KIMO®
INSTRUMENTS

CP20

Differential pressure transmitter

USER MANUAL

1. Safety instructions

Before using the device, please read carefully this user manual. It delivers important information about the device operations, maintenance and storage.

- Interior use.
- Respect the measuring ranges of transmitter.
- This device has been developed to measure differential pressure. It must not be used in any other purpose.
- This device has been developed and produced to be sold exclusively to trained and qualified HVACR technicians and engineers. Appropriate training might be necessary in order to ensure safe use of this instrument. Sauermann is not responsible for any possible accident during its use.
- Before connecting, check the type of power supply indicated on the product.
- Please always use the device in accordance with its intended use and within parameters described in the technical features in order not to compromise the protection ensured by the device.
- When using the device, the safety of the system integrating the device is the responsibility of the system assembler.
- Only the accessories provided with the device or available as an option must be used.
- Do not use the device if it is damaged or if it operates abnormally. Inspect the device before every use. In case of doubt, please contact Sauermann's After-sales service.
- Do not authorize pressures beyond the device limits. Please refer to the technical features described in this user manual.
- The device must not be exposed to rain or any other humid environments (> 85 %RH) without using a proper protection.
- Do not use the device next to explosive and corrosives gases, vapours or dust.
- Do not place your fingers in movable zones of the device (articulations).
- The device must not be used in ATEX zones according to applicable standards.
- Do not store the device with solvents. Do not use desiccants. Do not use isopropanol.
- During use, keep inspecting the device and accessories for effective operation and your own safety.
- Do not give this product to a child.
- If the device falls or in case of similar inconveniences, or if an irregular malfunction appears, please send back the device to Kimo's After-sales service for a technical check and to ensure your own safety.

2. Symbols used

For your safety and in order to avoid any damage of the device, please read carefully the notes preceded by the following symbol:

The following symbol will also be used in this document, please read carefully the information notes indicated after this symbol:

3. 2014/30/EU Directive

Hereby, Sauermann Industrie SAS declares that the equipment type CP20 is in compliance with Directive 2014/30/EU. The full text of the EU declaration of conformity is available at the following internet address: sauermanngroup.com

4. Technical features

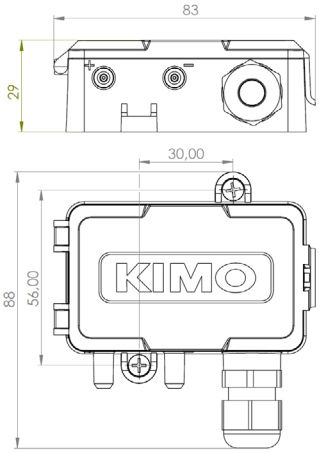
	CP21	CP22	CP23
Measuring ranges	-250 to 250 Pa	0 to 2500 Pa	0 to 5000 Pa
Measurement units	Pa	Pa	Pa
Accuracy*	±(2 Pa +1%m.v.**) @ 25°C	±(5 Pa +1.5%m.v **) @ 25°C	±(15 Pa ±1.5%m.v **) @ 25°C
Tolerated overpressure	30 000 Pa	60 000 Pa	100 000 Pa

Output / Power Supply	Active sensor 0-10 V (power supply 24 Vac/Vdc ±10%), 3-4 wires Passive sensor 4-20 mA (power supply 16/30 Vdc), 2 wires Maximum load: 500 Ohms (4-20 mA) - Minimum load: 1 K Ohms (0-10 V) 24 Vac 50Hz / 24Vdc ±10%
Consumption	1 VA
European directives	2014/30/EU EMC; 2015/863/EU RoHS 3; 2012/19/EU WEEE
Security	Protection class 3 - Pollution degree 2
Electrical connection	Screw terminal block for cables from 0.15 to 1.5 mm^2 or from 21 to 16 AWG. Carried out according to the code of good practice
Environment	Air and neutral gases
Response time	<8 seconds
Zero setting	Manual autozero with push-button
Type of fluid	Air and neutral gases
Conditions of use (°C/%RH/m)	Indoor use. From -40 to +60 °C (-40 to 140 °F). In non-condensing condition. From 0 to 2000 m (0 to 6561').
Storage temperature	From -40 to +70 °C (-40 to 158 °F)

*All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

**m.v = measured value

5. Features of the housing

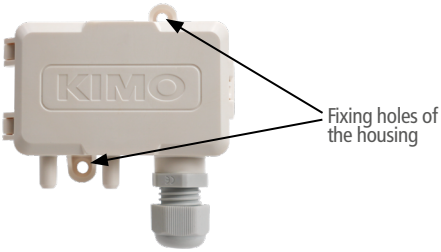


Material	ABS V0 as per UL94
Protection	IP54
Connections	Straight, Ø 6.2 mm
Cable gland	For cable Ø 8 mm maximum
Weight	64 g

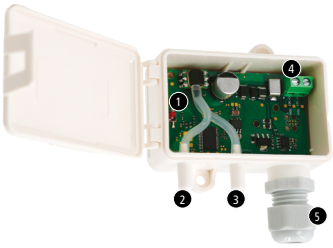
6. Mounting

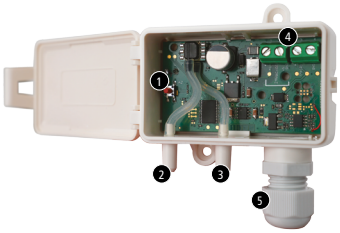
To install the transmitter on a wall drill two Ø6 mm holes and use the screws and wall-plugs to fix the transmitter.

⚠ **Once the transmitter is installed and powered up, please make an autozero to guarantee the correct working of the transmitter in any position.**



7. Connections



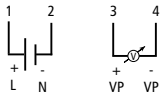


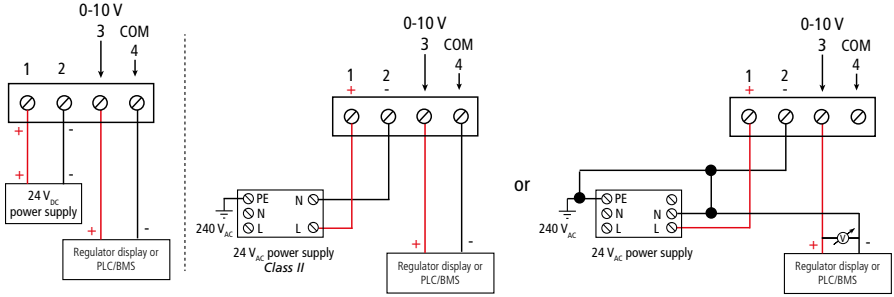
1. Autozero button
2. P+ connector
3. P- connector
4. Power supply terminal block
5. Cable gland

8. Electrical connections as per NFC15-100 standard

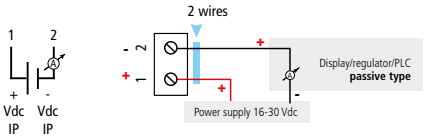
This connection must be made by a formed and qualified technician. Whilst making the connection, the transmitter must not be energized. The presence of a switch or a circuit breaker upstream the device is compulsory.

Active models





Passive models



9. Maintenance

Please avoid any aggressive solvents. Please protect the transmitter and its probes from any cleaning product containing formalin, that may be used for cleaning rooms or ducts.

10. Precautions for use

Please always use the device in accordance with its intended use and within parameters described in the user manual in order not to compromise the protection ensured by the device.

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