TURCK

Ethernet Communication for Ex Areas

Turck's GEN-3G excom gateway brings signals from Zone 0 at high data rates to the control system

Mülheim, March 25, 2020 – Turck is opening the world of the process industry for digitalization and Industry 4.0 with the first Zone 2 Ethernet gateway for the excom I/O system. All process data can thus now for the first time reach IT systems for analysis and evaluation at sufficient speed via a parallel data channel – a fast and easy way of implementing condition monitoring and predictive maintenance. Controllers and control systems are protected here from access attempts. The new GEN-3G multiprotocol device operates at high data rates in Profinet, Ethernet/IP or Modbus TCP networks without the need for manual intervention.

The integrated gateway switch enables the implementation of linear topologies which can be connected easily in the network to form a ring. Besides the hardware redundancies for power supply units and gateways, excom also supports redundancy concepts such as S2 system redundancy to ensure maximum availability. excom can also provide special solutions for protocols that do not specify any native standards for redundancy. The I/O system thus offers a standard redundancy landscape for operators – irrespective of the protocol used at the particular site or plant section.

Regardless of whether excom is used for Zone 1, 2 or the safe area: Users can always rely on the same DTM, EDS or GSDML and the same operator logic. This reduces the training required and ensures flexible use by specialist personnel in different plant sections. Turck's Cloud components and edge devices such as the TX700 are ideal solutions for calling up and routing the parallel process data. The tailored graphical user interfaces for industrial applications simplify the selection of the relevant information. The analysis systems can be hosted in the Turck cloud, by other cloud suppliers, or in the local network. Turck's encrypted Kolibri cloud protocol as well as MQTT and OPC UA are available as protocols.