CLG   Load Limiter   FABERCOM
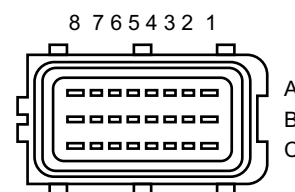

Overall dimensions: 138 x 110 (147 with connector) x 38 mm
Drilling interaxis: 119 x 99 mm (n° 4 screw M5)

Pinout FCI connector (24 ways)

A1 - Power supply	B1 - RX serial comm.	C1 - TX serial comm.
A2 - +V transducer supply	B2 - +V PRG2 supply	C2 - PRG2 ground signal
A3 - not used	B3 - ground for 90% signal	C3 - ground for 100% signal
A4 - +V switch supply	B4 - +ELV1 signal	C4 - not used
A5 - +V switch supply	B5 - ELV1 ground	C5 - not used
A6 - not used	B6 - input TRANSD. 1 (P)	C6 - input RESET
A7 - DV input	B7 - input DECREMENT	C7 - not used
A8 - Emergency input	B8 - Emergency output	C8 - GND

FEATURES
Power supply range: from 10Vdc, up to 30Vdc.
Connector FCI, 24 ways, IP68, mechanical polarization, easy locking cam.
Maximum output current supply: 3A

<u>In the respect of EN 954-1 the safety features belong to category 2</u>

Two different working areas with two different load limits.
Fast and easy programming sequence.

HUMAN MACHINE INTERFACE
The green led on the board, in normal operation mode, is lighten to show the power supply.
When faults are present, the green led blinks following a particular sequence related to the fault reasons.
(look at the last page for a detailed blinking sequence meaning).

Leds placed into the emergency button box (red colour and yellow colour), are lighten in the following
situations:
  - When emergency button is pressed, the red button and the yellow button blink together.
  - When the load exceedes the 90% of the limit, yellow led is ON.
  - When the load exceedes the 100% of the limit, red led is ON.

INPUT
- RESET: That input allows the load limiter to power the valve for a short period, even if the load value
    exceedes the load limit.
- LIMIT REDUCTION: It is used to set the working area. When it is low value, then the load limiter
    compare the pressure from the transducer with a reduced threshold.
- PRESSURE transducer input: 4÷20 mA.
- INPUT DV: It allows to connect the load limiter to a remote control in a safety way.
- DIFFERENT POWER SUPPLY for logic control unit and powered OUTPUT.

OUTPUT
- Powered output to drive bypass valve coil. The board implements a feedback current control on the
    mentioned output.
- Two powered output to drive external optional lamps. The mentioned outputs are driven as well as the
    leds into emergency button box (90% and 100%).

SETTING PARAMETERS by CRANE MANUFACTURER
The load limiter's thresholds are programmed using an external, little, 4 buttons, keyboard. The keyboard
is an optional. Its name is "PRG-CLG". When it is connected the green led blinks four times in a second.
In order to set whole the load limiter's parameters and download the working configuration, an optional
serial interface can be used to connect the PC to the load limiter. The program interface is named
SepSim.

SETTING PARAMETERS by FINAL USER
The final user uses a different programmer "PRG2-DEC", which is only allowed to decrease the
manufacturer thresholds. Moreover the programmer is able to recall the manufacturer parameters.

HARDWARE KEY TO INCREASE THE LOAD LIMIT THRESHOLD
The PRG2 (either CLG version or DEC version) can be used even to increase the load limit threshold up
to 125%, for a brief period of time.
In order to increase the limit: when you connect the PRG2, the "+" button has to be pressed
within 5 seconds then kept pressed till the green led blinking will becomes slower.

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ELECTRONIC BOARD
CLG

Code PCLGS2 : Control unit CLG + cabling
Code PCLGS2E : Only control unit
Code A1003720010 : Pressure transducer

+ Battery
90%
100%

Pressure transducer,
4÷20 mA, M12 connector

4÷20 mA
a 2 m

Not included in the scope of supply

2x0.75 L=5.0m
(protection conduit øext.=11mm)

wire 0,5mm^2 L.: 30 cm.
to connect the remote control DV
(hidden under the conduit)

+   (blu)
90% (brown)
100%(grey)

Connector to plug
the PRG2_CLG

CABLES

3x0.75
L=0.25m

EMERGENCY BUTTONS
with LED 90% and 100%

POWER SUPPLY
+ Red
- Black

FUSE-5A

2x1.5
L=1.5m

1

2x1+2x0,5
L=1.1m

2x1+2x0,5
L= 2,5 m

3x0,75

2x0.75 L=2.0m
(protection conduit ø ext.=11 mm)

3

4

2x0.75
L=1.2m

2x1
L=1.0m

2

2P+T

ELV1

reset   limit reduction

• PRG2-CLG
+
PREV NEXT
–
FABER-COM

Code PPRG2MC

• PRG2-DEC
+
PREV NEXT
–
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Code PPRG2MD

Programming keyboard PRG2-CLG

Programming keyboard PRG2-DEC

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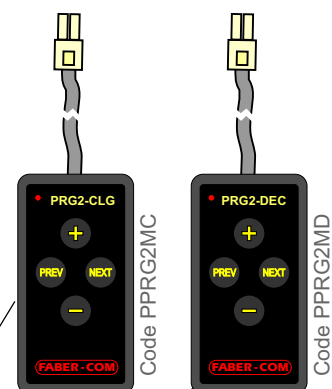
LED BLINKING IN CASE OF ERROR

Here below you can see a table to summarize the green led blinking and a brief description of the related error.

CLG STATE	BLINKING		DESCRIPTION
	Slow sequence	Fast sequence	
WORKING STATE	1	1	Input from transducer 1 exceedes the maximum working limit.
	1	2	Input from transducer 1 is lower than minimum working value.
	2	1	Input from transducer 2 exceedes the maximum working limit.
	2	2	Input from transducer 2 is lower than minimum working value.
	3	1	The current value on the valve 1 is outside the normal working range.
	3	2	The current value on the valve 2 is outside the normal working range.
	4	2	The input transducer 1 is in protection mode.
	4	3	The input transducer 2 is in protection mode.
	4	4	Relay broken because of the welded contacts.
AUTOTEST	5	1	FLASH MEMORY ERROR.
	5	3	It is not possible to close the relay. The outputs are not powered.
	5	4	There is current flowing on the valve coil even though the CLG is not driving the related output.
	5	5	There is current flowing on the transducer even though the CLG gives no power to it.
	5	7	There is current flowing on switches even though the CLG gives no power to it.

CLG STATE	BLINKING	DESCRIPTION
ANY TIME	LED 100% + LED 90% blinking together	Emergency button pressed

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