Raychem

excellence is everything

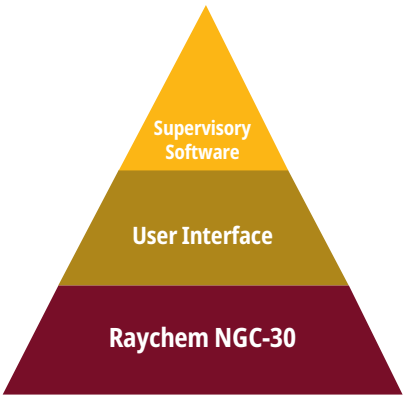
Industrial Control Solutions

NGC-30 Advanced Heat-Tracing Control System

chemelex.com

chemelex

Raychem NGC-30



User Interface Terminals (NGC-UIT2s) are available for panel door mounting in either nonhazardous/indoor or hazardous*/outdoor locations. An alternative NGC-UIT2 is also available for remote-mounting in any convenient nonhazardous indoor location. Regardless of where the user interface is installed, users can configure and monitor their Heat Management System (HMS) using the Supervisor software package.

Supervisor supervisory software provides the capability to remotely configure the control systems, monitor status and alarms, and offers other advanced features such as data logging, trending, recipes and batching. It provides fully configurable user access and rights levels while providing the flexibility of control access from any remote location anywhere in the world. The NGC-30 control and monitoring system complements any Heat Management System and is true to Chemelex's corporate commitment to being the global leader in electrical heat tracing.

* - Class 1 Div 2

Central control and monitoring is becoming increasingly important for industrial heat-tracing installations.

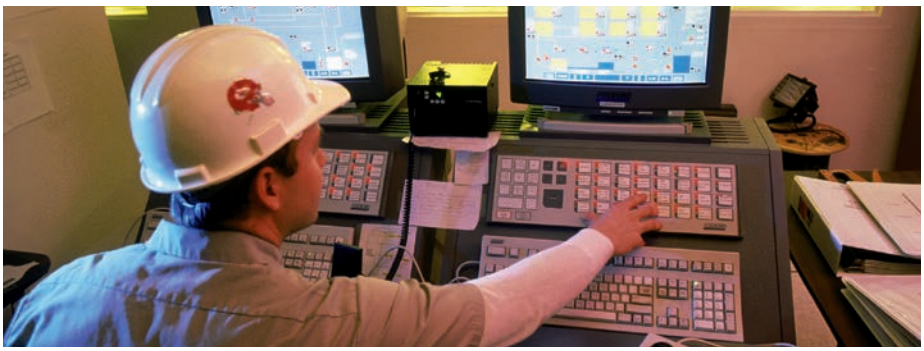
The reduction in the number of on-site maintenance personnel coupled with the demand for safe and reliable operation has increased the need for centralized access to critical information on the integrity of heat-tracing systems.

For improved production quality and higher yields, it is important to control an increased number of heat-tracing circuits while temperature bands become narrower. A centralized control and monitoring system offers the possibility of monitoring and changing parameters from a single location.

The Raychem NGC-30 control system has been designed to meet these objectives. Temperatures, ground fault currents, operating currents and other valuable information reflecting the integrity of the heat-tracing circuit are monitored and communicated to a central location with easy access for maintenance and operations.

Using the NGC-30 control system, the wiring cost of temperature sensors can be reduced significantly, as it fully supports a distributed architecture. The ability to locate power distribution and control in a single enclosure for hazardous* or nonhazardous locations results in significant reductions of secondary power distribution cost.

Upsets in the heat-tracing system are reported to the user with clear messages and alarms. These are displayed on the Raychem User Interface Terminal (NGC-UIT2) or remotely using the Raychem Supervisor software package.



NGC-30 FEATURES

The NGC-30 complements a Heat Management System with the following features:

- Control and monitoring of up to 260 circuits via multiple control algorithms
- Supports multiple languages: Spanish, French, German, Russian, Chinese and others
- Monitors temperatures, ground-fault currents, operating currents and voltages
- Alarms for temperatures, ground-fault currents, and operating currents
- Trips if a ground-fault condition occurs
- State-of-the-art User Interface
- Terminal with touch screen technology available for both nonhazardous and hazardous* locations
- Central monitoring and configuration via Supervisor client-server software
- Temperature input and control output modules can be placed at most convenient location (distributed architecture)
- Various levels of access for different user groups
- Fully configurable alarms
- Automatic heat-tracing system integrity checks and many more features

NGC-30 BENEFITS

- Optimized control mode for each individual heat-tracing circuit
- Central status overview and access to all parameters of the entire heat-tracing installation (temperatures, alarms etc.)
- Ease of use by graphical user interface and state-of-the-art technology in local language
- Significant cost savings through distributed architecture, reduced RTD wiring
- Heat-tracing control becomes integral part of Heat Management System
- Detailed problem reporting decreases maintenance time
- Data logging for trending, fault finding and other analysis leading into predictive maintenance when using the Supervisor client-server software
- Easy access to documentation and drawings when using Supervisor client-server software

AVAILABLE AS A COMPLETE CONTROL, MONITORING AND POWER DISTRIBUTION SYSTEM

Chemelex offers the NGC-30 as a complete solution, where the control system is already fully integrated into engineered control and power distribution panels. Specific care has been taken to design the system to the highest safety standards by enabling optimum access for easy maintenance, as well as a clear layout of the functional blocks and terminals.

The systems are pre-wired and tested prior to shipment. The intuitive software and local graphical user interface simplifies set-up and operation of specific control points. The panels are available in various sizes (number of circuits/spares), types of control options and details for the panel configuration like circuit breaker size (MCB and individual circuit breakers), type of contactor (solid state or mechanical), position of the cabling entry and many other options.

A NGC-30 system can consist of multiple panels linked via a dedicated communication link where a master panel contains the User Interface Terminal.

SUPERVISOR SOFTWARE BRINGS IT ALL TOGETHER

The Supervisor client-server software package provides a graphic interface to the NGC system. The software allows the user to configure and monitor various control and monitoring systems from a central location, acknowledge and clear alarms, and take advantage of other advanced features such as data logging, trending, recipes and batching.

Users can access all information from anywhere in the world, making Supervisor a powerful management tool for the entire Heat Management System (HMS). The software supports multi-client and multi-server architecture and is based upon Microsoft's .NET architecture and SQL server, a proven enterprise class database system.

USER INTERFACE TERMINAL FOR EASY ACCESS ON SITE

The User Interface Terminal (NGC-UIT2) uses a state-of-the-art color touch screen and allows convenient user control access to all heat-tracing circuits. Available in different models, the UIT can be installed either on the front of the NGC-30 panel (in either nonhazardous indoor or hazardous*outdoor locations), or remotely in nonhazardous indoor locations. The panel-mount UIT version for hazardous outdoor locations is approved for CID2 environments (Groups A, B, C, and D) and carries a T4 rating. Each UIT can control multiple panels and provides the interface to the Supervisor client-server software. For more technical details refer to the product data sheet for the NGC-30 system (H57879).

* - Class 1 Div 2

NGC-30 SYSTEM OFFERS MANY OPTIONS

The flexible system architecture of the NGC-30 system allows different configurations. Set-up and monitoring is done by the User Interface Terminal (NGC-UIT2), while the control is done by Card Rack Modules (NGC-30-CRM):

- The User Interface Terminal NGC-UIT can monitor up to 260 circuits.
- The Card Rack Module (NGC-30-CRM) provides control functionality and temperature inputs for up to 5 circuits using mechanical contactors. Once set up, they operate independently from the NGC-UIT for increased system reliability.
- The Card Rack Module (NGC-30-CRMS) provides control functionality and temperature inputs for up to 5 circuits using solid-state relays. With this CRMS, you also get additional control features like proportional, current limiting, and soft-start.
- The Current Transformer Module (NGC-30-CTM) provides ground fault and operating current monitoring.
- The Voltage Module (NGC-30-CVM) provides voltage monitoring. (optional).

GROUND-FAULT PROTECTION AND MONITORING

Ground-fault current monitoring offers good indication of water ingress or mechanical damage to heat-tracing systems.

The NGC-30 system offers continuous monitoring of ground-fault levels of every circuit. Increasing values may indicate potential issues and can be used to raise alarms before the circuit trips. The system identifies which branch circuit has the increased ground-fault current and action can then be taken before the system stops operating. This can significantly simplify maintenance activities.

National electrical codes require ground-fault equipment protection on all heat-tracing circuits. Heat-tracing circuits equipped with NGC-30 controllers do not require additional ground-fault detection equipment, simplifying installation and reducing costs.

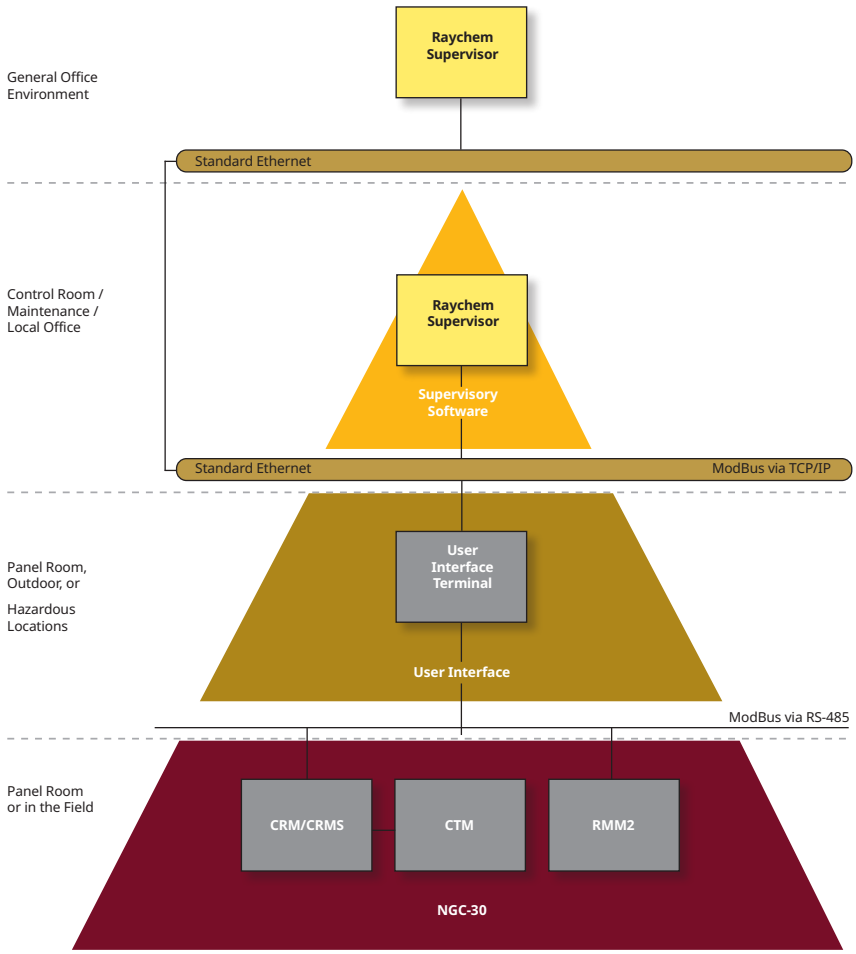
The Raychem NGC-30 System Overview

The NGC-30 is an advanced electronic multipoint control, monitoring and power distribution system for industrial heat-tracing applications.

Temperatures, ground-fault currents, operating currents and other valuable information reflecting the integrity of the heat-tracing circuit can be monitored and communicated to a central location, to the right person at the right time. The information is visible via the User Interface Terminal with touch screen technology or via the Supervisor client-server software.

This system provides a smooth upgrade path from the very successful MoniTrace-200N system. It provides a state-of-the-art user interface and an opportunity for existing 200N installations to benefit from the new features of the Supervisor software as well as the option to add circuits with ground-fault monitoring and many other features.

* - Class 1 Div 2



North America

Tel +1 800 545 6258
info@chemelex.com

Latin America

Tel +1 713 868 4800
info@chemelex.com

Europe, Middle East, Africa, India

Tel +32 16 213 511
Fax +32 16 213 604
info@chemelex.com

Asia Pacific

Tel +86 21 2412 1688
infoAPAC@chemelex.com

chemelex
excellence is everything

Raychem Tracer Pyrotenax Nuheat

RAYCHEM-SB-H57981-NGC30-EN-2504