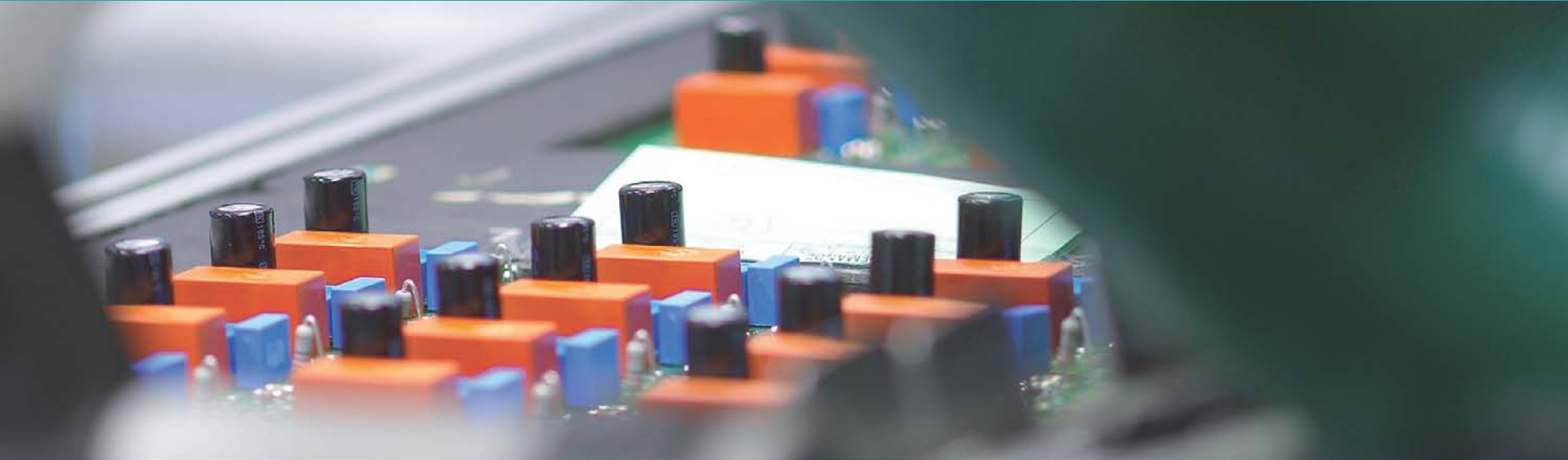


02 / 26 / 2014

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**

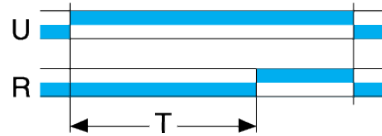
New Chronos 2 Part Numbers

- 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

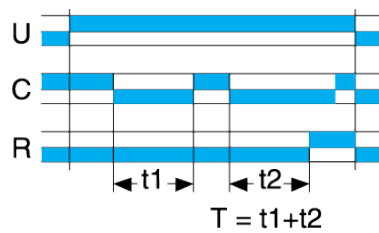
Part Number	Type	Functions	Output(s) Changeover	Timing	Supply
88 866 175	RQR1	Q	1 x 8 A	0.1 s to 100 h	24 VDC / 24 to 240 VAC
88 866 176	RQR6	Q	1 x 8 A	0.1 s to 100 h	230 to 240 VAC
88 866 215	RA2R1	A, At	2 x 8 A	0.1 s to 100 h	24 VDC / 24 to 240 VAC
88 866 300	RU2R4	A, At, B, C, H, Ht, Di, D, Ac, Bw	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

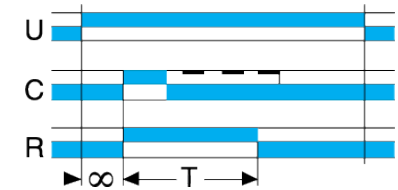
Function A:
Delay on energization



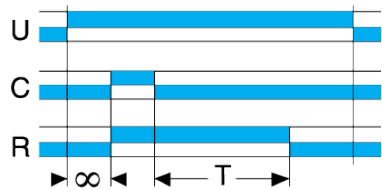
Function At: Timing on energization with memory



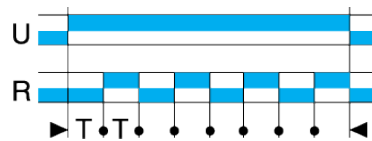
Function B: Timing on impulse (one shot) – Shaping (cannot be reset)



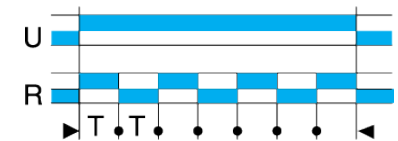
Function C: Timing after impulse. True delay off (with auxiliary power supply)



Function D:
Symmetrical flashing



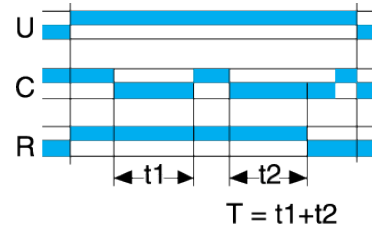
Function Di:
Symmetrical flashing



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



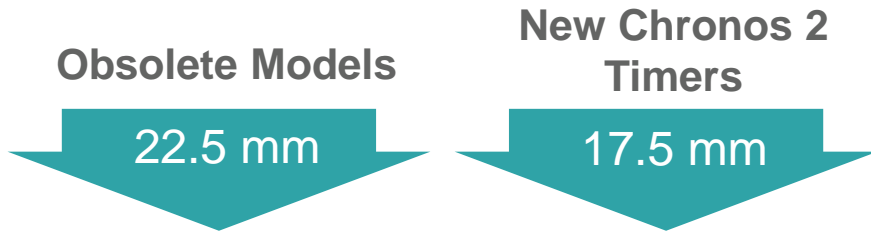
Function Ht: Delay on energization with memory



Function Q:
“Star-delta” starting



Reminder: Other Obsolete 22.5 mm Models



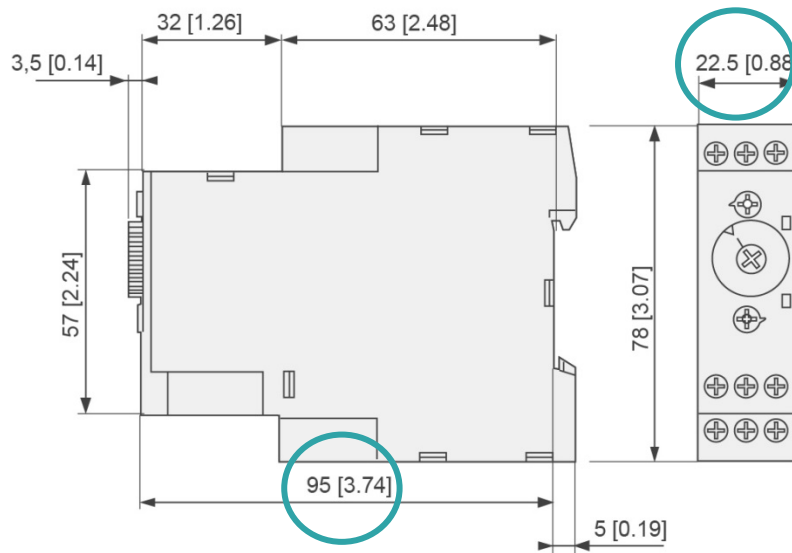
Old P/N	Type	New P/N	Type	Power supply	Function
88 865 105	TUR1	88 827 105	MUR1	24 VDC / 24 to 240 VAC	A, At, H, Ht, B, C, Di, D, Ac, Bw
88 865 115	TAR1	88 827 115	MAR1	24 VDC / 24 to 240 VAC	A, At
88 865 125	TBR1	88 827 125	MBR1	24 VDC / 24 to 240 VAC	B
88 865 135	TCR1	88 827 135	MCR1	24 VDC / 24 to 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.

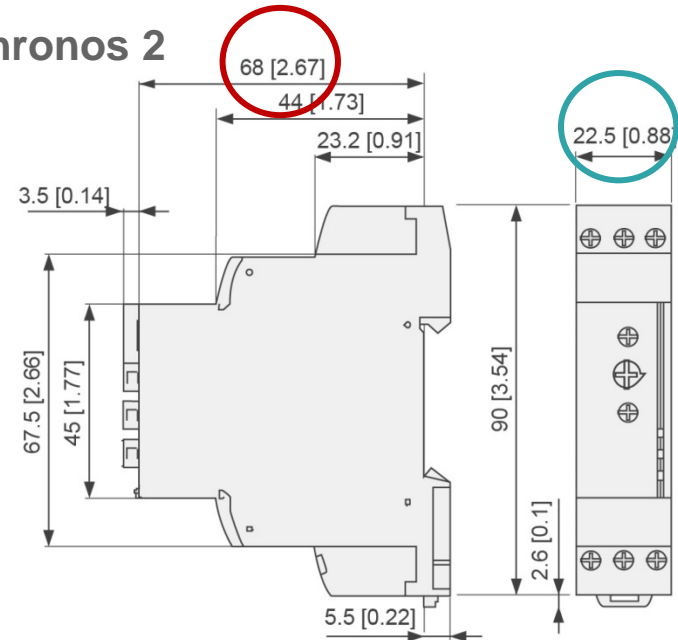
Mechanical Dimensions

- 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



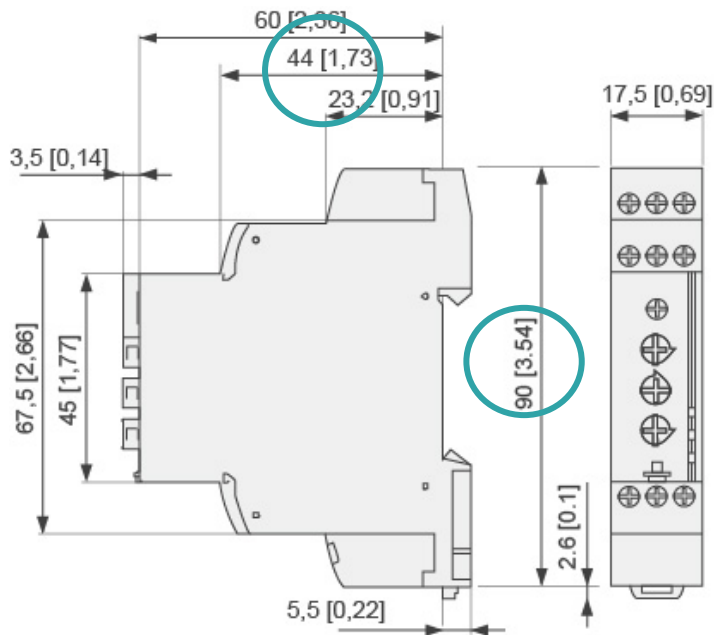
New Chronos 2



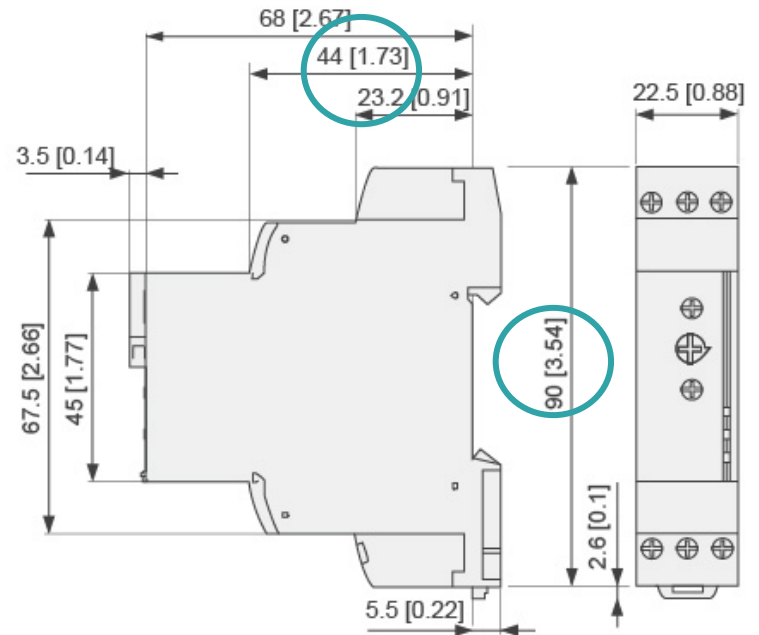
Mechanical Dimensions (cont.)

- 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



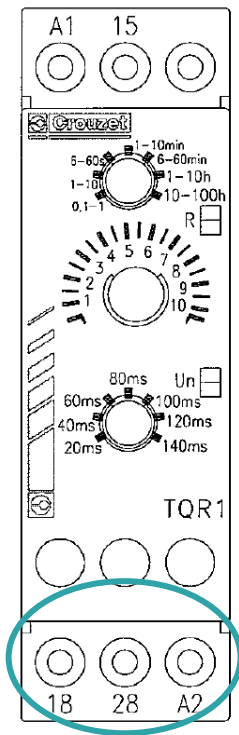
Agency Approvals

- New 22.5 mm Chronos 2 Timers

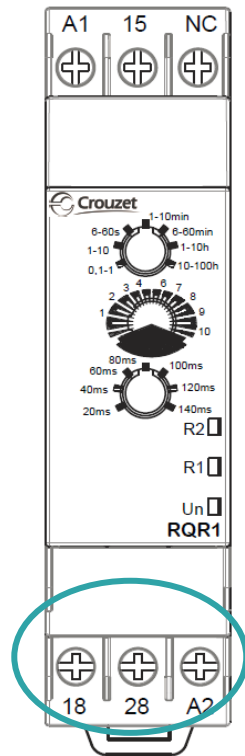
New Timer Commercial Reference	CE	cUL ^{US} LISTED	SA [®]	GL CERTIFIED
88 866 175	•	•	•	•
88 866 176	•	•		
88 866 215	•	•	•	•
88 866 300	•	•	•	•
88 866 303	•	•		•
88 866 305	•	•	•	•
88 866 385	•	•		•

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

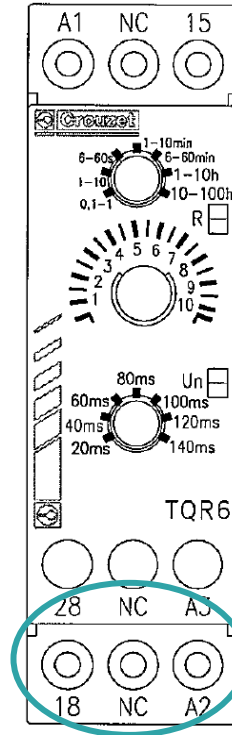
Old P/N
88 865 175



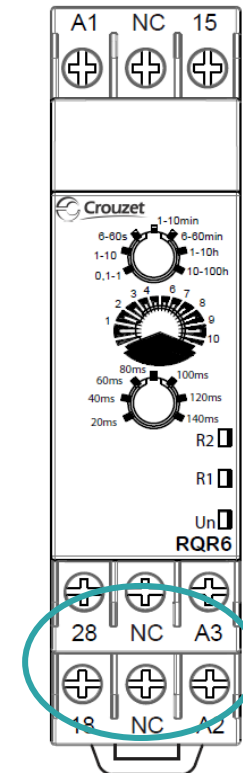
New P/N
88 866 175



Old P/N
88 865 176



New P/N
88 866 176

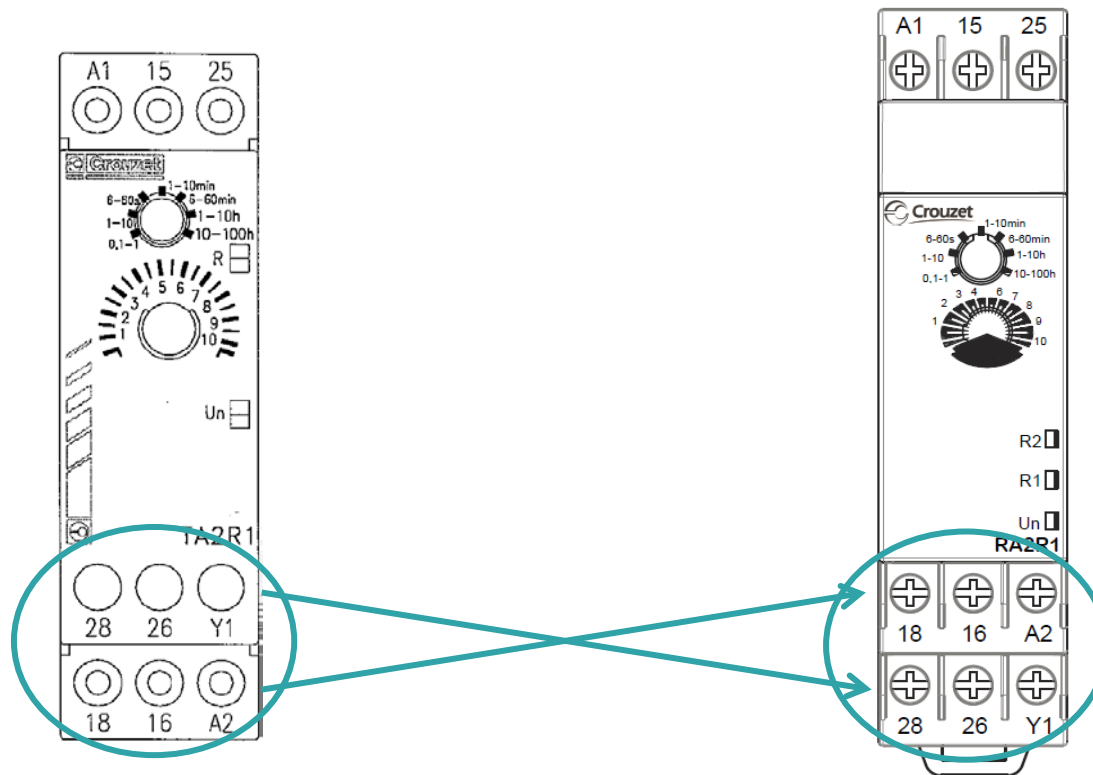


Good to know (cont.)

- 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

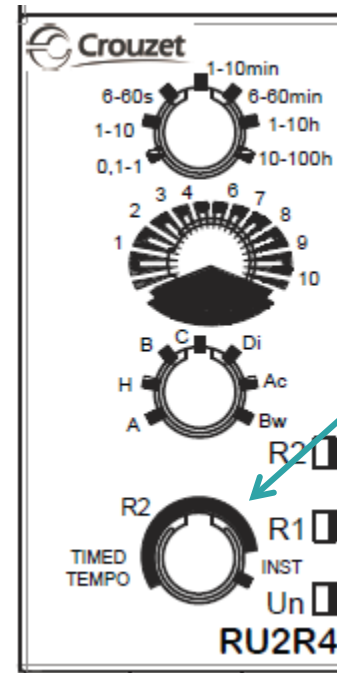
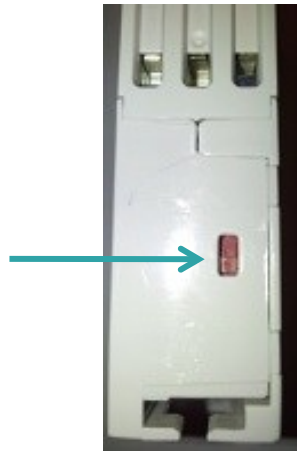
New P/N 88 866 215
/300/303/305/385



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.

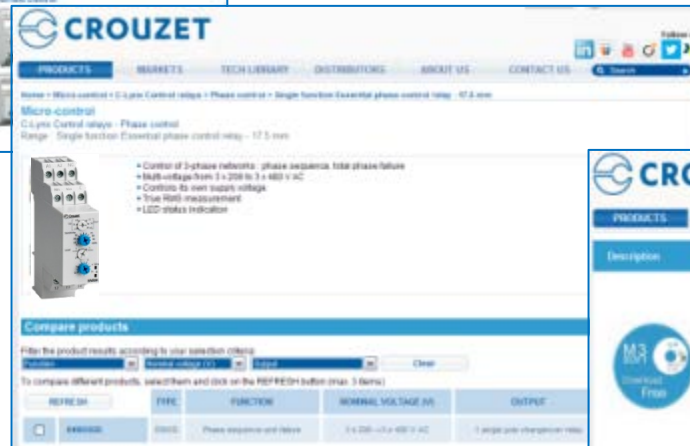
2 New Product Premiere, March 31st

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 >



- New datasheets will be available on the website in English, German, Spanish & French

New Chronos 2 timers

→ 22.5 mm

- Timer or solid state output
- Multi-function or mono-function
- Multi-stage
- Multi-stage
- Power terminals
- LED status indicator



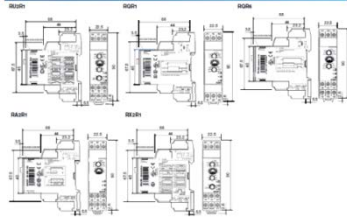
Part numbers	Type	Function	Timing	Output	Control setting	Connections	Supply voltage	Code
80201	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	24 V / 12 V +24 V / -	8020101
80202	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	12 V - 240 V AC	8020201
80203	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	12 V AC	8020301
80204	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	24 V / 12 V +24 V / -	8020401
80205	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	12 V - 240 V AC	8020501
80206	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	24 V / 12 V +24 V / -	8020601
80207	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	12 V - 240 V AC	8020701
80208	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	24 V / 12 V +24 V / -	8020801
80209	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	12 V - 240 V AC	8020901
80210	2	ON, OFF, ON-OFF	0.1 s - 1000 s	2-pole relay	23.9 A	Solar terminals	24 V / 12 V +24 V / -	8021001

General characteristics	Value
Production	50 mA
Minimum load current (switching capacity)	100 mA
Minimum load time for de-energisation (switch)	100 ms
Maximum load time for de-energisation (switch)	100 ms
Maximum load current	10 A (24 V AC) 10 A (12 V AC) 10 A (24 V DC) 10 A (12 V DC)
Maximum load power	240 W (24 V AC) 120 W (12 V AC) 240 W (24 V DC) 120 W (12 V DC)
Temperature range (operating)	-25°C
Temperature range (storage)	-25°C to 70°C
Weight (including LED)	0.03 kg

Standard accessories according to VDE 0618-10

CROUZET CONTROL

Dimensions (mm)



Connections

1 changeover relay output	2 changeover relay output	3 changeover relay output
A, A1, A2, B, B1, C, D, D1, H, H1	D	A1, A2, 230/240 V AC A3, A2, 230/240 V AC
A, A1	A1, A2, A3, D, P, R, T, T1, W	

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Curves

Function A	Function A1	Function A1
Delay on energisation	Timing after closing and opening of control contact	Timing on energisation with memory
Function B	Pulse output (adjustable)	Function C
Timing on impulse one shot	Timing after impulse delay (OFF)	Timing on energisation with memory
Function D	Flip-Flop Pulse start	Function E (DAB/1)
Flip-Flop Pulse start	Delay on energisation	Delay on energisation
Function H	Function O	Function P
Delay on energisation with memory	Star-delta	Flashing single pulse by switch from neutral
Function A1 (DAB/1)	Function A1	Function P
Timing on energisation with memory	Delay on energisation by switch from neutral	Delayed lead length pulse
Function N	Function O	Function P
Solo-gate	Delayed solo-gate	Delayed lead length pulse

CROUZET CONTROL

- Previous Chronos 2 datasheets will remain available on the website in a new « Legacy & Obsolete » section in the on-line catalog.
- A cross-reference between previous and new part numbers will also be available.

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THANK YOU

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