



INSTALLATION AND OPERATION MANUAL

cod. 80129C / Edit 04 - 0809 - ENG

1 • MAIN FEATURES

- 8 analog inputs configurable via software
- 16 bit resolution
- Intercepts
- Configuration of inputs via software
- On board power supply for transducers
- Diagnostics LEDs for power supplies and alarm
- Removable connector supplied

2 • INSTALLATION AND CONNECTION



This section contains the instructions necessary for correct installation of the GILOGIK II into the machine control panel or the host system and for correct connection of the system power supply, inputs, outputs and interfaces.



Before proceeding with installation read the following warnings carefully!
Remember that lack of observation of these warnings could lead to problems of electrical safety and electromagnetic compatibility, as well as invalidating the warranty.

Qualified staff

the installation and use of the system and components are only reserved at qualified staff.

Conform use

the system and relative components are usable exclusively to the use previewed in the manual
 In order to guarantee a correct and sure operation are indispensable that the product comes transported, stored correctly, installed, and controlled second the previewed modalities.

Suitable for use in pollution degree 2 environment.

Open type equipment.

Notes Concerning Electrical Safety and Electromagnetic Compatibility:

- **CE MARKING: EMC Conformity (electromagnetic compatibility)** in accordance with EEC Directive 2004/108/CE. The GILOGIK II system is mainly designed to operate in industrial environments, installed on the switchboards or control panels of productive process machines or plants.
 Norm of applicable product EN 61131-2.
 The Declaration of conformity is available on GEF RAN web: www.gefran.com
- UL listed standard: UL508 file E198546

BT Conformity (low tension)

in accordance with Directive LVD 2006/95/CE.
 Advice for Correct Installation for EMC

Inputs and outputs connection

- The externally connected circuits must be doubly isolated.
- To connect the analogue inputs the following is necessary:
 - physically separate the input cables from those of the power supply, the outputs and the power connections.
 - use woven and screened cables, with the screen earthed in one point only.



GEFRAN S.p.A. declines all responsibility for any damage to persons or property caused by tampering, neglect, improper use or any use which does not conform to the characteristics of the controller and to the indications given in these Instructions for Use.

3 • TECHNICAL DATA

- 8 analog inputs with 16 bit A/D conversion
- Sample time <100µsec for all channels
- Digital Filter
- Power supply: via R-BUS(x) 3.3V backplane

Inputs for:

- Potentiometer min. 2kΩ
- Differential 0...100mV, 0...30mV for strain gauge
- Linear 0...10V, ±10V, 0...2V
- Linear 0...20mA, 4...20mA

Input impedance for:

- Potentiometer > 1MΩ

- Linear 0...10V, ±10V e 0...2V > 1MΩ
 - Strain gauge 0...30mV, 0...100mV > 1MΩ
 - Linear 0/4...20mA = 100Ω
- Accuracy of inputs better than 0,2%

Power supply for transducers and potentiometers

24VDC ± 25% 500mA max. external (fed to front terminals)
 Power supply is internally distributed to the various channels:

- 10V for strain-gauge max 150mA
- 24V amplified sensors max. 500mA

Input isolation: > 2,0kV

Over-voltage on inputs for 1 ms maximum: max. 1kV

For UL: supply with class 2 device

Diagnostics

- Yellow LED presence external 24V power supplies
- Yellow LED presence power supply for transducers
- Green RUN LED with double function:
 - Low frequency: work with parameters of default
 - High frequency: work with parameters sets from master
- Red LED Interrupt on
- Red Fail LED module error

AMBIENT CONDITIONS

- Working temperature:** 0...50°C
- Storage temperature:** -20...70°C
- Humidity:** max. 90% Rh not condensing
- For UL:** Maximum surrounding air temperature 50°C

MECHANICAL DATA

Dimensions: 92x90x25.4 mm
 Weight: 120 g. max
 Attachment: snaps onto R-BUS(x)
 Protection level IP20
 36 pin front panel connector with spring-mounted lock

CONFIGURABILITY OF INPUTS

	Potentiometer 10V power supply on board	Voltage 0...10V	Voltage -10...+10V	Voltage 0...2V	Current 0/4...20mA	Amplified sensor	Strain-gauge
CH1	X	X				X	X
CH2	X	X				X	X
CH3	X	X	X			X	
CH4	X	X	X			X	
CH5	X	X		X	X	X	
CH6	X	X		X	X	X	
CH7	X	X		X	X	X	
CH8	X	X		X	X	X	

INSTALLATION AND CONNECTIONS

Power supplies : 24Vdc \pm 25% 500mA max.: Use unipolar cable 0.5mm². Do not attach lug.

Field inputs:

Linear 0-10V \pm 10V 0-2V 0/4-20mA use 2 pin shielded cable with 0.5 mm max. cross-section. Do not attach lug. Connect shielding directly to the grounding rod and as close as possible to the module.

Potentiometer, use 3 pin shielded cable with 0.5 mm max. cross-section. Do not attach lug. Connect shielding directly to the grounding rod and as close as possible to the module.

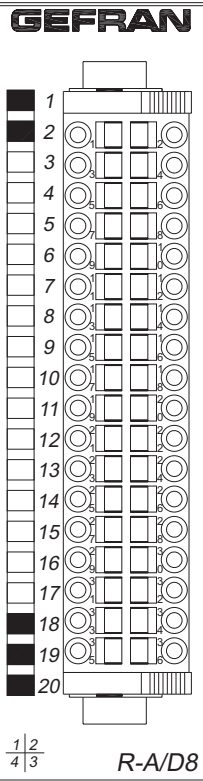
Amplified sensors: use 2 or 3 pin shielded cable with 0.5 mm max. cross-section. Do not attach lug. Connect shielding directly to the grounding rod and as close as possible to the module.

Strain-gauge: use 4 or 6 pin shielded cable with 0.5 mm max. cross-section. Do not attach lug. Connect shielding directly to the grounding rod and as close as possible to the module. To calibrate the transducer, use calibration cables outside the module



Any shielding must be secured near the module on the shielding rod (see appendix) or directly on the plate.

4 • CONNECTIONS



Vp = Supply for potentiometer

Vs = Supply for strain gauge

