

Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output

Electronic duct air flow sensor **RHEASGARD® KLGF** with active output, housing made of impact-resistant plastic with quick-locking screws, with cable gland, with/without display, to determine the flow velocity (0.1...20 m/s). The measuring transducer converts the measurement signal into a standard signal of 0 - 10 V.

Electronic duct air flow sensor/monitor **RHEASGARD® KLGF** (without display) and **KLGFVT** (with display) with active and switching output, housing made of impact-resistant plastic with quick-locking screws, with cable gland, to determine the flow velocity (0.1...20 m/s) and temperature (0...+50 °C). For device type **KLGFVT**, the calculated volume flow parameter can be retrieved as an alternative to the flow (configurable on the display). The measuring transducer automatically detects the required output type and converts the measurands into the required standard signal of 0 - 10 V or 4...20 mA (**Automatic Output Switching**).

Electronic duct airflow monitor **RHEASREG® KLSW** with switching output, housing made of impact-resistant plastic with quick-locking screws, with cable gland, with/without display, to determine the flow velocity (0.1...20 m/s). The flow sensors are suitable for monitoring or controlling airflows in ducts, at fans and dampers, for flow-dependent monitoring of humidifiers and electric heating registers according to DIN 57100, Sect. 420, or for use in connection with DDC systems.

TECHNICAL DATA

| | |
|----------------------|--|
| Power supply: | 24 V AC / DC (± 10 %) (KLSW-W24, KLGFxx) 230 V AC, 50 Hz (KLSW-W230) |
| Current consumption: | approx. 3 VA (KLGF, KLSW-W24, KLSW-W230) approx. 4 VA (KLGFVT, KLGFVT) |
| Data points: | flow velocity [m/s], volume flow [m³/h], temperature [°C] |
| Outputs: | KLGF 1x 0-10 V (U variant) KLGF(V)T 2x 0-10 V / 4...20 mA (via Automatic Output Switching – the unit recognises the required output type and automatically switches to U or I output); changeover contact 24 V (max. 5 A, cos φ = 1.0) KLSW-W24 changeover contact 24 V (max. 5 A, cos φ = 1.0) KLSW-W230 changeover contact 230V AC (max. 5 A, cos φ = 1.0) |

AIR FLOW

| | |
|-----------------------|---|
| Sensor: | calorimetric, temperature compensated, sensor breakage protection, with manual zero-point calibration (via button) |
| Measuring range: | 0.1...20 m/s |
| Accuracy: | 0.5 m/s + 3 % measured value |
| Long-term stability: | ± 0.5 % final value per year |
| Reproducibility: | ± 1.0 % final value |
| Switching point: | 1...20 m/s, threshold can be adjusted via potentiometer |
| Switching hysteresis: | 2.0 % of final value |
| Warm-up time: | < 2 min |
| Response time: | < 5 s |
| Start-up override: | 0 / 60 s (KLGF/KLSW without display), can be activated via DIP switch 0...120 s (KLGF/KLSW with display, KLGFVT/KLGFVT), can be adjusted via potentiometer |

TEMPERATURE KLGF(V)T

| | |
|------------------------|--|
| Sensor: | NTC 10k |
| Measuring range: | 0...+50 °C |
| Accuracy: | typical ± 0.5 K at +25 °C |
| Protective tube: | PLEUROFORM™ , material polyamide (PA6), with torsion protection, Ø 20 mm, NL = 120 mm / 220 mm, v _{max} = 30 m/s (air), optional on request made of stainless steel V2A (1.4301), Ø 16 mm |
| Housing: | plastic, UV-resistant, polyamide material, 30 % glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), housing cover for display is transparent! |
| Housing dimensions: | 126 x 90 x 50 mm (Tyr 2) |
| Cable connection: | cable gland , plastic (M 16 x 1.5; with strain relief, exchangeable, max. inner diameter 10.4 mm) |
| Electrical connection: | 0.2 - 1.5 mm², via push-in terminal |
| Process connection: | by means of plastic mounting flange (included in the scope of delivery) |
| Ambient temperature: | storage -20...+50 °C; operation 0...+50 °C |
| Medium temperature: | 0...+70 °C |
| Permitted humidity: | < 98 % RH, non-precipitating air free of harmful substances |
| Protection class: | II (according to EN 60 730) with UB = 230 V (KLSW-W230) III (according to EN 60 730) with UB = 24 V (KLSW-W24, KLGFxx) |
| Protection type: | IP 65 (according to EN 60 529) housing; IP20 sensor technology |
| Standards: | CE conformity according to EMC Directive 2014 / 30 / EU |
| Optional: | display with illumination , three-line, cutout approx. 70 x 40 mm (W x H), to display the flow velocity, volume flow and temperature |

Protective tube
(NL) 120 mm



Protective tube
(NL) 220 mm



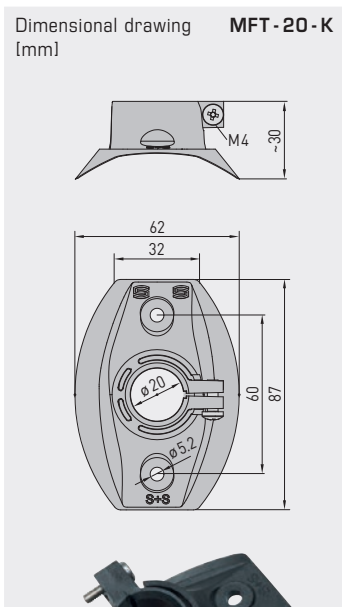
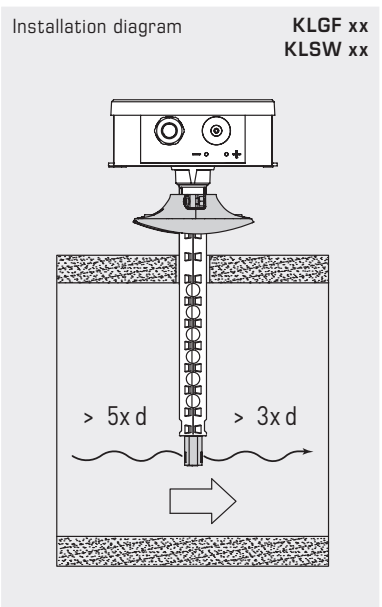
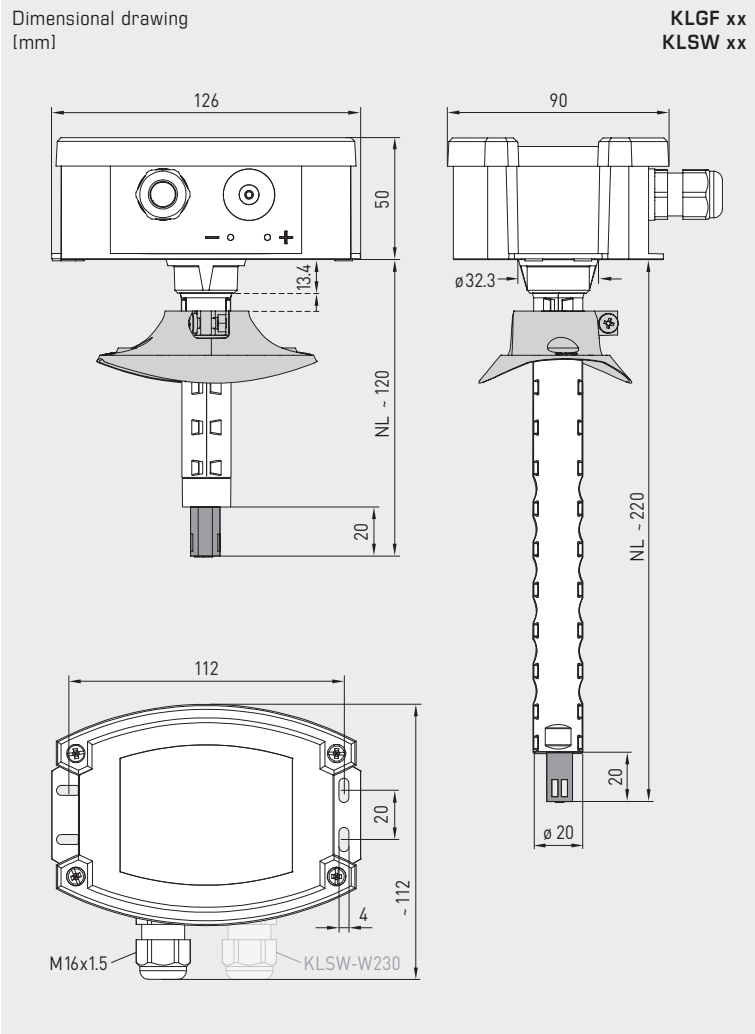


NEW

S+S REGELTECHNIK

RHEASGARD® **KLGF xx**
RHEASREG® **KLSW xx**

Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output



MFT-20-K
Mounting flange
made of plastic

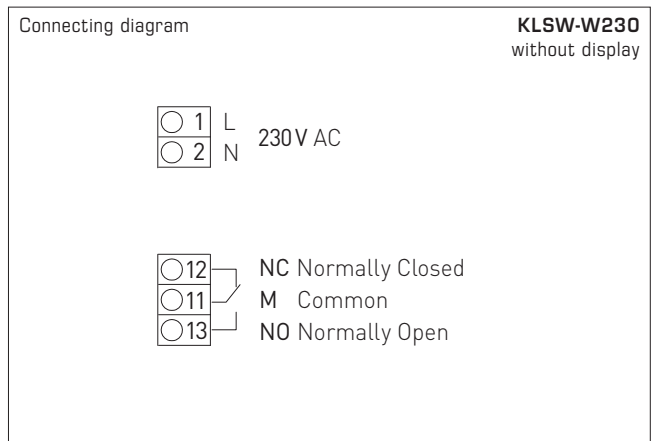
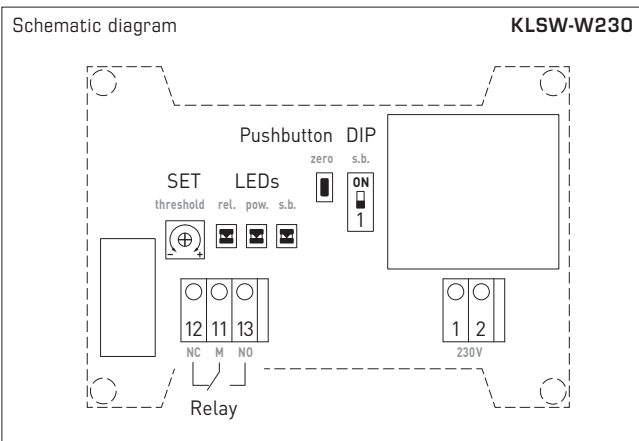
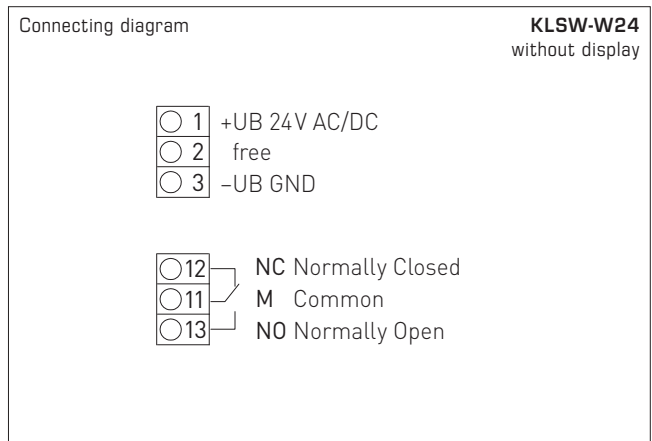
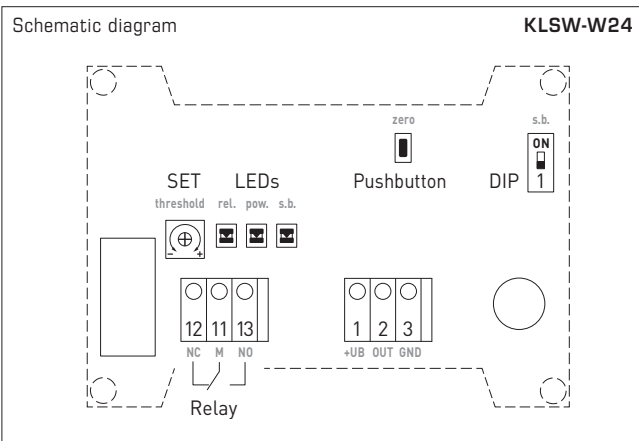
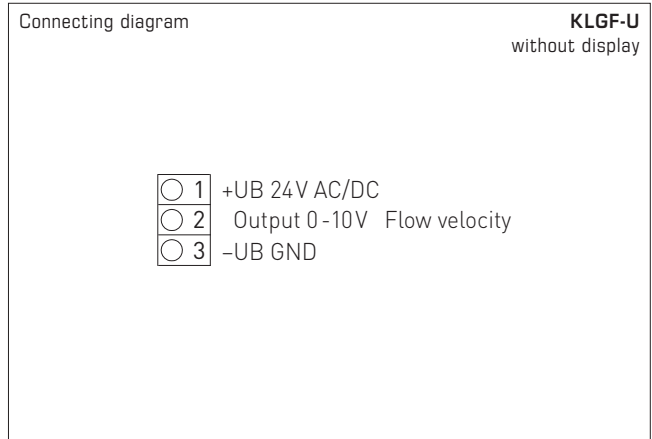
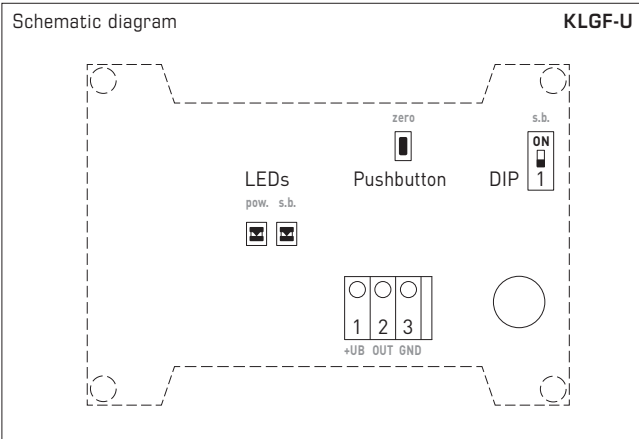


Automatic detection and switching
to standard signal 0...10V or 4...20 mA

AOS-PATENTED
AUTOMATIC OUTPUT SWITCHING



Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output



KLSW-W230
with changeover contact,
UB = 230 V

KLSW-W24
with changeover contact,
UB = 24 V

KLGF-U
with output 0-10V,
UB = 24 V



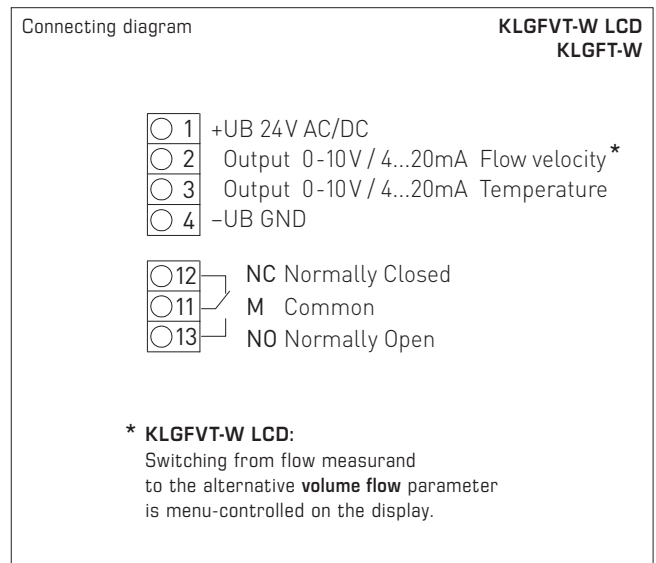
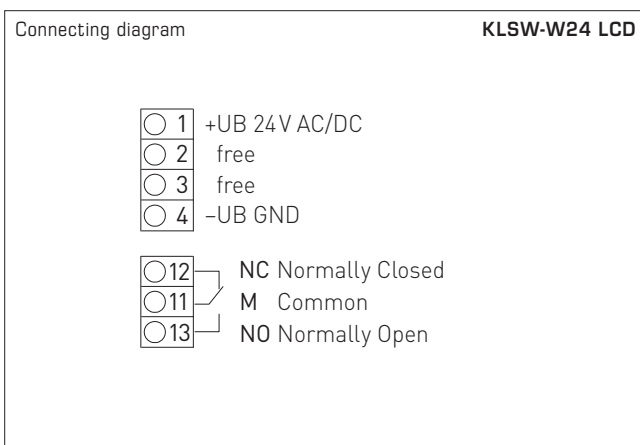
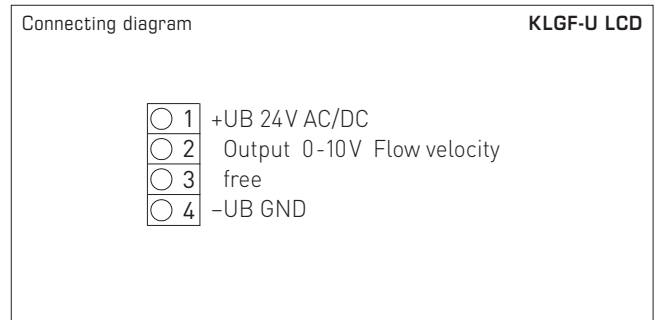
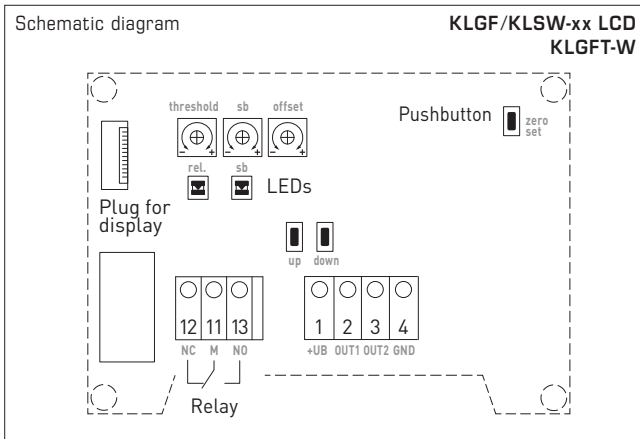


NEW

S+S REGELTECHNIK

RHEASGARD® **KLGF xx**
RHEASREG® **KLSWxx**

Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output



RHEASGARD® KLGF Duct air flow sensor, electronic, with active output
RHEASGARD® KLGF(V)T Duct air flow sensor, electronic, with active and switching output
RHEASREG® KLSW Duct air flow monitor, electronic, with switching output

| Type / WG01 | Power supply | Output active | Output switching | (NL) | Display | Item no. | Price |
|------------------|--|---------------------|----------------------|--------|---------|--------------------|------------|
| KLGF | | | | | | | |
| U variant | | | | | | | |
| KLGF-U 120mm | 24V AC / DC | 1x 0-10V | - | 120 mm | | 1701-4111-0102-000 | 269,14 € |
| KLGF-U | 24V AC / DC | 1x 0-10V | - | 220mm | | 1701-4111-0101-000 | 253,07 € |
| KLGF-U LCD | 24V AC / DC | 1x 0-10V | - | 220 mm | ■ | 1701-4111-1101-000 | 318,30 € |
| Optional: | Cable connection with M12 connector according to DIN EN 61076-2-101 | | | | | | on request |
| KLGF(V)T | | | | | | | |
| AOS | | | | | | | |
| KLGF-T-W | 24V AC / DC | 2x 0-10V / 4...20mA | 1 changeover contact | 220 mm | | 1701-4118-0201-001 | 320,56 € |
| KLGFVT-W LCD | 24V AC / DC | 2x 0-10V / 4...20mA | 1 changeover contact | 220 mm | ■ | 1701-4118-1401-001 | 394,79 € |
| KLSW-W24 | | | | | | | |
| KLSW-W24 120mm | 24V AC / DC | - | 1 changeover contact | 120 mm | | 1701-4113-0102-001 | 237,65 € |
| KLSW-W24 | 24V AC / DC | - | 1 changeover contact | 220 mm | | 1701-4113-0101-001 | 221,58 € |
| KLSW-W24 LCD | 24V AC / DC | - | 1 changeover contact | 220 mm | ■ | 1701-4113-1101-001 | 275,57 € |
| KLSW-W230 | | | | | | | |
| KLSW-W230 120mm | 230V AC | - | 1 changeover contact | 120 mm | | 1701-4133-0102-001 | 239,34 € |
| KLSW-W230 | 230V AC | - | 1 changeover contact | 220 mm | | 1701-4133-0101-001 | 223,27 € |

Note: **Changeover contact** with automatic reset (relay opens automatically when value falls below the threshold again)

AOS (Automatic Output Switching) = patented analogue interface (patent no. DE 10 2015 015 941 B4), the unit automatically detects the required output type 0 - 10 V or 4...20 mA

KLGF, KLGFVT **T** = temperature (0...+50 °C) – additional measurand
V = volume flow (0...200,000 m³/h) – alternative parameter, can be configured via display!