

# Micro-control

Control system solutions  
adapted to your applications

## 08 Overview



■ Logic controllers



■ Control relays



■ Timers

[www.crouzet.com](http://www.crouzet.com)





Contents

Editorial



■ Presentation of the offer P. 4-5



■ Overviews of the offer P. 6-39



■ Micro-control online P. 40-43



■ Index by part number P. 44-51



■ Sales and technical support P. 52



For over 40 years, Crouzet, a subsidiary of Schneider Electric, has established a reputation for providing quality timers, logic controllers and control relays. With the exciting new Millenium 3 & C-Lynx ranges, read on to discover Crouzet's complete Micro-control product offer.

Always one step ahead of market trends and customer requirements, Crouzet is continually developing its range of both standard and customised automation components and solutions to cover all the latest commercial and industrial applications and meet the needs expressed by manufacturers of automated equipment and machinery.

Throughout the world, Crouzet provides technical and industrial expertise to ensure that its products are perfectly customised and adapted for integration in any of your equipment.

In 2005, Schneider Electric set up the CST (Custom Sensors & Technologies) Business Unit incorporating the companies BEI, Crouzet, Crydom & Kavlico. In addition to the Micro-control products in this brochure, the new CST unit also offers an extensive range of products and solutions in detection, control and motorisation. The result? Even better service and technical choice for our customers.

Quality is at the heart of Crouzet's strategy. Our Quality Control and Environmental Management Systems are ISO 9001 and ISO 14001 certified respectively.



Eco-design is also a pivotal component in the company's "Offer Creation Process", the aim of which is to design products and services that match customer requirements whilst at the same time reducing their environmental impact throughout their life cycle.

All Crouzet products are now fully compliant with the RoHS directive.





# Micro-control expertise

## ► Expertise - for all your applications

■ **Crouzet's Micro-control offer** encapsulates all the vital steps in creating standard control system solutions and ensuring equipment reliability:

- **Analysis** of customer requirements
- **Multidisciplinary expertise** in the fields of sensors, motors and pneumatic components
- **Advanced prototyping** and on-site testing for adapted products
- Electrical, mechanical and climatic endurance **tests**
- **Standardisation and approval** of components (e.g., EMC)
- Electronics, electrical, mechanical and cable connections **expertise**
- Software & Firmware **engineering**
- **Customisable** product marking and labelling
- **International logistics**, after sales service.

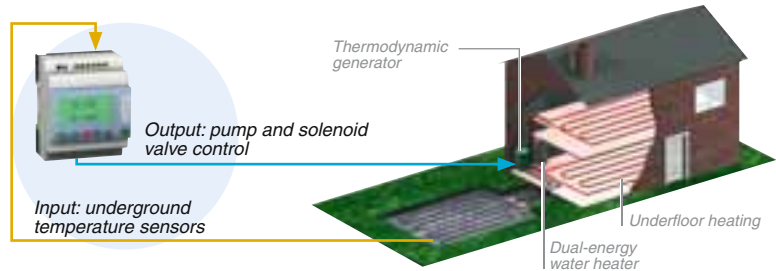
■ **Crouzet has developed extensive** "Adapted Control" expertise to meet the specific needs of each customer. Standard offers can therefore be tailored to provide dedicated products and solutions at any time.

■ **Crouzet's Micro-control products** are used in a variety of commercial applications, such as Building Management Systems, access management and vending machines, as well as in industrial applications, such as plastic forming tools, conveyors and woodworking machines. They can also control agricultural equipment, water treatments (pump control, filtration...) and manage installation dedicated to new energies (wind, solar, biomass...).

For more application examples, click on the "Applications" heading in the Micro-control section on our website: [www.crouzet.com](http://www.crouzet.com)

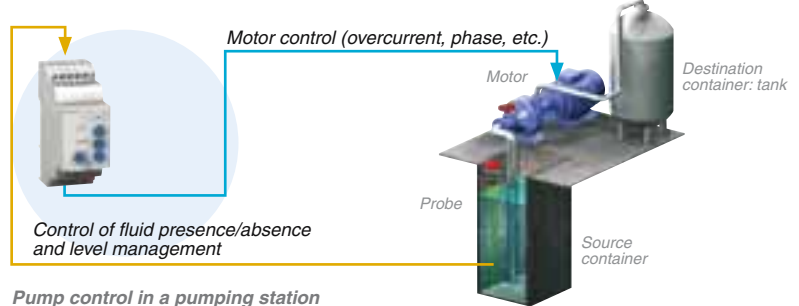
## ► Examples of Micro-control applications:

### Logic controller



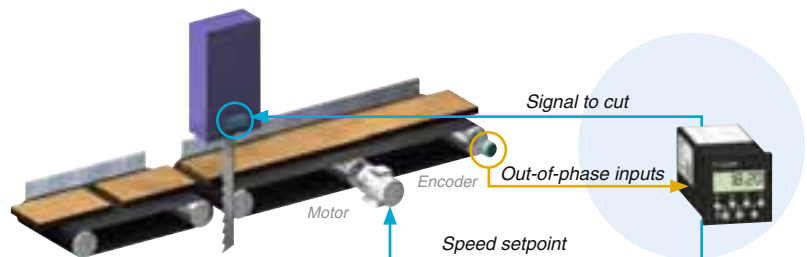
Heat control and domestic hot water system management: heat pump

### Control relay



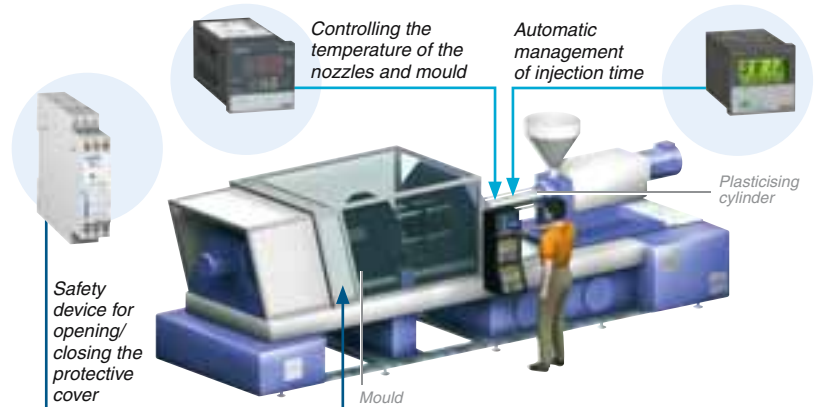
Pump control in a pumping station

### Counter / Ratemeter



Cutting to length on woodworking machine

### Temperature controller / Timer / Safety relay



Control and safety devices for injection/moulding press



▶ Adapted Micro-control offer



Whatever the type of machine, Crouzet can adapt standard components or create specific products to work in complete harmony with your equipment. Just take a look at the adaptation wheel below to discover the different levels of customisation offered by Crouzet's Customer Adaptation Technical Service.

■ Dedicated Adapted Control Team

■ Specific products

All our design and industrialisation expertise in control and automation systems at your service, to define and create specific products dedicated to your application.

■ Standard components

A complete range of standard stocked control products available to create your automation applications.



■ Adapted products

Defined jointly with our technical sales teams, these adapted products have all the performance and functionality you need for your application.

■ Components with added value

Standard products complemented by factory-mounted auxiliaries or accessories (connectors, cables, wire outputs, etc.) or supplied as special kits to assist integration into your equipment, simplify logistics and maximise the reliability of your installation.

# Presentation of the offer

## Micro-control offer



Taking a specialist approach to offer complete solutions, Crouzet harnesses electronic and electromechanical technologies to meet all your time management, management of physical and electrical values and counting requirements. The entire range is sold through a global distribution network working hand in hand with local sales forces dedicated to Micro-control applications.

■ Global distribution network

Product	Technology	Functions					
		Sensing	Operator dialogue	Processing	Actuating	Communicating	Supplying power
	<b>Electronic</b>	<b>Electromechanical</b>					
	<b>Range</b>	<b>Range</b>					
Logic controller P. 6-11	<ul style="list-style-type: none"> <li>Millenium 3 "compact" version</li> <li>Millenium 3 "expandable" version</li> <li>Millenium 3 digital or analogue extensions</li> <li>Millenium 3 "application-specific" extensions</li> <li>Accessories (faceplates, converters, display units, etc.)</li> </ul>	-	■	■	■	■	■
	<ul style="list-style-type: none"> <li>Millenium 3 network communication extensions</li> </ul>	-				■	
	<ul style="list-style-type: none"> <li>Millenium 3 modem communication interface</li> </ul>	-				■	
Serveur Web for supervision P. 11	<ul style="list-style-type: none"> <li>Millenium Web Server</li> </ul>	-		■	■	■	
Regulated switch mode power supply P. 12-13	<ul style="list-style-type: none"> <li>Modular power supply</li> <li>Equipment power supply for integrated control system</li> <li>DC/DC converter</li> </ul>	-				■	
Control relay P. 14-19	<ul style="list-style-type: none"> <li>C-Lynx</li> <li>E, L &amp; F series</li> <li>Defrost relay</li> </ul>	-	■		■	■	
Timer P. 20-31	<i>DIN rail mounted</i>	<ul style="list-style-type: none"> <li>Chronos</li> <li>RTM miniature</li> <li>S serie</li> </ul>	■	■	■	■	
	<i>Panel-mounted</i>	<ul style="list-style-type: none"> <li>TMR 48 (Analogue)</li> <li>MBA (Analogue)</li> <li>TIMER 8xx (Digital)</li> </ul>	■	■	■	■	
Counter / Ratemeter P. 32-35	<ul style="list-style-type: none"> <li>CPT4 (with preselection)</li> <li>CP2 (without preselection)</li> </ul>	<ul style="list-style-type: none"> <li>CH48G</li> <li>36 x 37 mm</li> <li>36 x 48 mm</li> </ul>	■	■	■	■	
Temperature controller P. 36-37	<ul style="list-style-type: none"> <li>CT48A (Analogue)</li> <li>CTD24 (Digital)</li> <li>MIC48 (Digital)</li> <li>CTD43 (Digital)</li> <li>CTD46 (Digital)</li> <li>CTH46 (Digital)</li> <li>Pt100 &amp; Thermocouple probes</li> </ul>	-	■	■	■	■	
Safety relay P. 38-39	<ul style="list-style-type: none"> <li>Emergency stops and/or mobile safety guards</li> <li>Relevelling check</li> <li>Timed contacts</li> <li>Extension relays</li> <li>Zero speed monitoring</li> <li>Two-hand control</li> </ul>	-	■		■	■	

Logic controllers

Power supplies

Control relays

Timers

Counters /  
Ratemeters

Temperature  
controllers

Safety products



▶ Millenium 3 "Compact" range

Millenium 3 logic controllers



Type	Part number	Power supply	Inputs	Outputs	
<b>With display</b>					
	<b>CD12</b> <b>NEW</b>	<b>88970041</b>	24 V $\overline{\text{DC}}$	8 digital (including 4 analogue)	4 relays 8 A
		<b>88970042</b>	24 V $\overline{\text{DC}}$	8 digital (including 4 analogue)	4 solid state 0.5 A (including 1 PWM)
		<b>88970043</b>	100 $\rightarrow$ 240 V $\sim$	8 digital	4 relays 8 A
		<b>88970044</b>	24 V $\sim$	8 digital	4 relays 8 A
		<b>88970045</b>	12 V $\overline{\text{DC}}$	8 digital (including 4 analogue)	4 relays 8 A
	<b>CD20</b> <b>NEW</b>	<b>88970051</b>	24 V $\overline{\text{DC}}$	12 digital (including 6 analogue)	8 relays 8 A
		<b>88970052</b>	24 V $\overline{\text{DC}}$	12 digital (including 6 analogue)	8 solid state 0.5 A (including 4 PWM)
		<b>88970053</b>	100 $\rightarrow$ 240 V $\sim$	12 digital	8 relays 8 A
		<b>88970054</b>	24 V $\sim$	12 digital	8 relays 8 A
		<b>88970055</b>	12 V $\overline{\text{DC}}$	12 digital (including 6 analogue)	8 relays 8 A
<b>Without display</b>					
	<b>CB12</b> <b>NEW</b>	<b>88970021</b>	24 V $\overline{\text{DC}}$	8 digital (including 4 analogue)	4 relays 8 A
		<b>88970023</b>	100 $\rightarrow$ 240 V $\sim$	8 digital	4 relays 8 A
		<b>88970024</b>	24 V $\sim$	8 digital	4 relays 8 A
	<b>CB20</b> <b>NEW</b>	<b>88970031</b>	24 V $\overline{\text{DC}}$	12 digital (including 6 analogue)	8 relays 8 A
		<b>88970033</b>	100 $\rightarrow$ 240 V $\sim$	12 digital	8 relays 8 A
		<b>88970034</b>	24 V $\sim$	12 digital	8 relays 8 A



■ Ergonomic display



■ Optimum memory capacity

▶ Millenium 3 logic controllers operate with the following software:



■ **M3 SOFT**

Multilingual programming software (CD-ROM)

**Part no.: 88970100**

■ **M3 SPECIFIC FUNCTIONS**

Libraries of specific functions (CD-ROM)

**Part no.: 88970103**

■ **M3 ALARM**

Alarm management software (CD-ROM)

**Part no.: 88970116**

This software is used alongside communication interface M3MOD (Part no.: 88970117)

# Logic controllers

## Modem communication solutions



88970117 88970118 88970119

## Modular power supplies <sup>(1)</sup>



88950306 88950303 88950304 88950307 88950302

## Starter kits and demo case



Standard

- 88970080
- 88970106 (Demo-case)
- 88970081
- 88970082
- 88970083

88970117	88970118	88970119	88950306	88950303	88950304	88950307	88950302
■	□	□		■	■	■	■
■	□	□		■	■	■	■
■	□	□					
■	□	□	■				
■	□	□		■	■	■	■
■	□	□		■	■	■	■
■	□	□					
■	□	□	■				
■	□	□		■	■	■	■
■	□	□					
■	□	□					
■	□	□		■	■	■	■
■	□	□					
■	□	□					
■	□	□					
■	□	□					
■	□	□					

■ Compatible  
 □ Mounted with M3MOD:  
 - GSM modem  
 - or STN modem

<sup>(1)</sup> Find the whole "Power Supplies" offer on pages 12-13



### ▶ The 4 starter kits each contain:

- 1 CD12 or CD20 logic controller + 1 USB link cable + 1 M3 SOFT programming software CD-ROM + 1 M3 SPECIFIC FUNCTIONS CD-ROM.

Part no.: 88970080 / 88970081 / 88970082 / 88970083



### ▶ The demonstration case contains:

- 1 CD12 logic controller + 1 USB link cable + 1 M3 SOFT programming software CD-ROM + 1 M3 SPECIFIC FUNCTIONS CD-ROM + 1 voltage adaptor + 1 I/O simulation card.

Part no.: 88970106

Logic controllers

Power supplies

Control relays

Timers

Counters / Rate meters

Temperature controllers

Safety products

## Millenium 3 "Expandable" range

### Millenium 3 logic controllers



Type	Part number	Power supply	Inputs	Outputs	
<b>With display</b>					
	<b>XD10</b> <b>NEW</b>	<b>88970141</b>	24 V $\overline{\text{---}}$	6 digital (including 4 analogue)	4 relays 8 A
		<b>88970142</b>	24 V $\overline{\text{---}}$	6 digital (including 4 analogue)	4 solid state 0.5 A (including 1 PWM)
		<b>88970143</b>	100 $\rightarrow$ 240 V $\sim$	6 digital	4 relays 8 A
		<b>88970144</b>	24 V $\sim$	6 digital	4 relays 8 A
	<b>XD26</b> <b>NEW</b>	<b>88970161</b>	24 V $\overline{\text{---}}$	16 digital (including 6 analogue)	10 relays (8 x 8 A relay and 2 x 5 A relay)
		<b>88970162</b>	24 V $\overline{\text{---}}$	16 digital (including 6 analogue)	10 solid state 0.5 A (including 4 PWM)
		<b>88970163</b>	100 $\rightarrow$ 240 V $\sim$	16 digital	10 relays (8 x 8 A relay and 2 x 5 A relay)
		<b>88970164</b>	24 V $\sim$	16 digital	10 relays (8 x 8 A relay and 2 x 5 A relay)
		<b>88970165</b>	12 V $\overline{\text{---}}$	16 digital (including 6 analogue)	10 relays (8 x 8 A relay and 2 x 5 A relay)

### "Sandwich" extensions

Type	Part number	Power supply	Inputs	Outputs	
<b>Digital</b>					
	<b>XE10</b> <b>NEW</b>	<b>88970321</b>	Via the controller 24 V $\overline{\text{---}}$	6 digital	4 relays 5 A (1 of which is a changeover relay)
		<b>88970323</b>	100 $\rightarrow$ 240 V $\sim$	6 digital	4 relays 5 A (1 of which is a changeover relay)
		<b>88970324</b>	24 V $\sim$	6 digital	4 relays 5 A (1 of which is a changeover relay)

Type	Part number	Power supply	Network	Characteristics of exchanges (words)
<b>Communication</b>				
	<b>XN05</b> <b>NEW</b>	<b>88970270</b>	Via the controller 24 V $\overline{\text{---}}$	Ethernet (Server) Read: 8 - Read/Write: 8 Clock: 4 - Status: 1
	<b>XN03</b> <b>NEW</b>	<b>88970250</b>	Via the controller 24 V $\overline{\text{---}}$	Modbus RS-485 (Slave) Read: 4 - Read/Write: 4 Clock: 4 - Status: 1
	<b>XN06</b> <b>NEW</b>	<b>88972250*</b>	Via the controller 24 V $\overline{\text{---}}$	Modbus RS-485 (Slave) Read: 8 - Read/Write: 8 Clock: 12 - Status: 1

### Termination extensions

Type	Part number	Power supply	Inputs	Outputs	
<b>Digital</b>					
	<b>XR06</b> <b>NEW</b>	<b>88970211</b>	Via the controller 24 V $\overline{\text{---}}$	4 digital	2 relays 8 A
		<b>88970213</b>	Via the controller 100 $\rightarrow$ 240 V $\sim$	4 digital	2 relays 8 A
		<b>88970214</b>	Via the controller 24 V $\sim$	4 digital	2 relays 8 A
		<b>88970215</b>	Via the controller 12 V $\overline{\text{---}}$	4 digital	2 relays 8 A
	<b>XR10</b> <b>NEW</b>	<b>88970221</b>	Via the controller 24 V $\overline{\text{---}}$	6 digital	4 relays 8 A
		<b>88970223</b>	Via the controller 100 $\rightarrow$ 240 V $\sim$	6 digital	4 relays 8 A
		<b>88970224</b>	Via the controller 24 V $\sim$	6 digital	4 relays 8 A
		<b>88970225</b>	Via the controller 12 V $\overline{\text{---}}$	6 digital	4 relays 8 A
	<b>XR14</b> <b>NEW</b>	<b>88970231</b>	Via the controller 24 V $\overline{\text{---}}$	8 digital	6 relays (4 x 8 A relay and 2 x 5 A relay)
		<b>88970233</b>	Par le contrôleur 100 $\rightarrow$ 240 V $\sim$	8 digital	6 relays (4 x 8 A relay and 2 x 5 A relay)
		<b>88970234</b>	Via the controller 24 V $\sim$	8 digital	6 relays (4 x 8 A relay and 2 x 5 A relay)
		<b>88970235</b>	Via the controller 12 V $\overline{\text{---}}$	8 digital	6 relays (4 x 8 A relay and 2 x 5 A relay)

### Analogue and "Application-specific" analogue










Type	Part number	Power supply	Inputs	Outputs	
	<b>XA04</b> <b>NEW</b>	<b>88970241</b>	Via the controller 24 V $\overline{\text{---}}$	1 analogue (0-10V / 0-20mA), 1 analogue (0-10V / 0-20mA / Pt100)	2 analogue (0-10V) / PWM
	<b>XA04W</b> <b>NEW</b>	<b>88972805*</b>	Via the controller 24 V $\overline{\text{---}}$	1 pH <sup>(1)</sup> (0-14), 1 ORP <sup>(2)</sup> (0-1000mV) 1 current (4-20mA), 1 Pt100 (0-50°C)	-
	<b>XA03</b> <b>NEW</b>	<b>88970800*</b>	Via the controller 24 V $\overline{\text{---}}$	3 Pt100 (-25 $\rightarrow$ +125°C)	-

\* These products are used with the M3 AC SOFT software - Part no.: 88970111

<sup>(1)</sup> pH probe - Part no.: 89750171 - <sup>(2)</sup> ORP (Redox) probe - Part no.: 89750173



# Logic controllers

Modem communication solutions			Modular power supplies <sup>(1)</sup>					Starter kits
M3 MOD	RTC	GSM	12 V DC - 24 W	24 V DC - 7.5 W	24 V DC - 15 W	24 V DC - 30 W	24 V DC - 60 W	
								
NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW
88970117	88970118	88970119	88950306	88950303	88950304	88950307	88950302	Expandable
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	88970084 / 88970094
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	88970085
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					

Compatible  
 Mounted with M3MOD:  
 - GSM modem  
 - or STN modem

<sup>(1)</sup> Find the whole "Power Supplies" offer on pages 12-13

## ▶ Millenium 3 logic controllers operate with the following software:

### ■ M3 SOFT

Multilingual programming software (CD-ROM)

Part no.: 88970100

### ■ M3 SPECIFIC FUNCTIONS

Libraries of specific functions (CD-ROM)

Part no.: 88970103

### ■ M3 ALARM

Alarm management software (CD-ROM)

Part no.: 88970116

This software is used alongside communication interface M3MOD (Part no.: 88970117)



## ▶ The 3 starter kits each contain:

- 1 XD26 logic controller + 1 USB link cable + 1 M3 SOFT programming software CD-ROM + 1 M3 SPECIFIC FUNCTIONS CD-ROM

Part no: 88970084 / 88970085 / 88970094

- The 88970094 starter kit also contains a 24 V DC - 30 W power supply.



## ▶ Millenium 3 Adapted Control:

■ Crouzet offers a range of "hardened or specific" products:


- Bare board versions (12 or 20 I/O)
- Resin board versions for harsh environments (vibration resistance and extended temperature range)
- "Application-specific" analogue extensions: Temperature control (3 Pt100), Water treatment (pH, ORP/Redox).

■ Crouzet can also provide **Millenium 3 solutions adapted**, as required to meet any specification, offering, for example, a greater number of I/O, specific extensions, dedicated connections, customised laser marking, and "customer" software functions, kitting of products (ie.: Millenium 3 + temperature sensors)...

*For any special applications, please contact our Micro-control sales and technical experts.*



## ▶ Millenium 3 "Accessories" range

### Programming

Type	Part number	Description
<b>Connection accessories</b>		
	<b>PA</b> <b>NEW</b>	<b>88970102</b> 3 m serial link cable: PC => Millenium 3
		<b>88970104</b> Millenium 3 => Bluetooth interface (class A 10 m)
		<b>88970108</b> EEPROM memory cartridge for transferring/saving programs
		<b>88970109</b> 3 m USB link cable: PC => Millenium 3
		<b>88970110</b> Bluetooth => USB adaptor (class A 10 m)
		<b>88970123</b> 1.80 m serial link cable: DB9/DB9

(PA): Programming accessories



### Sensing

Type	Part number	Description	Power supply	Main characteristic
<b>Analogue temperature sensors</b>				
	<b>AS</b>	<b>89750146</b> Copper protective sleeve	-	-20 → +100°C
		<b>89750147</b> Stainless steel 316 protective sleeve	-	-20 → +400°C
		<b>89750150</b> Zone/space sensor (0-10 V)	24 V $\overline{\text{---}}$	-10 → +40°C
		<b>89750151</b> Ventilation duct (0-10 V)	24 V $\overline{\text{---}}$	-10 → +60°C
		<b>89750152</b> Outdoor sensor (0-10 V)	24 V $\overline{\text{---}}$	-10 → +40°C
		<b>89750153</b> Remote/submersible probe (0-10 V)	24 V $\overline{\text{---}}$	-10 → +150°C
		<b>89750155</b> Remote/submersible probe (0-10 V)	24 V $\overline{\text{---}}$	-40 → +20°C
		<b>89750180</b> Sensor CTN for Millenium 3 - 24 V $\overline{\text{---}}$ (pack of 10)	-	-25 → +85°C
		<b>89750181</b> Sensor CTN fo Millenium 3 - 24 V $\overline{\text{---}}$ (pack of 100)	-	-25 → +85°C
		<b>18373112</b> Heat transfer compound	-	-
		<b>79696035</b> Pt100 probe Class B with stainless steel 316 sheath	-	max.: 200°C
		<b>79696036</b> Pt100 probe Class B with stainless steel 316 sheath	-	max.: 400°C
		<b>79696037</b> Pt100 probe Class B with aluminium V6 sheath	-	max.: 200°C
<b>Analogue pressure transmitters 4-20 mA <sup>(1)</sup></b>				
	<b>AS</b> <b>NEW</b>	<b>89210001</b> Capacitive pressure transmitter: Relative <sup>(2)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 0.25 bar
		<b>89210002</b> Capacitive pressure transmitter: Relative <sup>(2)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 1 bar
		<b>89210003</b> Capacitive pressure transmitter: Relative <sup>(2)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 2.5 bar
		<b>89210004</b> Capacitive pressure transmitter: Relative <sup>(2)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 10 bar
		<b>89210005</b> Capacitive pressure transmitter: Relative <sup>(2)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 25 bar
		<b>89210006</b> Capacitive pressure transmitter: Relative <sup>(2)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 60 bar
		<b>89210007</b> Capacitive pressure transmitter: Absolute <sup>(3)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 1 bar
		<b>89210008</b> Capacitive pressure transmitter: Absolute <sup>(3)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 2.5 bar
		<b>89210009</b> Capacitive pressure transmitter: Absolute <sup>(3)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 10 bar
		<b>89210010</b> Capacitive pressure transmitter: Absolute <sup>(3)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 25 bar
		<b>89210011</b> Capacitive pressure transmitter: Absolute <sup>(3)</sup>	12 → 32 V $\overline{\text{---}}$	0 → 100 bar

(AS): Analogue sensors





<sup>(1)</sup> Connection: G 1/4 male DIN 16288<sup>(2)</sup> In relation to the atmospheric pressure<sup>(3)</sup> In relation to vacuum

### Converting



Type	Part number	Description	Power supply	Inputs	Outputs
<b>Signal converters</b>					
	<b>AC</b>	<b>88950108</b> 0-20 mA / 0-10 V input converter	-	4	4
		<b>88950112</b> PWM / 0-10 V output converter	24 V $\overline{\text{---}}$	1	1
<b>Temperature converters</b>					
	<b>AC</b>	<b>88950150</b> Input converter -20 → + 150°C	24 V $\overline{\text{---}}$	Pt1000 3-wire	0-10 V
		<b>88950151</b> Input converter -40 → + 40°C	24 V $\overline{\text{---}}$	Pt100 3-wire	0-10 V
		<b>88950152</b> Input converter 0 → + 100°C	24 V $\overline{\text{---}}$	Pt100 3-wire	0-10 V
		<b>88950153</b> Input converter 0 → + 250°C	24 V $\overline{\text{---}}$	Pt100 3-wire	0-10 V
		<b>88950154</b> Input converter 0 → + 300°C	24 V $\overline{\text{---}}$	Thermocouple J	0-10 V
	<b>88950155</b> Input converter 0 → + 600°C	24 V $\overline{\text{---}}$	Thermocouple K	0-10 V	

(AC): Analogue Converter

# Logic controllers

Displaying			
Type	Part number	Description	Power supply
<b>Remote LCD alphanumeric displays (Modbus communication)</b>			
	<b>RD</b>	<b>88970421</b> Runtime kit: Three-colour screen + XN06 Modbus extension	24 V $\overline{\text{---}}$
		<b>88970422</b> Runtime kit: Monochrome screen + XN06 Modbus extension	24 V $\overline{\text{---}}$
		<b>88970844</b> Programming kit: Monocolour screen + XN06 Modbus extension + CD + cables	24 V $\overline{\text{---}}$
		<b>88970849</b> Programming kit: Three-colour screen + XN06 Modbus extension + CD + cables	24 V $\overline{\text{---}}$
<b>Remote LCD displays/keypads (direct link with Millenium 3 via cable)</b>			
	<b>RD</b> <b>NEW</b>	<b>88970410</b> Remote LCD screen/keypad	24 V $\overline{\text{---}}$
		<b>88970411</b> Remote LCD screen/keypad + 4 function buttons + 4 LEDs	24 V $\overline{\text{---}}$
		<b>88970412</b> Kit with remote LCD screen/keypad + cable	24 V $\overline{\text{---}}$
		<b>88970413</b> Kit with remote LCD screen/keypad + 4 function buttons + 4 LEDs + cable	24 V $\overline{\text{---}}$
		<b>88970414</b> IP65 protection accessory for display/keypad	
<b>Remote LED display - Input 0-10 V</b>			
	<b>RD</b>	<b>88950400</b> Display with 4 x 14 mm red digits	24 V $\overline{\text{---}}$
<b>Potentiometer Ø 22 mm</b>			
	<b>EP</b>	<b>88950109</b> External potentiometer for value adjustment (4700 $\Omega$ )	30 V $\overline{\text{---}}$ max


(RD): Remote Display - (EP): External potentiometer

Mounting			
Type	Part number	Description	List of products
<b>Removable connectors</b>			
	<b>MA</b>	<b>88970310</b> Removable kit 12 I/O	CD12 or CB12
		<b>88970311</b> Removable kit 20 I/O	CD20 or CB20
<b>Faceplates</b>			
	<b>MA</b> <b>NEW</b>	<b>89750160</b> IP67 sealed faceplate (76.5 mm)	CD12
		<b>89750161</b> IP67 sealed faceplate (147.5 mm)	<ul style="list-style-type: none"> <li>■ XD10 + XR06 or XN03 or XN05 or XA04</li> <li>■ CD20</li> <li>■ XD10 + XN03 or XN05 + XR06 or XA04</li> <li>■ XD10 + XR10 or XR14</li> </ul>
		<b>89750162</b> IP67 sealed faceplate (248.5 mm)	<ul style="list-style-type: none"> <li>■ XD26 + XR06 or XN03 or XN05 or XA04</li> <li>■ XD10 + XN03 or XA04 + XR10 or XR14</li> <li>■ XD10 + XE10 + XR06 or XA04</li> <li>■ XD26 + XN03 or XN05 + XR06 or XA04</li> <li>■ XD26 + XR10 or XR14</li> <li>■ XD10 + XE10 + XR10 or XR14</li> <li>■ XD26 + XE10 + XR06 or XA04</li> <li>■ XD26 + XN03 or XN05 + XR10 or XR14</li> </ul>
		<b>88970809</b> IP40 faceplate	CD12 or CB12
		<b>88970810</b> IP40 faceplate	CD20 or CB20

(MA): Mounting Accessories




## ▶ Millenium Web Server Solution

### Supervising / Archiving / Remote diagnostics / Managing Modbus networks

Type	Part number	Description	Power supply
	<b>XC10</b> <b>NEW</b>	<b>88950124</b> The Millenium Web Server solution comprises: the Web Server module + 1 supervision page configuration software package (any Internet browser can be used)	24 V $\overline{\text{---}}$



## ▶ Regulated switch mode power supplies

Description	Type	Part number	Input voltage	Nominal output voltage
<b>Modular casing &lt; 60W</b>				
<b>Modular power supplies - Millenium range</b>				
	<b>PS</b> <b>NEW</b>	88950303	100 → 240 V ~	24 V $\ddot{=}$ (22.8 V → 28.8 V)
		88950304		24 V $\ddot{=}$ (22.8 V → 28.8 V)
		88950305		5 V $\ddot{=}$ (4.75 → 6.25 V)
		88950306		12 V $\ddot{=}$ (11.4 V → 15 V)
		88950307		24 V $\ddot{=}$ (22.8 V → 28.8 V)
		88950302		24 V $\ddot{=}$ (22.8 V → 28.8 V)
<b>DC/DC converter</b>				
	<b>PS</b> <b>NEW</b>	88950320	9 → 18 V $\ddot{=}$	12 V $\ddot{=}$ (11.8 V → 12.2 V)
		88950321	9 → 36 V $\ddot{=}$	24 V $\ddot{=}$ (23.5 V → 24.5 V)
<b>Metal casing &gt; 60W</b>				
<b>Equipment power supplies for integrated control systems</b>				
	<b>89450</b> <b>Without PFC*</b>	89450110	100 → 240 V ~	12 V $\ddot{=}$
		89450210		24 V $\ddot{=}$
		89450221	115 / 230 V ~	24 V $\ddot{=}$
		89450231		24 V $\ddot{=}$
		89450241		24 V $\ddot{=}$
	<b>89450</b> <b>With PFC*</b>	89450122	100 → 240 V ~	12 V $\ddot{=}$
		89450222		24 V $\ddot{=}$
		89450232	115 / 230 V ~	24 V $\ddot{=}$
		89450242		24 V $\ddot{=}$
	<b>89450</b> <b>Accessories</b>	26450100	Snap-on plate for 35 mm DIN rail	
26450101		Mounting bracket		

\* PFC = Power Factor Correction

# Power supplies

	Nominal power	Nominal output current	Casing width	Connection
	7.5 W	0.3 A	36 mm	Screw terminals
	15 W	0.6 A	36 mm	
	20 W	4 A	54 mm	
	24 W	2 A	54 mm	
	30 W	1.2 A	54 mm	
	60 W	2.5 A	72 mm	
	10 W	0.8 A	36 mm	Screw terminals
	10 W	0.4 A	36 mm	
	60 W	5 A	-	Screw terminals
	60 W	2.5 A	-	
	100 W	4.2 A	-	
	150 W	6.2 A	-	
	240 W	10 A	-	
	100 W	8.3 A	-	
	100 W	4.2 A	-	
	150 W	6.2 A	-	
	240 W	10 A	-	

Logic controllers

Power supplies

Control relays





Timers

Counters /  
Rate meters

Temperature  
controllers

Safety products

## ▶ E, F, L and C-Lynx ranges

Description	Type	Part number	Power supply
<b>C-Lynx phase control</b>			
	MWS <b>NEW</b>	84873020	Self-powered 3 x 208 → 3 x 480 V ~ - 50/60 Hz
	MWS2 <b>NEW</b>	84873021	Self-powered 3 x 208 → 3 x 440 V ~ - 50/60 Hz
	MWG <b>NEW</b>	84873022	Self-powered 3 x 208 → 3 x 480 V ~ - 50/60 Hz
	MWU <b>NEW</b>	84873023	Self-powered 3 x 208 → 3 x 480 V ~ - 50/60 Hz
	MWA <b>NEW</b>	84873024	Self-powered 3 x 208 → 3 x 480 V ~ - 50/60 Hz
	MWUA <b>NEW</b>	84873025	Self-powered 3 x 208 → 3 x 480 V ~ - 50/60 Hz
	HWUA <b>NEW</b>	84873026	Self-powered 3 x 220 → 3 x 480 V ~ - 50/60 Hz
	H3US <b>NEW</b>	84873220	Self-powered 3 x 220 → 3 x 480 V ~ - 50/60 Hz
	H3USN <b>NEW</b>	84873221	Self-powered 3 x 120 → 3 x 277 V ~ (Phase-Neutral) 50/60 Hz
	M3US <b>NEW</b>	84873222	Self-powered 3 x 208 → 3 x 480 V ~ - 50/60 Hz
<b>E-series phase control</b>			
	EWS	84892299	Self-powered 3 x 200 → 3 x 500 V ~ - 50/60 Hz
	EWS2	84873004	Self-powered 3 x 200 → 3 x 460 V ~ - 50/60 Hz
<b>C-Lynx current control</b>			
	MIC <b>NEW</b>	84871122	24 → 240 V ~ - 50/60 Hz
	HIL <b>NEW</b>	84871120	24 → 240 V ~ - 50/60 Hz
	HIH <b>NEW</b>	84871130	24 → 240 V ~ - 50/60 Hz
<b>E-series current control</b>			
	EIT	84871040	24 V --- - 50/60 Hz
		84871041	24 V ~ - 50/60 Hz
		84871042	48 V ~ - 50/60 Hz
		84871043	120 V ~ - 50/60 Hz
		84871044	230 V ~ - 50/60 Hz
	TI for EIT	26852304	-
	EIL	84871020	24 V --- - 50/60 Hz
		84871021	24 V ~ - 50/60 Hz
		84871022	48 V ~ - 50/60 Hz
		84871023	120 V ~ - 50/60 Hz
EIH	84871024	230 V ~ - 50/60 Hz	
	84871030	24 V --- - 50/60 Hz	
	84871031	24 V ~ - 50/60 Hz	
	84871032	48 V ~ - 50/60 Hz	
	84871033	120 V ~ - 50/60 Hz	
	84871034	230 V ~ - 50/60 Hz	
<b>C-Lynx frequency control</b>			
	HHZ <b>NEW</b>	84872501	120 → 277 V ~ - 50/60 Hz



# Control relays

Control functions	Control values	Output relay	Casing width
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz	1 single pole changeover relay 5 A	17.5 mm
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz	2 single pole changeover relays 5 A	17.5 mm
Phase failure and phase sequence (with regeneration)	208 → 480 V ~ - 50/60 Hz	1 single pole changeover relay 5 A	17.5 mm
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz	1 single pole changeover relay 5 A	17.5 mm
Undervoltage	-20% → -2%		
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz	1 single pole changeover relay 5 A	17.5 mm
Asymmetry	5% → 15 %		
Undervoltage and overvoltage	-20% → -2% / +2% → +20%	1 single pole changeover relay 5 A	17.5 mm
Asymmetry	5% → 15 %		
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz		
Overvoltage	+2% → +20%	1 double changeover relay 2 x 5 A	35 mm
Asymmetry	5% → 15 %		
Undervoltage	-20% → -2%		
Phase failure and phase sequence	220 → 480 V ~ - 50/60 Hz		
Phase failure	220 → 480 V ~ - 50/60 Hz	2 single pole changeover relays 5 A	35 mm
Undervoltage	-20% → -2%		
Overvoltage	+2% → +20%		
Phase failure and loss of neutral	120-277 V ~ - 50/60 Hz	2 single pole changeover relays 5 A	35 mm
Undervoltage	-20% → -2%		
Overvoltage	+2% → +20%		
Phase failure	208 → 480 V ~ - 50/60 Hz	1 single pole changeover relay 5 A	17.5 mm
Undervoltage	-20% → -2%		
Overvoltage	+2% → +20%		
Phase failure and phase sequence	200 - 500 V ~	1 single pole changeover relay 8 A	22.5 mm
Phase failure and phase sequence	200 - 460 V ~	2 single pole changeover relays 8 A	22.5 mm
Overcurrent (or undercurrent) with built-in current transformer	2 A → 20 A	1 single pole changeover relay 5 A	17.5 mm
Undercurrent or overcurrent	2 mA → 20 mA / 10 mA → 100 mA / 50 mA → 500 mA	1 double changeover relay 2 x 5 A	35 mm
Undercurrent or overcurrent	0,1 A → 1 A / 0.5 A → 5 A / 1 A → 10 A	1 double changeover relay 2 x 5 A	35 mm
Undercurrent or overcurrent	10 A → 100 A with current transformer (Part no: 26852304)	1 single pole changeover relay 8 A	22.5 mm
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Current transformer	10 → 100 A	-	-
Undercurrent or overcurrent	2 mA → 20 mA / 10 mA → 100 mA / 50 mA → 500 mA	1 single pole changeover relay 8 A	22.5 mm
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Undercurrent or overcurrent	0.1 A → 1 A / 0.5 A → 5 A / 1 A → 10 A	1 single pole changeover relay 8 A	22.5 mm
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Undercurrent or overcurrent			
Underfrequency or overfrequency (window)	40 → 60 Hz and 50 → 70 Hz	2 single pole changeover relays 5 A	35 mm

Logic controllers

Power supplies

Control relays

Timers

Counters /  
Ratemeters

Temperature  
controllers

Safety products



Description	Type	Part number	Power supply	Control functions
<b>C-Lynx voltage control</b>				
	<b>MUS12DC</b> <b>NEW</b>	84872140	Self-powered 12 V $\overline{\text{DC}}$ - 50/60 Hz	Overvoltage or undervoltage
	<b>MUS80ACDC</b> <b>NEW</b>	84872141	Self-powered 24 $\rightarrow$ 48 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage
	<b>MUS260ACDC</b> <b>NEW</b>	84872142	Self-powered 110 $\rightarrow$ 240 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage
	<b>MUSF80ACDC</b> <b>NEW</b>	84872151	Self-powered 24 $\rightarrow$ 48 V $\sim$ - 50/60 Hz	Overvoltage and undervoltage (window)
	<b>MUSF260ACDC</b> <b>NEW</b>	84872152	Self-powered 110 $\rightarrow$ 240 V $\sim$ - 50/60 Hz	Overvoltage and undervoltage (window)
	<b>HUH</b> <b>NEW</b>	84872120	24 $\rightarrow$ 240 V $\sim$ - 50/60 Hz - 50/60 Hz	Overvoltage or undervoltage
	<b>HUL</b> <b>NEW</b>	84872130	24 $\rightarrow$ 240 V $\sim$ - 50/60 Hz - 50/60 Hz	Overvoltage or undervoltage

#### E-series voltage control

	<b>EUL</b>	84872020	24 V $\overline{\text{DC}}$ - 50/60 Hz	Overvoltage or undervoltage
		84872021	24 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage
		84872023	120 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage
		84872024	230 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage
	<b>EUH</b>	84872030	24 V $\overline{\text{DC}}$ - 50/60 Hz	Overvoltage or undervoltage
		84872031	24 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage
		84872033	120 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage
		84872034	230 V $\sim$ - 50/60 Hz	Overvoltage or undervoltage



#### C-Lynx level control

	<b>HNM</b> <b>NEW</b>	84870700	24 $\rightarrow$ 240 V $\sim$ - 50/60 Hz	Filling or emptying with conductive liquids (1 or 2 levels)
	<b>MNS</b> <b>NEW</b>	84870720	24 $\rightarrow$ 240 V $\sim$ - 50/60 Hz	Filling (1 level)
	<b>HNE</b> <b>NEW</b>	84870710	24 $\rightarrow$ 240 V $\sim$ - 50/60 Hz	Filling or emptying with all types of material (1 or 2 levels)

#### E, F and L series level control

	<b>ENR</b>	84870201	24 V $\sim$ - 50/60 Hz	Filling or emptying with conductive liquids (1 or 2 levels)
		84870203	120 V $\sim$ - 50/60 Hz	
		84870204	230 V $\sim$ - 50/60 Hz	
		<b>ENRM</b>	84870211	
84870213	120 V $\sim$ - 50/60 Hz			
84870214	230 V $\sim$ - 50/60 Hz			
	<b>FNLS</b>	84870803	230 V $\sim$ - 50/60 Hz	Filling or emptying with conductive liquids (2 levels: high/low)
		<b>FN</b>	84870501	24 V $\sim$ - 50/60 Hz
	<b>LN</b>	84870502	48 V $\sim$ - 50/60 Hz	
		84870503	120 V $\sim$ - 50/60 Hz	
		84870504	230 V $\sim$ - 50/60 Hz	
		84870301	24 V $\sim$ - 50/60 Hz	Emptying with conductive liquids (1 or 2 levels))
		84870303	120 V $\sim$ - 50/60 Hz	
		84870304	230 V $\sim$ - 50/60 Hz	
		84870306	24 V $\sim$ - 50/60 Hz	
<b>L2N</b>	84870308	120 V $\sim$ - 50/60 Hz		
	84870309	230 V $\sim$ - 50/60 Hz		
	84870401	24 V $\sim$ - 50/60 Hz	Filling and monitoring of wells (2 levels)	
	84870403	120 V $\sim$ - 50/60 Hz		
84870404	230 V $\sim$ - 50/60 Hz			

#### Level control accessories

	<b>S5</b>	79696006	High-pressure and high-temperature probe $\leq$ 350°C (connection: G 3/8)
	<b>S3</b>	79696014	Electrode holder with a single 1000 mm probe $\leq$ 200°C (connection: G 1/2)
	<b>S7</b>	79696043	Protected electrode for level > 1 metre, for mounting by suspension and connected using cable C1 (part no.: 79696001: length as per request)
	<b>S8</b>	79696044	A light, compact 3-probe electrode holder (probes measuring 1000 mm) $\leq$ 80°C (connection: G 1/2)

# Control relays

Control values	Output relay	Casing width
9 → 15 V $\overline{\text{---}}$	1 single pole changeover relay 5 A	17.5 mm
20 → 80 V $\overline{\text{~}}$	1 single pole changeover relay 5 A	17.5 mm
65 → 260 V $\overline{\text{~}}$	1 single pole changeover relay 5 A	17.5 mm
20 → 80 V $\overline{\text{~}}$	1 single pole changeover relay 5 A	17.5 mm
65 → 260 V $\overline{\text{~}}$	1 single pole changeover relay 5 A	17.5 mm
0,2 V → 2 V / 1 V → 10V / 6V → 60 V	1 double changeover relay 2 x 5 A	35 mm
15 V → 150 V / 30 V → 300 V / 60 V → 600 V	1 double changeover relay 2 x 5 A	35 mm
0,2 V → 2 V / 1 V → 10V / 6 V → 60 V	1 single pole changeover relay 8 A	22.5 mm
15 V → 150 V / 30 V → 300 V / 60 V → 600 V	1 single pole changeover relay 8 A	22.5 mm
Sensitivity: 250 $\Omega$ → 5 k $\Omega$ / 5 k $\Omega$ → 100 k $\Omega$ / 50 k $\Omega$ → 1 M $\Omega$	1 double changeover relay 2 x 5 A	35 mm
Contact input for discrete sensor	1 single pole changeover relay 5 A	17.5 mm
Contact input for discrete sensor: PNP or NPN sensor/contact	1 single pole changeover relay 5 A	35 mm
Sensitivity: 5 k $\Omega$ - 100 k $\Omega$	1 single pole changeover relay 8 A	22.5 mm
Sensitivity: 250 $\Omega$ - 5 k $\Omega$ / 5 k $\Omega$ - 100 k $\Omega$ / 50 k $\Omega$ - 1 M $\Omega$	1 single pole changeover relay 8 A	22.5 mm
Sensitivity: 250 $\Omega$ - 5 k $\Omega$	2 single pole changeover relays 8 A	45 mm
Sensitivity: 5 k $\Omega$ - 100 k $\Omega$ with alarm (overflow or running dry)	2 single pole changeover relays 8 A	45 mm
Sensitivity: 5 k $\Omega$ - 100 k $\Omega$	1 single pole changeover relay 8 A	45 mm plug-in 8-pin <sup>(1)</sup> 45 mm plug-in 8-pin <sup>(1)</sup> 45 mm plug-in 8-pin <sup>(1)</sup> 45 mm plug-in 11-pin <sup>(2)</sup> 45 mm plug-in 11-pin <sup>(2)</sup> 45 mm plug-in 11-pin <sup>(2)</sup>
Sensitivity: 5 k $\Omega$ - 100 k $\Omega$	1 single pole changeover relay 8 A	45 mm plug-in 11-pin <sup>(2)</sup> 45 mm plug-in 11-pin <sup>(2)</sup> 45 mm plug-in 11-pin <sup>(2)</sup>

<sup>(1)</sup> 8-pin connector base - Part no.: 25622080  
<sup>(2)</sup> 11-pin connector base - Part no.: 25622130



## ► C-Lynx Adapted Control:

- Based on your specifications, Crouzet can also offer a range of C-Lynx control relays adapted to your requirements:
  - Adaptation of the level of regeneration for phase failure checks,
  - Conversion of adjustable products into products with a fixed threshold,
  - Adaptation of input voltage ranges and measurement ranges,
  - Option of customising markings.

*For any special applications, please contact our Micro-control sales and technical experts.*





Description	Type	Part number	Power supply
-------------	------	-------------	--------------



## C-Lynx speed control



HSV <b>NEW</b>	84874320	24 → 240 V ~ - 50/60 Hz
----------------	----------	-------------------------



## C-Lynx temperature control in lifts according to EN 81



HT81 <b>NEW</b>	84874110	24 → 240 V ~ - 50/60 Hz
-----------------	----------	-------------------------

HT81-2 <b>NEW</b>	84874120	24 → 240 V ~ - 50/60 Hz
-------------------	----------	-------------------------

HWT81 <b>NEW</b>	84874130	24 → 240 V ~ - 50/60 Hz
------------------	----------	-------------------------



## C-Lynx pump control



HPC <b>NEW</b>	84874200	1-phase: 230 V ~ - 50/60 Hz 3-phases (self-powered): 3 x 208 → 3 x 480 V ~ - 50/60 Hz
----------------	----------	--



## C-Lynx motor temperature and phase control



HWTM <b>NEW</b>	84873027	24 → 240 V ~ - 50/60 Hz
-----------------	----------	-------------------------

HWTM2 <b>NEW</b>	84873028	24 → 240 V ~ - 50/60 Hz
------------------	----------	-------------------------

## Series E motor temperature control



ETM	84874015	24 V ~ - 50/60 Hz
-----	----------	-------------------

84874013	120 V ~ - 50/60 Hz
----------	--------------------

84874014	230 V ~ - 50/60 Hz
----------	--------------------

ETM2	84874025	24 V ~ - 50/60 Hz
------	----------	-------------------

84874023	120 V ~ - 50/60 Hz
----------	--------------------

84874024	230 V ~ - 50/60 Hz
----------	--------------------

ETM22	84874035	24 V ~ - 50/60 Hz
-------	----------	-------------------

84874033	120 V ~ - 50/60 Hz
----------	--------------------

84874034	230 V ~ - 50/60 Hz
----------	--------------------

## Heat exchanger defrost relay for air conditioning system



NFR	88899204	90 → 260 V ~ - 50/60 Hz
-----	----------	-------------------------

## C-Lynx accessories

Description	Type	Part number
-------------	------	-------------

## Removable sealable covers to protect settings

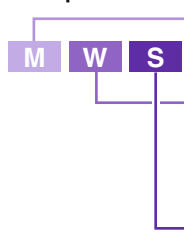
For 17.5 mm casing	84800000
--------------------	----------

For 35 mm casing	84800001
------------------	----------

# Control relays

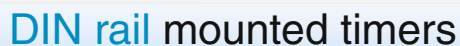
Control functions	Control values	Output relay	Casing width
Underspeed or overspeed	Time between controlled pulses: 0.05 → 0.5 s / 0.1 → 1 s / 0.5 → 5 s / 1 → 10 s / 0.1 → 1 mn / 0.5 → 5 mn / 1 → 10 mn	1 single pole changeover relay 5 A	35 mm
Undertemperature and overtemperature (window)	Input Pt100 3-wire Low threshold: -1°C → +11°C High threshold: +34°C → +46°C	1 single pole changeover relay 5 A	35 mm
Undertemperature and overtemperature (window)	Input Pt100 3-wire Low threshold: -1°C → +11°C High threshold: +34°C → +46°C	2 N/O relays 5 A	35 mm
Undertemperature and overtemperature (window)	Input Pt100 3-wire Low threshold: -1°C → +11°C High threshold: +34°C → +46°C	2 N/O relays 5 A	35 mm
Phase failure and phase sequence	3 x 208 → 3 x 480 V ~ - 50/60Hz		
3-phase network monitoring	-	1 single pole changeover relay 5 A	35 mm
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz		
Undercurrent or overcurrent (window)	1 A → 10 A ~		
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz	2 N/O relays 5 A	35 mm
Thermal protection	PTC		
Phase failure and phase sequence	208 → 480 V ~ - 50/60 Hz	2 N/O relays 5 A	35 mm
Thermal protection	PTC		
Test	-		
Latching	-		
Thermal protection	PTC	1 N/O relay 8 A	22.5 mm
Thermal protection	PTC	1 single pole changeover relay 8 A	22.5 mm
Thermal protection	PTC	1 single pole changeover relay 8 A	22.5 mm
Frost formation monitored by temperature probe (length: 1.60 m)	Temperature of the exchanger < -3°C	1 single pole changeover relay 8 A	22.5 mm 6.35 mm Faston connectors








Example:



## Description of product types

<input type="checkbox"/> Casing width	<b>M</b> 17.5 mm	<b>H</b> 35 mm	<b>E</b> 22,5 mm	<b>F</b> 45 mm	<b>L</b> Plug-in 45 mm
<input type="checkbox"/> Control functions	<b>W</b> Phase	<b>I</b> Current	<b>HZ</b> Frequency	<b>U</b> Voltage	<b>3U</b> 3-phase voltage
	<b>N</b> Level	<b>SV</b> Underspeed	<b>P</b> Pump control	<b>T81</b> Temperature of lift machine room	<b>WT</b> Phase + Temperature of lift machine room
<input type="checkbox"/> Function details	<b>T</b> Temperature				



Description	Type	Part number	Power supply	Functions (see pages 28-31)
<b>Electronic timers</b>				
<b>Chronos 2 range - 17.5 mm</b>				
 	MUR4	88826100	12 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	MUR3	88826103	12 $\rightarrow$ 240 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	MUR1	88826105	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	MAR1	88826115	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-At
	MBR1	88826125	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	B
	MCR1	88826135	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	C
	MHR1	88826145	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	H-Ht
	MLR1	88826155	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Li-L
	MXR1	88826185	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Ad-Ah-N-O-P-Pt-TL-Tt-W
	MURc3	88826503	12 $\rightarrow$ 240 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	MUS2	88826004	24 $\rightarrow$ 240 V $\sim$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	MAS5	88826014	24 $\rightarrow$ 240 V $\bar{\sim}$	A
	MHS2	88826044	24 $\rightarrow$ 240 V $\sim$	H
MLS2	88826054	24 $\rightarrow$ 240 V $\sim$	Li-L	
<b>Chronos 2 range - 22.5 mm</b>				
  	TUR4	88865100	12 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	TUR3	88865103	12 $\rightarrow$ 240 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	TUR1	88865105	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	TAR1	88865115	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-At
	TBR1	88865125	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	B
	TCR1	88865135	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	C
	THR1	88865145	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	H-Ht
	TLR1	88865155	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Li-L
	TQR1	88865175	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Q
	TQR6	88865176	230 $\rightarrow$ 400 V $\sim$	Q
	TXR1	88865185	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Ad-Ah-N-O-P-Pt-TL-Tt-W
	TXR4	88865180	12 V $\bar{\sim}$	Ad-Ah-N-O-P-Pt-TL-Tt-W
	TURc3	88865503	12 $\rightarrow$ 240 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	TA2R1	88865215	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-At
	TU2R4	88865300	12 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	TU2R3	88865303	12 $\rightarrow$ 230 V $\sim$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	TU2R1	88865305	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	TX2R1	88865385	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Ad-Ah-N-O-P-Pt-TL-Tt-W
	TK2R1	88865265	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	K
	<b>Chronos 2 range - 35 mm plug-in</b>			
 	OUR4	88867100	12 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	OUR3	88867103	12 $\rightarrow$ 240 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	OUR1	88867105	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	OCR1	88867135	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	C
	OLR1	88867155	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Li-L
	OA2R1	88867215	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A
	PA2R1	88867415	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-At
	PC2R1	88867435	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	C
	PL2R1	88867455	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	Li-L
	PU2R4	88867300	12 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
	PU2R3	88867303	12 $\rightarrow$ 240 V $\bar{\sim}$	A-Ac-At-B-Bw-C-D-Di-H-Ht
PU2R1	88867305	24 V $\bar{\sim}$ / 24 $\rightarrow$ 240 V $\sim$	A-Ac-At-B-Bw-C-D-Di-H-Ht	



# Timers



Timing	Outputs	Rated current	Casing width	Connection
0 → 1 s / 1 → 10 s / 0.1 → 1 min / 1 → 10 min / 0.1 → 1 h / 1 → 10 h / 10 → 100 h /	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	1 timed changeover relay	8 A	17.5 mm	Screw terminals
	Solid state	0.7 A	17.5 mm	Screw terminals
	Solid state	0.7 A	17.5 mm	Screw terminals
Solid state	0.7 A	17.5 mm	Screw terminals	
Solid state	0.7 A	17.5 mm	Screw terminals	
0 → 1 s / 1 → 10 s / 0.1 → 1 min / 1 → 10 min / 0.1 → 1 h / 1 → 10 h / 10 → 100 h /	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	1 timed changeover relay	8 A	22.5 mm	Screw terminals
	2 timed changeover relay	8 A	22.5 mm	Spring terminals
	2 timed changeover relays <sup>(1)</sup>	8 A	22.5 mm	Screw terminals
	2 timed changeover relays <sup>(1)</sup>	8 A	22.5 mm	Screw terminals
2 timed changeover relays <sup>(1)</sup>	8 A	22.5 mm	Screw terminals	
2 timed changeover relays <sup>(1)</sup>	8 A	22.5 mm	Screw terminals	
0.06 → 0.6 s / 0.25 → 2.5 s / 2 → 20 s / 16 → 160 s	2 timed changeover relays <sup>(1)</sup>	8 A	22.5 mm	Screw terminals
1 s / 10 s / 1 min / 10 min / 1 h / 10 h / 100 h	1 timed changeover relay	8 A	35 mm	Plug-in 8-pin <sup>(2)</sup>
	1 timed changeover relay	8 A	35 mm	Plug-in 8-pin <sup>(2)</sup>
	1 timed changeover relay	8 A	35 mm	Plug-in 8-pin <sup>(2)</sup>
	1 timed changeover relay	8 A	35 mm	Plug-in 8-pin <sup>(2)</sup>
	1 timed changeover relay	8 A	35 mm	Plug-in 8-pin <sup>(2)</sup>
	1 timed changeover relay	8 A	35 mm	Plug-in 8-pin <sup>(2)</sup>
	2 timed changeover relay	8 A	35 mm	Plug-in 8-pin <sup>(2)</sup>
	2 timed changeover relay	8 A	35 mm	Plug-in 11-pin <sup>(3)</sup>
	2 timed changeover relay	8 A	35 mm	Plug-in 11-pin <sup>(3)</sup>
	2 timed changeover relays	8 A	35 mm	Plug-in 11-pin <sup>(3)</sup>
	2 timed changeover relays <sup>(1)</sup>	8 A	35 mm	Plug-in 11-pin <sup>(3)</sup>
	2 timed changeover relays <sup>(1)</sup>	8 A	35 mm	Plug-in 11-pin <sup>(3)</sup>
2 timed changeover relays <sup>(1)</sup>	8 A	35 mm	Plug-in 11-pin <sup>(3)</sup>	

<sup>(1)</sup> or 1 timed & 1 instantaneous

<sup>(2)</sup> 8-pin connector base - Part no.: 25622080

<sup>(3)</sup> 11-pin connector base - Part no.: 25622130



Description	Type	Part number	Power supply	Functions (see pages 28-31)
<b>Miniatures range - 21 x 27 mm</b>				
	RTMA2	88895201	12 V $\text{---}$	A
		88895202	24 V $\text{---}$	
		88895203	24 V $\sim$	
		88895206	110 V $\sim$	
		88895207	230 V $\sim$	
	RTMA4	88896201	12 V $\text{---}$	A
		88896202	24 V $\text{---}$	
		88896203	24 V $\sim$	
		88896206	110 V $\sim$	
		88896207	230 V $\sim$	
RTM Accessories	26532702	Spring clips for DIN rail mounting base		
	26532706	Base for DIN rail mounting RTMA4		
	26532707	Base for DIN rail mounting RTMA2		
	26532708	PCB base RTMA4		
	26532709	PCB base RTMA2		
<b>Electromechanical timers</b>				
<b>TOP 2000 range</b>				
	6 s - 12 min	88225011	220 $\rightarrow$ 240 V $\sim$	2-3-4
		88225012	110 $\rightarrow$ 127 V $\sim$	
		88225013	24 V $\sim$	
		88225019	42 $\rightarrow$ 48 V $\sim$	
		88225014	220 $\rightarrow$ 240 V $\sim$	
	88225015	110 $\rightarrow$ 127 V $\sim$		
	88225016	24 V $\sim$		
	88225017	42 $\rightarrow$ 48 V $\sim$		



### ► Adapted Control timer:

■ To satisfy the requirements of equipment manufacturers, Crouzet offers an adapted range of DIN rail mounted timers with solid state output: the **S series**

- Mono-function
- Single-range
- Mono-voltage
- Timing fixed or adjustable by external or built-in potentiometer.

On request, Crouzet can modify output contacts, remove the mounting brackets and even reduce the dimensions.

■ Based on your specifications, Crouzet can also adapt any other DIN rail- or panel-mounted timer:

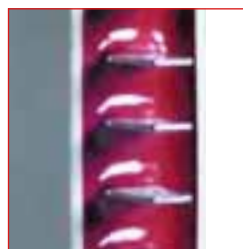
- Conversion of adjustable timing products into products with fixed timing
- Other timing ranges
- Adaptation of the output power
- Customer labelling.

*For any special applications, please contact our Micro-control sales and technical experts.*

Timing	Outputs	Rated current	Casing width	Connection
<ul style="list-style-type: none"> <li>■ 0 → 1 s</li> <li>■ 1 → 10 s</li> <li>■ 0.1 → 1 min</li> <li>■ 1 → 10 min</li> <li>■ 0.1 → 1 h</li> <li>■ 1 → 10 h</li> <li>■ 10 → 100 h</li> </ul>	2 timed changeover relays	5 A	21 mm	Plug-in 8-pin
<ul style="list-style-type: none"> <li>■ 0 → 1 s</li> <li>■ 1 → 10 s</li> <li>■ 0.1 → 1 min</li> <li>■ 1 → 10 min</li> <li>■ 0.1 → 1 h</li> <li>■ 1 → 10 h</li> <li>■ 10 → 100 h</li> </ul>	4 timed changeover relays	5 A	21 mm	Plug-in 14-pin
6 s → 12 min	1 time changeover relay & 1 instantaneous	5 A	48 mm	Screw terminals
6 min → 12 h	1 time changeover relay & 1 instantaneous	5 A	48 mm	Screw terminals



■ Resin-coated for sealed protection.



■ Connection by 6.35 mm Faston connectors.



■ Dedicated version for compressors and heat pumps (prevention of compressor short-cycling, percentage timer).



Description	Type	Part number	Power supply	Functions (see pages 28-31)
<b>Electronic timers - ANALOGUE</b>				
<b>TMR 48 range</b>				
	<b>TMR48 A</b>	88886106	12 → 240 V $\overline{\text{---}}$ / 24 → 240 V $\sim$	A
	<b>TMR48 X</b>	88886116	12 → 240 V $\overline{\text{---}}$ / 24 → 240 V $\sim$	A1, A2, H1, H2, Q1, Q2, D-Di
	<b>TMR48 U</b>	88886016	12 → 240 V $\overline{\text{---}}$ / 24 → 240 V $\sim$	A, B, C, W, G, Ac, Bw
	<b>TMR48 L</b>	88886516	12 → 240 V $\overline{\text{---}}$ / 24 → 240 V $\sim$	L/Li, G/Gi
	<b>TMR Accessories</b>	25622080	11-pin connector base	
	25622130	8-pin connector base		
	79237739	Spring clips		
	79694002	11-pole rear base		
	25622203	8-pole rear base		
<b>MBA range</b>				
	<b>MBA2F</b>	88901308	100 → 240 V $\overline{\text{---}}$	A
		88901328		
		88901348		
		88901378		
		88901398		
	<b>MBA3F</b>	88901302	24 V $\overline{\text{---}}$	A
		88901322		
		88901342		
		88901372		
		88901392		
<b>Electronic timers - DIGITAL</b>				
<b>TIMER 8xx range with LCD display</b>				
	<b>812</b>	88857400	220 → 240 V $\sim$	A
		88857406	110 V $\sim$	
		88857409	24 V $\overline{\text{---}}$	
	<b>814</b>	88857003	12 V $\overline{\text{---}}$ / 24 → 48 V $\overline{\text{---}}$	A, B, C, D, Di, H
		88857005	24 V $\overline{\text{---}}$ / 110 → 240 V $\sim$	
		88857103	12 V $\overline{\text{---}}$ / 24 → 48 V $\overline{\text{---}}$	A, B, C, D, Di, H
		88857105	24 V $\overline{\text{---}}$ / 110 → 240 V $\sim$	A, B, C, D, Di, H
	<b>815</b>	88857301	24 V $\overline{\text{---}}$ / 220 → 240 V $\sim$	A1, A2, AM, Amt
		88857302	12 V $\overline{\text{---}}$ / 42 → 48 V $\overline{\text{---}}$	
		88857307	24 V $\overline{\text{---}}$ / 110 V $\sim$	
	<b>816</b>	88857601	24 V $\overline{\text{---}}$ / 220 → 240 V $\sim$	A, B, C, D, Di, H
		88857604	24 V $\overline{\text{---}}$ / 48 $\overline{\text{---}}$	
		88857607	24 V $\overline{\text{---}}$ / 110 V $\sim$	
		88857701	24 V $\overline{\text{---}}$ / 220 → 240 V $\sim$	A, B, C, D, Di, H
		88857704	24 V $\overline{\text{---}}$ / 110 V $\sim$	
<b>TIMER 8xx Accessories</b>	25622301	8-pin solder tag connector		
	25622076	11-pin solder tag connector		
	79237739	Spring clips		
	25622080	11-pin connector base		
	25622130	8-pin connector base		
	79694002	11-pole rear base		
	25622203	8-pole rear base		



# Timers

Timing	Outputs	Rated current	Casing width	Connection												
0.02 → 1.2 s / 0.05 → 3 s / 0.2 → 12 s / 0.5 → 30 s / 2 → 120 s / 5 → 300 s / 0.2 → 12 min / 0.5 → 30 min / 2 → 120 min / 5 → 300 min / 0.2 → 12 h / 0.5 → 30 h / 2 → 120 h / 5 → 300 h	2 timed changeover relays	5 A	48 mm	Plug-in 8-pin												
	2 timed changeover relays (or 1 timed & 1 instantaneous)	5 A	48 mm	Plug-in 8-pin												
	2 timed changeover relays	5 A	48 mm	Plug-in 11-pin												
	2 timed changeover relays	5 A	48 mm	Plug-in 11-pin												
0.1 s → 1 s 0.5 s → 10 s 3 s → 60 s 0.5 min → 10 min 3 min → 60 min	Solid state	400 mA	Ø 22 mm	Screw terminals												
					Solid state	200 mA	Ø 22 mm	Screw terminals								
									Solid state	2 x 5 A	48 mm	Plug-in 8-pin				
													1 timed changeover relay	8 A	48 mm	Plug-in 8-pin
													1 changeover relay (timed or instantaneous)	8 A	48 mm	Plug-in 8-pin
1 changeover relay (timed or instantaneous)	8 A	48 mm	Plug-in 11-pin													
1 timed changeover relay	8 A	48 mm	Plug-in 11-pin													
1 changeover relay (timed or instantaneous)	2 x 8 A	48 mm	Plug-in 11-pin													
1 timed changeover relay	8 A	48 mm	Plug-in 8-pin													
1 timed changeover relay	8 A	48 mm	Plug-in 11-pin													

Logic controllers

Power supplies

Control relays

Timers

Counters /  
Rate meters

Temperature  
controllers

Safety products

Description	Type	Part number	Power supply	Functions (see pages 28-31)
<b>Electromechanical timers</b>				
<b>TOP 2000 range</b>				
	<b>6 s - 12 min</b>	88226011	220 → 240 V ~	2-3-4
		88226012	110 → 127 V ~	
		88226013	24 V ~	
		88226019	42 → 48 V ~	
		88226501	24 V ~	
		88226502	42 → 48 V ~	
		88226503	110 → 127 V ~	
		88226504	220 → 240 V ~	
	<b>6 min - 12 h</b>	88226014	220 → 240 V ~	2-3-4
		88226015	110 → 127 V ~	
		88226016	24 V ~	
		88226017	42 → 48 V ~	
		88226505	24 V ~	
		88226506	42 → 48 V ~	
88226507		110 → 127 V ~		
88226508		220 → 240 V ~		
<b>TOP 2000 Accessories</b>		25622301	8-pin solder tag connector	
		25622130	8-pin connector base	
<b>Manual reset range</b>				
	<b>882564 Single-pole</b>	88256401	127 V ~ / 230 V ~	A
		88256402		
		88256403		
		88256404		
		88256405		
		88256406		
		88256407		
		88256408		
	<b>882565 2-pole</b>	88256506	127 V ~ / 230 V ~	A
		88256507		
		88256508		
		88256509		
		88256510		
		88256511		
		88256512		
	<b>882569 3-pole</b>	88256906	127 V ~ / 230 V ~	A
		88256907		
		88256908		
		88256909		
		88256910		
		88256911		
		88256912		
	88256913			

# Timers

Timing	Outputs	Rated current	Casing width	Connection
6 s → 12 min	1 timed changeover relay & 1 instantaneous	5 A	48 mm	Plug-in 8-pin
6 s → 12 min	1 timed changeover relay & 1 instantaneous	5 A	48 mm	Screw terminals
6 min → 12 h	1 timed changeover relay & 1 instantaneous	5 A	48 mm	Plug-in 8-pin
6 min → 12 h	1 timed changeover relay & 1 instantaneous	5 A	48 mm	Screw terminals
5 min (max. display time: 4 min 40 s) 15 min (max. display time: 14 min) 30 min (max. display time: 28 min) 60 min (max. display time: 56 min) 120 min (max. display time: 1 h 53 min) 5 h (max. display time: 4 h 43 min) 15 h (max. display time: 14 h 10 min) 30 h (max. display time: 28 h 20 min)	1 timed changeover	16 A	55 mm	6.35 mm Faston connectors
5 min (max. display time: 4 min 40 s) 15 min (max. display time: 14 min) 30 min (max. display time: 28 min) 60 min (max. display time: 56 min) 120 min (max. display time: 1 h 53 min) 5 h (max. display time: 4 h 43 min) 15 h (max. display time: 14 h 10 min) 30 h (max. display time: 28 h 20 min)	2 timed changeovers	16 A	55 mm	6.35 mm Faston connectors
5 min (max. display time: 4 min 40 s) 15 min (max. display time: 14 min) 30 min (max. display time: 28 min) 60 min (max. display time: 56 min) 120 min (max. display time: 1 h 53 min) 5 h (max. display time: 4 h 43 min) 15 h (max. display time: 14 h 10 min) 30 h (max. display time: 28 h 20 min)	3 timed changeovers	16 A	55 mm	6.35 mm Faston connectors

Logic controllers

Power supplies

Control relays

**Timers**

Counters /  
Rate meters

Temperature  
controllers

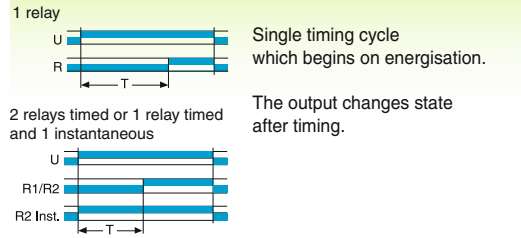
Safety products

Generic functions

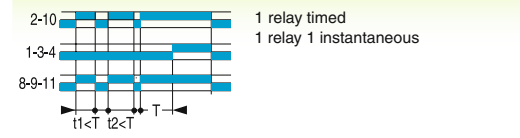
This section contains all the function diagrams for Crouzet timers.

U : Supply  
 R : Output or load relay  
 T : Timing  
 C (Y1) : Control contact  
 ∞ : indefinite

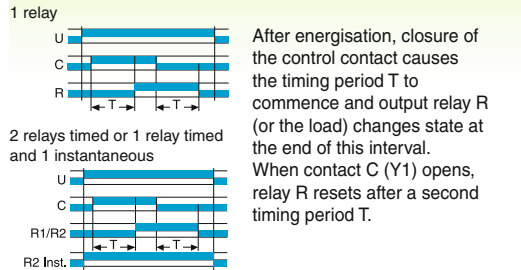
→ Function A: Delay on energisation



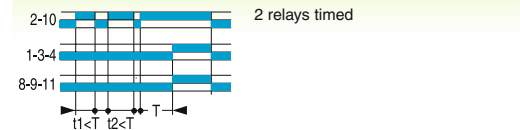
→ Function A1: Delay on energisation



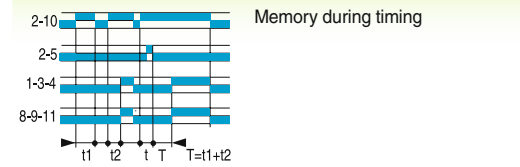
→ Function Ac: Timing after closing and opening of control contact



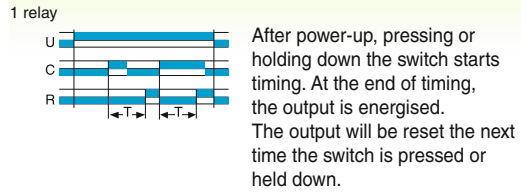
→ Function A2: Delay on energisation



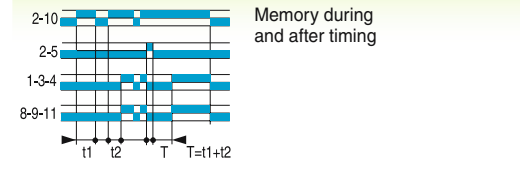
→ Function AM: Delay on energisation



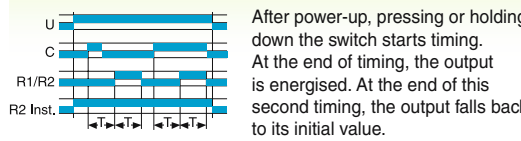
→ Function Ad: Delay on energisation by switch (not resettable)



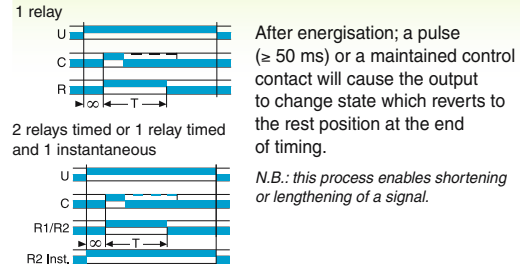
→ Function AMt: Delay on energisation



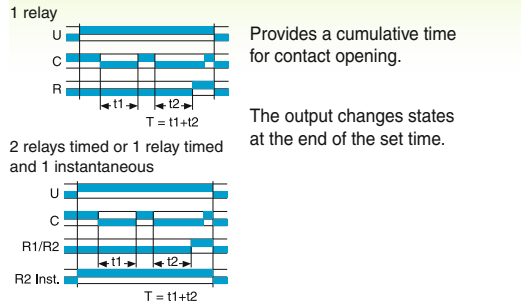
→ Function Ah: Flashing single cycle by switch (not resettable)



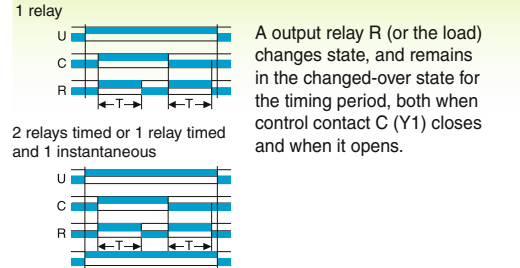
→ Function B: Timing on impulse one shot On pulse (with constant supply)



→ Function At: Timing on energisation with memory



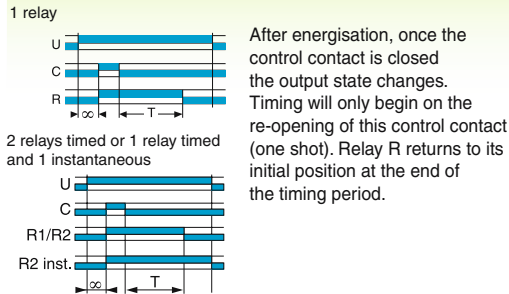
→ Function Bw: Pulse output (adjustable)





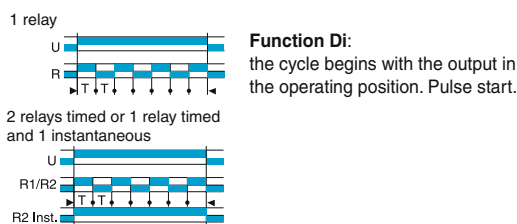
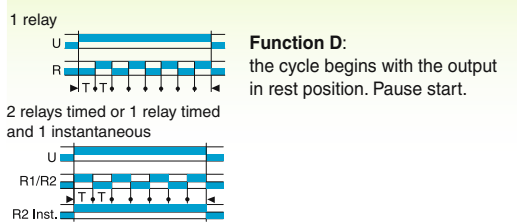
**U** : Supply  
**R** : Output or load relay  
**T** : Timing  
**C (Y1)** : Control contact  
 $\infty$  : indefinite

## → Function C: Timing after impulse Delay OFF (with constant supply)

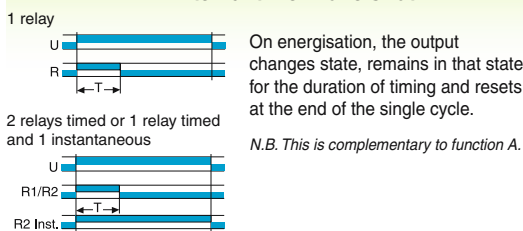


## → Function D or Di: Symmetric recycler

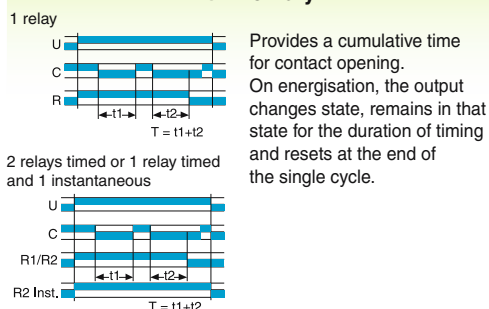
Repetitive cycle which switches the output alternately between the rest and operating position for equal time bases.  $T1 + T2 = T$  total



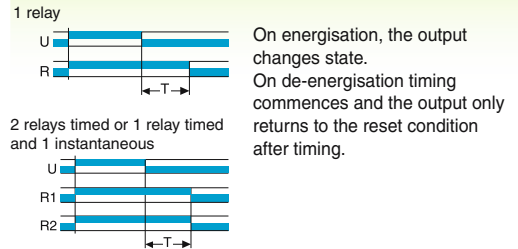
## → Function H: Timing on energisation Interval timer - one shot



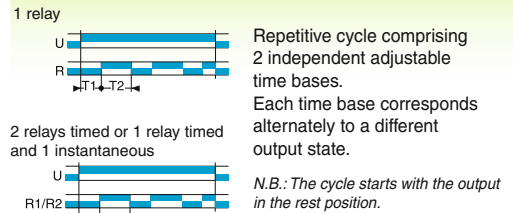
## → Function Ht: Delay on energisation with memory



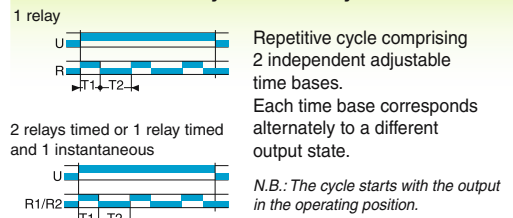
## → Function K: Delay on de-energisation - True delay OFF



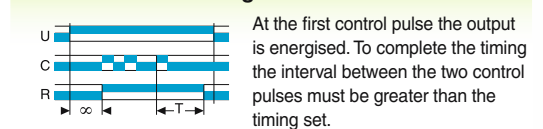
## → Function L: Asymmetric recycler



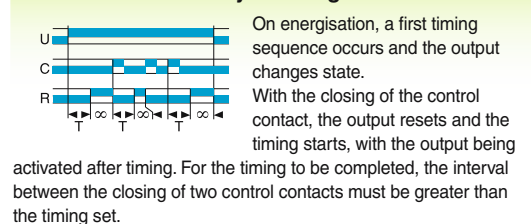
## → Function Li: Asymmetric recycler



## → Function N: "Safe-guard"



## → Function O: "Delayed safe-guard"





**U** : Supply  
**R** : Output or load relay  
**T** : Timing  
**C (Y1)** : Control contact  
 $\infty$  : indefinite

**→ Function P: Delayed fixed-length pulse**

Timing begins on energisation. At the end of the timing period output relay R (or the load) changes state for a period of approximately 500 ms.

**→ Function TL: Impulse relay**

After power-up, pressing or holding down the switch closes the relay. Pressing the switch a second time opens the relay.

**→ Function Pt: Impulse counter (delay on)**

Calculates the total opening time of a contact. At the end of timing, the output is energised for approximately 500 ms.

$T = t1 + t2$

**→ Function Tt: Timed impulse relay**

After power-up, pressing or holding down the switch closes the relay and starts timing. The relay opens at the end of timing or when the switch is pressed a second time.

**→ Function Q: "Star-delta"**

At the end of timing, the output is not energised. It remains "open" (not conducting) and will only change state after the fixed time of TI has elapsed. Dwell time selectable.

**→ Function W: Timing after pulse on control contact**

After energisation, if the control contact opens it causes output relay R (or the load) to change state and timing to start. At the end of the timing period, relay R resets to its original state.

**▶ Dedicated functions TOP2000**

**▶ Dedicated functions Manual reset**

**→ Function 2:**

**→ 1 pole:**

**→ Function 3:**

$\geq 400$  ms

**→ 2 poles:**

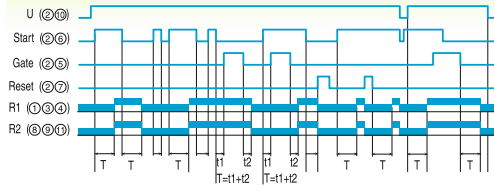
**→ Function 4:**

$\geq 400$  ms

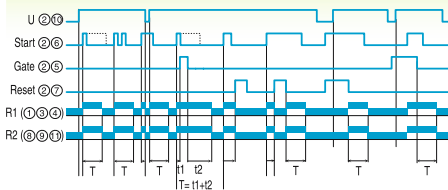
**→ 3 poles:**

## TMR48 dedicated functions

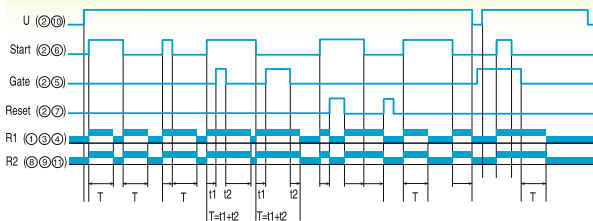
### → Function Ac: Timing after closing and opening of control contact



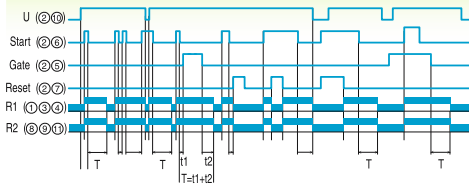
### → Function B: Timing on impulse



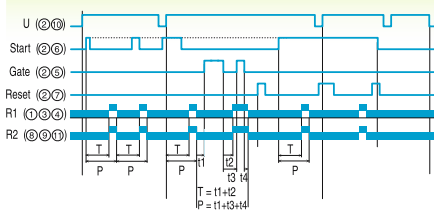
### → Function Bw: Pulse output (adjustable)



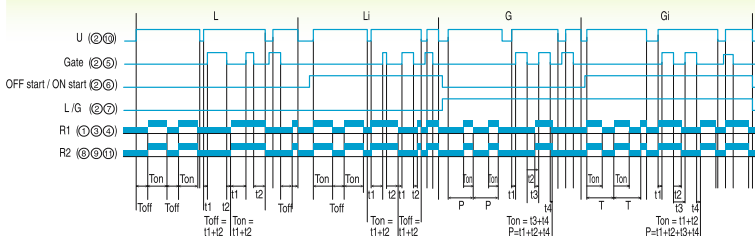
### → Function C: Timing after impulse - Delay off with constant supply



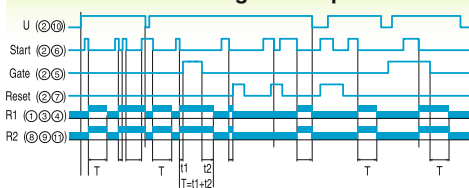
### → Function G: Cyclic function



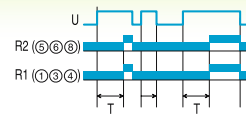
### → Function L/LiG/Gi: Asymmetric recycler



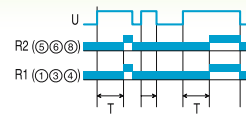
### → Function W: Timing after impulse on control contact



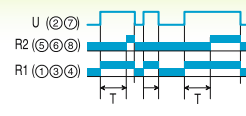
### → Function A TMR48 A: Delay on energisation



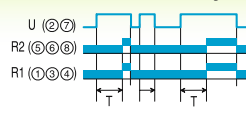
### → Function A TMR48 U: Delay on energisation



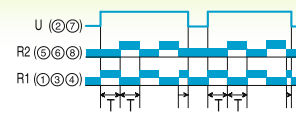
### → Function A1: Delay on energisation



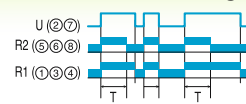
### → Function A2: Delay on energisation



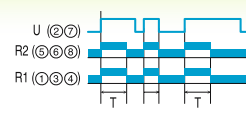
### → Function D-Di: Symmetric recycler



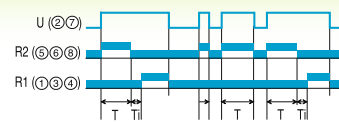
### → Function H1: Timing on energisation



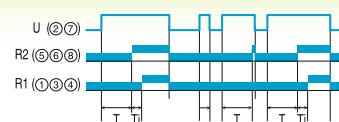
### → Function H2: Timing on energisation







### → Function Q1: Star-delta




### → Function Q2: Star-delta 2





Description	Type	Part number	Power supply	Functions
<b>With preselection</b>				
<b>Multifunction up/down counters - CPT4 range</b>				
	<b>CPT4 - LCD <span style="color:red">NEW</span></b> 1 preset	87620111	12 → 24 V $\overline{\text{---}}$	<ul style="list-style-type: none"> <li>■ Preselection counter</li> <li>■ Ratemeter</li> <li>■ Timer</li> <li>■ Multi-totaliser</li> </ul>
		87620112	24 V $\sim$	
		87620113	115 V $\sim$	
		87620114	230 V $\sim$	
	<b>CPT4 - LCD <span style="color:red">NEW</span></b> 2 presets	87620121	12 → 24 V $\overline{\text{---}}$	<ul style="list-style-type: none"> <li>■ Preselection counter</li> <li>■ Ratemeter</li> <li>■ Timer</li> <li>■ Multi-totaliser</li> <li>■ Batch counters</li> </ul>
		87620122	24 V $\sim$	
		87620123	115 V $\sim$	
		87620124	230 V $\sim$	
	<b>CPT4 - LED <span style="color:red">NEW</span></b> 1 preset	87620211	12 → 24 V $\overline{\text{---}}$	<ul style="list-style-type: none"> <li>■ Preselection counter</li> <li>■ Ratemeter</li> <li>■ Timer</li> <li>■ Multi-totaliser</li> </ul>
		87620212	24 V $\sim$	
		87620213	115 V $\sim$	
		87620214	230 V $\sim$	
	<b>CPT4 - LED <span style="color:red">NEW</span></b> 2 presets	87620221	12 → 24 V $\overline{\text{---}}$	<ul style="list-style-type: none"> <li>■ Preselection counter</li> <li>■ Ratemeter</li> <li>■ Timer</li> <li>■ Multi-totaliser</li> <li>■ Batch counters</li> </ul>
		87620222	24 V $\sim$	
		87620223	115 V $\sim$	
		87620224	230 V $\sim$	
<b>CPT4 - Accessories <span style="color:red">NEW</span></b>		87620300	Panel cut-out adaptor plate 72 x 72 mm	

Description	Type	Part number	Power supply	Functions	
<b>Without preselection</b>					
<b>Totalizer - CP2 range*</b>					
	CP2 - 2108	87610340	Lithium battery	Totalizer	
	CP2 - 2231	87610040	Lithium battery	Totalizer	
	CP2 - 2232	87610050	Lithium battery	Totalizer	
<b>Total/partial impulse counter - CP2 range*</b>					
	CP2 - 2293	87610240	Lithium battery	Total / partial impulse counter	
	CP2 - 2294	87610250	Lithium battery	Total / partial impulse counter	
<b>Hour counters / Chronometer - CP2 range*</b>					
	CP2 - 2108 H	87610440	Lithium battery	Hour counter / chronometer (second, minute, hour)	
<b>Hour counters - CP2 range*</b>					
	CP2 - 2213	87610140	Lithium battery	Hour counter (second, minute, hour)	
	CP2 - 2214	87610150	Lithium battery	Hour counter (second, minute, hour)	
	<b>CPT4 - Accessories</b>	26546829	Panel cut-out adaptor plate 25 x 50 mm		
		26546830	Panel cut-out adaptor plate 45 x 45 mm		
	26546831	Panel cut-out adaptor plate $\varnothing$ 50 mm			

\* with manual or remote reset



# Counters / Ratemeters

Max. counting speed	Type of counter inputs*	Output relay	Display	Dimension
5 kHz	Voltage or solid state	1 changeover relay & 1 solid state	LCD screen with 6 digits (height 9 mm) Display: -99999 to 999999	48 x 48 mm
5 kHz	Voltage or solid state	2 changeover relays & 2 solid state	LCD screen with 6 digits (height 9 mm) Display: -99999 to 999999	48 x 48 mm
5 kHz	Voltage or solid state	1 changeover relay & 1 solid state	LCD screen with 6 digits (height 7.6 mm) Display: -99999 to 999999	48 x 48 mm
5 kHz	Voltage or solid state	2 changeover relays & 2 solid states	LCD screen with 6 digits (height 7.6 mm) Display: -99999 to 999999	48 x 48 mm

\* Input counting modes: Upcounting, Downcounting, Cumulative counting, Directional up-down counting, Independent up-down counting, Phase.

Max. counting speed	Type of counter inputs	Output relay	Display	Dimension
7 kHz	Volt-free contact, solid state or voltage	-	LCD screen with 6 digits (height 7 mm)	24 x 48 mm
7.5 kHz	Solid state	-	LCD screen with 8 digits (height 7 mm)	24 x 48 mm
40 Hz	Voltage	-	LCD screen with 8 digits (height 7 mm)	24 x 48 mm
100 Hz	Volt-free contact or solid state	-	LCD screen with 8 digits (height 7 mm)	24 x 48 mm
100 Hz	Voltage	-	LCD screen with 8 digits (height 7 mm)	24 x 48 mm
7 kHz	Volt-free contact	-	LCD screen with 8 digits (height 7 mm)	24 x 48 mm
-	Volt-free contact or solid state	-	LCD screen with 6 digits (height 7 mm)	24 x 48 mm
-	Voltage	-	LCD screen with 6 digits (height 7 mm)	24 x 48 mm


  
 ▶ Electromechanical counters

Description	Type	Part number	Power supply	Functions
<b>Without preselection</b>				
<b>Hour counters - CH48G range</b>				
	<b>CH48G Without reset</b>	99761710	18 → 26 V ~	Hour counter (hour)
		99761711	36 → 48 V ~	
		99761712	110 → 127 V ~	
		99761714	220 → 240 V ~	
		99761715	110 → 127 V ~	
		99761716	220 → 240 V ~	
		99761718	24 → 30 V ~	
	<b>CH48G Accessories</b>	26546803	Connector base for DIN rail mounting	
26546805		Bezel (grey) 55 x 55 mm		
<b>Totalizers - 24 x 28 mm range</b>				
	<b>Without reset</b>	99766901	230 V ~	Totalizer
		99766902	115 V ~	
		99766904	24 V ~	
		99766907	24 V ---	
	<b>With manual reset</b>	99766921	230 V ~	Totalizer
		99766922	115 V ~	
		99766924	24 V ~	
		99766927	24 V ---	
<b>Totalizers - 36 x 37 mm range</b>				
	<b>Without reset</b>	99766601	230 V ~	Totalizer
		99766602	115 V ~	
		99766604	24 V ~	
		99766607	24 V ---	
	<b>With manual reset</b>	99766610	230 V ~	Totalizer
		99766611	115 V ~	
		99766613	24 V ~	
		99766616	24 V ---	
<b>Totalizers - 36 x 48 mm range</b>				
	<b>Without reset</b>	99766701	230 V ~	Totalizer
		99766702	115 V ~	
		99766704	24 V ~	
		99766707	24 V ---	
	<b>With manual reset</b>	99766710	230 V ~	Totalizer
		99766711	115 V ~	
		99766713	24 V ~	
		99766716	24 V ---	

# Counters / Ratemeters

Max. counting speed	Type of counter inputs	Output relay	Display	Dimensions
- - - - - - -	Voltage	-	7 digits, including 2 decimals (height 3.8 mm)	48 x 48 mm
50 → 60 Hz 50 → 60 Hz 50 → 60 Hz -	-	-	6 digits (height 4 mm)	24 x 48 mm
50 → 60 Hz 50 → 60 Hz 50 → 60 Hz -	-	-	5 digits (height 4 mm)	24 x 48 mm
50 → 60 Hz 50 → 60 Hz 50 → 60 Hz -	-	-	6 digits (height 4 mm)	36 x 37 mm
50 → 60 Hz 50 → 60 Hz 50 → 60 Hz -	-	-	5 digits (height 4 mm)	36 x 37 mm
50 → 60 Hz 50 → 60 Hz 50 → 60 Hz -	-	-	6 digits (height 4 mm)	36 x 48 mm
50 → 60 Hz 50 → 60 Hz 50 → 60 Hz -	-	-	5 digits (height 4 mm)	36 x 48 mm

Logic controllers

Power supplies

Control relays

Timers

Counters / Ratemeters

Temperature controllers

Safety products

## Electronic temperature controllers

Description	Type	Part number	Voltage	Functions	Output relay 1	Output relay 2	
<b>Analogue</b>							
<b>CT48A range</b>							
	<b>CT48A</b>	<b>89420047</b>	230 V ~	Heating	Relay 5 A	-	
		<b>89420067</b>					
		<b>89420097</b>					
		<b>89420077</b>	230 V ~	Heating	Relay 5 A	-	
		<b>89420087</b>					
		<b>89420207</b>	230 V ~	Heating	Relay 5 A	-	
		<b>89420217</b>					
		<b>89420227</b>					
	<b>89420237</b>						
	<b>89420257</b>						
<b>CT48A Accessories</b>		<b>25622301</b>	8-pin solder tag connector				
		<b>25622303</b>	8-pin connector base for DIN rail and panel mounting				
		<b>79237709</b>	IP54 protective cover				
<b>Digital</b>							
<b>CTD24 range</b>							
	<b>CTD24 1 alarm</b>	<b>89422702</b>	24 V ~	Heating <b>or</b> cooling	Relay 3 A	Relay 3 A	
		<b>89422708</b>	100 → 240 V ~				
		<b>89422712</b>	24 V ~	Heating <b>or</b> cooling	Relay 3 A	Voltage logic	
		<b>89422718</b>	100 → 240 V ~				
		<b>89422722</b>	24 V ~	Heating <b>or</b> cooling	Voltage logic	Voltage logic	
		<b>89422728</b>	100 → 240 V ~				
<b>MIC48 range</b>							
	<b>MIC48 2 alarms</b>	<b>89422002</b>	24 V ~	Heating <b>and/or</b> cooling	Relay 3 A	Relay 1 A	
		<b>89422008</b>	100 → 240 V ~				
		<b>89422012</b>	24 V ~	Heating <b>and/or</b> cooling	Voltage logic		
		<b>89422018</b>	100 → 240 V ~				
		<b>89422402 *</b>	24 V ~	Heating <b>and/or</b> cooling	Relay 3 A		
		<b>89422408 *</b>	100 → 240 V ~				
		<b>89422412 *</b>	24 V ~	Heating <b>and/or</b> cooling	Voltage logic		
<b>89422418 *</b>	100 → 240 V ~						
<b>CTD43 range</b>							
	<b>CTD43 1 alarm</b>	<b>89421102</b>	24 V ~	Heating <b>or</b> cooling	Relay 3 A	Relay 1 A	
		<b>89421108</b>	100 → 240 V ~				
		<b>89421112</b>	24 V ~	Heating <b>or</b> cooling	Voltage logic	Relay 1 A	
		<b>89421118</b>	100 → 240 V ~				
<b>CTD46 range</b>							
	<b>CTD46 1 alarm</b>	<b>89422102</b>	24 V ~	Heating <b>or</b> cooling	Relay 3 A	Relay 1 A	
		<b>89422108</b>	100 → 240 V ~				
		<b>89422112</b>	24 V ~	Heating <b>or</b> cooling	Voltage logic	Relay 1 A	
		<b>89422118</b>	100 → 240 V ~				
<b>CTH46 range</b>							
	<b>CTH46</b>	<b>89422502</b>	24 V ~	Heating <b>or</b> cooling	Relay 3 A	Relay 1 A	
		<b>89422508</b>	100 → 240 V ~				
		<b>89422512</b>	24 V ~	Heating <b>or</b> cooling	Voltage logic	Relay 1 A	
		<b>89422518</b>	100 → 240 V ~				
<b>Temperature probes</b>							
	<b>Thermocouple</b>	<b>79696030</b>		Thermocouple probe J with nickel-plated brass eyelet - max.: 400°C			
		<b>79696031</b>		Thermocouple probe J with stainless steel 304 casing - max.: 600°C			
		<b>79696032</b>		Thermocouple probe J with stainless steel 316 sheath Ø 6 mm - max.: 400°C			
		<b>79696033</b>		Thermocouple probe J with stainless steel 316 sheath Ø 5 mm - max.: 400°C			
		<b>79696034</b>		Thermocouple probe K with stainless steel 304 casing - max.: 1100°C			
	<b>Pt100</b>	<b>79696035</b>		Pt100 probe Class B with stainless steel 316 sheath - max.: 200°C			
		<b>79696036</b>		Pt100 probe Class B with stainless steel 316 sheath - max.: 400°C			
		<b>79696037</b>		Pt100 probe Class B with aluminium V6 sheath - max.: 200°C			

\* Optional Modbus-Jbus RS 485 link on request for MIC 48 controllers



# Temperature controllers

Temperature	Input type	Control type	Number of displays	Dimensions	Connection				
(0 → + 250° C) (0 → + 450° C) (0 → + 600° C)	Thermocouple J	Digital or Proportional derivative selected by wiring	-	56 mm x 48 mm	Plug-in 8-pin				
(0 → + 800° C) (0 → + 1200° C)	Thermocouple K								
(-50 → +30° C) (0 → + 40° C) (0 → + 120° C) (0 → + 200° C) (0 → + 400° C)	Resistance temperature detector Pt100 (2-wire)								
-	<b>Universal configurable:</b> Resistance temperature detector Pt100 (2-3 wire) / Thermocouples J-K-R-S-L-N / Voltage					PID with auto-tune & adaptive tune	1 (4 digits)	24 mm x 48 mm	Screw terminals
-	Resistance temperature detector PT100 (3-wire) / Thermocouples J-K-R-S-T-L-N / Voltage / Current					PID with auto-tune & adaptive tune  <i>Option: load break monitoring with current transformer:</i> <b>Part no.: 26852301 (10 A / 50 mA)</b> <b>Part no.: 26852302 (25 A / 50 mA)</b> <b>Part no.: 26852303 (50 A / 50 mA)</b> <b>Part no.: 26852304 (100 A / 50 mA)</b>	2 (4 digits)	56 mm x 48 mm	Screw terminals
-	Resistance temperature detector PT100 (3-wire) / Thermocouples J-K-L-N					PID with auto-tune & adaptive tune	1 (3 digits)	56 mm x 48 mm	Screw terminals
-	Resistance temperature detector PT100 (3-wire) / Thermocouples J-K-L-N					PID with auto-tune & adaptive tune	2 (3 digits)	56 mm x 48 mm	Screw terminals
-	Resistance temperature detector PT100 (3-wire) / Thermocouples J-K-L-N	PID with auto-tune & adaptive tune	2 (3 digits)	56 mm x 48 mm	Screw terminals				

Logic controllers

Power supplies

Control relays










Timers

Counters /  
Rate meters

Temperature  
controllers

Safety products

 Safety relays

Description	Type	Part number	Power supply	Functions	Levels of safety according to EN 954-1
<b>Emergency stop and/or mobile guards</b>					
	KNA3-XS	85100036	24 V ~	<ul style="list-style-type: none"> <li>■ Emergency stops</li> <li>■ Mobile guard monitoring</li> </ul>	3
		85100037	40 → 260 V ~		
	KNA3-RS	85100434	115 V ~	<ul style="list-style-type: none"> <li>■ Emergency stops</li> <li>■ Mobile guard monitoring</li> </ul>	4
		85100435	230 V ~		
		85100436	24 V ~		
	KZP3-RS	85100536	24 V ~		
<b>Relevelling zone check</b>					
	KZHNV-XS	85100526	24 V ~	Relevelling zone check for lifts according to EN81	4
<b>Timed contacts</b>					
	KZR3-RS	85100736	24 V ~	<ul style="list-style-type: none"> <li>■ Emergency stops</li> <li>■ Mobile guard monitoring</li> <li>■ Safety timer function from 0.5 s to 30 s</li> </ul>	4
<b>Extension relay</b>					
	KZE3-XS	85100936	24 V ~	Extending the number of contacts in a safety relay	Depending on main relay
	KZEC3-XS	85101936	24 V ~	Extending the number of contacts in a safety relay	Depending on main relay
<b>Zero speed monitoring</b>					
	KSW2-RS	85100326	24 V ~	Zero speed monitoring for a single or 3-phase motor	4
<b>2-hand control</b>					
	KZH2-XS	85100626	24 V ~	Type III C "2-hand control" functions according to EN 574/97	4
		85100634	115 V ~		
	KZH3-RS	85100635	230 V ~	Type III C "2-hand control" functions according to EN 574/97	4
		85100636	24 V ~		

# Safety products

Safety contacts	Data contacts	Casing width	Connection
3 N/O safety contacts	1 N/C signalling contact	22.5 mm	Screw terminals
3 N/O safety contacts	1 N/C signalling contact	45 mm	Screw terminals
2 N/O safety contacts	1 N/C signalling contact	22.5 mm	Screw terminals
1 N/O instantaneous safety contacts 1 N/O timed safety contact 1 N/C timed safety contact	1 N/C timed signalling contact	45 mm	Screw terminals
3 N/O safety contacts	1 N/C return loop	22.5 mm	Screw terminals
3 N/O safety contacts	1 N/C return loop	22.5 mm	Spring terminals
1 N/O safety contacts 1 N/C safety contact	Separate return loop	45 mm	Screw terminals
2 N/O safety contacts	-	22.5 mm	Screw terminals
3 N/O safety contacts	1 N/C signalling contact	45 mm	Screw terminals

Logic controllers

Power supplies

Control relays

Timers

Counters /  
Rate meters

Temperature  
controllers

**Safety products**



► Crouzet & Micro-control website

# Discover...

► **Crouzet website**

- Company presentation
- Sales network
- CST presentation
- Applications
- News
- Links
- Download PDF documents
- Direct access to eCatalogue

**www.crouzet.com**



■ Crouzet website home page



- Micro-control range
- Applications
- Adapted Micro-control
- FAQ
- Download PDF documents:
  - Micro-control overview
  - General catalogue
  - Product catalogues



■ Micro-control on the Crouzet website

## our websites

### ► eCatalogue

- Search by part number facility
- Links to product-specific sites
- RoHS function
- Download PDF documents:
  - Micro-control overview
  - Activity catalogue
  - Product catalogues

[www.catalogue.crouzet.com](http://www.catalogue.crouzet.com)



■ Micro-control eCatalogue home page

- Technical data
- Diagrams:
  - Wiring
  - Dimensions
  - Timing
- Download PDF documents:
  - Catalogue pages
  - Installation manuals
  - Selection guides



■ Example of a page in the Millennium 3 eCatalogue





▶ **Micro-control products website**

# Discover...

▷ **Millenium 3 logic controller**

- Advantages of Millenium 3
- Millenium 3 Adapted Control
- Selection guides
- FAQ
- Applications
- Download
  - PDF documents:
    - Technical documents
    - Promotional material
    - Installation manuals
    - Demo software
    - Media gallery

[www.millenium3.crouzet.com](http://www.millenium3.crouzet.com)



▷ **C-Lynx control relay**

- Advantages of C-Lynx
- Adaptations
- Selection guides
- FAQ
- Applications
- Download
  - PDF documents:
    - Technical documents
    - Promotional material
    - Installation manuals
    - Media gallery

[www.c-lynx.crouzet.com](http://www.c-lynx.crouzet.com)



# our product websites

## ▷ CPT4 counters

- Advantages of CPT4
- Operating mode
- Selection guides
- Applications
- Download
  - PDF documents:
    - Technical documents
    - Promotional material
    - Installation manuals

[www.crouzet.com/cpt4](http://www.crouzet.com/cpt4)



## ▷ Millenium Web Server Solution

- Advantages of the solution
- Implementation
- Applications
- Download
  - PDF documents:
    - Technical documents
    - Promotional material
    - Installation manuals

[www.webserver.crouzet.com](http://www.webserver.crouzet.com)





Part number	Description	Range name	Type	Pages
<b>18000000</b>				
18373112	Heat transfer compound for temperature sensor	Millenium 3	AS	10
<b>25000000</b>				
25622076	11-pin solder tag connector	-	Accessory	24
25622080	11-pin connector base	-	Accessory	17 / 21 / 24
25622130	8-pin connector base	-	Accessory	17 / 21 / 24 / 26
25622203	8-pole rear base	-	Accessory	24-25
25622301	8-pin solder tag connector	-	Accessory	24 / 26 / 36
25622303	8-pin connector base for DIN rail and panel mountings	CT48A	CT48 A accessory	36
<b>26000000</b>				
26450100	Snap-on plate for 35 mm DIN rail	-	89450 accessory	12
26450101	Mounting bracket	-	89450 accessory	12
26532702	Spring clips for DIN rail mounting base	Miniatures	RTM accessory	22
26532706	Base for DIN rail mounting	Miniatures	RTMA4 accessory	22
26532707	Base for DIN rail mounting	Miniatures	RTMA2 accessory	22
26532708	PCB base	Miniatures	RTMA4 accessory	22
26532709	PCB base	Miniatures	RTMA2 accessory	22
26546803	DIN rail socket connector	CH48G	CH48G accessory	34
26546805	Bezel (grey) 55 x 55 mm	CH48G	CH48G accessory	34
26546829	Panel cut-out adaptor plate 25 x 50 mm	CP2	CP2 accessory	32
26546830	Panel cut-out adaptor plate 45 x 45 mm	CP2	CP2 accessory	32
26546831	Panel cut-out adaptor plate Ø 50 mm	CP2	CP2 accessory	32
26852301	Current transformer 10 A / 50 m A	MIC48	MIC48 accessory	37
26852302	Current transformer 25 A / 50 m A	MIC48	MIC48 accessory	37
26852303	Current transformer 50 A / 50 m A	MIC48	MIC48 accessory	37
26852304	Current transformer 100 A / 50 m A	-	MIC48/EIT accessory	14 / 37
<b>79000000</b>				
79237709	IP54 protective cover	CT48A	CT48 A accessory	36
79237739	Spring clips	-	Accessory	24
79694002	11-pin rear base	-	Accessory	24
79696006	High-pressure and high-temperature probe for level control relay	-	S5	16-17
79696014	Electrode holder with a single probe for level control relay	-	S3	16-17
79696030	Thermocouple probe J with nickel-plated brass eyelet	-		35-36
79696031	Thermocouple probe J with stainless steel casing	-		36-37
79696032	Thermocouple probe J with stainless steel sheath Ø 6 mm	-		36-37
79696033	Thermocouple probe J with stainless steel sheath Ø 5 mm	-		36-37
79696034	Thermocouple probe K with stainless steel casing	-		36-37
79696035	Pt100 probe Class B with stainless steel sheath	-		10 / 36-37
79696036	Pt100 probe Class B with stainless steel sheath	-		10 / 36-37
79696037	Pt100 probe Class B with aluminium V6 sheath	-		10 / 36-37
79696043	Protected electrode for mounting by suspension for level control relay	-	S7	16-17
79696044	Electrode holder with 3 probes for level control relay	-	S8	16-17
<b>84000000</b>				
84800000	Removable sealable covers for control relay 17.5 mm	C-Lynx	-	18-19
84800001	Removable sealable covers for control relay 35 mm	C-Lynx	-	18-19
84870201	Level control relay	E	ENR	16-17
84870203	Level control relay	E	ENR	16-17
84870204	Level control relay	E	ENR	16-17
84870211	Level control relay	E	ENRM	16-17
84870213	Level control relay	E	ENRM	16-17
84870214	Level control relay	E	ENRM	16-17
84870301	Level control relay	L	LN	16-17
84870303	Level control relay	L	LN	16-17
84870304	Level control relay	L	LN	16-17
84870306	Level control relay	L	LN	16-17
84870308	Level control relay	L	LN	16-17
84870309	Level control relay	L	LN	16-17
84870401	Level control relay	L	L2N	16-17
84870403	Level control relay	L	L2N	16-17
84870404	Level control relay	L	L2N	16-17
84870501	Level control relay	F	FN	16-17
84870502	Level control relay	F	FN	16-17
84870503	Level control relay	F	FN	16-17
84870504	Level control relay	F	FN	16-17

# Index by part number

Part number	Description	Range name	Type	Pages
84870700	Level control relay	C-Lynx	HNM	16-17
84870710	Level control relay	C-Lynx	HNE	16-17
84870720	Level control relay	C-Lynx	MNS	16-17
84870803	Level control relay	F	FN LS	16-17
84870807	Level control relay	L	LN	16-17
84870808	Level control relay	L	L2N	16-17
84871020	Current control relay	E	EIL	14-15
84871021	Current control relay	E	EIL	14-15
84871022	Current control relay	E	EIL	14-15
84871023	Current control relay	E	EIL	14-15
84871024	Current control relay	E	EIL	14-15
84871030	Current control relay	E	EIH	14-15
84871031	Current control relay	E	EIH	14-15
84871032	Current control relay	E	EIH	14-15
84871033	Current control relay	E	EIH	14-15
84871034	Current control relay	E	EIH	14-15
84871040	Current control relay	E	EIT	14-15
84871041	Current control relay	E	EIT	14-15
84871042	Current control relay	E	EIT	14-15
84871043	Current control relay	E	EIT	14-15
84871044	Current control relay	E	EIT	14-15
84871120	Current control relay	C-Lynx	HIL	14-15
84871122	Current control relay	C-Lynx	MIC	14-15
84871130	Current control relay	C-Lynx	HIH	14-15
84872020	Voltage control relay	E	EUL	16-17
84872021	Voltage control relay	E	EUL	16-17
84872023	Voltage control relay	E	EUL	16-17
84872024	Voltage control relay	E	EUL	16-17
84872030	Voltage control relay	E	EUH	16-17
84872031	Voltage control relay	E	EUH	16-17
84872033	Voltage control relay	E	EUH	16-17
84872034	Voltage control relay	E	EUH	16-17
84872120	Voltage control relay	C-Lynx	HUH	16-17
84872130	Voltage control relay	C-Lynx	HUL	16-17
84872140	Voltage control relay	C-Lynx	MUS12DC	16-17
84872141	Voltage control relay	C-Lynx	MUS80ACDC	16-17
84872142	Voltage control relay	C-Lynx	MUS260ACDC	16-17
84872151	Voltage control relay	C-Lynx	MUSF80ACDC	16-17
84872152	Voltage control relay	C-Lynx	MUSF260ACDC	16-17
84872501	Frequency control relay	C-Lynx	HHZ	14-15
84873004	Phase control relay	E	EWS2	14-15
84873020	Phase control relay	C-Lynx	MWS	14-15
84873021	Phase control relay	C-Lynx	MWS2	14-15
84873022	Phase control relay	C-Lynx	MWG	14-15
84873023	Phase control relay	C-Lynx	MWU	14-15
84873024	Phase control relay	C-Lynx	MWA	14-15
84873025	Phase control relay	C-Lynx	MWUA	14-15
84873026	Phase control relay	C-Lynx	HWUA	14-15
84873027	Motor temperature and phase control relay	C-Lynx	HWTM	18-19
84873028	Motor temperature and phase control relay	C-Lynx	HWTM2	18-19
84873220	Phase control relay	C-Lynx	H3US	14-15
84873221	Phase control relay	C-Lynx	H3USN	14-15
84873222	Phase control relay	C-Lynx	M3US	14-15
84874013	Motor temperature control relay	E	ETM	18-19
84874014	Motor temperature control relay	E	ETM	18-19
84874015	Motor temperature control relay	E	ETM	18-19
84874023	Motor temperature control relay	E	ETM2	18-19
84874024	Motor temperature control relay	E	ETM2	18-19
84874025	Motor temperature control relay	E	ETM2	18-19
84874033	Motor temperature control relay	E	ETM22	18-19
84874034	Motor temperature control relay	E	ETM22	18-19
84874035	Motor temperature control relay	E	ETM22	18-19
84874110	Lift temperature control relay, according to EN81	C-Lynx	HT81	18-19
84874120	Lift temperature control relay, according to EN81	C-Lynx	HT81-2	18-19
84874130	Lift temperature control relay, according to EN81	C-Lynx	HWT81	18-19
84874200	Pump control relay	C-Lynx	HPC	18-19
84874320	Speed control relay	C-Lynx	HSV	18-19



Part number	Description	Range name	Type	Pages
84892299	Phase control relay	E	EWS	14-15
<b>85000000</b>				
85100036	Safety relay - Emergency stop and/or mobile guards	KN	KNA3-XS	38-39
85100037	Safety relay - Emergency stop and/or mobile guards	KN	KNA3-XS	38-39
85100326	Safety relay - Zero speed monitoring	KS	KSW2-RS	38-39
85100434	Safety relay - Emergency stop and/or mobile guards	KN	KNA3-RS	38-39
85100435	Safety relay - Emergency stop and/or mobile guards	KN	KNA3-RS	38-39
85100436	Safety relay - Emergency stop and/or mobile guards	KN	KNA3-RS	38-39
85100526	Safety relay - Releveling zone check	KZ	KZHNV-XS	38-39
85100536	Safety relay - Emergency stop and/or mobile guards	KZ	KZP3-RS	38-39
85100626	Safety relay - Two-hand control	KZ	KZH2-XS	38-39
85100634	Safety relay - Two-hand control	KZ	KZH3-RS	38-39
85100635	Safety relay - Two-hand control	KZ	KZH3-RS	38-39
85100636	Safety relay - Two-hand control	KZ	KZH3-RS	38-39
85100736	Safety relay - Timed contacts	KZ	KZR3-RS	38-39
85100936	Safety relay - Extension relay	KZ	KZE3-XS	38-39
85101936	Safety relay - Extension relay	KZ	KZEC3-XS	38-39
<b>87000000</b>				
87610040	Electronic counter without preselection - Totalizer	CP2	CP2 - 2231	32-33
87610050	Electronic counter without preselection - Totalizer	CP2	CP2 - 2232	32-33
87610140	Electronic counter without preselection - Hour	CP2	CP2 - 2213	32-33
87610150	Electronic counter without preselection - Hour	CP2	CP2 - 2214	32-33
87610240	Electronic counter without preselection - Total/Partial impulse	CP2	CP2 - 2293	32-33
87610250	Electronic counter without preselection - Total/Partial impulse	CP2	CP2 - 2294	32-33
87610340	Electronic counter without preselection - Totalizer	CP2	CP2 - 2108	32-33
87610440	Electronic counter without preselection - Hour/Chronometer	CP2	CP2 - 2108 H	32-33
87620111	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 1 preset	32-33
87620112	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 1 preset	32-33
87620113	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 1 preset	32-33
87620114	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 1 preset	32-33
87620121	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 2 presets	32-33
87620122	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 2 presets	32-33
87620123	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 2 presets	32-33
87620124	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LCD - 2 presets	32-33
87620211	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 1 preset	32-33
87620212	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 1 preset	32-33
87620213	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 1 preset	32-33
87620214	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 1 preset	32-33
87620221	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 2 presets	32-33
87620222	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 2 presets	32-33
87620223	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 2 presets	32-33
87620224	Electronic counter with preselection - Multifunction	CPT4	CPT4 - LED - 2 presets	32-33
87620300	Panel cut-out adaptor plate 72 x 72 mm	CPT4	CPT4 accessory	32-33
<b>88000000</b>				
88225011	Electromechanical panel-mounted timer	TOP 2000	6 s - 12 min	22-23
88225012	Electromechanical panel-mounted timer	TOP 2000	6 s - 12 min	22-23
88225013	Electromechanical panel-mounted timer	TOP 2000	6 s - 12 min	22-23
88225014	Electromechanical panel-mounted timer	TOP 2000	6 min - 12 h	22-23
88225015	Electromechanical panel-mounted timer	TOP 2000	6 min - 12 h	22-23
88225016	Electromechanical panel-mounted timer	TOP 2000	6 min - 12 h	22-23
88225017	Electromechanical panel-mounted timer	TOP 2000	6 min - 12 h	22-23
88225019	Electromechanical panel-mounted timer	TOP 2000	6 s - 12 min	22-23
88226011	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226012	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226013	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226014	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27
88226015	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27
88226016	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27
88226017	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27
88226019	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226501	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226502	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226503	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226504	Electromechanical panel-mounted timers	TOP 2000	6 s - 12 min	26-27
88226505	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27
88226506	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27
88226507	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27



# Index by part number

Part number	Description	Range name	Type	Pages
88226508	Electromechanical panel-mounted timers	TOP 2000	6 min - 12 h	26-27
88256401	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256402	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256403	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256404	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256405	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256406	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256407	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256408	Electromechanical panel-mounted timers	Manual reset	882564 Single-pole	26-27
88256506	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256507	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256508	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256509	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256510	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256511	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256512	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256513	Electromechanical panel-mounted timers	Manual reset	882565 2-pole	26-27
88256906	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88256907	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88256908	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88256909	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88256910	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88256911	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88256912	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88256913	Electromechanical panel-mounted timers	Manual reset	882569 3-pole	26-27
88826004	Electronic DIN rail mounted timer	Chronos 2	MUS2	20-21
88826014	Electronic DIN rail mounted timer	Chronos 2	MAS5	20-21
88826044	Electronic DIN rail mounted timer	Chronos 2	MHS2	20-21
88826054	Electronic DIN rail mounted timer	Chronos 2	MLS2	20-21
88826100	Electronic DIN rail mounted timer	Chronos 2	MUR4	20-21
88826103	Electronic DIN rail mounted timer	Chronos 2	MUR3	20-21
88826105	Electronic DIN rail mounted timer	Chronos 2	MUR1	20-21
88826115	Electronic DIN rail mounted timer	Chronos 2	MAR1	20-21
88826125	Electronic DIN rail mounted timer	Chronos 2	MBR1	20-21
88826135	Electronic DIN rail mounted timer	Chronos 2	MCR1	20-21
88826145	Electronic DIN rail mounted timer	Chronos 2	MHR1	20-21
88826155	Electronic DIN rail mounted timer	Chronos 2	MLR1	20-21
88826185	Electronic DIN rail mounted timer	Chronos 2	MXR1	20-21
88826503	Electronic DIN rail mounted timer	Chronos 2	MURc3	20-21
88857003	Digital electronic panel-mounted timer	Timer 8xx	814	24-25
88857005	Digital electronic panel-mounted timer	Timer 8xx	814	24-25
88857103	Digital electronic panel-mounted timer	Timer 8xx	814	24-25
88857105	Digital electronic panel-mounted timer	Timer 8xx	814	24-25
88857301	Digital electronic panel-mounted timer	Timer 8xx	815	24-25
88857302	Digital electronic panel-mounted timer	Timer 8xx	815	24-25
88857307	Digital electronic panel-mounted timer	Timer 8xx	815	24-25
88857400	Digital electronic panel-mounted timer	Timer 8xx	812	24-25
88857406	Digital electronic panel-mounted timer	Timer 8xx	812	24-25
88857409	Digital electronic panel-mounted timer	Timer 8xx	812	24-25
88857601	Digital electronic panel-mounted timer	Timer 8xx	816	24-25
88857604	Digital electronic panel-mounted timer	Timer 8xx	816	24-25
88857607	Digital electronic panel-mounted timer	Timer 8xx	816	24-25
88857701	Digital electronic panel-mounted timer	Timer 8xx	816	24-25
88857704	Digital electronic panel-mounted timer	Timer 8xx	816	24-25
88865100	Electronic DIN rail mounted timer	Chronos 2	TUR4	20-21
88865103	Electronic DIN rail mounted timer	Chronos 2	TUR3	20-21
88865105	Electronic DIN rail mounted timer	Chronos 2	TUR1	20-21
88865115	Electronic DIN rail mounted timer	Chronos 2	TAR1	20-21
88865125	Electronic DIN rail mounted timer	Chronos 2	TBR1	20-21
88865135	Electronic DIN rail mounted timer	Chronos 2	TCR1	20-21
88865145	Electronic DIN rail mounted timer	Chronos 2	THR1	20-21
88865155	Electronic DIN rail mounted timer	Chronos 2	TLR1	20-21
88865175	Electronic DIN rail mounted timer	Chronos 2	TQR1	20-21
88865176	Electronic DIN rail mounted timer	Chronos 2	TQF6	20-21
88865180	Electronic DIN rail mounted timer	Chronos 2	TXR4	20-21
88865185	Electronic DIN rail mounted timer	Chronos 2	TXR1	20-21
88865215	Electronic DIN rail mounted timer	Chronos 2	TA2R1	20-21
88865265	Electronic DIN rail mounted timer	Chronos 2	TK2R1	20-21

Part number	Description	Range name	Type	Pages
88865300	Electronic DIN rail mounted timer	Chronos 2	TU2R4	20-21
88865303	Electronic DIN rail mounted timer	Chronos 2	TU2R3	20-21
88865305	Electronic DIN rail mounted timer	Chronos 2	TU2R1	20-21
88865385	Electronic DIN rail mounted timer	Chronos 2	TX2R1	20-21
88865503	Electronic DIN rail mounted timer	Chronos 2	TURc3	20-21
88867100	Electronic DIN rail mounted timer	Chronos 2	OUR4	20-21
88867103	Electronic DIN rail mounted timer	Chronos 2	OUR3	20-21
88867105	Electronic DIN rail mounted timer	Chronos 2	OUR1	20-21
88867135	Electronic DIN rail mounted timer	Chronos 2	OCR1	20-21
88867155	Electronic DIN rail mounted timer	Chronos 2	OLR1	20-21
88867215	Electronic DIN rail mounted timer	Chronos 2	OA2R1	20-21
88867300	Electronic DIN rail mounted timer	Chronos 2	PU2R4	20-21
88867303	Electronic DIN rail mounted timer	Chronos 2	PU2R3	20-21
88867305	Electronic DIN rail mounted timer	Chronos 2	PU2R1	20-21
88867415	Electronic DIN rail mounted timer	Chronos 2	PA2R1	20-21
88867435	Electronic DIN rail mounted timer	Chronos 2	PC2R1	20-21
88867455	Electronic DIN rail mounted timer	Chronos 2	PL2R1	20-21
88886016	Analogue electronic panel-mounted timer	TMR48	TMR48 U	24-25
88886106	Analogue electronic panel-mounted timer	TMR48	TMR48 A	24-25
88886116	Analogue electronic panel-mounted timer	TMR48	TMR48 X	24-25
88886516	Analogue electronic panel-mounted timer	TMR48	TMR48 L	24-25
88895201	Electronic DIN rail mounted timer	Miniatures	RTMA2	22-23
88895202	Electronic DIN rail mounted timer	Miniatures	RTMA2	22-23
88895203	Electronic DIN rail mounted timer	Miniatures	RTMA2	22-23
88895206	Electronic DIN rail mounted timer	Miniatures	RTMA2	22-23
88895207	Electronic DIN rail mounted timer	Miniatures	RTMA2	22-23
88896201	Electronic DIN rail mounted timer	Miniatures	RTMA4	22-23
88896202	Electronic DIN rail mounted timer	Miniatures	RTMA4	22-23
88896203	Electronic DIN rail mounted timer	Miniatures	RTMA4	22-23
88896206	Electronic DIN rail mounted timer	Miniatures	RTMA4	22-23
88896207	Electronic DIN rail mounted timer	Miniatures	RTMA4	22-23
88899204	Heat exchanger defrost relay for air conditioning system	-	NFR	18-19
88901302	Analogue electronic panel-mounted timer	MBA	MBA3F	24-25
88901308	Analogue electronic panel-mounted timer	MBA	MBA2F	24-25
88901322	Analogue electronic panel-mounted timer	MBA	MBA3F	24-25
88901328	Analogue electronic panel-mounted timer	MBA	MBA2F	24-25
88901342	Analogue electronic panel-mounted timer	MBA	MBA3F	24-25
88901348	Analogue electronic panel-mounted timer	MBA	MBA2F	24-25
88901372	Analogue electronic panel-mounted timer	MBA	MBA3F	24-25
88901378	Analogue electronic panel-mounted timer	MBA	MBA2F	24-25
88901392	Analogue electronic panel-mounted timer	MBA	MBA3F	24-25
88901398	Analogue electronic panel-mounted timer	MBA	MBA2F	24-25
88950108	0-20 mA / 0-10 V input signal converter	Millenium 3	AC	10
88950109	External potentiometer for value adjustment (4700 Ω)	Millenium 3	EP	11
88950112	PWM / 0-10 V output signal converter	Millenium 3	AC	10
88950124	Web server	Millenium Web Server	XC10	11
88950150	Temperature converter - Input -20 → +150°C	Millenium 3	AC	10
88950151	Temperature converter - Input -40 → +40°C	Millenium 3	AC	10
88950152	Temperature converter - Input 0 → +100°C	Millenium 3	AC	10
88950153	Temperature converter - Input 0 → +250°C	Millenium 3	AC	10
88950154	Temperature converter - Input 0 → +300°C	Millenium 3	AC	10
88950155	Temperature converter - Input 0 → +600°C	Millenium 3	AC	10
88950302	Regulated switch mode modular power supply	Millenium	PS 24-60 W	12-13
88950303	Regulated switch mode modular power supply	Millenium	PS 24-7,5 W	12-13
88950304	Regulated switch mode modular power supply	Millenium	PS 24-15 W	12-13
88950305	Regulated switch mode modular power supply	Millenium	PS 5-20 W	12-13
88950306	Regulated switch mode modular power supply	Millenium	PS 12-24 W	12-13
88950307	Regulated switch mode modular power supply	Millenium	PS 24-30 W	12-13
88950320	DC/DC converter	Millenium	PS 12-10 W	12-13
88950321	DC/DC converter	Millenium	PS 24-10 W	12-13
88950400	Remote LED display - Input 0 - 10 V	Millenium 3	RD	11
88970021	Compact version logic controller without display	Millenium 3	CB12	6-7
88970023	Compact version logic controller without display	Millenium 3	CB12	6-7
88970024	Compact version logic controller without display	Millenium 3	CB12	6-7
88970031	Compact version logic controller without display	Millenium 3	CB20	6-7
88970033	Compact version logic controller without display	Millenium 3	CB20	6-7
88970034	Compact version logic controller without display	Millenium 3	CB20	6-7

# Index by part number

Part number	Description	Range name	Type	Pages
88970041	Compact version logic controller with display	Millenium 3	CD12	6-7
88970042	Compact version logic controller with display	Millenium 3	CD12	6-7
88970043	Compact version logic controller with display	Millenium 3	CD12	6-7
88970044	Compact version logic controller with display	Millenium 3	CD12	6-7
88970045	Compact version logic controller with display	Millenium 3	CD12	6-7
88970051	Compact version logic controller with display	Millenium 3	CD20	6-7
88970052	Compact version logic controller with display	Millenium 3	CD20	6-7
88970053	Compact version logic controller with display	Millenium 3	CD20	6-7
88970054	Compact version logic controller with display	Millenium 3	CD20	6-7
88970055	Compact version logic controller with display	Millenium 3	CD20	6-7
88970100	Multilingual programming software (CD-ROM)	Millenium 3	M3 SOFT	6-7 / 8-9
88970102	3 m serial link cable: PC => Millenium 3	Millenium 3	PA	10
88970103	Libraries of specific functions (CD-ROM)	Millenium 3	M3 SPECIFIC FUNCTIONS	6-7 / 8-9
88970104	Millenium 3 => Bluetooth interface (class A 10 m)	Millenium 3	PA	10
88970108	EEPROM memory cartridge	Millenium 3	PA	10
88970109	3 m USB link cable: PC => Millenium 3	Millenium 3	PA	10
88970110	Bluetooth => USB adaptor (class A 10 m)	Millenium 3	PA	10
88970116	Alarm management software (CD-ROM)	Millenium 3	M3 ALARM	6-7 / 8-9
88970123	1.80 m serial link cable: DB9/DB9	Millenium 3	PA	10
88970141	Expandable version logic controller with display	Millenium 3	XD10	8-9
88970142	Expandable version logic controller with display	Millenium 3	XD10	8-9
88970143	Expandable version logic controller with display	Millenium 3	XD10	8-9
88970144	Expandable version logic controller with display	Millenium 3	XD10	8-9
88970161	Expandable version logic controller with display	Millenium 3	XD26	8-9
88970162	Expandable version logic controller with display	Millenium 3	XD26	8-9
88970163	Expandable version logic controller with display	Millenium 3	XD26	8-9
88970164	Expandable version logic controller with display	Millenium 3	XD26	8-9
88970165	Expandable version logic controller with display	Millenium 3	XD26	8-9
88970211	Digital extension	Millenium 3	XR06	8-9
88970213	Digital extension	Millenium 3	XR06	8-9
88970214	Digital extension	Millenium 3	XR06	8-9
88970215	Digital extension	Millenium 3	XR06	8-9
88970221	Digital extension	Millenium 3	XR10	8-9
88970223	Digital extension	Millenium 3	XR10	8-9
88970224	Digital extension	Millenium 3	XR10	8-9
88970225	Digital extension	Millenium 3	XR10	8-9
88970231	Digital extension	Millenium 3	XR14	8-9
88970233	Digital extension	Millenium 3	XR14	8-9
88970234	Digital extension	Millenium 3	XR14	8-9
88970235	Digital extension	Millenium 3	XR14	8-9
88970241	Analogue extension	Millenium 3	XA04	8-9
88970250	"Sandwich" communication extension	Millenium 3	XN03	8-9
88970270	"Sandwich" communication extension	Millenium 3	XN05	8-9
88970310	12 I/O removable kit for CD12 or CB12	Millenium 3	MA	11
88970311	20 I/O removable kit for CD20 or CB20	Millenium 3	MA	11
88970321	Digital "Sandwich" extension	Millenium 3	XE10	8-9
88970323	Digital "Sandwich" extension	Millenium 3	XE10	8-9
88970324	Digital "Sandwich" extension	Millenium 3	XE10	8-9
88970410	Remote LCD screen/keypad	Millenium 3	RD	11
88970411	Remote LCD screen/keypad + 4 function buttons + 4 LEDs	Millenium 3	RD	11
88970412	Kit with Remote LCD screen/keypad + cable	Millenium 3	RD	11
88970413	Kit with Remote LCD screen/keypad + 4 function buttons + 4 LEDs + cable	Millenium 3	RD	11
88970421	Runtime kit with three-colour alphanumeric screen	Millenium 3	RD	11
88970422	Runtime kit with monochrome alphanumeric screen	Millenium 3	RD	11
88970800	Application-specific analogue extension	Millenium 3	XA03	8-9
88970809	IP40 front panel adaptor for CD12 or CB12	Millenium 3	MA	11
88970810	IP40 front panel adaptor for CD20 or CB20	Millenium 3	MA	11
88970844	Programming kit with monochrome alphanumeric screen	Millenium 3	RD	11
88970849	Programming kit with three-colour alphanumeric screen	Millenium 3	RD	11
88972250	"Sandwich" communication extension	Millenium 3	XN06	8-9
88972805	Application-specific analogue extension	Millenium 3	XA04W	8-9
89000000				
89210001	Capacitive pressure transmitter: Relative	Millenium 3	AS	10
89210002	Capacitive pressure transmitter: Relative	Millenium 3	AS	10
89210003	Capacitive pressure transmitter: Relative	Millenium 3	AS	10
89210004	Capacitive pressure transmitter: Relative	Millenium 3	AS	10
89210005	Capacitive pressure transmitter: Relative	Millenium 3	AS	10

Part number	Description	Range name	Type	Pages
89210006	Capacitive pressure transmitter: Relative	Millenium 3	AS	10
89210007	Capacitive pressure transmitter: Absolute	Millenium 3	AS	10
89210008	Capacitive pressure transmitter: Absolute	Millenium 3	AS	10
89210009	Capacitive pressure transmitter: Absolute	Millenium 3	AS	10
89210010	Capacitive pressure transmitter: Absolute	Millenium 3	AS	10
89210011	Capacitive pressure transmitter: Absolute	Millenium 3	AS	10
89420047	Electronic analogue temperature controller	CT48A	-	36-37
89420067	Electronic analogue temperature controller	CT48A	-	36-37
89420077	Electronic analogue temperature controller	CT48A	-	36-37
89420087	Electronic analogue temperature controller	CT48A	-	36-37
89420097	Electronic analogue temperature controller	CT48A	-	36-37
89420207	Electronic analogue temperature controller	CT48A	-	36-37
89420217	Electronic analogue temperature controller	CT48A	-	36-37
89420227	Electronic analogue temperature controller	CT48A	-	36-37
89420237	Electronic analogue temperature controller	CT48A	-	36-37
89420257	Electronic analogue temperature controller	CT48A	-	36-37
89421102	Electronic digital temperature controller	CTD43	1 alarm	36-37
89421108	Electronic digital temperature controller	CTD43	1 alarm	36-37
89421112	Electronic digital temperature controller	CTD43	1 alarm	36-37
89421118	Electronic digital temperature controller	CTD43	1 alarm	36-37
89422002	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422008	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422012	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422018	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422102	Electronic digital temperature controller	CTD46	1 alarm	36-37
89422108	Electronic digital temperature controller	CTD46	1 alarm	36-37
89422112	Electronic digital temperature controller	CTD46	1 alarm	36-37
89422118	Electronic digital temperature controller	CTD46	1 alarm	36-37
89422402	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422408	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422412	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422418	Electronic digital temperature controller	MIC48	2 alarms	36-37
89422502	Electronic digital temperature controller	CTH46	-	36-37
89422508	Electronic digital temperature controller	CTH46	-	36-37
89422512	Electronic digital temperature controller	CTH46	-	36-37
89422518	Electronic digital temperature controller	CTH46	-	36-37
89422702	Electronic digital temperature controller	CTD24	1 alarm	36-37
89422708	Electronic digital temperature controller	CTD24	1 alarm	36-37
89422712	Electronic digital temperature controller	CTD24	1 alarm	36-37
89422718	Electronic digital temperature controller	CTD24	1 alarm	36-37
89422722	Electronic digital temperature controller	CTD24	1 alarm	36-37
89422728	Electronic digital temperature controller	CTD24	1 alarm	36-37
89450110	Regulated switch mode equipment power supply for integrated control systems	-	89450 without PFC*	12-13
89450122	Regulated switch mode equipment power supply for integrated control systems	-	89450 with PFC*	12-13
89450210	Regulated switch mode equipment power supply for integrated control systems	-	89450 without PFC*	12-13
89450221	Regulated switch mode equipment power supply for integrated control systems	-	89450 without PFC*	12-13
89450222	Regulated switch mode equipment power supply for integrated control systems	-	89450 with PFC*	12-13
89450231	Regulated switch mode equipment power supply for integrated control systems	-	89450 without PFC*	12-13
89450232	Regulated switch mode equipment power supply for integrated control systems	-	89450 with PFC*	12-13
89450241	Regulated switch mode equipment power supply for integrated control systems	-	89450 without PFC*	12-13
89450242	Regulated switch mode equipment power supply for integrated control systems	-	89450 with PFC*	12-13
89750146	Copper protective sleeve for temperature sensor	Millenium 3	AS	10
89750147	Stainless steel 316 protective sleeve for temperature sensor	Millenium 3	AS	10
89750150	Zone/space temperature sensor	Millenium 3	AS	10
89750151	Ventilation duct temperature sensor	Millenium 3	AS	10
89750152	Outdoor temperature sensor	Millenium 3	AS	10
89750153	Remote/submersible temperature sensor	Millenium 3	AS	10
89750155	Remote/submersible temperature sensor	Millenium 3	AS	10
89750160	IP67 sealed faceplate adaptor (76.5 mm)	Millenium 3	MA	11
89750161	IP67 sealed faceplate adaptor (147.5 mm)	Millenium 3	MA	11
89750162	IP67 sealed faceplate adaptor (248.5 mm)	Millenium 3	MA	11
89750171	pH probe	Millenium 3	AS	8
89750173	ORP (Redox) probe	Millenium 3	AS	8
89750180	Sensor CTN for Millenium 3 - 24 V $\overline{\text{---}}$ (pack of 10)	Millenium 3	AS	10
89750181	Sensor CTN for Millenium 3 - 24 V $\overline{\text{---}}$ (pack of 100)	Millenium 3	AS	10
99000000				
99761710	Electromechanical counter without preselection - Hour	CH48G	CH48G without zero reset	34-35



# Index by part number

Part number	Description	Range name	Type	Pages
99761711	Electromechanical counter without preselection - Hour	CH48G	CH48G without zero reset	34-35
99761712	Electromechanical counter without preselection - Hour	CH48G	CH48G without zero reset	34-35
99761714	Electromechanical counter without preselection - Hour	CH48G	CH48G without zero reset	34-35
99761715	Electromechanical counter without preselection - Hour	CH48G	CH48G without zero reset	34-35
99761716	Electromechanical counter without preselection - Hour	CH48G	CH48G without zero reset	34-35
99761718	Electromechanical counter without preselection - Hour	CH48G	CH48G without zero reset	34-35
99766601	Electromechanical counter without preselection - Totalizer	36 x 37 mm	Without reset	34-35
99766602	Electromechanical counter without preselection - Totalizer	36 x 37 mm	Without reset	34-35
99766604	Electromechanical counter without preselection - Totalizer	36 x 37 mm	Without reset	34-35
99766607	Electromechanical counter without preselection - Totalizer	36 x 37 mm	Without reset	34-35
99766610	Electromechanical counter without preselection - Totalizer	36 x 37 mm	With manual reset	34-35
99766611	Electromechanical counter without preselection - Totalizer	36 x 37 mm	With manual reset	34-35
99766613	Electromechanical counter without preselection - Totalizer	36 x 37 mm	With manual reset	34-35
99766616	Electromechanical counter without preselection - Totalizer	36 x 37 mm	With manual reset	34-35
99766701	Electromechanical counter without preselection - Totalizer	36 x 48 mm	Without reset	34-35
99766702	Electromechanical counter without preselection - Totalizer	36 x 48 mm	Without reset	34-35
99766704	Electromechanical counter without preselection - Totalizer	36 x 48 mm	Without reset	34-35
99766707	Electromechanical counter without preselection - Totalizer	36 x 48 mm	Without reset	34-35
99766710	Electromechanical counter without preselection - Totalizer	36 x 48 mm	With manual reset	34-35
99766711	Electromechanical counter without preselection - Totalizer	36 x 48 mm	With manual reset	34-35
99766713	Electromechanical counter without preselection - Totalizer	36 x 48 mm	With manual reset	34-35
99766716	Electromechanical counter without preselection - Totalizer	36 x 48 mm	With manual reset	34-35
99766901	Electromechanical counter without preselection - Totalizer	24 x 48 mm	Without reset	34-35
99766902	Electromechanical counter without preselection - Totalizer	24 x 48 mm	Without reset	34-35
99766904	Electromechanical counter without preselection - Totalizer	24 x 48 mm	Without reset	34-35
99766907	Electromechanical counter without preselection - Totalizer	24 x 48 mm	Without reset	34-35
99766921	Electromechanical counter without preselection - Totalizer	24 x 48 mm	With manual reset	34-35
99766922	Electromechanical counter without preselection - Totalizer	24 x 48 mm	With manual reset	34-35
99766924	Electromechanical counter without preselection - Totalizer	24 x 48 mm	With manual reset	34-35
99766927	Electromechanical counter without preselection - Totalizer	24 x 48 mm	With manual reset	34-35



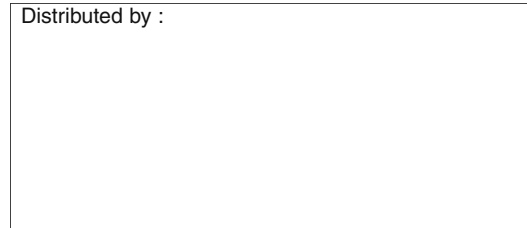
## Crouzet across the globe:



Headquartered in Moorpark, California-USA, Custom Sensors & Technologies (CST) is a business unit of Schneider Electric. CST is made up of the leading brands of Crouzet, Kavlico and Crydom, as well as the former divisions of BEI Technologies, including Newall and Systron Donner Inertial. CST provides sensors, controls, and actuation products to the transportation, industrial, and military & defense markets.

[www.cst.schneider-electric.com](http://www.cst.schneider-electric.com)

Distributed by :



### Crouzet Automatismes SAS

2 rue du Docteur Abel - BP 59  
26902 Valence CEDEX 9  
FRANCE

[www.crouzet.com](http://www.crouzet.com)

CRZ GC 01/ BEN  
Ref. 6712505 EN

## AMERICA

### BRAZIL

**Crouzet do Brasil Ltda**  
Rua Gal.Furtado Nascimento,  
740 - sala 77  
Alto de Pinheiros / 05465-070  
São Paulo - SP  
BRASIL  
Tel. : +55 (11) 3026 9008  
Fax : +55 (11) 3026 9009  
E-mail : [crz-infobrasil@crouzet.com](mailto:crz-infobrasil@crouzet.com)  
[www.crouzet.com.br](http://www.crouzet.com.br)

### MEXICO

**Automatismo Crouzet S.A. de C.V.**  
Calzada Zavaleta 2505 - C  
Col Sta Cruz Buenavista  
C.P. 72150 - Puebla  
MEXICO  
Tel. : +52 (222) 409 7000  
Fax : +52 (222) 409 7810  
01 800 087 6333  
[www.crouzet.com](http://www.crouzet.com)

### USA/CANADA

**Crouzet North America**  
204 Airline Drive, suite 300  
75019 Coppell Texas  
USA  
Tel. : +1 (800) 677 5311  
Fax : +1 (972) 471 2560  
E-mail : [customerservice@us.crouzet.com](mailto:customerservice@us.crouzet.com)  
[www.crouzet-usa.com](http://www.crouzet-usa.com)

### OTHER COUNTRIES

**Crouzet do Brasil Ltda**  
Rua Gal.Furtado Nascimento,  
740 - sala 77  
Alto de Pinheiros / 05465-070  
São Paulo - SP  
BRASIL  
Tel. : +55 (11) 3026 9008  
Fax : +55 (11) 3026 9009  
E-mail : [crz-infobrasil@crouzet.com](mailto:crz-infobrasil@crouzet.com)  
[www.crouzet.com.br](http://www.crouzet.com.br)

## EUROPE MIDDLE EAST AFRICA

### AUSTRIA

**Crouzet GmbH**  
Zweigniederlassung Österreich  
Spengergasse 1/3  
1050 Wien  
ÖSTERREICH  
Tel. : +43 (0) 1 36 85 471  
Fax : +43 (0) 1 36 85 472  
E-mail : [info-direkt@crouzet.com](mailto:info-direkt@crouzet.com)  
[www.crouzet.at](http://www.crouzet.at)

### BELGIUM

**Crouzet NV/SA**  
Koning Albert I Laan 40  
40 Avenue Roi Albert I  
1780 Wemmel  
BELGIUM  
Tel. : +32 (0) 2 462 07 30  
Fax : +32 (0) 2 461 00 23  
E-mail : [com-be@crouzet.com](mailto:com-be@crouzet.com)  
[www.crouzet.be](http://www.crouzet.be)

Creation-Design: Communication Crouzet

Editing-Publishing: Sedoc

Photos-Graphics: Ginko, Daniel Lattard, Shutterstock

Printing: Imprimerie des Deux Ponts



## FRANCE

**Crouzet Automatismes SAS**  
2 rue du Docteur Abel - BP 59  
26902 Valence CEDEX 9  
FRANCE  
Tel. : +33 (0) 4 75 44 88 44  
Fax : +33 (0) 4 75 55 98 03  
E-mail : [com-fr@crouzet.com](mailto:com-fr@crouzet.com)  
[www.crouzet.fr](http://www.crouzet.fr)

### Customer service

**N° Indigo 0 825 333 350**  
24 H 7 J / FR

**N° Azur FAX 0 810 610 102**  
FR - APPEL LOCAL

## GERMANY

**Crouzet GmbH**  
Otto-Hahn-Str. 3, 40721 Hilden  
Postfach 203, 40702 Hilden  
DEUTSCHLAND  
Tel. : +49 (0) 21 03 9 80-0  
Fax : +49 (0) 21 03 9 80-200  
E-mail : [info-direkt@crouzet.com](mailto:info-direkt@crouzet.com)  
[www.crouzet.de](http://www.crouzet.de)

### Customer service

Tel. : +49 (0) 21 03 9 80-108/176

Fax : +49 (0) 21 03 9 80-250

E-mail : [info-direkt@crouzet.com](mailto:info-direkt@crouzet.com)

## ITALY

**Crouzet Componenti s.r.l.**  
Via Viganò De Vizzi, 93/95  
20092 Cinisello Balsamo (Mi)  
ITALIA  
Tel. : +39 (02) 66 599 220  
Fax : +39 (02) 66 599 228  
E-mail : [crz-iti-microcontrol@crouzet.com](mailto:crz-iti-microcontrol@crouzet.com)  
[www.crouzet.it](http://www.crouzet.it)

## SPAIN/PORTUGAL

**Crouzet Ibérica**  
C/ Aragón 224, 2º 2ª  
08011 Barcelona  
ESPAÑA  
Tel. : +34 (93) 484 39 70  
Fax : +34 (93) 484 39 73  
E-mail : [es-consultas@crouzet.es](mailto:es-consultas@crouzet.es)  
[www.crouzet.es](http://www.crouzet.es)

## THE NETHERLANDS

**Crouzet BV**  
Industrieweg 17  
2382 NR Zoeterwoude  
NEDERLAND  
Tel. : +31 (0) 71-581 20 30  
Fax : +31 (0) 71-541 35 74  
E-mail : [com-nl@crouzet.com](mailto:com-nl@crouzet.com)  
[www.crouzet.nl](http://www.crouzet.nl)

## UNITED KINGDOM

**Crouzet Ltd**  
Intec 3 Wade Road  
Basingstoke Hampshire  
RG24 8NE  
UNITED KINGDOM  
Tel. : +44 (0)1256 318 900  
Fax : +44 (0)1256 318 901  
E-mail : [info@crouzet.co.uk](mailto:info@crouzet.co.uk)  
[www.crouzet.co.uk](http://www.crouzet.co.uk)

## SWITZERLAND

**Crouzet AG**  
Gewerbepark - Postfach 56  
5506 Mägenwil  
SCHWEIZ  
Tel. : +41(0) 62 887 30 30  
Fax : +41(0) 62 887 30 40  
E-mail : [info-direkt@crouzet.com](mailto:info-direkt@crouzet.com)  
[www.crouzet.ch](http://www.crouzet.ch)

## OTHER COUNTRIES

**Crouzet Automatismes SAS**  
2 rue du Docteur Abel - BP 59  
26902 Valence CEDEX 9  
FRANCE  
Tel. : +33 (0) 475 802 102  
Fax : +33 (0) 475 448 126  
E-mail : [com-ex@crouzet.com](mailto:com-ex@crouzet.com)  
[www.crouzet.com](http://www.crouzet.com)

## ASIA PACIFIC

### CHINA & HONG-KONG

**Crouzet Asia (Shanghai) Limited**  
2 Floor, Innovation Building  
No. 1009, Yi Shan Road  
Shanghai 200233  
CHINA  
Tel. : +86 (21) 2401 7766  
Fax : +86 (21) 6249 0701  
E-mail : [com-cn@cn.crouzet.com](mailto:com-cn@cn.crouzet.com)  
[www.crouzet.cn](http://www.crouzet.cn)

### INDIA

**Crouzet India**  
Prestige Meridian II  
No. 30, 13th Floor,  
Unit No: 1301 & 1302  
Mahatma Gandhi Road  
Bangalore 560 001  
INDIA  
Tel. : +91 (0) 80 41132204/05  
Fax : +91 (80) 41132206  
E-mail : [crz\\_bangalore@crouzet.com](mailto:crz_bangalore@crouzet.com)  
[www.crouzet.co.in](http://www.crouzet.co.in)

### TAIWAN

**Crouzet Taiwan**  
3F, No. 39, Ji-Hu Road,  
Nei-Hu Dist., Taipei 114  
TAIWAN  
Tel. : +886-2-8751-6388  
ext. 130  
Fax : +886-2-2657-8725  
E-mail : [com-tw@tw.crouzet.com](mailto:com-tw@tw.crouzet.com)  
[www.crouzet.tw](http://www.crouzet.tw)

### EAST ASIA & PACIFIC

**Crouzet Asia (Shanghai) Limited**  
2 Floor, Innovation Building  
No. 1009, Yi Shan Road  
Shanghai 200233  
CHINA  
Tel. : +86 (21) 2401 7766  
Fax : +86 (21) 6249 0701  
E-mail : [com-tw@tw.crouzet.com](mailto:com-tw@tw.crouzet.com)  
[www.crouzet.eu](http://www.crouzet.eu)

### 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 Automatismes 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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.