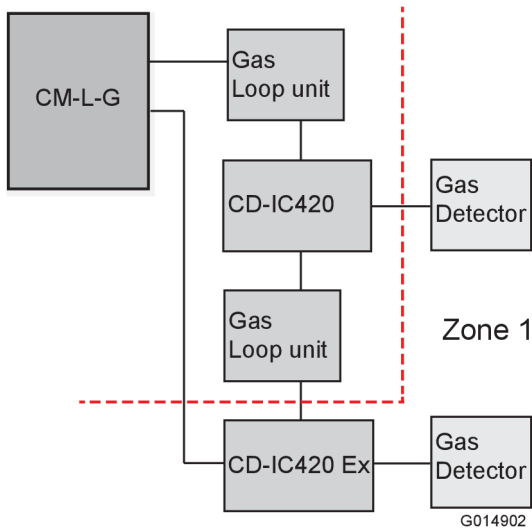G014901

CM-L-G

Part no. 5100247-00A

System: CGD50/500

General description

The CM-L-G is an addressable loop controller module with power and communication redundance.

The module offers one loop-line interface that is capable of handling 20 addressable loop units. The CM-L-G communicates via the IDAxt protocol with all loop units on its the loop-line. It is designed to comply with the standards for industries and maritime markets.

Figure 1. Example of a loop-line configuration

Features

The CM-L-G controls the loop-line and features:
- Redundant power supply inputs
- Redundant serial RS-485 ports for backbone communication
- Redundant loop-line interface
- An analogue xGas back-up signal for transmitting the gas alarm condition.

For details on assembling a system and definitions of common system terms, refer to the Installation Manual.

About the datasheet

This data sheet contains product information for the following units (1) and (2):

G015150

Parts:

Item	Part name	Part no.
1 & 2	CM-L-G module (fully assembled)	5100247-00
1	Spare part: PCB module	5100245-00
2	Spare part: Housing	5100102-01

Data

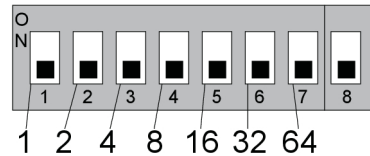|	
Operating voltage	19–30 VDC
Current consumption (at 24 V)	70 mA
Loop line output:	
- Nominal voltage	35 VDC
- Max. output current	400 mA (< 15 minutes)
- Continuous output current	200 mA
Max. no. of loop units	20
Cable terminals	2.5 mm^2
Operating temperature	-40 °C to +70 °C
Storage temperature	-50 °C to +70 °C
Relative humidity	≤ 95 % RH non-condensing
Addressing method	DIP switch
Material	Nylon 6.6
Weight (with housing)	140 g ± 5%
Colour housing Colour shell	Black (RAL 9005) Gray (RAL 7042)
Spare part no. CM-L-G	5100245-00
Spare part no. for housing	5100102-01
Loop cable requirement	See the Installation & Commissioning manual
Compatible loop units	All gas loop units that communicates with the IDAxt protocol
Certified according to	2531/yyyy yyyy = year of production

Settings

The module is identified by a physical address on the Backbone Bus. The address is set with an 8-pole DIP switch.

Address switch

The DIP switch value follows the binary system. The address no. can be set from 63 to 74* using DIP-switch poles 1 to 7.

* Addresses 63-74 can only be used under specific conditions, see installation manual for details.

1 2 4 8 16 32 64

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NOTE!
DIP switch 8 shall always be set to ON.

Connections

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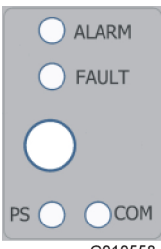|		
A	+	11
	,	12
B	+	13
	,	14

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Indicators

Loop M Gas indicators display output and alarm status.

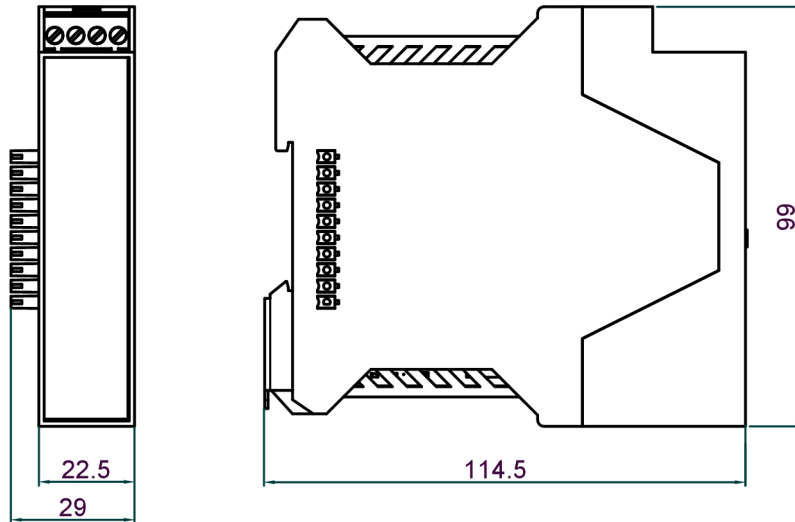| Front label	Indicator	Colour, pattern	Module status	Failure classification
ALARM FAULT PS COM G010558	ALARM	Red, steady	One or more gas alarms are present	Follow local procedures
		None	There are no alarms	N/A
	FAULT	Yellow, steady	One or more faults are present	*
		Yellow, flashing	Module is booting or re-scanning the loop	*
		None	There are no faults	N/A
	PS (Power Supply)	Green	Operational mode with no power fault	N/A
		Yellow, steady	Operational mode with a power fault. A single power fault does not prevent the loop module from communicating with the loop units.	Minor fault*
		Yellow, flashing: 0.5 sec On, 0.5 sec Off.	Boot loader mode. Only active during firmware download to the loop module. In this mode the loop unit can't communicate with the loop units.	*
		None	Quarantine mode	*
	COM (Backbone communication)	Green, steady	Communication present and successfully received configuration (operational)	N/A
		Green, flashing: 0.5 sec On, 0.5 sec Off.	Communication present and waiting for configuration	Major fault*
		Yellow, steady	No communication	Major fault*
		Yellow, flashing: 0.5 sec On, 0.5 sec Off.	Firmware transfer	Major fault*
		Yellow, flashing: 1 sec On, 0.5 sec Off.	Quarantine mode	Major fault*
	PS + COM (both flashing)	PS Yellow, flashing: 0.5 sec On, 0.5 sec Off. COM Green, flashing: 0.5 sec On, 0.5 sec Off.	Transferring software. (Download or upload.)	*

* Check fault alarm on the control panel and refer to fault code information in the CGD500 Installation manual or Service & Maintenance manual.

NOTE!
If all LED's are flashing the DIP switches are set to OFF or all are set to ON.
Please set according to project documentation.

Dimensions (mm)

22.5

29

114.5

99

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Mounting

Mount the module on a horizontal 35 mm DIN rail.

Consilium