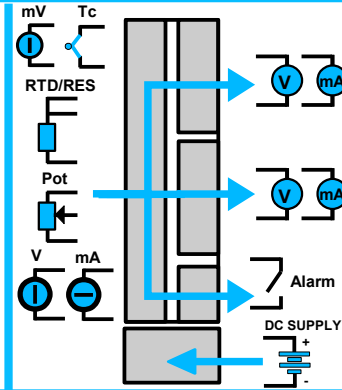


DAT 4530



FEATURES

- Universal configurable input for: mV, Tc, RTD, Res, Potentiometer, V and mA
- Two outputs configurable in current or voltage
- Trip alarm
- Configurable by dip-switch or PC
- High accuracy
- On-field reconfigurable
- Galvanic isolation among all the ways
- EMC compliant – CE mark
- Suitable for DIN rail mounting in compliance with EN-50022 and EN-50035



GENERAL DESCRIPTION

The universal isolated converter DAT 4530 is able to measure and linearise voltage, current and resistance signals, potentiometers and the standard thermocouples and RTDs with, if required, the cold junction compensation, the wires compensation. For mV, V and mA input it is possible to set an option for the fast sampling (option HS) or to extract the square root of the measured signal (option SQRT). In function of programming, the measured values are converted in a current or voltage signal on the two outputs. Moreover an output contact is available as trip alarm.

The device guarantees high accuracy and performances stability both versus time and temperature.

The programming is made by the dip-switch located in the window on the side of the enclosure. By means of dip-switches it is possible to select the input type and range and the output type without recalibrate the device.

Moreover, by Personal Computer the user can program all of the device's parameters for his own necessity; the programming by PC allows to set the two outputs with independent settings and the parameters of the Trip Alarm.

The 1500 Vac galvanic isolation on all ways (input, outputs and power supply) eliminates the effects of all ground loops eventually existing and allows the use of the converter in heavy environmental conditions found in industrial applications.

The DAT 4530 is in compliance with the Directive 2004/108/EC on the Electromagnetic Compatibility.

It is housed in a plastic enclosure of 12.5 mm thickness suitable for DIN rail mounting in compliance with EN-50022 and EN-50035 standards.

USER INSTRUCTIONS

The converter must be powered by a direct voltage applied to the terminals U and V.

The analogue channel measures the value from the sensor connected to the terminals C-D-E-F-G-H-I-L and transmits the output measures on the terminals M-N-O-P (OUT A) and the terminals Q-R-S-T (OUT B). A contact for the trip alarm is available on the terminals A-B.

The input and output connections must be made as shown in the section "Connections".

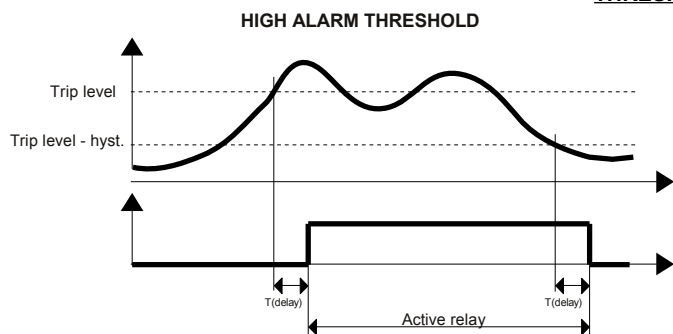
It is possible to configure the converter on field by dip-switch or Personal Computer as shown in the section " Programming ". The configuration by dip-switches can be made also if the device is powered (note: after the configuration the device takes some seconds to provide the right output measure).

TECHNICAL SPECIFICATIONS (Typical @ 25 °C and in nominal conditions)

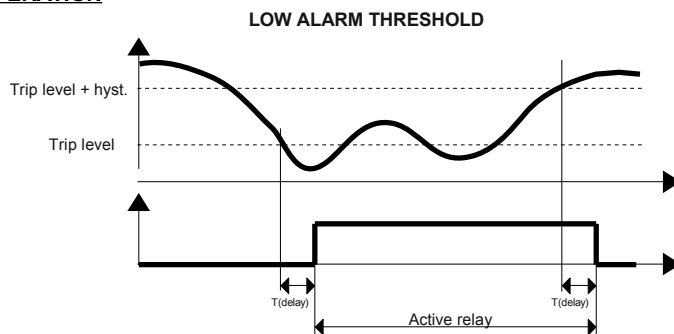
| INPUT | | | | Linearity (1) | | | | ALARM TRIP | | | |
|--------------------------------|---------|---------|----------|---------------------------------------|------------------------------|--|--|---------------------------------|------|--|--|
| Input type | Min | Max | Span min | TC, RTD | ± 0.1 % f.s. | | | Contact | SPST | | |
| TC (CJC int./ext.) | | | | mV, V, mA | | | | ± 0.05 % f.s. | | | |
| J | -200°C | 1200°C | 100°C | Input impedance | | | | Max Load (resistive) : | | | |
| K | -200°C | 1300°C | 100°C | TC, mV | ≥ 10 MΩ | | | Voltage | | | |
| S | 0°C | 1750°C | 400°C | mA | ~22 Ω | | | Current | | | |
| R | 0°C | 1750°C | 400°C | RTD excitation current | | | | 48 V (ac/dc) | | | |
| B | 0°C | 1850°C | 400°C | RTD, Res | 400 uA | | | 0.4 A | | | |
| E | -200°C | 1000°C | 100°C | Aux. Voltage | | | | | | | |
| T | -200°C | 400°C | 100°C | >18V @ 20mA | | | | | | | |
| N | -200°C | 1300°C | 100°C | Line resistance influence (1) | | | | | | | |
| Voltage | | | | TC, mV | ≤ 0.8 uV/Ohm | | | POWER SUPPLY | | | |
| mV | -100 mV | +90 mV | 5 mV | RTD 3 wires | 0.05%/Ω (50Ω max balanced) | | | Power supply voltage | | | |
| mV | -100 mV | +200 mV | 10 mV | RTD 4 wires | 0.005%/Ω (100Ω max balanced) | | | Reverse polarity protection | | | |
| mV | -100 mV | +800 mV | 20 mV | Thermal drift (1) | | | | 60 Vdc max | | | |
| RTD (2, 3, 4 wires) | | | | Full scale | ± 0.01% / °C | | | Current consumption | | | |
| Pt100 | -200°C | 850°C | 50°C | CJC | ± 0.01% / °C | | | Current output | | | |
| Pt1000 | -85°C | 185°C | 30°C | CJC Comp. | | | | Voltage output | | | |
| Ni100 | -60°C | 180°C | 50°C | ± 0.5°C | | | | 90 mA max. | | | |
| Ni1000 | -60°C | 150°C | 30°C | OUTPUT (2 CHANNELS) | | | | 30 mA max. | | | |
| RES. (2, 3, 4 wires) | | | | Output type | | | | ISOLATION | | | |
| 0 Ω | | | | Current | | | | Among all the ways | | | |
| 0 Ω | | | | Voltage | | | | 1500 Vac, | | | |
| 500 Ω | | | | 0 mA | | | | 50 Hz, 1 min | | | |
| 2000 Ω | | | | 0 V | | | | | | | |
| 50 Ω | | | | 20 mA | | | | | | | |
| 50 Ω | | | | 10 V | | | | | | | |
| 1 V | | | | 4 mA | | | | | | | |
| 10 V | | | | 0 V | | | | | | | |
| 1 V | | | | 1 V | | | | | | | |
| Pot. (Rnom. < 50KΩ) | | | | Output calibration | | | | TEMPERATURE AND HUMIDITY | | | |
| 0 % | | | | Current | | | | Operative temperature | | | |
| 100 % | | | | Voltage | | | | -20°C .. +60°C | | | |
| 10 % | | | | Aux. Voltage | | | | Storage temperature | | | |
| 10 V | | | | >12V @ 20mA | | | | -40°C.. +85°C | | | |
| 1 V | | | | Burn-out values | | | | Humidity (not condensed) | | | |
| 1 mA | | | | Max. output value | | | | 0 .. 90 % | | | |
| | | | | Min. output value | | | | | | | |
| | | | | 0 mA or -0.6 V | | | | | | | |
| Calibration (1) | | | | Output load Resistance - Rload | | | | HOUSING | | | |
| mV, TC | | | | Current output | | | | Material | | | |
| the higher of ±0.1% and ±12 uV | | | | Voltage output | | | | Self-extinguishing plastic | | | |
| RTD | | | | Short circuit current | | | | Mounting | | | |
| the higher of ±0.1% and ±0.2°C | | | | 30 mA max. | | | | DIN rail in compliance | | | |
| Res. | | | | Response time (10± 90%) | | | | with EN-50022 and EN-50035 | | | |
| the higher of ±0.1% and ±0.15 | | | | about 400 ms | | | | Weight | | | |
| ± 0.05 % f.s. | | | | 100 ms (option HS) | | | | about 90 g. | | | |
| Potentiometer | | | | | | | | | | | |
| ± 0.05 % f.s. | | | | | | | | | | | |
| Voltage | | | | | | | | | | | |
| the higher of ±0.1% and ± 2 mV | | | | | | | | | | | |
| mA | | | | | | | | | | | |
| the higher of ±0.1% and ± 6 uA | | | | | | | | | | | |
| mV, V, mA | | | | | | | | | | | |
| ± 0.5 % f.s. (opt. HS) | | | | | | | | | | | |

(1) referred to the input Span (difference between max. and min.)

THRESHOLD OPERATION



For the high alarm the relay goes on when the input signal is higher than the trip level and after the delay time. The relay goes off only when the input signal is lower than the trip level minus the hysteresis value or when reaches the minimum value of the input scale and after the delay time.



For the low alarm the relay goes on when the input signal is lower than the trip level and after the delay time. The relay goes off only when the input signal is higher than the trip level plus the hysteresis value or when reaches the maximum value of the input scale and after the delay time.

PROGRAMMING

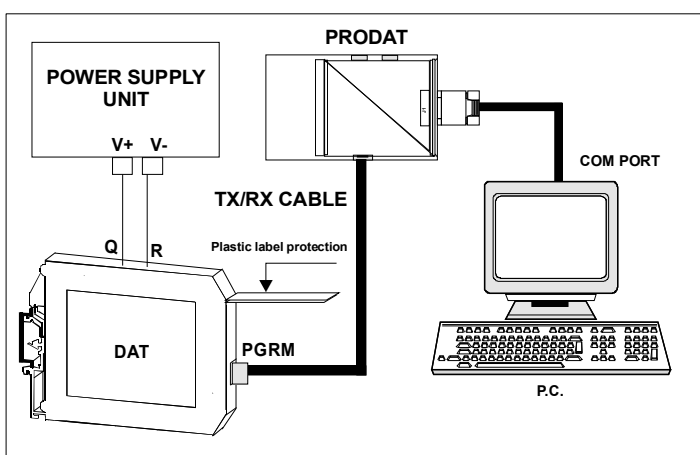
CONFIGURATION BY PC

By software DATESOFT it is possible to:

- set the default programming of the device;
- program the options not available with the dip-switch;
(burn-out level, CJC offset, trip alarm settings, fast sampling, etc...);
- read, in real time, the input and output measures;
- follow the dip-switches configuration wizard.

To configure the device follow the next steps:

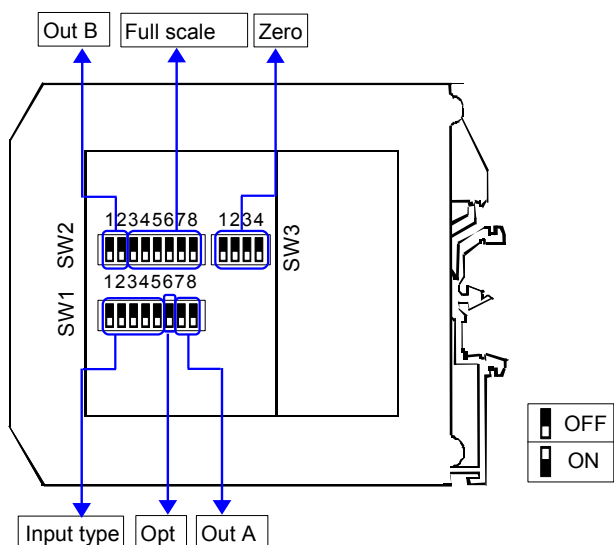
- 1) Power-on the device.
- 2) Open the protection plastic label on the front of the device.
- 3) Connect the interface PRODAT to the PC (COM port) and to the device (PGRM connector).
- 4) Open DATESOFT.
- 5) Select the COM port in use.
- 6) Click on "Open COM".
- 7) Click on the icon "Program".
- 8) Set the programming data.
- 9) Click on the icon "Write" to send the programming data to the device.



Warning: during these operations the device must always be powered and the TX/RX cable always connected.
For information about DATESOFT refer to the software's user guide.

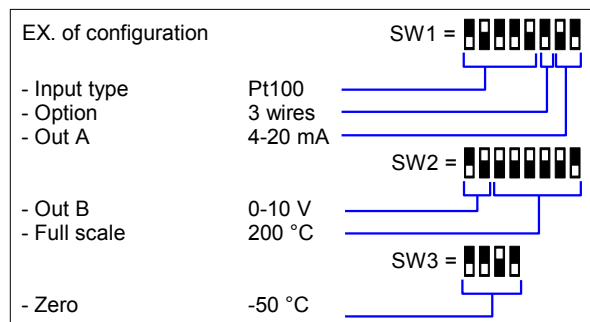
CONFIGURATION BY DIP-SWITCHES

- 1) Open the suitable door on the side of the device.
- 2) Set the input type by the dip-switch SW1 [1..5] (see TAB.1)
- 3) Set the output A type by the dip-switch SW1 [7..8] and SW2 [1..2] (see TAB.2)
- 4) Set, if available, the input option by the dip-switch SW1 [6] (see TAB.3)
- 5) Set the minimum input scale value (Zero) by the dip-switch SW3 [1..4] (see TAB.4)*
- 6) Set the maximum input value (Full scale) by the dip-switch SW2 [3..8] (see TAB.4)*



NOTE:

- It is also possible to set the dip-switches using the wizard of the configuration software following the procedure described in the section "Configuration by PC" until the step 6 and clicking on icon "Switch".



DIP-SWITCH CONFIGURATION TABLES

TAB.1 – Input type settings

| | | | | | |
|--|---|---|--|---|--|
| SW1 1 2 3 4 5 [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] | EPROM * 90 mV 200 mV 800 mV 10 V 20 mA | SW1 1 2 3 4 5 [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] | Tc J Tc K Tc R Tc S Tc T Tc B Tc E Tc N | SW1 1 2 3 4 5 [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] [][][][][] | Res. 2KΩ Res. 500Ω Pt100 Ni100 Pt 1K Ni 1K Pot. <500Ω Pot. <2KΩ |
|--|---|---|--|---|--|

NOTES:

* To set the input range refer to the TAB.4 (next pages) referred to the input type selected by the TAB.1.

* If the dip-switches SW1 [1..5] are all set in the position 0 ("EPROM"), the device will follow the configuration programmed by PC (input type and range, output type and range, trip alarm 's settings and options).

* If the dip-switches SW2 [3..8] and SW3 [1..4] are all set in the position 0 ("Default"), the device will follow the input scale programmed by PC for the input type selected by the dip-switches SW1 [1..5]

* Eventual wrong dip-switches settings will be signalled by the blinking of the led "PWR".

* If the dip-switch SW1 [6] is set in the ON position and is in progress a measure by Resistance or RTD 2 wires sensor, it is necessary to connect the terminal I to the terminal L and the terminal G to the terminal H.

TAB.2
Out A

| | |
|----------------------|---------|
| SW1 7 8 [][] | 0-20 mA |
| [][] | 4-20 mA |
| [][] | 0-10 V |
| [][] | 0-5 V |

Out B

| | |
|----------------------|---------|
| SW2 1 2 [][] | 0-20 mA |
| [][] | 4-20 mA |
| [][] | 0-10 V |
| [][] | 0-5 V |

TAB.3
Options

| | | |
|--------------------|-----------------------------|---------------------------------|
| SW1 6 [][] | CJC External Internal | RTD/RES 3 wires 2/4 wires |
|--------------------|-----------------------------|---------------------------------|

TAB.4a – mV, Tc input scale settings

| Zero | | Full scale | | | | | |
|----------------|---------|-----------------------|---------|-----------------------|-------|-----------------------|-------|
| SW3 1 2 3 4 | mV-°C | SW2 3 4 5 6 7 8 | mV-°C | SW2 3 4 5 6 7 8 | mV-°C | SW2 3 4 5 6 7 8 | mV-°C |
| [][][][] | Default | [][][][][][][] | Default | [][][][][][][] | 75 | [][][][][][][] | 225 |
| [][][][] | -200 | [][][][][][][] | 0 | [][][][][][][] | 80 | [][][][][][][] | 250 |
| [][][][] | -100 | [][][][][][][] | 5 | [][][][][][][] | 85 | [][][][][][][] | 255 |
| [][][][] | -80 | [][][][][][][] | 10 | [][][][][][][] | 90 | [][][][][][][] | 275 |
| [][][][] | -60 | [][][][][][][] | 15 | [][][][][][][] | 95 | [][][][][][][] | 300 |
| [][][][] | -50 | [][][][][][][] | 20 | [][][][][][][] | 100 | [][][][][][][] | 325 |
| [][][][] | -40 | [][][][][][][] | 25 | [][][][][][][] | 110 | [][][][][][][] | 350 |
| [][][][] | -30 | [][][][][][][] | 30 | [][][][][][][] | 120 | [][][][][][][] | 375 |
| [][][][] | -20 | [][][][][][][] | 35 | [][][][][][][] | 130 | [][][][][][][] | 400 |
| [][][][] | -10 | [][][][][][][] | 40 | [][][][][][][] | 140 | [][][][][][][] | 425 |
| [][][][] | 0 | [][][][][][][] | 45 | [][][][][][][] | 150 | [][][][][][][] | 450 |
| [][][][] | 10 | [][][][][][][] | 50 | [][][][][][][] | 160 | [][][][][][][] | 475 |
| [][][][] | 20 | [][][][][][][] | 55 | [][][][][][][] | 170 | [][][][][][][] | 500 |
| [][][][] | 50 | [][][][][][][] | 60 | [][][][][][][] | 180 | [][][][][][][] | 550 |
| [][][][] | 100 | [][][][][][][] | 65 | [][][][][][][] | 190 | [][][][][][][] | 600 |
| [][][][] | 150 | [][][][][][][] | 70 | [][][][][][][] | 200 | [][][][][][][] | 650 |

TAB.4b – Pt100, Pt1K, Ni100, Ni1K input scale settings

| Zero | | Full scale | | | | | |
|----------------|---------|-----------------------|---------|-----------------------|-----|-----------------------|-----|
| SW3 1 2 3 4 | °C | SW2 3 4 5 6 7 8 | °C | SW2 3 4 5 6 7 8 | °C | SW2 3 4 5 6 7 8 | °C |
| [][][][] | Default | [][][][][][][] | Default | [][][][][][][] | 75 | [][][][][][][] | 210 |
| [][][][] | -200 | [][][][][][][] | 0 | [][][][][][][] | 80 | [][][][][][][] | 220 |
| [][][][] | -150 | [][][][][][][] | 5 | [][][][][][][] | 85 | [][][][][][][] | 230 |
| [][][][] | -100 | [][][][][][][] | 10 | [][][][][][][] | 90 | [][][][][][][] | 240 |
| [][][][] | -50 | [][][][][][][] | 15 | [][][][][][][] | 95 | [][][][][][][] | 250 |
| [][][][] | -40 | [][][][][][][] | 20 | [][][][][][][] | 100 | [][][][][][][] | 260 |
| [][][][] | -30 | [][][][][][][] | 25 | [][][][][][][] | 110 | [][][][][][][] | 270 |
| [][][][] | -20 | [][][][][][][] | 30 | [][][][][][][] | 120 | [][][][][][][] | 280 |
| [][][][] | -10 | [][][][][][][] | 35 | [][][][][][][] | 130 | [][][][][][][] | 290 |
| [][][][] | 0 | [][][][][][][] | 40 | [][][][][][][] | 140 | [][][][][][][] | 300 |
| [][][][] | 5 | [][][][][][][] | 45 | [][][][][][][] | 150 | [][][][][][][] | 310 |
| [][][][] | 10 | [][][][][][][] | 50 | [][][][][][][] | 160 | [][][][][][][] | 320 |
| [][][][] | 20 | [][][][][][][] | 55 | [][][][][][][] | 170 | [][][][][][][] | 330 |
| [][][][] | 30 | [][][][][][][] | 60 | [][][][][][][] | 180 | [][][][][][][] | 340 |
| [][][][] | 50 | [][][][][][][] | 65 | [][][][][][][] | 190 | [][][][][][][] | 350 |
| [][][][] | 100 | [][][][][][][] | 70 | [][][][][][][] | 200 | [][][][][][][] | 360 |

TAB.4c – Resistance < 2 Kohm input scale settings.

| Zero | | | | Full Scale | | | | | | | | | | | | | | | | | |
|---------|---|---|---|------------|---|---|---|------|---|---|---|------|---|---|---|------|---|---|---|---|---|
| SW3 | | | | SW2 | | | | SW2 | | | | SW2 | | | | | | | | | |
| 1 | 2 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 |
| Default | | | | Default | | | | 800 | | | | 1150 | | | | 1600 | | | | | |
| 0 | | | | 500 | | | | 820 | | | | 1175 | | | | 1650 | | | | | |
| 150 | | | | 520 | | | | 840 | | | | 1200 | | | | 1700 | | | | | |
| 200 | | | | 540 | | | | 860 | | | | 1225 | | | | 1750 | | | | | |
| 250 | | | | 560 | | | | 880 | | | | 1250 | | | | 1800 | | | | | |
| 300 | | | | 580 | | | | 900 | | | | 1275 | | | | 1850 | | | | | |
| 350 | | | | 600 | | | | 920 | | | | 1300 | | | | 1900 | | | | | |
| 400 | | | | 620 | | | | 940 | | | | 1325 | | | | 1950 | | | | | |
| 450 | | | | 640 | | | | 960 | | | | 1350 | | | | 2000 | | | | | |
| 500 | | | | 660 | | | | 980 | | | | 1375 | | | | 2000 | | | | | |
| 550 | | | | 680 | | | | 1000 | | | | 1400 | | | | 2000 | | | | | |
| 600 | | | | 700 | | | | 1025 | | | | 1425 | | | | 2000 | | | | | |
| 650 | | | | 720 | | | | 1050 | | | | 1450 | | | | 2000 | | | | | |
| 700 | | | | 740 | | | | 1075 | | | | 1475 | | | | 2000 | | | | | |
| 750 | | | | 760 | | | | 1100 | | | | 1500 | | | | 2000 | | | | | |
| 800 | | | | 780 | | | | 1125 | | | | 1550 | | | | 2000 | | | | | |

TAB.4d – Resistance < 500 ohm input scale settings

| Zero | | | | Full Scale | | | | | | | | | | | | | | | | | |
|---------|---|---|---|------------|---|---|---|-----|---|---|---|-----|---|---|---|-----|---|---|---|---|---|
| SW3 | | | | SW2 | | | | SW2 | | | | SW2 | | | | | | | | | |
| 1 | 2 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 |
| Default | | | | Default | | | | 125 | | | | 210 | | | | 370 | | | | | |
| 0 | | | | 50 | | | | 130 | | | | 220 | | | | 380 | | | | | |
| 10 | | | | 55 | | | | 135 | | | | 230 | | | | 390 | | | | | |
| 20 | | | | 60 | | | | 140 | | | | 240 | | | | 400 | | | | | |
| 30 | | | | 65 | | | | 145 | | | | 250 | | | | 410 | | | | | |
| 40 | | | | 70 | | | | 150 | | | | 260 | | | | 420 | | | | | |
| 50 | | | | 75 | | | | 155 | | | | 270 | | | | 430 | | | | | |
| 75 | | | | 80 | | | | 160 | | | | 280 | | | | 440 | | | | | |
| 100 | | | | 85 | | | | 165 | | | | 290 | | | | 450 | | | | | |
| 125 | | | | 90 | | | | 170 | | | | 300 | | | | 460 | | | | | |
| 150 | | | | 95 | | | | 175 | | | | 310 | | | | 470 | | | | | |
| 175 | | | | 100 | | | | 180 | | | | 320 | | | | 480 | | | | | |
| 200 | | | | 105 | | | | 185 | | | | 330 | | | | 490 | | | | | |
| 225 | | | | 110 | | | | 190 | | | | 340 | | | | 500 | | | | | |
| 250 | | | | 115 | | | | 195 | | | | 350 | | | | 500 | | | | | |
| 300 | | | | 120 | | | | 200 | | | | 360 | | | | 500 | | | | | |

TAB.4e – Potentiometer input scale settings

| Zero | | | | Full Scale | | | | | | | | | | | | | | | | | |
|---------|---|---|---|------------|---|---|---|-----|---|---|---|-----|---|---|---|-----|---|---|---|---|---|
| SW3 | | | | SW2 | | | | SW2 | | | | SW2 | | | | | | | | | |
| 1 | 2 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 4 | 5 | 6 | 7 | 8 |
| Default | | | | Default | | | | 34 | | | | 66 | | | | 98 | | | | | |
| 0 | | | | 5 | | | | 36 | | | | 68 | | | | 100 | | | | | |
| 15 | | | | 6 | | | | 38 | | | | 70 | | | | 100 | | | | | |
| 20 | | | | 8 | | | | 40 | | | | 72 | | | | 100 | | | | | |
| 25 | | | | 10 | | | | 42 | | | | 74 | | | | 100 | | | | | |
| 30 | | | | 12 | | | | 44 | | | | 76 | | | | 100 | | | | | |
| 35 | | | | 14 | | | | 46 | | | | 78 | | | | 100 | | | | | |
| 40 | | | | 16 | | | | 48 | | | | 80 | | | | 100 | | | | | |
| 45 | | | | 18 | | | | 50 | | | | 82 | | | | 100 | | | | | |
| 50 | | | | 20 | | | | 52 | | | | 84 | | | | 100 | | | | | |
| 55 | | | | 22 | | | | 54 | | | | 86 | | | | 100 | | | | | |
| 60 | | | | 24 | | | | 56 | | | | 88 | | | | 100 | | | | | |
| 65 | | | | 26 | | | | 58 | | | | 90 | | | | 100 | | | | | |
| 70 | | | | 28 | | | | 60 | | | | 92 | | | | 100 | | | | | |
| 75 | | | | 30 | | | | 62 | | | | 94 | | | | 100 | | | | | |
| 80 | | | | 32 | | | | 64 | | | | 96 | | | | 100 | | | | | |

TAB.4f – Current input scale settings

| Zero | | Full Scale | | | | | |
|----------------|---------|--------------------|---------|--------------------|-------|--------------------|-------|
| SW3 1 2 3 4 | mA | SW2 3 4 5 6 7 8 | mA | SW2 3 4 5 6 7 8 | mA | SW2 3 4 5 6 7 8 | mA |
| | Default | | Default | | 8 | | 11.5 |
| | 0 | | 5 | | 8.2 | | 11.75 |
| | 1.5 | | 5.2 | | 8.4 | | 12 |
| | 2 | | 5.4 | | 8.6 | | 12.25 |
| | 2.5 | | 5.6 | | 8.8 | | 12.5 |
| | 3 | | 5.8 | | 9 | | 12.75 |
| | 3.5 | | 6 | | 9.2 | | 13 |
| | 4 | | 6.2 | | 9.4 | | 13.25 |
| | 4.5 | | 6.4 | | 9.6 | | 13.5 |
| | 5 | | 6.6 | | 9.8 | | 13.75 |
| | 5.5 | | 6.8 | | 10 | | 14 |
| | 6 | | 7 | | 10.25 | | 14.25 |
| | 6.5 | | 7.2 | | 10.5 | | 14.5 |
| | 7 | | 7.4 | | 10.75 | | 14.75 |
| | 7.5 | | 7.6 | | 11 | | 15 |
| | 8 | | 7.8 | | 11.25 | | 15.5 |

TAB.4g – Voltage input scale settings

| Zero | | Full Scale | | | | | |
|----------------|---------|--------------------|---------|--------------------|------|--------------------|------|
| SW3 1 2 3 4 | Volt | SW2 3 4 5 6 7 8 | Volt | SW2 3 4 5 6 7 8 | Volt | SW2 3 4 5 6 7 8 | Volt |
| | Default | | Default | | 3.4 | | 6.6 |
| | 0 | | 0.5 | | 3.6 | | 6.8 |
| | 1.5 | | 0.6 | | 3.8 | | 7 |
| | 2 | | 0.8 | | 4 | | 7.2 |
| | 2.5 | | 1 | | 4.2 | | 7.4 |
| | 3 | | 1.2 | | 4.4 | | 7.6 |
| | 3.5 | | 1.4 | | 4.6 | | 7.8 |
| | 4 | | 1.6 | | 4.8 | | 8 |
| | 4.5 | | 1.8 | | 5 | | 8.2 |
| | 5 | | 2 | | 5.2 | | 8.4 |
| | 5.5 | | 2.2 | | 5.4 | | 8.6 |
| | 6 | | 2.4 | | 5.6 | | 8.8 |
| | 6.5 | | 2.6 | | 5.8 | | 9 |
| | 7 | | 2.8 | | 6 | | 9.2 |
| | 7.5 | | 3 | | 6.2 | | 9.4 |
| | 8 | | 3.2 | | 6.4 | | 9.6 |

INSTALLATION INSTRUCTIONS

The device is suitable for fitting to DIN rails in the vertical position. For optimum operation and long life follow these instructions:

When the devices are installed side by side it may be necessary to separate them by at least 5 mm in the following cases:

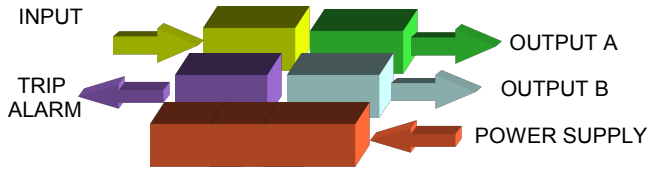
- If panel temperature exceeds 45°C.
- Use of high power supply value (> 27 Vdc).
- Use of one or both current outputs.
- Use of active current input.

Make sure that sufficient air flow is provided for the device avoiding to place raceways or other objects which could obstruct the ventilation slits. Moreover it is suggested to avoid that devices are mounted above appliances generating heat; their ideal place should be in the lower part of the panel.

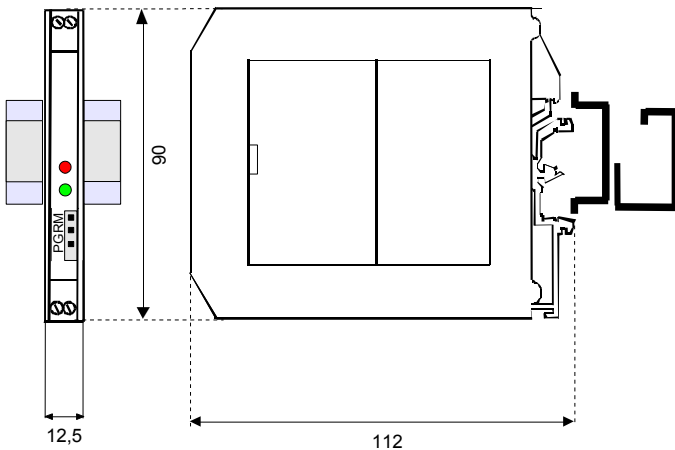
Install the device in a place without vibrations.

Moreover it is suggested to avoid routing conductors near power signal cables (motors, induction ovens, inverters etc...) and to use shielded cable for connecting signals.

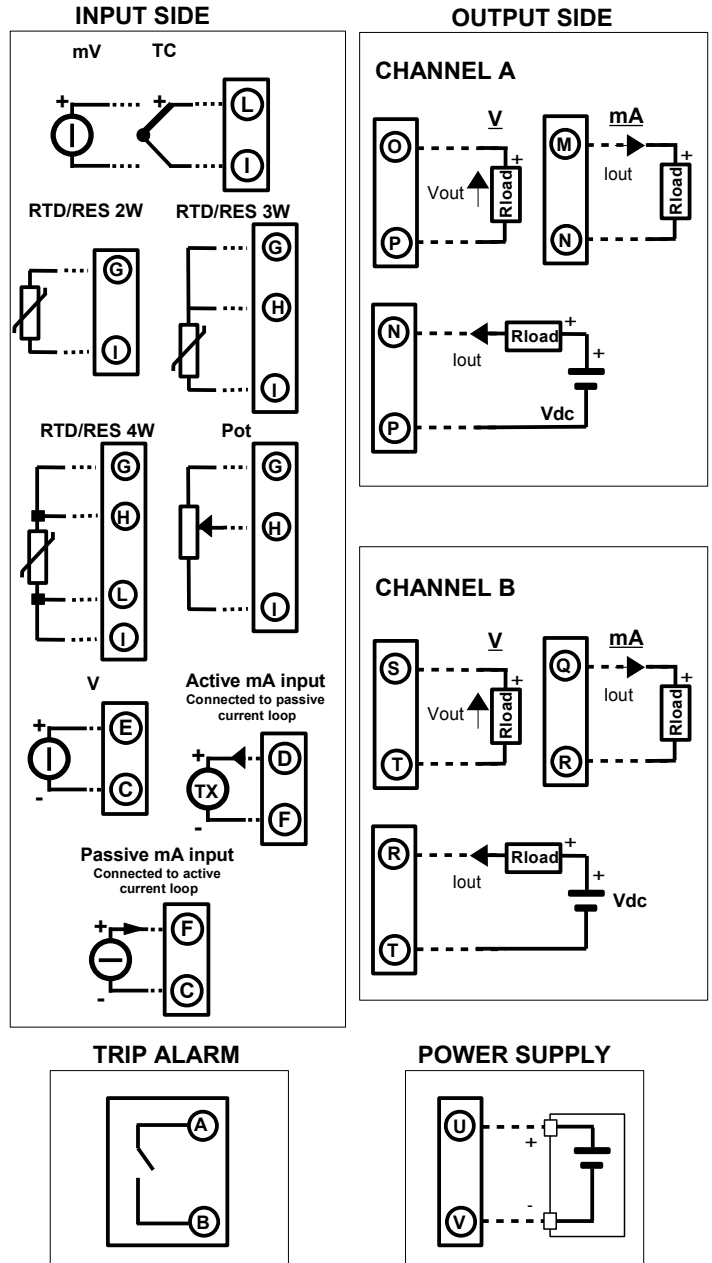
ISOLATION STRUCTURE



DIMENSIONS (mm)



CONNECTIONS



LIGHT SIGNALLING

| LED | COLOUR | STATE | DESCRIPTION |
|-------|--------|----------|-----------------------------|
| PWR | GREEN | ON | Device powered |
| | | OFF | Device not powered |
| | | BLINKING | Wrong dip-switches settings |
| ALARM | RED | ON | Trip alarm active |
| | | OFF | Trip alarm not active |

HOW TO ORDER

The device is provided as requested on the Customer's order. Refer to the section "Programming" to determine the input and output ranges. In case of the configuration is not specified, the parameters must be set by the user.

ORDER CODE EXAMPLE:

DAT 4530 / Pt100 / 0 ÷ 200 °C / 4 ÷ 20 mA / 4 ÷ 20 mA / 3wires

