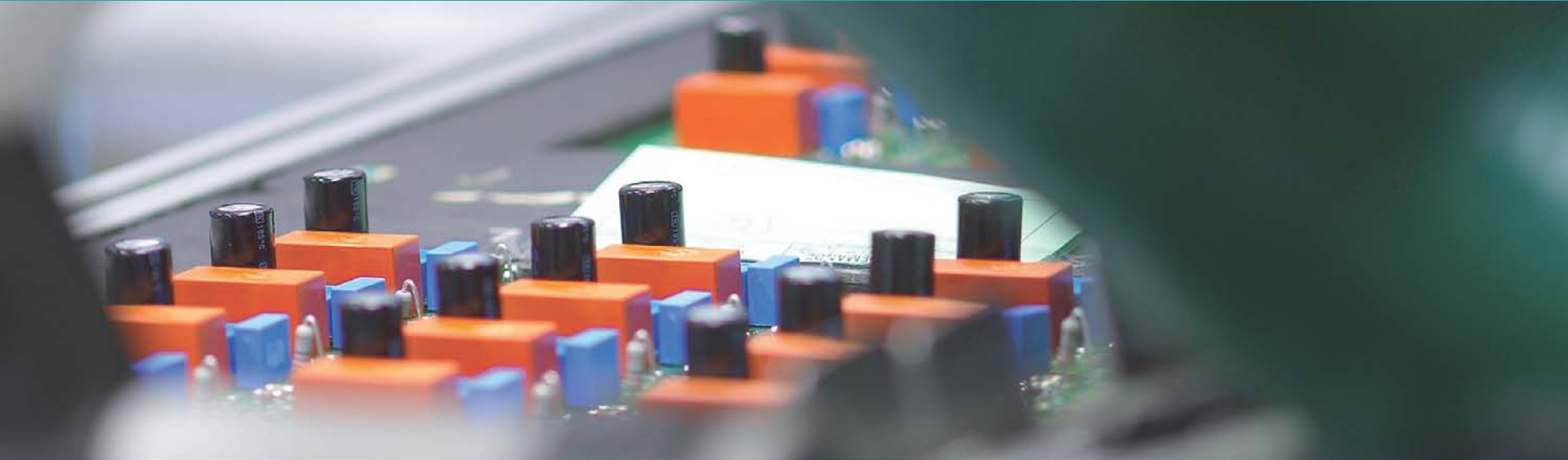


02 / 26 / 2014

# LAUNCH NOTE

## CHRONOS 2 22.5 MM



# SUMMARY

- Introduction
- New Chronos 2 Timers
  - New Models Cross-reference
  - New Chronos 2 Part Numbers
  - Reminder: Other Obsolete 22.5 mm Timers
  - Products dimensions
  - Agency Approvals
  - Good to know
- Applications
- Launch Details

## Chronos 2 Timers - 22.5mm

- The new 22.5mm is close to identical to the profile of the 17.5mm Chronos 2:
  - Same position of terminal blocks for a perfect alignment between the 17.5mm and 22.5mm timer versions.
  - Same appearance in design than the 17.5mm versions.
  - A 45mm “nose height” on the front of the product to allow the mounting of the 22.5mm versions in modular panels.
  - Slightly longer than the 17.5mm versions to allow the 2 relays SPDT 8A / 250VAC.



# New Models' Cross-reference

Obsolete Models

New Models

22.5 mm

22.5 mm

Old P/N	Type	New P/N	Type
88 865 175	TQR1	88 866 175	RQR1
88 865 176	TQR6	88 866 176	RQR6
88 865 215	TA2R1	88 866 215	RA2R1
88 865 300	TU2R4	88 866 300	RU2R4
88 865 303	TU2R3	88 866 303	RU2R3
88 865 305	TU2R1	88 866 305	RU2R1
88 865 385	TX2R1	88 866 385	RX2R1

- 7 new part numbers directly replace 7 old Chronos 2 22.5 mm models
- The nomenclature is now **88 866** instead of **88 865**

# New Chronos 2 Part Numbers

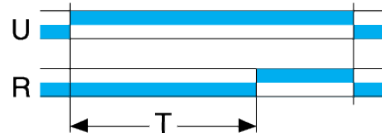
- A total of 7 redesigned timers (22.5 mm) with:
  - Same rated supply voltage as old versions
  - Same electrical specifications as old versions
- **88 865 265** (function K) will not suffer any change in nomenclature and will remain available

Part Number	Type	Functions	Output(s) Changeover	Timing	Supply
88 866 175	RQR1	Q	1 x 8 A	0.1 s to 100 h	24 VDC / 24 to 240 VAC
88 866 176	RQR6	Q	1 x 8 A	0.1 s to 100 h	230 to 240 VAC
88 866 215	RA2R1	A, At	2 x 8 A	0.1 s to 100 h	24 VDC / 24 to 240 VAC
88 866 300	RU2R4	A, At, B, C, H, Ht, Di, D, Ac, Bw	2 x 8 A	0.1 s to 100 h	12 VAC / VDC
88 866 303	RU2R3	A, At, H, Ht, B, C, Di, D, Ac, Bw	2 x 8 A	0.1 s to 100 h	12 to 240 VAC / VDC
88 866 305	RU2R1	A, At, H, Ht, B, C, Di, D, Ac, Bw	2 x 8 A	0.1 s to 100 h	24 VDC / 24 to 240 VAC
88 866 385	RX2R1	Ad, Ah, N, O, P, Pt, TL, Tt, W	2 x 8 A	0.1 s to 100 h	24 VDC / 24 to 240 VAC

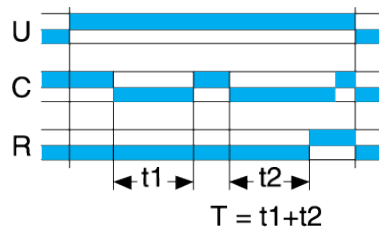
# Generic Functions

## Function A:

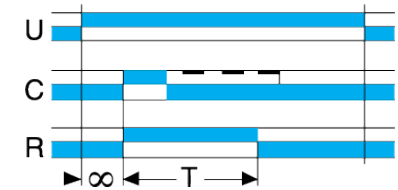
Delay on energization



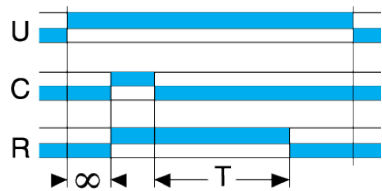
## Function At: Timing on energization with memory



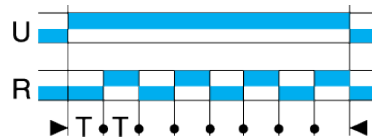
## Function B: Timing on impulse (one shot) – Shaping (cannot be reset)



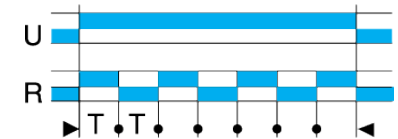
## Function C: Timing after impulse. True delay off (with auxiliary power supply)



## Function D: Symmetrical flashing



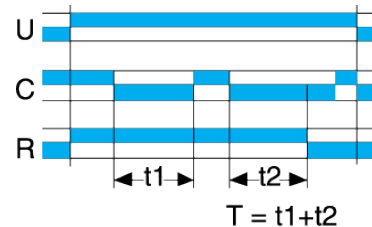
## Function Di: Symmetrical flashing



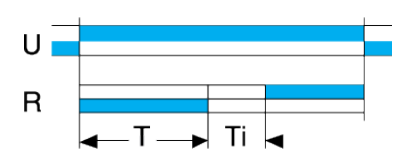
## Function H: Timing on energization – Pulse output (adjustable)



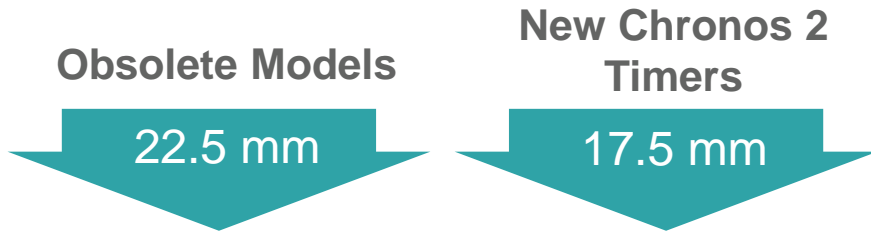
## Function Ht: Delay on energization with memory



## Function Q: “Star-delta” starting



# Reminder: Other Obsolete 22.5 mm Models



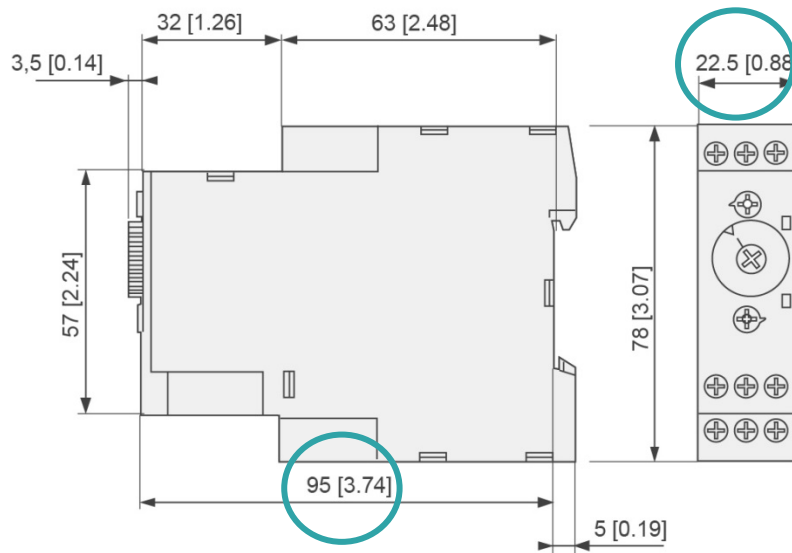
Old P/N	Type	New P/N	Type	Power supply	Function
88 865 105	TUR1	88 827 105	MUR1	24 VDC / 24 to 240 VAC	A, At, H, Ht, B, C, Di, D, Ac, Bw
88 865 115	TAR1	88 827 115	MAR1	24 VDC / 24 to 240 VAC	A, At
88 865 125	TBR1	88 827 125	MBR1	24 VDC / 24 to 240 VAC	B
88 865 135	TCR1	88 827 135	MCR1	24 VDC / 24 to 240 VAC	C
88 865 145	THR1	88 827 145	MHR1	24 VDC / 24 to 240 VAC	H, Ht
88 865 155	TLR1	88 827 155	MLR1	24 VDC / 24 to 240 VAC	L, Li
88 865 100	TUR4	88 827 103	MUR3	12 to 240 VAC / VDC	A, At, H, Ht, B, C, Di, D, Ac, Bw
88 865 103	TUR3				A, At, H, Ht, B, C, Di, D, Ac, Bw
88 865 503	TURc3	88 827 503	MURc3	12 to 240 VAC / VDC	A, At, H, Ht, B, C, Di, D, Ac, Bw

- These other obsolete 22.5 mm models have already been replaced with more compact Chronos 2 17.5 mm Timers since April 2013.

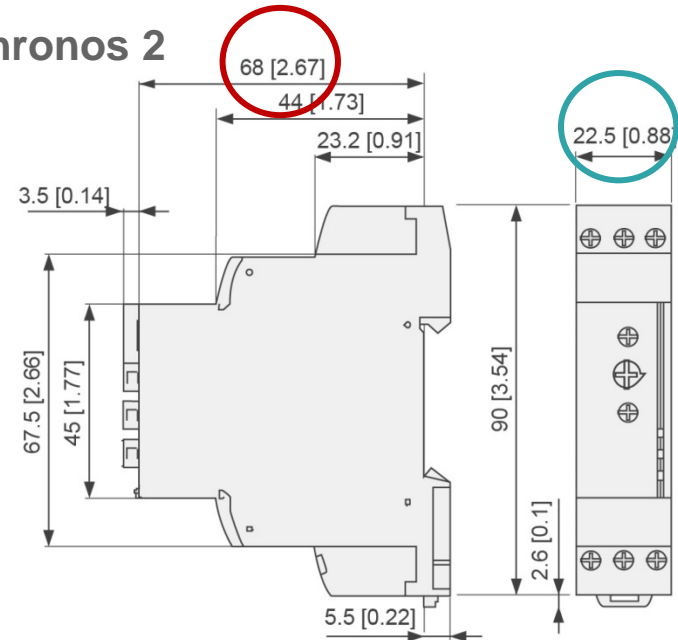
# Mechanical Dimensions

- The new 22.5 mm Chronos 2 timers offer a compact and enhanced design with same width (22.5 mm), but 27 mm less depth than the previous version.

**Previous Chronos 2**



**New Chronos 2**

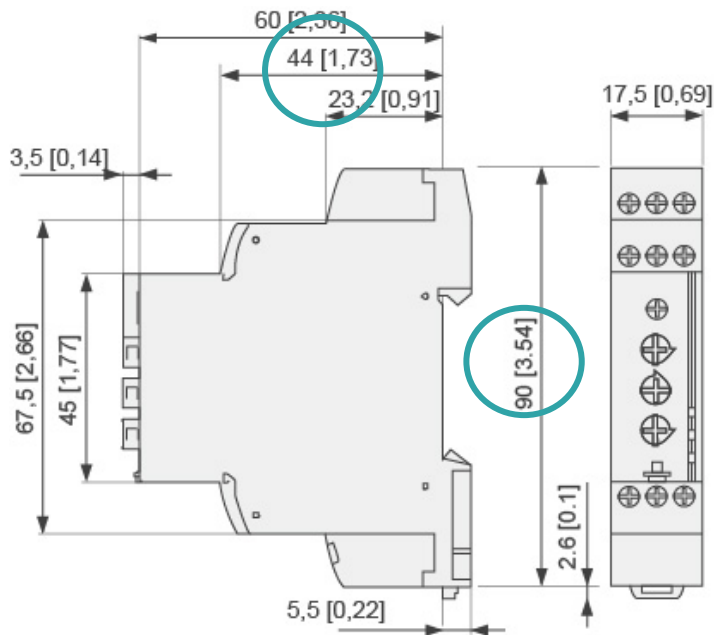




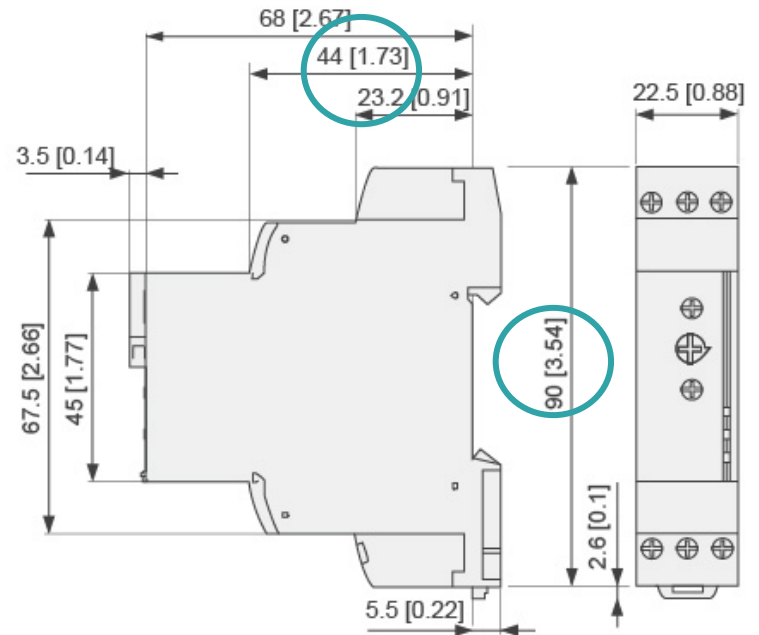
# Mechanical Dimensions (cont.)

- Designed for modular use, the new 22.5 mm Chronos 2 timers have a similar profile as the already redesigned 17.5 mm Chronos 2 Timers 88827.

**New 17.5 mm Chronos 2**



**New 22.5 mm Chronos 2**



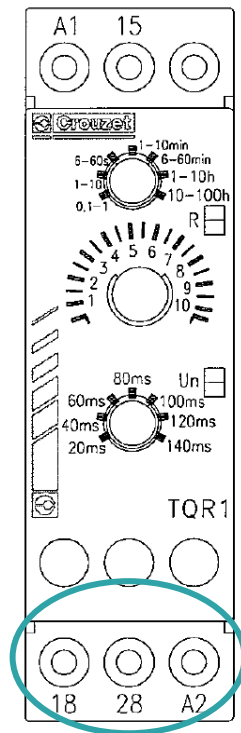
# Agency Approvals

- New 22.5 mm Chronos 2 Timers

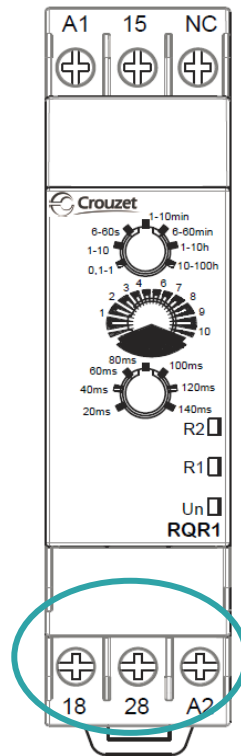
New Timer Commercial Reference				
88 866 175	•	•	•	•
88 866 176	•	•		
88 866 215	•	•	•	•
88 866 300	•	•	•	•
88 866 303	•	•		•
88 866 305	•	•	•	•
88 866 385	•	•		•

- Input & output terminals are the same for Q function.

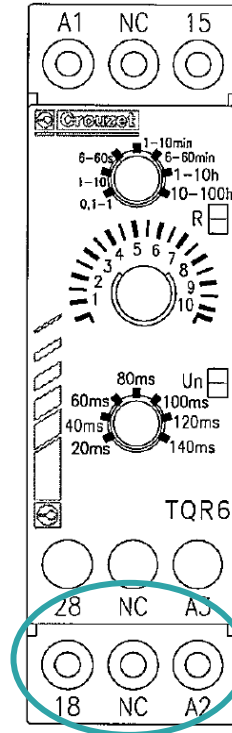
**Old P/N**  
**88 865 175**



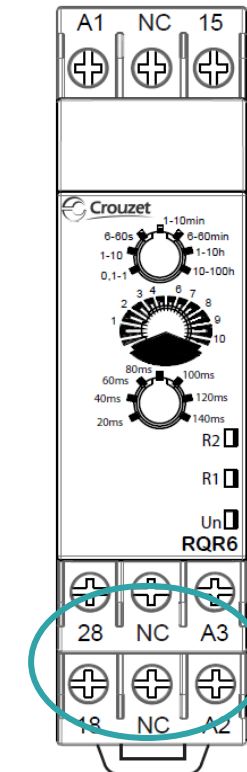
**New P/N**  
**88 866 175**



**Old P/N**  
**88 865 176**



**New P/N**  
**88 866 176**

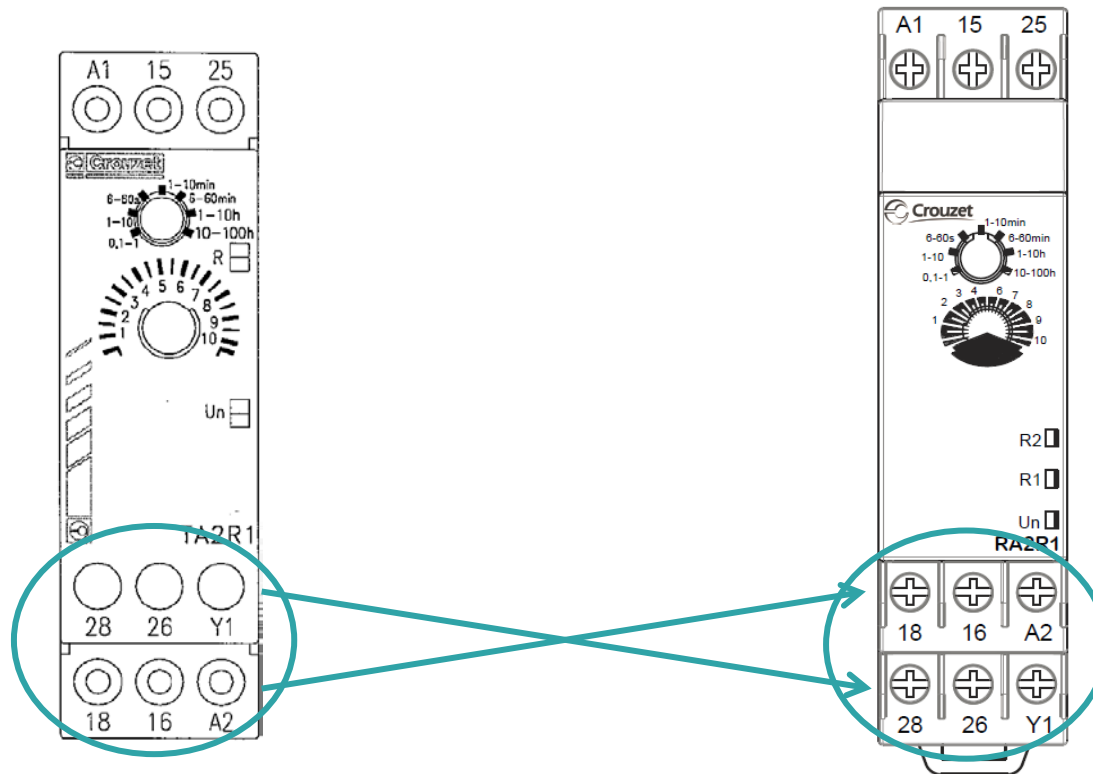


# Good to know (cont.)

- For other functions, Input & output terminals have a slight change in position, but remain on the same side of the timer.

**Old P/N 88 865 215**  
**/300/303/305/385**

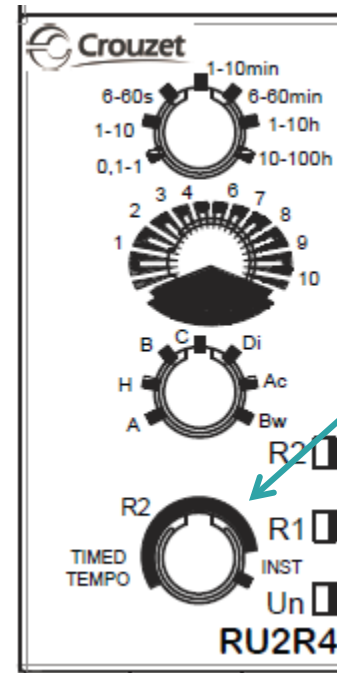
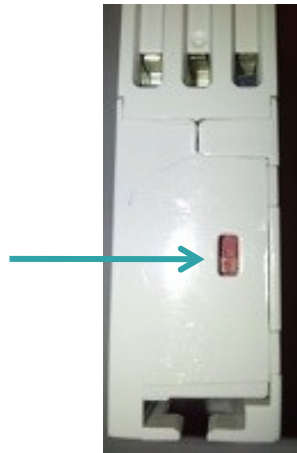
**New P/N 88 866 215**  
**/300/303/305/385**



# Good to know (cont.)

- Instantaneous switch is now on the front face instead of the side

Current  
**slide**  
switch on  
the side



New **rotary** switch on front face (same function as the slide switch)

Typical applications for Timers are with:

- OEM Industrial
- Industrial ovens
- Ice makers
- HVAC systems
- Compressors
- Plastic machinery
- Packaging equipment
- Trains
- Trucks and Buses
- Oil and Gas

## **1** NPI First Glance, February 26th

Several marketing materials are made available only to distributors and sales people to support their preparation for the day of the New Product Premiere.

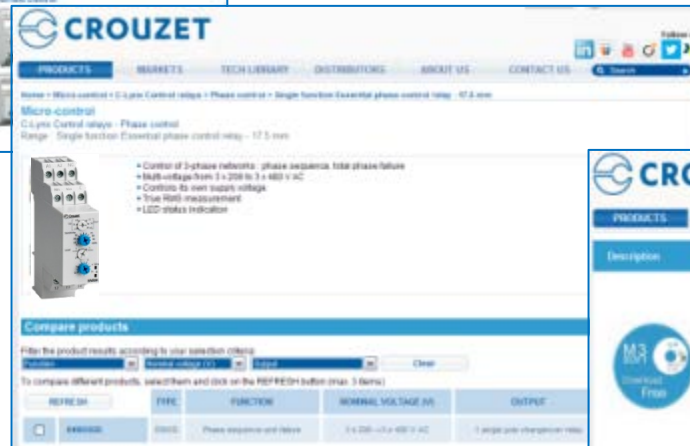
## **2** New Product Premiere, March 31st

The new Chronos 2 Timers (22.5 mm) will be announced outside of the company. Product information will be available at the Crouzet website.

- Product information will be available in the Crouzet on-line catalog



Micro-control >  
DIN Rail Mounted Timers >  
New Chronos 2 Timers >  
22.5 mm DIN Rail Mounting >







## Europe, Middle East Africa

### Belgium

Tel.: +32 (0) 2 462 07 30  
Fax: +32 (0) 2 461 00 23  
com-be@crouzet.com

### France

Tel.: +33 (0) 4 75 80 21 01  
Fax: +33 (0) 4 75 82 89 00  
com-fr@crouzet.com

### Germany / Austria

Tel.: +49 (0) 21 03 9 80-108  
Fax: +49 (0) 21 03 9 80-250  
info-direkt@crouzet.com

### Italy

Tel.: +39 (02) 66 599 220  
Fax: +39 (02) 66 599 228  
crz-it-microcontrol@crouzet.com

### Netherlands

Tel.: +31 (0) 71-581 20 30  
Fax: +31 (0) 71-541 35 74  
com-nl@crouzet.com

### United Kingdom

Tel.: +44 (0)1256 318 900  
Fax: +44 (0)1256 318 901  
info@crouzet.co.uk

### Spain / Portugal

Tel.: +34 (93) 484 39 70  
Fax: +34 (93) 484 39 73  
es-consultas@crouzet.es

### Switzerland

Tel.: +41(0) 62 887 30 30  
Fax: +41(0) 62 887 30 40  
info-direkt@crouzet.com

### Other Countries

Tel.: +33 (0) 475 802 102  
Fax: +33 (0) 475 448 126  
com-ex@crouzet.com

## Americas

### Brazil

Tel.: +55 (11) 2505 7500  
Fax: +55 (11) 2505 7507

### USA/Canada

Tel.: +1 (877) 502 5500  
Fax: +1 (619) 210 1590  
customer.service@us.crouzet.com

### Mexico

Tel.: +1 (222) 409 7000  
Fax: +1 (222) 409 7810  
mexico@cstsensors.com

### Other Countries

Tel.: +55 (11) 4195 1834  
Fax: +55 (11) 4191 9136

## Asia

### China & Hong Kong

Tel.: +86 (21) 6065 6699  
Fax: +86 (21) 6065 7749  
china@cstsensors.com

### India

Tel.: +91 (0) 80 4113 2204/05  
Fax: +91 (0) 80 4113 2206  
india@cstsensors.com

### Korea

Tel.: +82 (0)2 2629 8312  
Fax: +82 (0)2 2629 8310  
korea@cstsensors.com

### South East Asia & Pacific

Tel.: +886 (0)2 8751 6388  
Fax: +886 (0)2 2657 8725  
eap@cstsensors.com  
taiwan@cstsensors.com

**THANK YOU**

**WWW.CROUZET.COM**



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

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- 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.);

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- 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.