

Press Release

THE NEW NRG DIGITAL SOLID STATE RELAYS WITH AN EtherNet/IP™ INTERFACE

Compact, multifunctional solid state relays with real-time monitoring enable reduction of costly unplanned downtime.

Lainate, December 2020 - Carlo Gavazzi Automation, the international electronics group with activities in the design, manufacture and marketing of electronic equipment, today presents an addition to the family of Ethernet-based NRG solid state relays – the NRG with an EtherNet/IP™ communication interface.

The digital transformation is a reality in every sector. In industrial automation, many businesses are turning to advanced technologies to ensure they remain competitive and continue to thrive. At the core of all this is data, an indispensable resource to guarantee maximized plant efficiency and cost savings.

The NRG is the solid state relay platform that perfectly matches to the emerging needs of the new industrial automation revolution. Switching, real-time monitoring and data exchange with the machine controller are possible through a communication interface added to the solid state relay. This interface enables real-time monitoring, crucial to predict failures, reduce unplanned machine stoppages and optimize machine performance.

The interface between the NRG and the machine controller is possible via Modbus, PROFINET and now also via EtherNet/IP™.

“Machine components need to be connected in a scalable and efficient way”, Dorianne Grech International Product Manager says. “In recent years, Industrial Ethernet protocols have taken over serial fieldbus protocols, mainly due to their faster communication speed. After the recent launch of the NRG with PROFINET, we are now providing an additional solution for easy and efficient integration of the NRG in EtherNet/IP™ networked machines.”

Developed in our competence centre in Malta, the NRG has been designed to suit any heating application where precise temperature control is crucial to guarantee the quality of the end product and where unplanned machine stoppages can result in a considerable loss of revenue. Typical applications are plastic injection machines, packaging machines, semiconductor manufacturing and glass tempering machines.

Main technical features

- EtherNet/IP™ (ODVA conformant), PROFINET (PI certified) or Modbus RTU interface
- Up to 32 NRG solid state relays in 1 NRG bus chain
- An NRG bus chain occupies 1 adapter (EtherNet/IP™), 1 node (PROFINET) or 1 Modbus address
- NRG solid state relays ratings up to 660 VAC, 90 A
- ON/OFF or % power control modes
- Selectable switching modes
- Predictive failure detection with Load deviation indication
- Read-outs: Current, Voltage, Power, Energy consumption kWh, Load and SSR Running hours
- Malfunction detection: Mains loss, Load loss, SSR short circuit, SSR over-temperature, Voltage/Current/Frequency out-of-range

ABOUT CARLO GAVAZZI AUTOMATION

Carlo Gavazzi Automation is an international electronics group with activities in the design, manufacture and marketing of electronic equipment targeted at the global markets of industrial and building automation.

Carlo Gavazzi Automation provides customers with technologically innovative, high quality and competitive solutions, in compliance with their requirements and expectations through its 22 National Sales Companies in Europe, the Americas and Asia & Pacific, operating with its production sites in Denmark, Italy, Malta, Lithuania and China.

For further information:

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