

Technical data sheet

GUAC-DM3 Controller for volumetric flow control

Description

Controller for volumetric flow control in conjunction with actuators

- Nominal voltage 24 VAC/DC
- Control (0)2...10 VDC
- Sensor 300 Pa (dynamic)
- Communication PP-Bus



Technical data

Electrical data	Nominal voltage	24 VAC/DC, 50/60 Hz
	Nominal voltage range	19...29 VAC/DC
	Power consumption	0,6 W
	Wire sizing	1,3 VA
	Control	(0)2...10 VDC / Ri > (100 kΩ) 50 kΩ (0)4...20 mA / Rext. = 500 Ω
	Feedback signal	(0)2...10 VDC, max. 0,5 mA
	Priority control	closed / Vmin / Vbtw / Vmax / open
	Connection	screw terminals, 4-pin 0,5...2,5 mm ²
	Connection actuator	cable 1000 mm with Lumberg connector
	Connection GUIV	via diagnostic connector and feedback signal U
Sensor	Communication	PP-Bus (1200 Bd, max. 15 VDC)
	Calibration	300 Pa, height adjustment necessary (300 Pa = 1,2 in H2O), dynamic measurement principle

Technical data

Sensor	Measuring range	0...300 Pa
	Burst pressure	1 bar
	Nominal value	damper manufacturer specific value Vmin / Vbtw / Vmax based on Vnom
	P/I-proportion	adjustable via software (recommended settings): - GUAC + controller > 20 s (P - 4 I - 1) - GUAC + controller < 20 s (P - 2 I - 30)
	Medium	air 0...70°C / 5...95% r.H., non condensing
	Mounting position	independent of position
	Connection	Ultem 2200 / tube clip Ø 4-6 mm
Functional data	Attachment	fastening tabs on the device slot 7,5 x 5,5 mm
Safety	Protection class	III (safety extra-low voltage)
	Degree of protection	IP 54 (cable downwards, tube clip plugged)
	EMC	CE (2014/30/EU)
	LVD	CE (2014/35/EU)
	RoHS	CE (2011/65/EU - 2015/863/EU - 2017/2102/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature normal operation	0°C...+50°C
	Storage temperature	-20°C...+80°C
	Ambient humidity	5...95% r.H., non condensing (EN 60730-1)
	Maintenance	maintenance free
Dimensions / Weight	Dimensions	122 x 71 x 67 mm
	Weight	400 g

Functionality / Properties

Operating mode

Connect power supply to terminal 1+2 and a reference signal Y to terminal 3 in range of (0)2...10 VDC, the connected actuator regulates to its specified setpoint. The actual flow in % of Vnom is provided as a feedback signal U on terminal 4 for other actuators and can be communicate via PP-Bus.

CAV modes / override controls:
-AC*/DC signal terminal 3

The controller is overload-proof.

Edit

The selector allows the changing of values. The position of the arrow shows the value set. The changes are displayed as soon as the selector is moved $\pm 10^\circ$ from the position.

Flow / Unit

Setting the desired actual volume flow unit in m³/h and l/s.

Vmin

Adjust the desired flow Vmin (setpoint Y = 0 / 2 VDC).

Vmax

Adjust the desired flow Vmax (setpoint Y = 10 VDC).

Diag

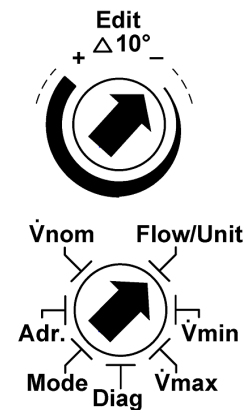
Diagnostic menu:
off - diagnostic mode is off
on - diagnostic mode is on
oP - open the damper
cL - close the damper
Lo - activate Vmin
Hi - activate Vmax
123 - software version

Mode

Setting the direction of rotation:
0-n...0-10 VDC normal
2-n...2-10 VDC normal
0-i ...0-10 VDC invers
2-i ...2-10 VDC invers

Vnom

Setting the nominal volumetric flow depending on the VAV-box.



Technical Drawing

