GEFRAN

R-ETH100

BRIDGE ETHERNET 100 MODULE

INSTALLATION AND OPERATION MANUAL

cod. **80127C** / Edit **04** - **08/2011** - **ENG**

1 • MAIN FEATURES

- Complete control of R-BUS(x) back plane
- Refresh of all installed I/Os in 100us (1 node)
- GDNet interface
- Power supply of backplane

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.

Electrical power supply
- the GILOGIK II is NOT equipped with an On/Off switch: the user must provide a two-phase disconnecting switch that conforms to the required safety standards (CE marking), to cut off the power supply upstream of the system. The switch must be located in the vicinity of the system and must be within easy reach of the operator.
  One switch may control more than one systems.
- To make sure that the system very is connected to earth second the detailed lists of the relative understood one it.
- if the system is used in applications with risk of damage to persons, machinery or materials, it is essential to connect it up to auxiliary security equipment. It is advisable to make sure that alarm signals are also triggered during normal operation.
  The dispositif must NOT be installed in flammable or explosive environments; it may be connected to equipment operating in such atmospheres only by means of appropriate and adequate types of interface, conforming to the applicable safety standards

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: EN61131-2.
  The Declaration of conformity is available on GEFRAN 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

Module power supply
- Supply with class 2 device
- The power supply to the modules on the switchboards must always come directly from an isolation device with a fuse.
- The electronic instruments and electromechanical power devices such as relays, contactors, solenoid valves, etc., must always be powered by separate lines.
- When the power supply is strongly disturbed by the commutation of transistor or power units or motors, an isolation transformer should be used, earthing the screen.
- It is essential that the plant has a good earth connection:
  - the voltage between neutral and earth must not be > 1V
  - the Ohmic resistance must be < 6Ω;
- In the proximity of high frequency generators or arc welders, use adequate filters.
- The power supply lines must be separate from the instrument input and output ones.

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

Power supply
- Supply with class 2 device
- 24 VDC ±25% 2A max., powers the entire GILOGIK II system
- polarity inversion protection

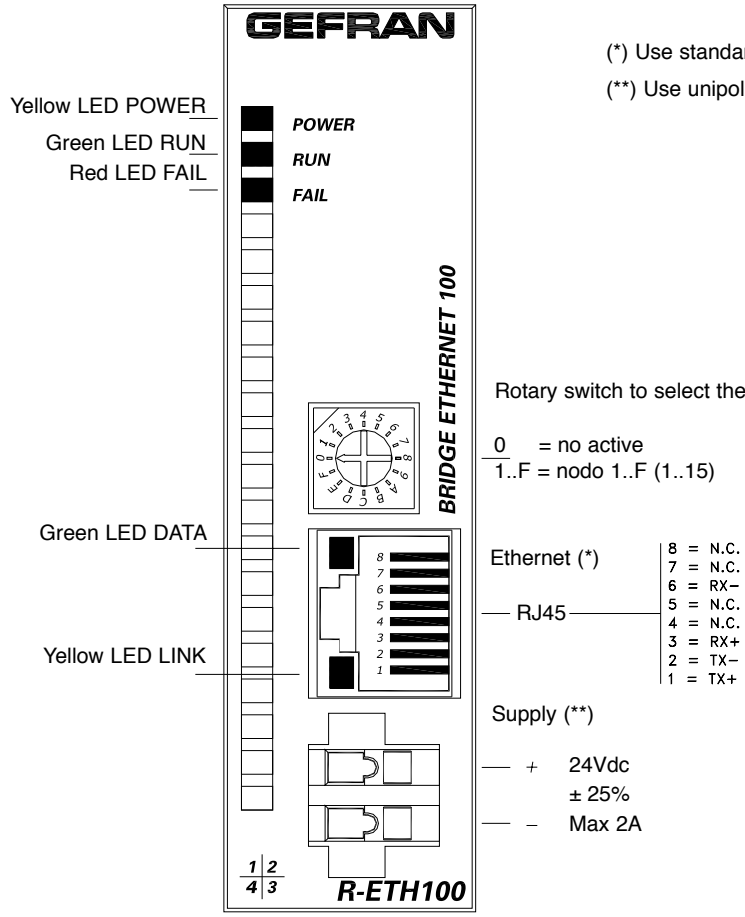
Ethernet
- standard RJ45 connection
- 16 position rotary switch for node identification on network configuration
- Standard IEEE802.3

Diagnostics
- power supply on (yellow POWER led)
- module in run / configuration (green RUN led)
- module or system in alarm / not configurated (red FAIL led)
- yellow LINK led: network connected
- green DATA led: data transfer

MECHANICAL DATA
Dimensions: 92x90x25,4mm
Weigth: 150g.
Fixing: snaps onto R-BUS(x)
Protection level: IP20

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

4 • CONNECTIONS



(*) Use standard category 6 cable according to TIA/EIA-568A

(**) Use unipolar cable with 1-1.5mm cross section Do not attach a lug

Rotary switch to select the node

0 = no active
1..F = nodo 1..F (1..15)

Ethernet (*)

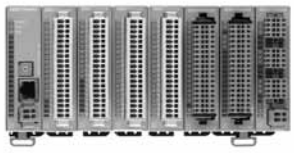
RJ45

8 = N.C.
7 = N.C.
6 = RX–
5 = N.C.
4 = N.C.
3 = RX+
2 = TX–
1 = TX+

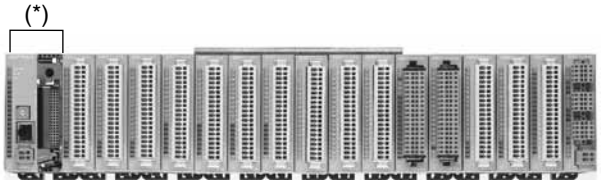
Supply (**)

\+ 24Vdc ± 25%

– Max 2A



The module installs on R-BUS(x) in the first slot on the left if there is no R-SW5 module; in the second slot if there is an R-SW5 module.



(*) with the 18 position bus, positions 1, 2 are reserved to the R-ETH100 and R-SW5 modules.

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