IAC 500– Measures ambient conditions in the room – Absolute pressure, room temperature, humidity

IAC 500

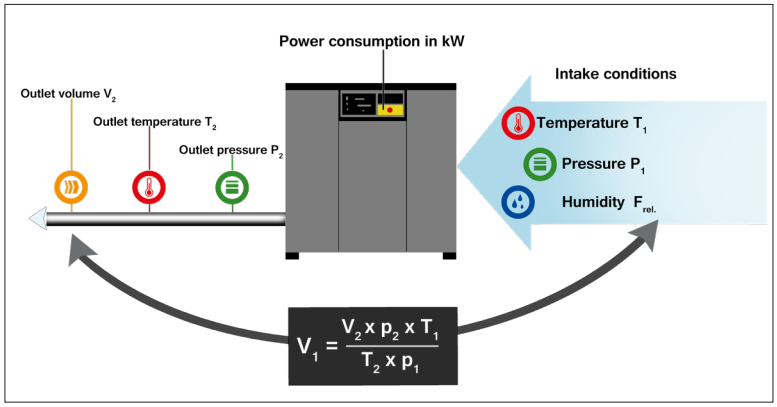
Special features:

- 3 in 1 sensor: absolute pressure, temperature and humidity in the room
- Modbus-RTU, Ethernet or M-Bus interface
- Alarm relay – limit value adjustable via buttons (max 60 VDC, 0.5 A)
- Optional: 2 x 4...20 mA analogue outputs, 2 x alarm relays, e.g., for dew point and temperature

IAC 510

Special features:

- **3-in-**1 sensor: absolute pressure, temperature and humidity in the room
- Modbus-RTU (RS 485)
- Two freely configurable analogue outputs, 4–20 mA, e.g. for humidity and temperature



The delivery rate of compressors depends on the intake air.

The installation site and the climatic conditions must already be taken into account when designing compressed air stations.

Large temperature fluctuations, e.g. between day and night, lead to uneven compressed air flow.

Example order code IAC 500:

0604 1000 _A1

Signal output option	
A1	1 x 4...20 mA analogue output (galvanically not isolated), alarm relay, RS 485 (Modbus-RTU)
A2	2 x 4...20 mA analogue output (galvanically not isolated), 2 x alarm relays, RS 485 (Modbus-RTU)
A3	Ethernet interface (Modbus/TCP), 1 x 4…20 mA analogue output (galvanically not isolated), RS 485 (Modbus-RTU)
A4	Ethernet interface PoE (Power over Ethernet) (Modbus/TCP), 1 x 4...20 mA analogue output (galvanically not isolated), RS 485 (Modbus-RTU)
A5	M-Bus, 1 x 4...20 mA analogue output (galvanically not isolated), alarm relay, RS 485 (Modbus-RTU)

DESCRIPTION	ORDER NO.
IAC 500 sensor for measuring ambient conditions (absolute pressure, temperature, rel. humidity), incl. wall bracket	0604 1000
Further accessories:	
Connection cable for probes 5 m with open ends	0553 0104
Connection cable for probes 10 m with open ends	0553 0105
Ethernet connection cable length 5 m, M12 plug x-coded (8 pin) to RJ 45 plug	0553 2503
Ethernet connection cable length 10 m, M12 plug x-coded (8 pin) to RJ 45 plug	0553 2504

TECHNICAL DATA of IAC	
Temperature **Measuring range:** **Accuracy:**	 -20…+60°C, ± 1.0 K (0…60°C) ± 1.25 K (-20…0°C)
Rel. humidity **Measuring range:** **Accuracy:**	 5…95% rF ± 3%
Absolute pressure measuring range: **Accuracy**	300...1100 hPa (abs) ±4 hPa
Voltage supply:	24 VDC, (IAC 500 - 18...36 V, IAC 510 - 10...36 V, via SELV supply) or Power over Ethernet (IEEE802.3af: Class 2 (3.84W - 6.49W)
Protection class of housing:	IAC 500 - IP 65 IAC 510 - IP 66
Operating temperature:	-20...+60°C
Ambient temperature:	-20...+60°C
Storage temperature:	-40...+80°C
Readable via Modbus:	Absolute pressure [hPa, mbar, bar, psi,...], dew point [°Ctd, °Ftd], temperature [°C, °F], rel. humidity [%RH], abs. humidity [g/m³].
Connection:	IAC 500 - M12, 5-polig IAC 510 - M12, 8-polig

Example order code IAC 510:

0604 1510_A1_B1_C1

Process connection	
A1	G 1/2“
A2	NPT 1/2“

Scaling of analogue output 1	
B1	Relative humidity [%RH]

Scaling of analogue output 2	
C1	Temperature T (°C)
C2	Temperature T (°F)

Example order code for cable for IAC 510:

0553 0145_A1

8-pin cable	
A1	5 m
A2	10 m
A3	variable on request

ZUBEHÖR	BESTELL-NR.
CS service software, including a USB cable for connection to a PC and a mains adapter - for configuring and setting the parameters of the IAC 510	0554 2010