



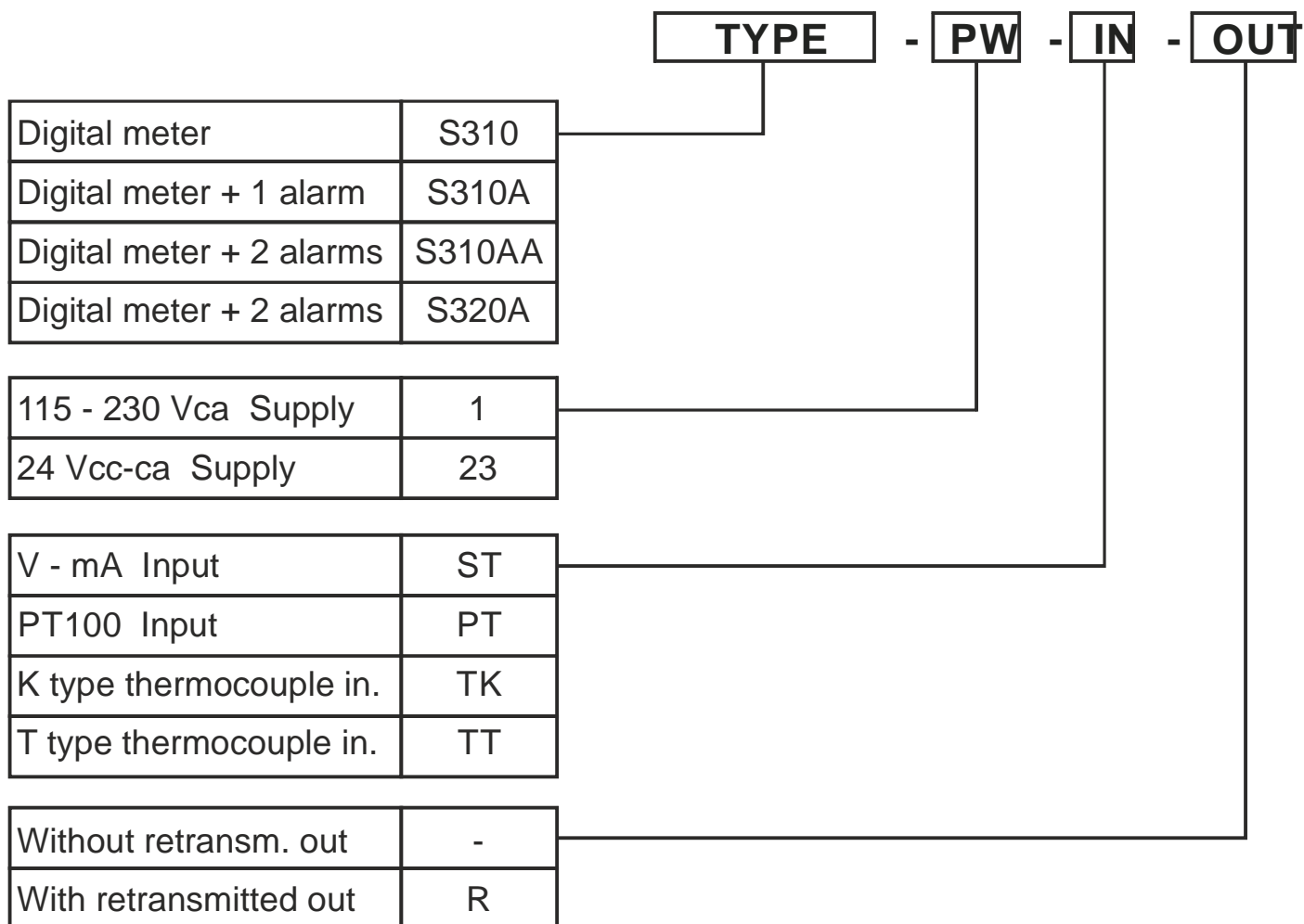
3 and 1/2 DECIMAL DIGIT DISPLAY METERS

• S310	Display Meter	Box 48 x 96
• S310A	1 Alarm Display Meter	Box 48 x 96
• S310AA	2 Alarms Display Meter	Box 48 x 96
• S320A	2 Alarms Display Meter	Box 96 x 96

FEATURES

- 3 and 1/2 decimal digit display (2000 spots), red LEDs high brightness, programmable decimal point in every positions. Double ramp conversion with autozero, 3 readings per second.
- Input :
Voltage : 0-2 Vdc , 0,4-2 Vdc , 0-5 Vdc , 1-5 Vdc , input impedance >100Kohm.
Current : 0-20 mA and 4-20 mA active (power loop 24 Vdc) or passive connection , input impedance 100ohm.
- Zero creep better than 1 ppm/°C, SPAN creep better than 50 ppm/°C.
- Optional boards for PT100 thermo resistors' input (0,2 % of the range precision) or for thermocouple K or T type (0,5 % of the range precision)
- Optional board for ritransmitted output galvanically isolated , 0-20 mA and 4-20 mA active and passive connection (power loop 24 Vdc).
- 1 alarm set-point with output wiht relay on S310A type.
2 alarms set-point with output wiht relay on S310AA and S320A type.
- Manual alarms regulation in the all range by a trimmer and there is also a button to display the value.
- It is also possible to set two threshold alarm levels for maximum and minimum operating value.
- Fixed hysteresis $\pm 0,5$ %. 1 SPDT switch, 5A 250 Vac (resistive load).
- 2 possible different power supply (**verify label before use**).
115/230 Vac ± 10 % 50/60 Hz 3,5 VA
24 Vdc-ac ± 10 % isolated dc/dc converter 3,5 VA
- Working temperature from -10 to +50 °C, humidity max 90 % at 40 °C (non condensing).
- ENCLOSURE in "V0" self-extinguishing NORYL, shock-proof cabinet, suitable for front-panel installation .
- Size : S310-S310A-S310AA (hlp) 96 x 96 x 148 mm (DIN 43700)
S320A (hlp) 96 x 96 x 148 mm (DIN 43700).
- Drill gauge : S310-S310A-S310AA (hl) 92 x 45 mm, S320A (hl) 90 x 91 mm.

ORDERING CODE



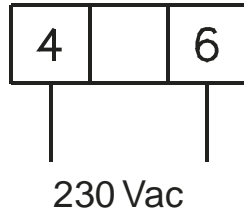
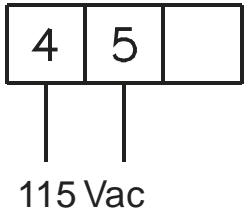
Complying equipments with prescriptions on electromagnetic compability (standard 89/336/CEE).

Industrial environment, reference standard : EN 50081-2 EMISSION /EN 50082-2 IMMUNITY.

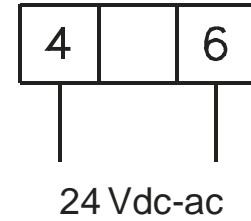
ELECTRICAL CONNECTIONS

POWER SUPPLY

115 - 230 Vac
POWER SUPPLY



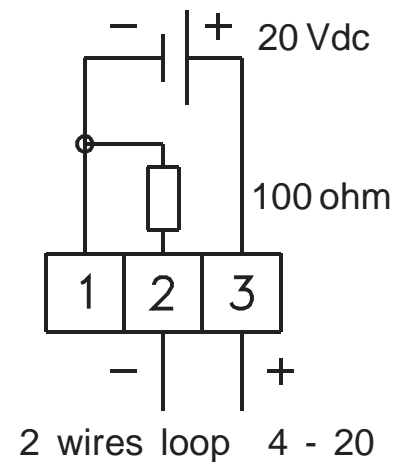
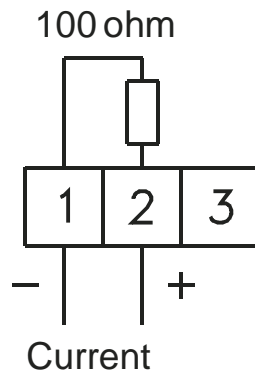
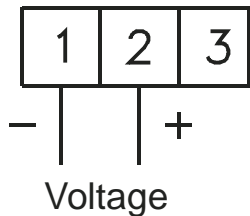
24 Vdc-ac
POWER SUPPLY



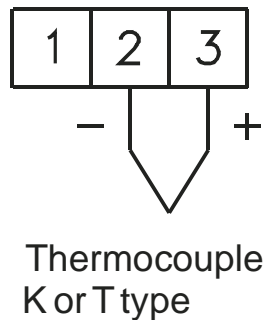
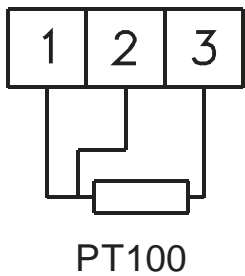
VERIFY VOLTAGE INDICATE ON EQUIPMENT'S LABEL BEFORE SUPPLY IT.

INPUTS

STANDARD INPUTS



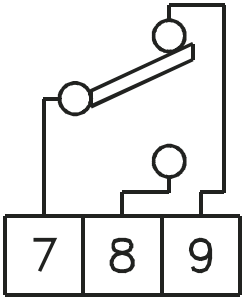
OPTIONAL INPUTS



ALARM OUTPUTS

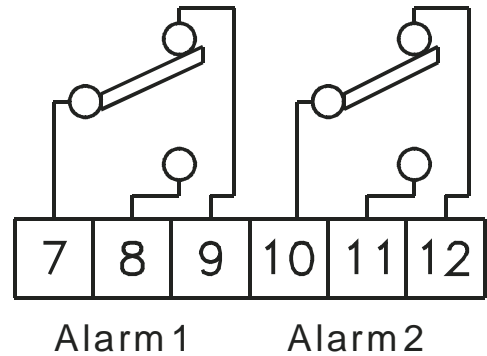
S310A

5A 250Vac



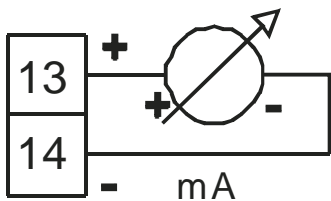
S310AA - S320A

2 x 5A 250Vac

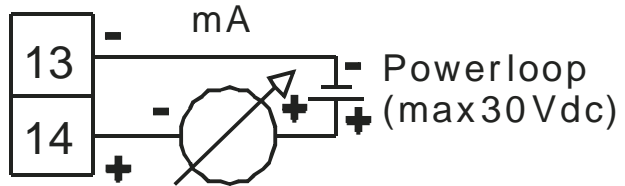


OPTIONAL RETRANSMITTED OUTPUT

ACTIVE



PASSIVE



Equipment (if there aren't specific requests) is made for 4-20mA active connection. To change retransmitted output, read HOW TO PROGRAM RETRANSMITTED OUTPUT page 5.

HOW TO SELECT INPUT

(ONLY FOR CURRENT OR VOLTAGE INPUT EQUIPMENTS) :

Equipment (if not required differently) made for 4-20mA input.

To select a different input, trim on internal shunts "TIPO INGRESSO" (see page 6) putting them as follows :

ZERO AND SPAN REGULATION

(ONLY FOR CURRENT OR VOLTAGE INPUT EQUIPMENTS) :

To access to zero and span trimmers (page 6) , remove red plexiglass front panel from equipment:

- ZERO REGULATION :

Give voltage or current signal corresponding displaying zero as input and then trim zero trimmer till the display shows desired value for zero-scale.

- SPAN REGULATION :

As desired displayed full-scale (<1000 or >1000), it will be necessary to program internal shunts "selezione FONDO-SCALA" (see page 6).

Give voltage or current signal corresponding displaying full-scale as input and then trim span trimmer till the display shows desired value for full-scale.

AS TO START A DECIMAL POINT

To start a decimal point in every position trim shunts on front panel above the display (page 4), remove red plexiglass front panel from equipment.

PROGRAMMING ALARMS (ONLY S310A - S310AA - S320A)

First thing to do is to choose alarm, you can select for min or max operation by internal shunts (see page 6).

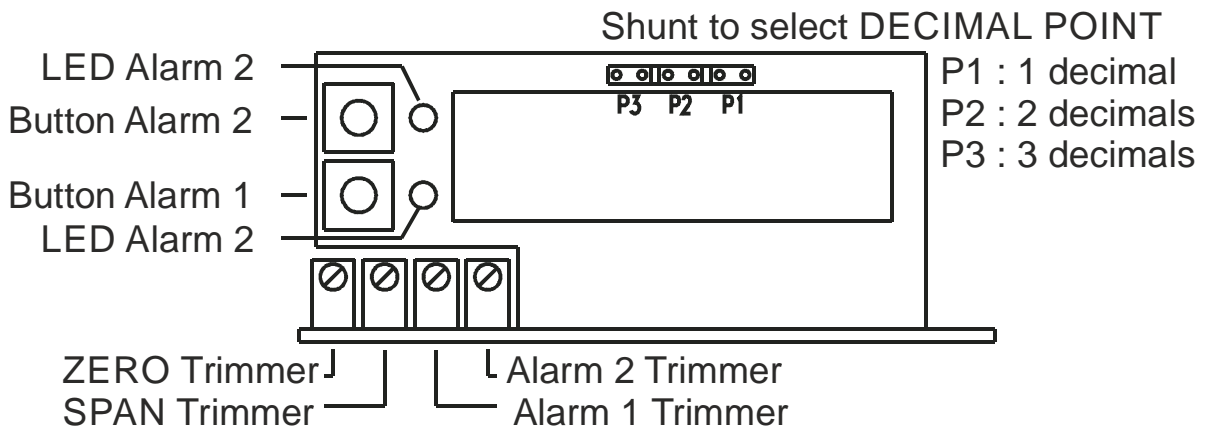
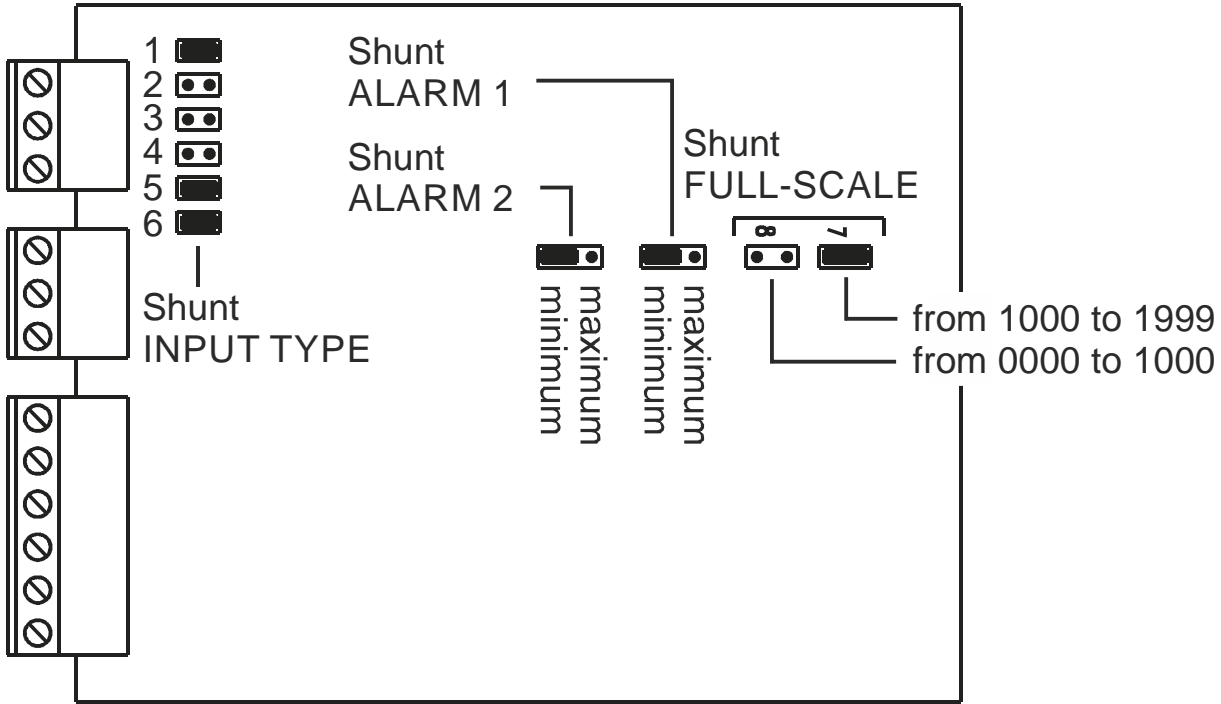
To set SET-POINT alarm's values you have to push front button corresponding alarm to be programmed (page 6) and trimming its trimmer till you see on display the desired value.

RETRANSMITTED OUTPUT SET (OPTIONAL)

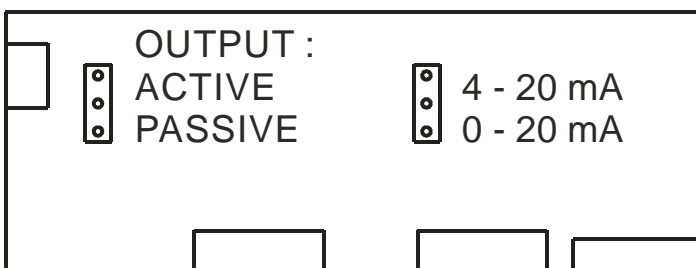
Optoisolated retransmitted output 0-20mA or 4-20mA (only with optional board), can function in an active way (powering loop with a 24Vdc voltage) and in a passive way.

To set retransmitted output signal and connection type work on shunts presents on this board as shown on page 6.

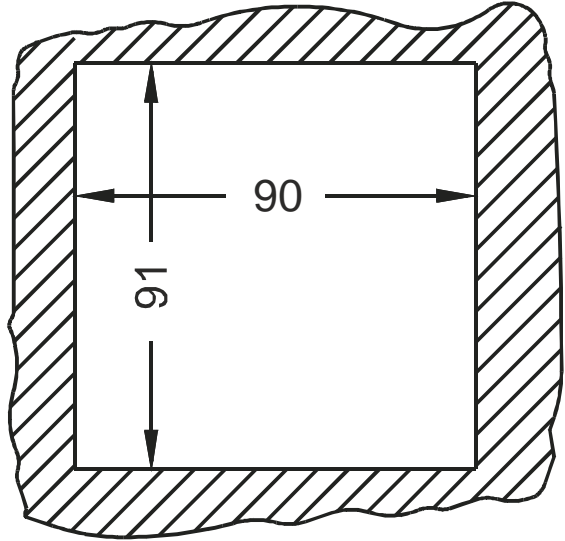
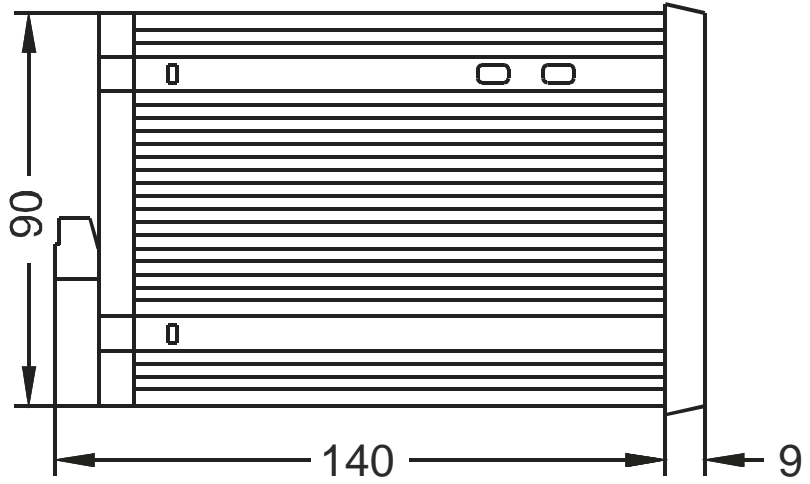
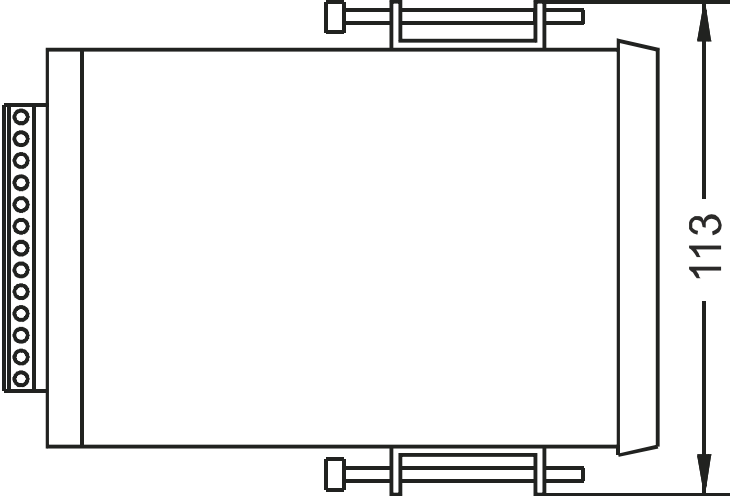
INPUT	Shunt 1	Shunt 2	Shunt 3	Shunt 4	Shunt 5	Shunt 6
0 - 20 mA	closed	closed	open	open	closed	closed
4 - 20 mA	closed	closed	open	closed	closed	closed
0 - 2 Vdc	closed	open	open	open	closed	closed
0,4 - 2 Vdc	closed	open	open	closed	closed	closed
0 - 5 Vdc	closed	open	closed	open	closed	closed
1 - 5 Vdc	closed	open	closed	closed	closed	closed



RETRANSMITTED OUTPUT BOARD

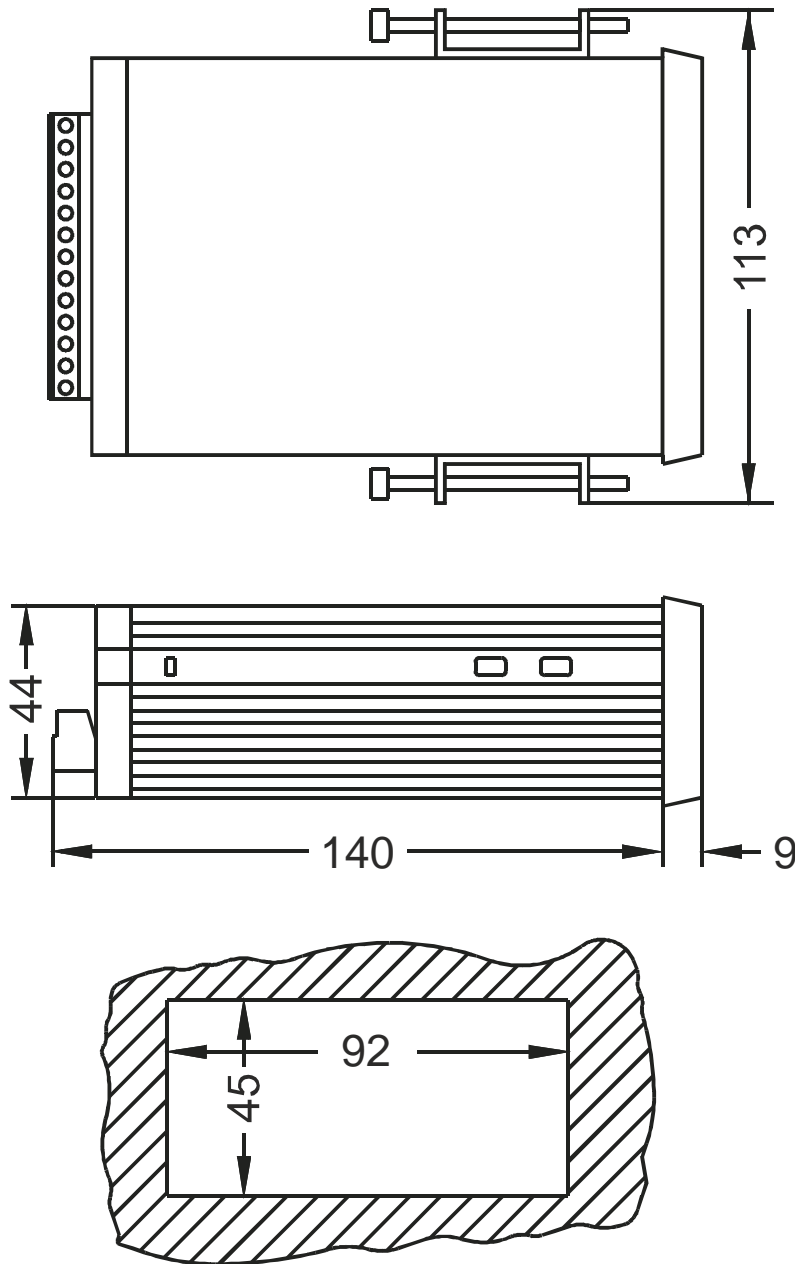


S320A
DIMENSIONS AND DRILL GAUGE

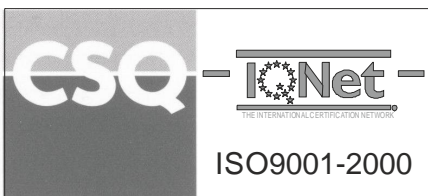


S310 - S310A - S310AA

DIMENSIONS AND DRILL GAUGE



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