**Main applications**

Reference signals sent to:

- Drives
- Proportional valves
- Electronic control devices
- Relays and solid state power units with analog control

**Main features**

- **R-D/A4** 4 analog outputs at 16 bit output  $\pm 10V$
- **R-D/A8** 8 analog outputs at 16 bit output  $\pm 10V$
- **R-D/A16** 16 analog outputs at 16 bit output  $\pm 10V$
- Diagnostics of outputs
- Power supplies and alarm diagnostics LED
- In Conformity with UL508

**PROFILE**

R-D/A4, R-D/A8, R-D/A16 are modules with 4, 8, 16 optically isolated analog outputs (16bit  $\pm 10V$ ) that send reference signals to drives, servocontrols, power solid state relays with linear input, or retransmit variables to recording devices / other units, etc.

The maximum current for each output is 20mA.

The outputs are protected against short circuit and overload, and have a feedback circuit for diagnosis of channel operation and direct reading (via software) of the output with 8 bit resolution.

The module installs on R-BUS(x), from which it is fed.

**TECHNICAL DATA****Outputs**

Analog outputs  $\pm 10V$ , 20mA max.  
 16 bit digital analog conversion  
 Settling time: 50 $\mu$ s max.  
 Output power supply: 24VDC  $\pm$  25%  
 500mA max.  
 Synchronous outputs  
 Electronic protection against short-circuit and overload for each group of 4 channels: max 120ma  
 Linearity better than 0.5%  
 Output isolation : >2.0kV  
 Over-voltage on inputs for 1 ms: maximum 1kV  
 Power supply via backplane  
 R-BUS(x) 3.3V

**Diagnostics**

- Yellow LED presence 24V external power supplies
- Red LED: Alarm
- Green LED: RUN

**MECHANICAL DATA**

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

**AMBIENT CONDITIONS**

**Working temperature:** 0...50°C

**Storage temperature:** -20...70°C

**Humidity:** max. 90% Rh not condensing

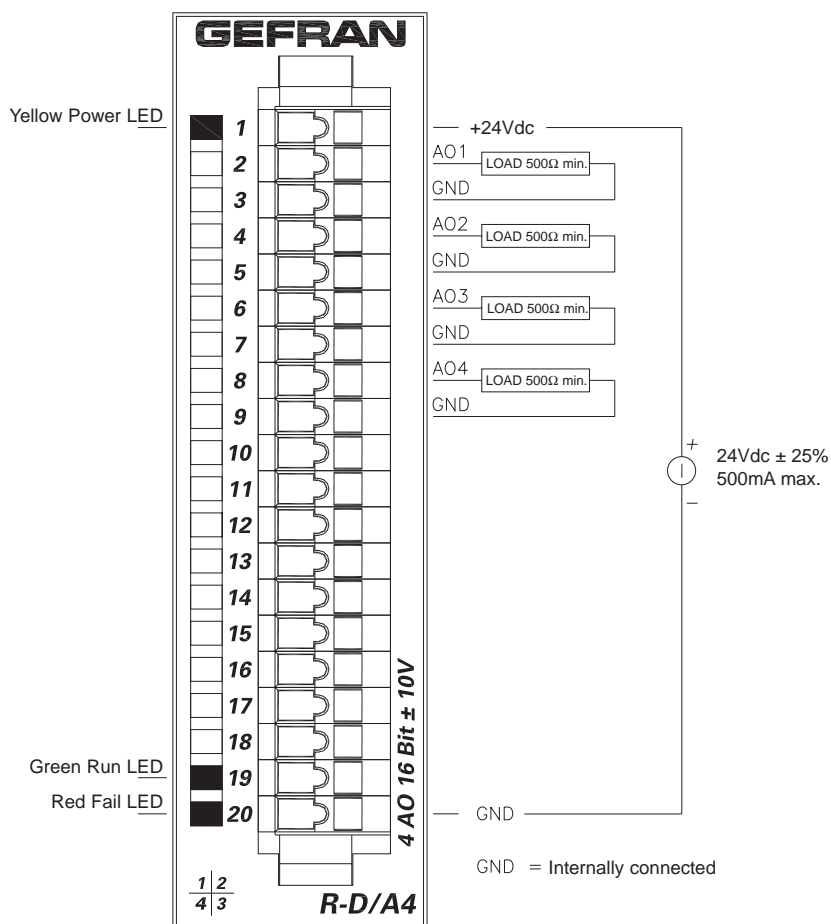
## WIRING

Front panel connections require:  
 Power supply 24 VDC  $\pm$  15% 500 mA max.. Use unipolar cable with 0.5 mm maximum cross-section.  
 Do not attach lug.  
 Bipolar analog outputs  $\pm$ 10V, use shielded cable with 0.5 mm maximum cross-section.  
 Do not attach lug.



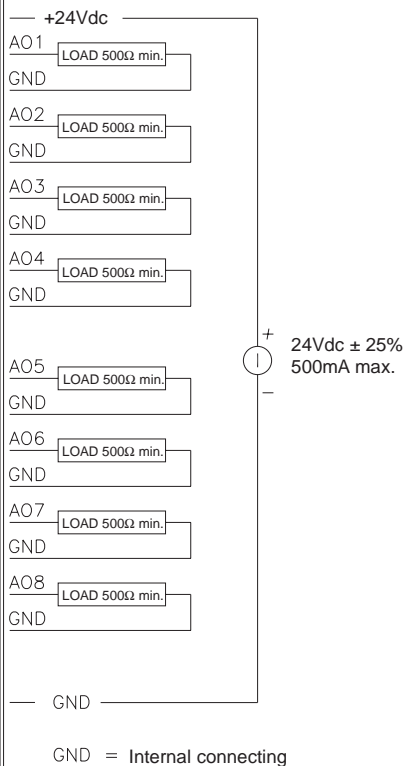
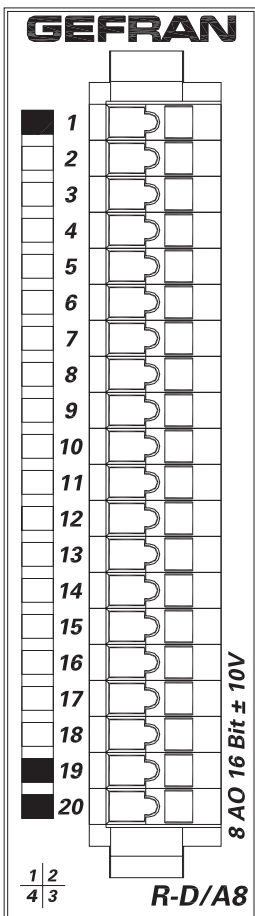
Connect the shielding directly to the grounded plate and as close as possible to the module.

## CONNECTIONS



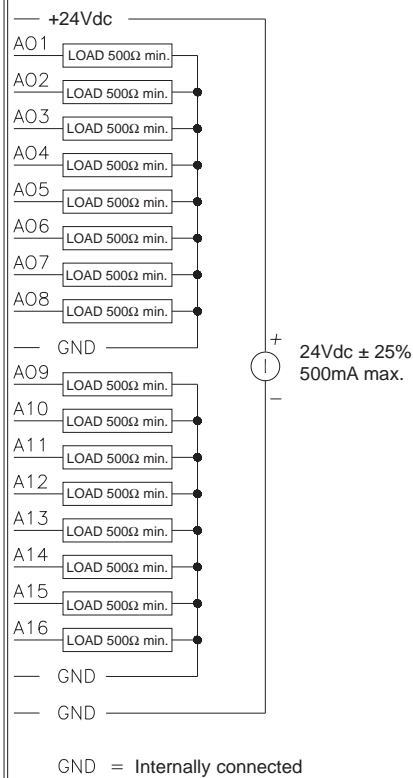
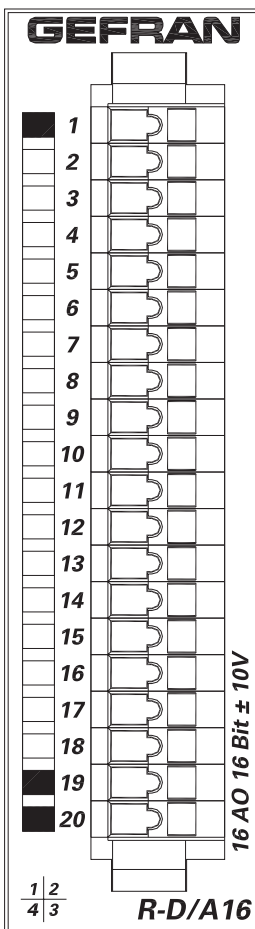
Yellow LED POWER

Green LED RUN  
Red LED alarm



Yellow LED POWER

Green Run LED  
Red Fail LED





**Important:** the wiring for R-D/A16 is NOT compatible with R-D/A4 or R-D/A8 (different groupings)

**ORDER CODE**

module code	<b>R-D/A4</b>	F027510	Code
	<b>R-D/A8</b>	F027064	
	<b>R-D/A16</b>	F027065	

GEFRAN spa reserves the right to make aesthetic or functional changes at any time and without notice

	Conformity UL508 File no. E198546
	The instrument conforms to the European Directives 2004/108/CE and 2006/95/CE with reference to the generic standards: - EN 61000-6-2 (immunity in industrial environments) - EN 61000-6-3 (emission in residential environments) - EN 61010-1 (safety) - EN 61161-2 (product standard). The Declaration of conformity is available on GEFran web: <a href="http://www.gefran.com">www.gefran.com</a>