

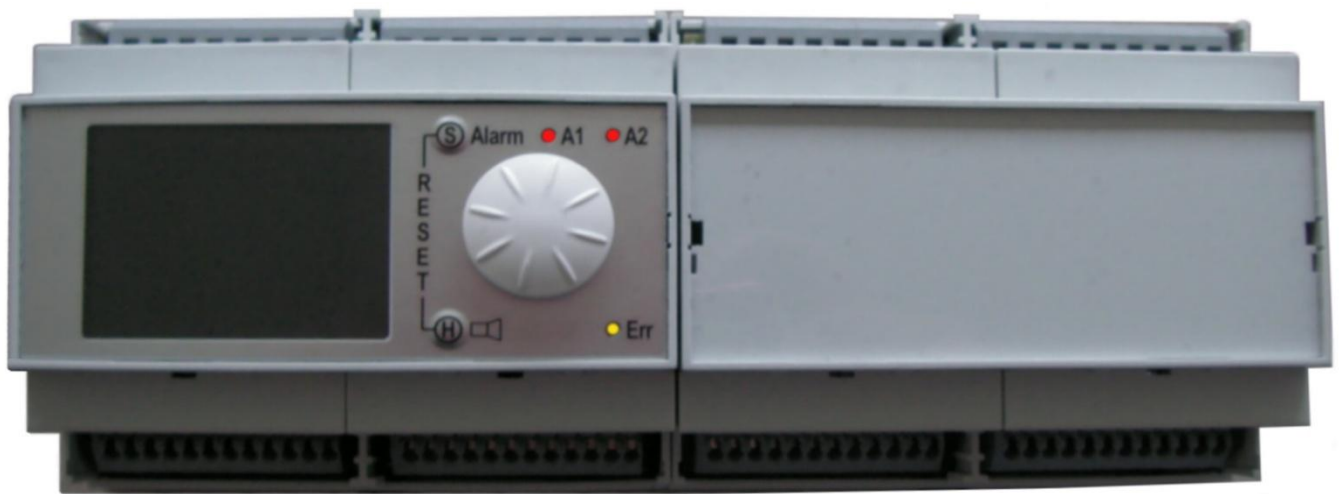
Gaswarningcontroller GC420 / EC420



Application

The GasController main module GC420 and the extension module EC420 are used in combination with various detectors / transmitters for monitoring and warning of toxic and combustible gases and vapours in the ambient air.

The easy operation of the GasController is done via the white Control Button, the informative LC-Display and the easy to use menu structure. A great number of programmable parameters enables the realisation of various requirements in the gas measuring technique. The configuration of the system can be made by Software (Computer) or the control button and the display



GC420 S

EC420 S

Features

- ❖ four measuring inputs 4-20mA for detectors / transmitters, each module
- ❖ five relays for alarms, potential-free change over contacts, each module
- ❖ Informative LC-Display with 7 lines and 20 characters each line, for Concentration, measuring units, Alarm and fault status
- ❖ four digital inputs for reset alarms, emergency stop functions, maintenance
- ❖ four programmable Alarm thresholds for each detector / transmitter
- ❖ expandable with additional modules EC420 - up to 40 detectors / transmitter and 50 alarm relays for alarm messages and devices



Gaswarningcontroller GC420 / EC420



Description

The GasController main module GC420 is suitable for connection up to four 4-20 mA detectors (MP) and has five relays for Alarm outputs. Four digital inputs for external alarm activation/deactivation (e.g. emergency stop, alarm reset, maintenance, etc.) are included. Each detector (MP) can be programmed for up to four alarm thresholds. The large LC-Display shows all needed information – concentration, measuring units, Alarms or faults. With additional EC420 Modules, the GasController System can be extended by each module with four 4-20mA Detector inputs and five Alarm outputs. The system can be totally enlarged for 40 Detectors and 50 Alarm Relays with potential-free change-over contacts. The Modules GC420 and EC420 are connected with a wired RS485 Bus and can be mounted together in one housing or separate in the operation field.

The GC420 system is equipped with a self-monitoring system, with power failure message as well as with a functional control of the registered detectors/transmitters according to the requirements of the gas measuring technique.

Technical Data

Electrical	
Power supply	24V/DC -10% +20%, or with a power supply module 230 VAC 50/60Hz;
Power consumption (incl. transmitters)	24V/DC max. 14 W, 0.6 A each module Depending on type and configuration
Analog output (max. 40)	4 to 20 mA, overload-proof and short-circuit-proof, Input resistance 200 Ω
Power supply voltage for detectors/ transmitter	24 VDC, max. 100 mA / per detector
Alarm relay (max. 30)	250 VAC, 5 A, potential-free, change-over contacts
Visualization GC420	
LC-Display	7 lines, 20 characters each, illuminated
Status LED's (3)	Yellow = Fault Red = 1st alarm, Red \geq 2nd alarm
Operation	1 Control-button, 2 push-buttons
Menu language (free selectable)	German, English
Interface bus	
Module to module	RS 485
Gases	
Gas transmitters MF420LEL..., MF420Tox..	Toxic, combustible and refrigerant gases
Environmental conditions	
Humidity	15 – 95 % RH non-condensing
Working temperature	- 5° C to + 40° C (23°F to 104 °F)
Storage temperature	0° C to + 40° C (32°F to 104 °F)
Physical S type	
Enclosure for rail mounting	Plastic housing
Colour	RAL 7032
Protection class	IP 40
Weight:	approx. 0,3 kg
Dimension (W x H x D) S	104 x 86 x 54 mm
Wire connection	spring type terminals.: min. 0.5, max. 1.5 mm ² (22 - 16 AWG)
Guidelines	EMC-Directive 2004/108/EC; CE; Low voltage directive 2006/95/EC
Warranty	two years on material



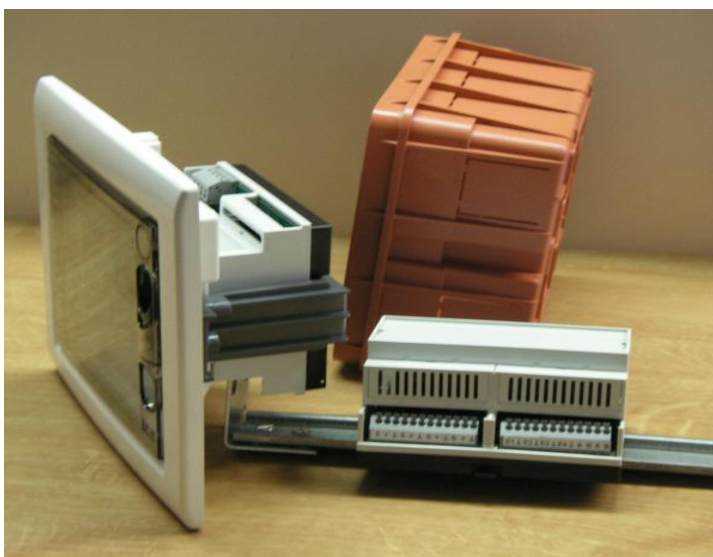
Gaswarningcontroller GC420 / EC420



Physical G type	
Enclosure for wall mounting	Plastic housing with view cover
Colour	RAL 7035 (gray)
Protection class	IP 65
Weight:	Min. approx. 3 kg Max. approx. 13 kg, depending on type
Cable entry	M 16; M 20; M 25
Dimension Type G12 (W x H x D)	298 x 260 x 140 mm
Dimension Type G24 (W x H x D)	298 x 420 x 140 mm
Dimension Type G36 (W x H x D)	298 x 570 x 140 mm
Dimension Type G54 (W x H x D)	410 x 655 x 140 mm



GC420-1 G12
for wall mounting



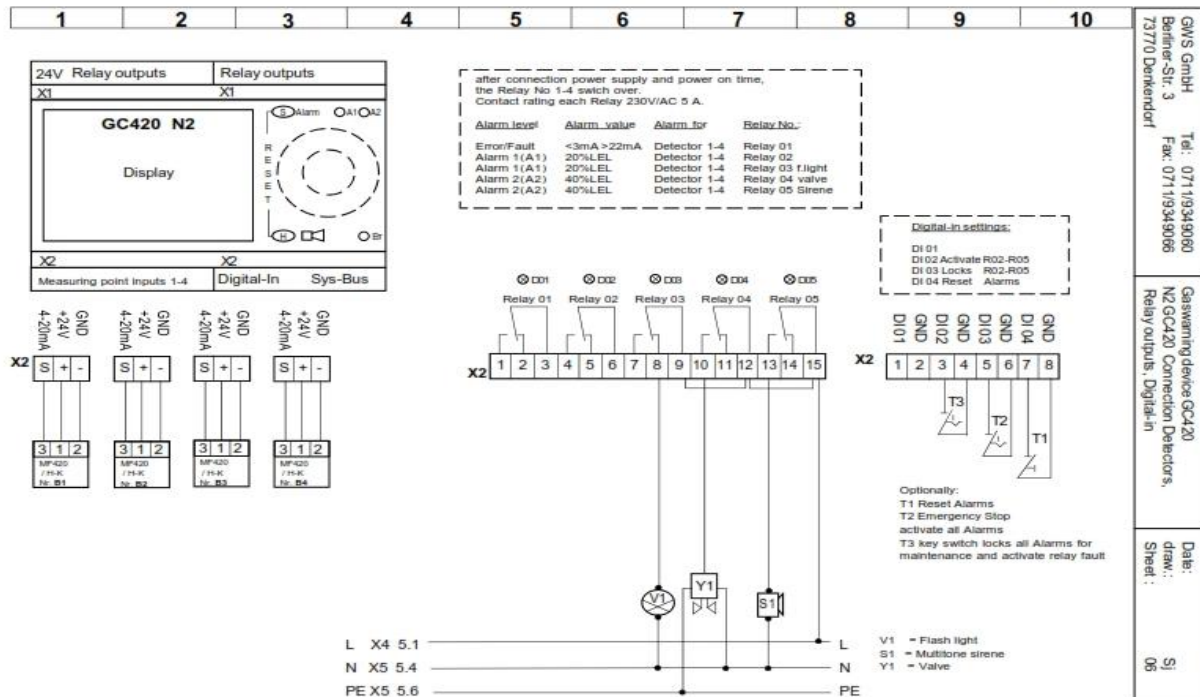
GC420 T1
for door mounting
(switchboard cabinet)



Gaswarningcontroller GC420 / EC420



Wiring diagram



GWS GmbH
 Berliner-Str. 3
 73770 Denkendorf
 Tel.: 07119349060
 Fax: 07119349066

Gaswarningdevice GC420
 N2 GC420 Connection Detectors,
 Relay outputs, Digital-in

Date: _____
 draw.: _____
 Sheet: 06

