



AUTOMATION & CONTROL

Overview



WWW.CROUZET.COM

Courtesy of Steven Engineering, Inc - (800) 258-9200 - sales@steveneng.com - www.stevenengineering.com

ABOUT CROUZET

Crouzet is an independent company **manufacturing mechatronic components for demanding applications in Aerospace & Transportation, Energy, Building and Machinery Industry.**

Crouzet provides **Switches and Sensors, Electromechanical Actuators, Electrical Protection Equipment, Cockpit Controls, Automation Controllers and Relays, and Instrumentation Services.**

Since 1921, Crouzet has a heritage of close collaboration with customers in the development of products, from standard components to fully customized solutions.

Crouzet's customers and partners can rely on our teams worldwide to always meet and often exceed their expectations. Driven by innovation, our experts are focused on designing and delivering the right product for the right application.

Crouzet is your trusted partner of choice to face industrial challenges of today and tomorrow.

WORLDWIDE PRESENCE



📍 HEADQUARTERS

■ SALES OFFICES

AUTOMATION CONTROLLERS



The all-in-one Telecontroller, 5 products in one. Connect to a cellular network to control and monitor any remote application:

- › **Cellular Modem:** Give cellular capabilities to your application
- › **Alert system:** Event alerts, status feedback and alarms where ever you are
- › **Data logger:** Measure and record key parameters
- › **Nano-PLC:** A PLC in a logic controller body
- › **Display:** Visualize and change parameters



Millenium EVO, the communicating logic controller for all your small-scale automation projects:

- › **Control at a distance:** Access to the front face from your PC, laptop, or mobile devices
- › Monitor your applications (Datalog, Events and FTP server connection)
- › Interact with other devices and program anywhere on your local network (via Ethernet or Modbus RTU)



The PLC made simple, PLC performance with logic controller simplicity, for your high-end applications:

- › **26 I/Os:** Configurable inputs to digital, analog, high-speed, relay, static and PWM outputs available
- › **Network communication:** Ethernet (Modbus TCP/IP), Modbus RTU and Bluetooth,
- › The ease of use of a simple logic controller



Millenium 3, the logic controller of choice for 10+ years. For everyone and for any simple application:

- › Many functions in a single product
- › **Smart Design:** Adapted for modular panels, can be DIN-rail mount or panel mount
- › Different power supplies available
- › Easy to use & free software
- › Expand up to 50 I/Os

AUTOMATION SOFTWARE



CROUZET SOFT

- › Easiest and most intuitive visual programming software
- › Pre-programmed application blocks like pump management, flow control, liquid level and many more



VIRTUAL DISPLAY

Visualize and manage your controller at a distance:

- › View and change parameters
- › Read & write programs
- › Download Datalog
- › Firmware update

Download it for FREE! <https://www.crouzet.com/software/download>

HMIS



HMIs

- › 4.3", 7" and 9.7" sizes available
- › **Several ways of communication:** Ethernet, Modbus RTU, SLin/SLout
- › **2 versions available:** High-Performance & Cost-Effective Essential



HMI SOFTWARE

- › Easy-to-use graphic software & pre-configured communication drivers
- › Wide range of tools to develop the perfect project

POWER SUPPLIES



POWER SUPPLIES

- › Compact offer of 24 VDC DIN-Rail Power Supplies
- › 10 W, 30 W, 60 W, 100 W
- › Up to 90 % efficiency

SENSORS & CONVERTERS



TEMPERATURE & SIGNAL CONVERTER

- › Convert temperature (Pt 100, 1000, Thermocouple J & K), current and PWM signals to voltage for use with Crouzet's Controllers



TEMPERATURE SENSORS

- › Air, duct, submersible and NTC Probes designed for simple & direct connection to Crouzet's Automation Controllers

SOLID STATE RELAYS



AC, PANEL MOUNT

GN, GN+, GNA

- › Standard Panel Mount (Hockey-Puck)
- › From 10 Amps to 125 Amps
- › Overvoltage protection and IP20 covers included
- › Multipurpose to switch different types of AC loads (Heating, Lighting, Motion and others)



AC, DIN-RAIL MOUNT

GNR, GNR+

- › 22.5 and 45 mm DIN-Rail Mount (Ready-to-use)
- › From 20 Amps to 45 Amps
- › Overvoltage protection and IP20 covers included
- › Multipurpose to switch different types of AC loads (Heating, Lighting, Motion and others)



DC, PANEL MOUNT

GND & GNAD

- › Standard Panel Mount (Hockey-Puck)
- › From 10 Amps to 40 Amps
- › Overvoltage protection and IP20 covers included
- › Multipurpose to switch different types of DC loads (Heating, Lighting, Motion and others)



SMART, PANEL MOUNT

GN SMART

- › Standard Panel Mount (Hockey-Puck)
- › From 35 Amps to 75 Amps
- › Overvoltage protection and IP20 covers included
- › Load and current detection



SMART, DIN-RAIL MOUNT

GNR SMART Module

- › Module for GNR/GNR+
- › Load current up to 40 Amps
- › Open loads/mains and partial load breaking detection and SSR faults
- › AC Current teaching function

TIMERS



UNIVERSAL DIGITAL

Syr-line

- › Super Multifunction with up to 138 operating functions
- › Universal connection
- › High-contrast LED screen
- › Precise time configuration
- › Limits and password settings
- › Program without power supply



PLUG-IN

Syr-line

- › Compact body with 8 or 11 pin connections
- › Easy and quick plug & play
- › Very large dial for an easy set up
- › Single or double output in the same package
- › Protective cover



HIGH-POWER

Syr-line

- › High-Power up to 16 Amps
- › Control more or bigger loads
- › Multi-function or Mono-function
- › Protective cover



DIGITAL 48X48

Syr-line TMR48-D

- › Big digits in a large digital screen
- › Wide and long visibility
- › Large buttons for an easy and quick programing
- › Water & Dust proof IP66



DOUBLE OUTPUT

Syr-line

- › Double 8 Amps Output in the same 17.5 mm package
- › Second Relay can work instantaneously or delayed
- › **Special functions:** Alternator and Delayed Alternator



ANALOG 48X48

TMR48

- › Large dial for an easy and quick programing
- › Multi-function or Mono-function
- › 8 or 11 pin connections
- › Multi-range from 0.02 s to 300 h

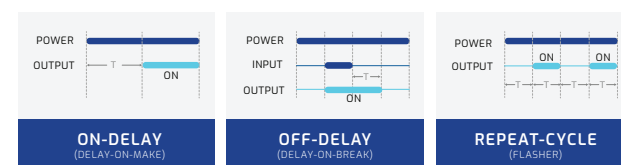


CLASSIC

Chronos 2

- › Multi-function or Mono-function
- › Multi-range
- › Multi-voltage
- › Screw or spring terminals

LARGE CHOICE OF TIMING FUNCTIONS



+ All timing functions on the market available

COUNTERS



ELECTRONIC

- › Hour counting, Totalizing (impulse), Ratemeter, Chronometer, Batch counting and Preset functions
- › LED, LCD and backlight LCD
- › 24x48 and 48x48 mm sizes available



ELECTROMECHANICAL

- › Hour counting and Totalizing (impulse) functions
- › Mechanical Dial visualization
- › 15x32, 24x48, 36x37, 36x48 and 48x48 sizes

MONITORING RELAYS



ELECTRICAL MONITORING

Three-Phase

- › Protect AC motors, HVAC Systems, Pumps, Conveyors, Packaging Machines and other loads
- › **Monitor in 3-phase networks (120 to 480 VAC):** phase sequence, phase failure, imbalance (asymmetry), over and undervoltage



CURRENT

Single-Phase

- › Detect over and under current in a single-phase network
- › **Detection of 3 ranges:** 2-500 mA, 0.1-10 A and 2-20 A
- › **2 packages available:** 17.5 and 35 mm



VOLTAGE

Single-Phase

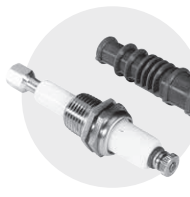
- › Detect over and undervoltage in a single-phase network
- › **Detection of range:** 0.2 to 600 VAC/DC
- › **2 packages available:** 17.5 and 35 mm



LEVEL CONTROL

Pump up or down

- › Pump-up (filling), Pump-down (emptying)
- › Control one or two levels
- › **Measuring ranges:** 5-100 kΩ, 250-1 MΩ



PROBES

Accessories

- › For use with level control relays
- › Electrode holder and protected suspension sensor

PNEUMATICS



LOGIC GATES

On Sub-base & Plug-in

- › **Functions:** OR, AND, YES (Buffer), NOT (Inverter)
- › **Operating pressure:** 2 to 8 bar
- › Blue, green, yellow, orange, light grey, dark grey product colors



TIMERS

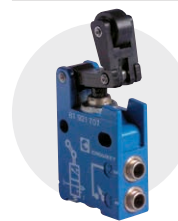
On Sub-base

- › **Functions:** positive, negative, impulse and frequency generator
- › **Timing range:** 0.1 to 60 s
- › **Frequency range:** 0.02 to 8 Hz
- › **Operating pressure:** 2 to 8 bar



COUNTERS

- › Totalizing, Preset functions
- › 4, 5, 6 digits with or without reset
- › With or without pre-selection



POSITION DETECTORS

- › Pressure decay sensor, low force position, microvalve, miniature, compact, adjustable stop versions
- › **Permissive Fluids:** Air, inert gas
- › Different plunger, lever, roller and rotary head options



PRESSURE & VACUUM SWITCHES

- › Vacuum pressure switches with electrical output
- › Adjustable pressure switches with positive or negative output
- › Adjustable vacuum switches with pneumatics positive, negative or electrical output available



90+ years of customization,
adaptation & co-design
expertise at your service

DESIGN LAB

When your application requires more than one of our high-quality standard products, Crouzet's multidisciplinary team is ready to partner with you in the development of the best customized solution dedicated to your project.



High-quality and
efficient manufacturing



Uncompromising and
highest standards



EXPERTISE AND TECHNOLOGY BEHIND EVERY PROJECT

OUR WIDE RANGE OF PRACTICAL AND EASY TO USE AUTOMATION AND CONTROL PRODUCTS ARE MANUFACTURED ACCORDING TO INTERNATIONAL AND ENVIRONMENTAL STANDARDS INCLUDING : UL, CSA, GL, CCC, TUV, CE, ROHS AND REACH.



AMERICAS

CANADA

Tel.: +1 (855) 929-5465
americas.custserv@crouzet.com

MEXICO

Tel.: +1 (855) 929-5465
americas.custserv@crouzet.com

USA

+1 (855) 929-5465
americas.custserv@crouzet.com

COUNTRIES NOT LISTED

+1 (855) 929-5465
americas.custserv@crouzet.com

EUROPE / MIDDLE EAST / AFRICA

BELGIUM

Tel.: +32 (0) 2 620 06 05
Fax: +32 (0) 2 461 00 23
klantenservice@crouzet.com

FRANCE

Tel.: +33 (0) 475 802 101
Fax: +33 (0) 475 828 900
relationclient@crouzet.com

GERMANY / AUSTRIA

Tel.: +49 (0) 2103/9385930
Fax: +49 (0) 2103/980-222
kundenservice@crouzet.com

ITALY

Tel.: +39 (02) 38 594 099
Fax: +39 (02) 82 952 104
assistenzaclienti@crouzet.com

SPAIN / PORTUGAL

Tel.: +34 (91) 215 80 95
Fax: +34 (93) 2 20 02 05
atencionalcliente@crouzet.com

SWITZERLAND

Tel.: +41 (0) 225 67 57 90
Fax: +41 (0) 565 88 02 75
kundenservice@crouzet.com

THE NETHERLANDS

Tel.: +31 (0) 20-654 52 20
klantenservice@crouzet.com

UNITED KINGDOM

Tel.: +44 (0) 2076 600 025
customer.relation@crouzet.com

COUNTRIES NOT LISTED

Tel.: +33 (0) 475 802 102
Fax: +33 (0) 475 828 900
customer.relation@crouzet.com

ASIA / PACIFIC

CHINA

Tel.: +86 (752) 5303 200
china@crouzet.com

INDIA

Tel.: +91 (80) 67624500/01
india@crouzet.com

SOUTH KOREA

Tel.: +82 (2) 2679 8312
korea@crouzet.com

SOUTH ASIA PACIFIC

Tel.: +86 (752) 5303 200
eap@crouzet.com

Warning:

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.