

## Press Release

### THE NEW NRG DIGITAL SOLID STATE RELAYS WITH A MODBUS TCP INTERFACE

Better interoperability with the additional ethernet-based protocols.

Lainate, May 2022 - Carlo Gavazzi Automation, the international electronics group with activities in the design, manufacture and marketing of electronic equipment, today presents an additional communication interface to the NRG family of digital solid state relays – the NRG with Modbus TCP communication.

The NRG range of digital solid state relays by Carlo Gavazzi is designed to face the digital transformation currently undergoing in industrial automation. Incorporating switching, monitoring, and diagnostics through a communication interface, the NRG enables real-time monitoring that is crucial to predict failures, reduce unplanned downtimes and optimize machine performance.

The NRG is currently available with PROFINET, EtherNet/IP™ and EtherCAT and today we are complementing the NRG range with a new controller with Modbus TCP. The availability of Modbus TCP in a wide variety of PLCs will broaden the interoperability of the NRG in the communication network of many industrial machines.

“Connectivity is the backbone of industrial IoT systems”, Dora Lee Borg International Product Specialist says. “The new NRG controller with Modbus TCP will enhance the adaptability of the NRG range of digital solid state relays to be implemented in a wider variety of applications”.

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, drying machines, and glass tempering machines.

#### Main technical features

- Modbus TCP, EtherCAT (Conformance Tested), EtherNet/IP™ (ODVA conformant), PROFINET (PI certified) or Modbus RTU interface
- Up to 32 NRG solid state relays in 1 NRG bus chain
- NRG solid state relays ratings up to 660 VAC, 90 A
- Predictive failure detection with Load deviation indication
- Selectable switching modes: ON/OFF, Burst, Advanced Full Cycle, Distributed Full Cycle, Phase Angle and Soft Start
- 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, and 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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