¹⁾ |
| 7 | TSiC2 ¹⁾ |
| 8 | TSiC1 ¹⁾ |
| 9 | GND ¹⁾ |



Revision overview:

2017.02.20: "v0" - revision

2018.02.26: "v99" - optional customized revision available with support of 2 TSiC sensors

References:

<http://www.ostech.de/en/products/tec-controllers/ps11-t85>

<http://www.ostech.de/en/downloads/manuals/ds-en.pdf>

<http://www.ostech.de/en/downloads/labview>

Accessories

- kab-24pol-0,34qmm-subd25m-oe-1.5m-674
cable 24polx0.34qmm, max-4A/pin, SUBD-25 to open ends, length-1m5
- acc-converter-usb-to-rs232-1m5-iso-417
RS232 to USB converter optical isolated with FTDI-Chip cable 1.5m