

AUTOMATION & **CONTROL**

Overview



ABOUT CROUZET

100+ YEARS MANUFACTURING THE FUTURE Together

We design and manufacture **Mechatronic Products** to turn engineering ideas into real world applications

OUR **MARKETS**







OUR **PRODUCTS**







OUR **SERVICES**

MRO

SPARES

INSTRUMENTATION

WE ARE GLOBAL

2000+ collaborators.

10 Manufacturing Plants, 9 Sales Offices & 4 R&D Labs









VALENCE NORD, FRANCE







VOUVRY, SWITZERLAND







HUIZHOU, CHINA



BANGALORE, INDIA



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



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.







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.

















TIMERS

MONITORING RELAYS

ELECTRICAL

MONITORING

Three-Phase

> Protect AC motors, HVAC Systems,

(120 to 480 VAC): phase sequence,

> Detect over and under current in a

2-500 mA, 0,1-10 A and 2-20 A

(asymmetry), over and undervoltage

Pumps, Conveyors, Packaging

> Monitor in 3-phase networks

Machines and other loads

phase failure, imbalance

CURRENT

Single-Phase

single-phase network

Detection of 3 ranges:

> 2 packages available:

17.5 and 35 mm

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PNEUMATICS

AUTOMATION CONTROLLERS



..

THE SMALLEST LOGIC CONTROLLER EVER!

Millenium 5



> The only highly configurable and multipurpose industrial logic controller

- with a 17.5 mm (0.69") body > Fits in any control panel or machine and supports DIN rail and panel mounting
- dozens of control panel products
- > Built-in Bluetooth communication to give wireless capabilities to your applications.

> 8 highly configurable I/Os (analog, digital, high-speed, PWM). It can replace

> Easy program transfer at a distance

Perfect for small-scale applications:

THE CLASSIC LOGIC CONTROLLER

Millenium

- Many functions in a single product

For everyone and for any simple application:

Millenium 5/0

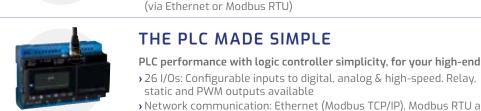
> Smart Design: Adapted for modular panels, can be DIN-rail mount or panel mount

- > Different input power versions (available)
- > Easy to use & free software > Expand up to 50 I/Os

THE COMMUNICATING LOGIC CONTROLLER

For all your simple applications with connectivity needs:

- > 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

em4_{NANOPLC} PLC performance with logic controller simplicity, for your high-end applications:



- static and PWM outputs available > Network communication: Ethernet (Modbus TCP/IP), Modbus RTU and Bluetooth
- The ease of use of a simple logic controller



THE 5-IN-1 TELECONTROLLER

Control and monitor any application remotely with a cellular network:



em4_{ALERT}

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

AUTOMATION CONTROLLERS SOFTWARE



> Easiest and most intuitive visual orogramming software

- > Pre-programmed application blocks
- like pump management, flow control, liquid level and many more

Millenium3 Soft Crouzet Soft



sualize and manage your controller at

- > View and change parameters
- > Read & write programs
- > Firmware update



HMIS

CROUZET.COM

4.3". 7" and 10" sizes available Several ways of communication: Ethernet, Modbus RTU, SLin/SLout

> 2 versions available: High-Performance & Cost-Effective Essential

SOLID STATE RELAYS



SINGLE-CHANEL

AC SINGLE-PHASE

- > PCB Mount: SIP

HMI SOFTWARE > Easy-to-use graphic software &

OVERVIEW

pre-configured communication

- > Wide range of tools to develop the perfect project
- Crouzet Touch Soft

POWER SUPPLIES



- DIN-Rail Power Supplies > From 10 W to 480 W
- >Up to 90 % efficiency

LOAD DIAGNOSTICS

AC SINGLE-PHASE

Single relays and add-on modules with load monitoring functions for heating systems

> Panel Mount: Hockey-puck > DIN-rail Mount: Module



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

› Air, duct, submersible and NTC

Probes designed for simple & direct

connection to Crouzet's Automation

SENSORS

CONTACTOR / REVERSER AC 3-PHASE

olid-state contactors for 3-phase heaters nd motors' control

Panel Mount: Contactor and Reverser > DIN-rail Mount: 90 mm Contactor

contactor

DC OUTPUT

C relays to control motors, lighting and other pplications working on a DC power supply

- > Panel Mount: Hockey-puck > DIN-rail Mount: 12 mm and 58 mm Reverser
- > PCB Mount: SIP



assic single relays available in multiple mats for any type of application

- > Panel Mount: Hockey-puck, Fast-on, Low-Profile and Mini-puck
- DIN-rail Mount: 22.5 mm, 45 mm and 12 mm

space-saving needs

MULTI-CHANNEL AC SINGLE-PHASE

2 or 4 relays in one single package for

Panel Mount: Hockey-puck and Fast-on

Syr-line

Syr-line

17.5 mm package

> Second Relay can work

Delayed Alternator

instantaneously or delayed

Syr-line

High-Power up to 16 Amps Control more or bigger loads

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UNIVERSAL DIGITAL

> Super Multifunction with up

to 138 operating functions

> High-contrast LED screen

> Precise time configuration

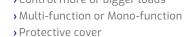
> Limits and password settings

Program without power supply

Universal connection

HIGH-POWER

OVERVIEW



DOUBLE OUTPUT

> Double 8 Amps Output in the same

> Special functions: Alternator and



DIGITAL 48X48

Compact body with 8 or 11 pin

> Very large dial for an easy set up

> Single or double output in the same

> Easy and quick plug & play

PLUG-IN

Syr-line

connections

package

> Protective cover

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

ANALOG 48X48

> 8 or 11 pin connections

> Large dial for an easy and quick

> Multi-function or Mono-function

Multi-range from 0.02 s to 300 h

INPUT OUTPUT ON ON

REPEAT-CYCLE

TMR48

programing

LARGE CHOICE OF TIMING FUNCTIONS



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



COUNTERS



LOGIC GATES

NOT (Inverter)

TIMERS

On Sub-base

and frequency generator

> Frequency range: 0,02 to 8 Hz

> Operating pressure: 2 to 8 bar

> Timing range: 0.1 to 60 s

On Sub-base & Plug-in

> Blue, green, yellow, orange, light grey,

Functions: positive, negative, impulse

> Functions: OR, AND, YES (Buffer),

> Operating pressure: 2 to 8 bar

dark grey product colors

> 4, 5, 6 digits with or without reset > With or without pre-selection



> Pump-up (filling), Pump-down (emptying)

LEVEL CONTROL

Pump up or down

- > Control one or two levels
- Measuring ranges: 5-100 kΩ. 250- 1 MΩ



compact, adjustable stop versions > Permissive Fluids: Air, inert gas

POSITION DETECTORS

> Pressure decay sensor, low force

position, microvalve, miniature.

Different plunger, lever, roller and rotary head options





PROBES

Accessories For use with level control relays

> Electrode holder and protected suspension sensor



> Vacuum pressure switches with electrical output

> Adjustable pressure switches with positive or negative output

> Adjustable vacuum switches with

electrical output available

MODULAR & INDUSTRIAL Compact offer of 12 & 24 VDC

COUNTERS

CLASSIC Chronos 2

- > Multi-function or Mono-function > Multi-range
- > Multi-voltage

Screw or spring terminals

OFF-DELAY ON-DELAY

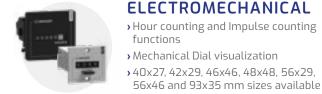
+ All timing functions on the market available



ELECTRONIC

- > Hour counting, Impulse counting, Ratemeter, Chronometer, Batch counting and Preset functions > LED, LCD and backlight LCD
- > 48x24 and 48x48 mm sizes available





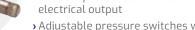
> Hour counting and Impulse counting functions Mechanical Dial visualization > 40x27, 42x29, 46x46, 48x48, 56x29,











pneumatics positive, negative or



- - > Download Datalog
 - Virtual Display
- Download it for FREE! https://www.crouzet.com/softwares/download



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