

Selection guide

Timers

Chronos 2 DIN rail mounted, Timers

DIN rail modular casings

Casing width (mm)	Connections	Functions		Type of output	Output(s)	Timing	Supply	Part number	Type
	Screw terminals	A / At / B / C / H / Ht		Relay	1 x 8 A changeover	0.1 s ⇒ 100 h	24 V $\overline{\sim}$ / 24 ⇔ 240 V $\sim$	88 827 105	MUR1
		Di / D / Ac / Bw						88 827 115	MAR1
		A / At						88 827 125	MBR1
		B						88 827 135	MCR1
		C						88 827 145	MHR1
		H / Ht						88 827 150	MLR4
		L / Li						88 827 155	MLR1
	Screw terminals	A / At / B / C / H / Ht		Relay	1 x 8 A changeover	0.1 s ⇒ 100 h	12 V $\overline{\sim}$	88 827 100	MUR4
	Di / D / Ac / Bw	88 827 103					MUR3		
	Spring terminals	88 827 503					MURc3		
	Screw terminals	Ad / Ah / N / O / P					24 V $\overline{\sim}$ / 24 ⇔ 240 V $\sim$	88 827 185	MXR1
	Screw terminals	Pt / TL / Tt / W		Solid state	0.7 A	0.1 s ⇒ 100 h	24 ⇔ 240 V $\sim$	88 827 004	MUS2
		A / At / B / C / H / Ht					88 827 014	MAS5	
		Di / D / Ac / Bw					88 827 044	MHS2	
		A					88 827 054	MLS2	
	Screw terminals	H / Ht		Relay	1 x 5A changeover	0.1 s ⇒ 20 h	24 ⇔ 240 V $\sim$	88 829 117	EMAR7
		L / Li					88 829 112	EMAR2	
		A					88 829 119	EMAR9	
		A / At / B / C / H / Ht					12 ⇔ 240 V $\overline{\sim}$ /	88 829 198	EMER8
Di / D / W / Pe	24 ⇔ 240 V $\sim$								
17.5	Screw terminals	Ac / Ad / Bw / Cx / N / O / Tt		Relay	1 x 5 A changeover	0.1 s => 20 h	12 ⇔ 240 V $\overline{\sim}$ / 24 ⇔ 240 V $\sim$	88 829 108	EMYR8

DIN rail industrial casings

Casing width (mm)	Connections	Functions		Type of output	Output(s)	Timing	Supply	Part number	Type		
	Screw terminals	A / At / B / C / H / Ht Di / D / Ac / Bw		Relay	1 x 8 A changeover	0.1 s ⇒ 100 h	24 V $\overline{\sim}$ / 24 ⇒ 240 V $\sim$	88 865 105	TUR1		
		A / At						88 865 115	TAR1		
		B						88 865 125	TBR1		
		C						88 865 135	TCR1		
		H / Ht						88 865 145	THR1		
		L / Li						88 865 155	TLR1		
		Q						88 865 175	TQR1		
		K						88 866 175*	RQR1*		
								88 865 265	TK2R1		
	Screw terminals	A / At / B / C / H / Ht Di / D / Ac / Bw		Relay	1 x 8 A changeover 1 inst. or timed 8 A	0.1 s ⇒ 100 h	12 V $\overline{\sim}$	88 865 300	TU2R4		
		1 x 8 A changeover			88 866 300*			RU2R4*			
		2 x 8 A changeover			88 865 100			TUR4			
		1 x 8 A changeover			88 865 215			TA2R1			
		2 x 8 A changeover			88 866 215*			RA2R1*			
		1 x 8 A changeover			88 865 103			TUR3			
	Spring terminals	A / At / B / C / H / Ht Di / D / Ac / Bw				88 865 503	TURc3				
		Screw terminals		Ad / Ah / N / O / P Pt / TL / Tt / W		Relay	1 x 8 A changeover 1 inst. or timed 8 A	0.1 s ⇒ 100 h	24 V $\overline{\sim}$ / 24 ⇒ 240 V $\sim$	88 865 385	TX2R1
							88 866 385*			RX2R1*	
			88 865 185	TXR1							
Q			88 865 176	TQR6							
			88 866 176*	RQR6*							
			88 865 303	TU2R3							
			88 866 303*	RU2R3*							
			88 865 305	TU2R1							
			88 866 305*	RU2R1*							
	A / At / B / C / H / Ht Di / D / Ac / Bw										

* Available in 2014. The casing of the new range will be different from the ones presented here.
Further information can be found on the data sheets available at www.crouzet.com

Selection guide



Timers

Plug-in industrial casings

Casing width (mm)	Connections	Functions (detail on pages 20 to 23)		Type of output	Output(s)	Timing	Supply	Part number	Type
 35	Plug-in 8-pin base	A / At / B / C / H / Ht Di / D / Ac / Bw		Relay	1 x 8 A changeover	0.1s ⇒ 100 h	24 V $\overline{\sim}$ / 24 ⇒ 240 V $\sim$	88 867 105	OUR1
		A			2 x 8 A changeover			88 867 215	OA2R1
		C			1 x 8 A changeover			88 867 135	OCR1
		L / Li		88 867 155				OLR1	
		A / At / B / C / H / Ht Di / D / Ac / Bw		12 V $\simeq$	88 867 100		OUR4		
12 ⇒ 240 V $\simeq$	88 867 103	OUR3							
 35	Plug-in 11-pin base	A / At / B / C / H / Ht Di / D / Ac / Bw		Relay	1 x 8 A changeover 1 inst. or timed 8 A	0.1s ⇒ 100 h	24 V $\overline{\sim}$ / 24 ⇒ 240 V $\sim$	88 867 305	PU2R1
		A			2 x 8 A changeover			88 867 415	PA2R1
		C			1 x 8 A changeover 1 inst. or timed 8 A			88 867 435	PC2R1
		L / Li						88 867 455	PL2R1
		A / At / B / C / H / Ht Di / D / Ac / Bw	12 V $\simeq$					88 867 300	PU2R4
12 ⇒ 240 V $\simeq$	88 867 303	PU2R3							
 21	Plug-in 8-pin base	A	Relay	2 x 5 A changeover	0.1s ⇒ 100 h	12 V $\overline{\sim}$	88 895 201	RTMA2	
						24 V $\overline{\sim}$	88 895 202	RTMA2	
						24 V $\sim$	88 895 203	RTMA2	
						110 V $\sim$	88 895 206	RTMA2	
						230 V $\sim$	88 895 207	RTMA2	
						12 V $\overline{\sim}$	88 896 201	RTMA4	
	Plug-in 14-pin base			4 x 3 A changeover		24 V $\overline{\sim}$	88 896 202	RTMA4	
						24 V $\sim$	88 896 203	RTMA4	
						110 V $\sim$	88 896 206	RTMA4	
						230 V $\sim$	88 896 207	RTMA4	

"Panel mounted", Timers

Analogue - TMR48 series

Dimensions (mm)	Connections	Functions (Detail on pages 20 to 23)		Type of output	Output(s)	Supply	Part number	Type	
 48 x 48	Plug-in 11-pin base	L / Li - G / Gi		Relay	2 timed changeover 2 x 5 A	12 ⇔ 240 V $\overline{\sim}$ 24 ⇔ 240 V $\sim$	88 886 516	TMR 48 L	
		A, B, C, W, G, Ac, Bw					88 886 016	TMR 48 U	
	Plug-in 8-pin base	A			2 timed changeover or 1 timed and 1 instantaneous (2 x 5 A)		88 886 106	TMR 48 A	
		A1, A2, H1, H2, Q1, Q2, D-Di					88 886 116	TMR 48 X	

Digital

Dimensions (mm)	Connections	Functions (Detail on pages 20 to 23)		Type of output	Output(s)	Supply	Part number	Type	
 48 x 48	Plug-in 8-pin base	A		Relay	2 timed changeover 2 x 5 A	24 V $\overline{\sim}$	88 857 409	Timer 812	
		110 V $\sim$				88 857 406	Timer 812		
		A, B, C, D, Di, H			1 x 8 A timed changeover	220 $\Rightarrow$ 240 V $\sim$	88 857 400	Timer 812	
						12 V $\overline{\sim}$ / 24 $\Rightarrow$ 48 V $\overline{\sim}$	88 857 003	Timer 814	
 48 x 48	Plug-in 11-pin base	A, B, C, D, Di, H			Relay	1 x 8 A timed changeover	24 V $\overline{\sim}$ / 110 $\Rightarrow$ 240 V $\sim$	88 857 005	Timer 814
		A1, A2, AM, AMt					12 V $\overline{\sim}$ / 24 $\Rightarrow$ 48 V $\overline{\sim}$	88 857 103	Timer 814
						2 timed changeover or 1 timed and 1 instantaneous (2 x 8 A)	24 V $\overline{\sim}$ / 110 V $\sim$	88 857 105	Timer 814
							12 V $\overline{\sim}$ / 42 $\Rightarrow$ 48 V $\overline{\sim}$	88 857 302	Timer 815
 48 x 48	Plug-in 11-pin base	A1, A1C, A2, A2C, AM, AMt, B, BM, C, CM, D, Di, DiM, Dpause, H, HM, T,TM, W, WM			Relay	2 timed changeover or 1 timed and 1 instantaneous (2 x 5 A)	24 V $\overline{\sim}$ / 110 V $\sim$	88 857 307	Timer 815
		24 V $\overline{\sim}$ / 220 $\Rightarrow$ 240 V $\sim$					88 857 301	Timer 815	
						12-24 V $\overline{\sim}$ / 100 $\Rightarrow$ 240 V $\sim$	88 857 311	Timer 815E	
							24 V $\overline{\sim}$ / 48 V $\overline{\sim}$	88 857 604	Timer 816
 48 x 48	Plug-in 8-pin base	A, B, C, D, Di, H			Relay	1 x 8 A timed changeover	24 V $\overline{\sim}$ / 110 V $\sim$	88 857 607	Timer 816
							24 V $\overline{\sim}$ / 220 $\Rightarrow$ 240 V $\sim$	88 857 601	Timer 816
	Plug-in 11-pin base						24 V $\overline{\sim}$ / 48 V $\overline{\sim}$	88 857 704	Timer 816
							24 V $\overline{\sim}$ / 110 V $\sim$	88 857 707	Timer 816
			24 V $\overline{\sim}$ / 220 $\Rightarrow$ 240 V $\sim$				88 857 701	Timer 816	

Accessories available: base socket 8-pin for DIN Rail mount 25 622 130, base socket 11-pin for DIN Rail mount 25 622 080.

The timer accessories guide is available on the product data sheets which can be downloaded from the website www.crouzet.com

Selection guide

MBA series

Casing width (mm)	Connections	Functions (Detail on pages 20 to 23)	Type of output	Output(s)	Timing	Supply	Part number	Type
 22 (diameter)	Screw terminals	A	Solid state	400 mA	0.1 s ⇒ 1 s	100 ⇒ 240 V ~	88 901 308	MBA2F
					0.5 s ⇒ 10 s		88 901 328	MBA2F
					3 s ⇒ 60 s		88 901 348	MBA2F
					0.5 min ⇒ 10 min		88 901 378	MBA2F
					3 min ⇒ 60 min		88 901 398	MBA2F
 22 (diameter)	Screw terminals	A	Solid state	200 mA	0.1 s ⇒ 1 s	24 V ---	88 901 302	MBA3F
					0.5 s ⇒ 10 s		88 901 322	MBA3F
					3 s ⇒ 60 s		88 901 342	MBA3F
					0.5 min ⇒ 10 min		88 901 372	MBA3F
					3 min ⇒ 60 min		88 901 392	MBA3F

Electromechanical - Top 2000 range

Casing width (mm)	Connections	Functions (Detail on pages 20 to 23)		Type of output	Output(s)	Timing	Supply	Part number	Type
 48 x 48	Screw terminals	2-3-4		Relay	1 timed changeover and 1 timed instantaneous (2 x 5 A)	6 s ⇒ 12 mn	24 V ~	88 226 013	Top 2000
							42 ⇔ 48 V ~	88 226 019	Top 2000
							110 ⇔ 127 V ~	88 226 012	Top 2000
							220 ⇔ 240 V ~	88 226 011	Top 2000
	Plug-in 8-pin base						24 V ~	88 226 501	Top 2000
							42 ⇔ 48 V ~	88 226 502	Top 2000
							110 ⇔ 127 V ~	88 226 503	Top 2000
							220 ⇔ 240 V ~	88 226 504	Top 2000
 48 x 48	Screw terminals	2-3-4		Relay	1 timed changeover and 1 timed instantaneous (2 x 5 A)	6 mn ⇒ 12 h	24 V ~	88 226 016	Top 2000
							24 V ~	88 226 505	Top 2000
							42 ⇔ 48 V ~	88 226 017	Top 2000
							42 ⇔ 48 V ~	88 226 506	Top 2000
	Plug-in 8-pin base						110 ⇔ 127 V ~	88 226 015	Top 2000
							110 ⇔ 127 V ~	88 226 507	Top 2000
							220 ⇔ 240 V ~	88 226 014	Top 2000
							220 ⇔ 240 V ~	88 226 508	Top 2000

Manual reset

Casing width (mm)	Connections	Functions (Detail on pages 20 to 23)	Type of output	Output(s)	Timing	Supply	Part number	Type
 55	Faston connectors 6.35 mm	A	Relay	1 x 16 A timed changeover	5 min (Max.display time: 4 min 40s)	127 / 230 V ~ 50 Hz	88 256 401	88 256 4
					15 min (Max.display time: 14 min)		88 256 402	88 256 4
					30 min (Max.display time: 28 min)		88 256 403	88 256 4
					60 min (Max.display time: 56 min)		88 256 404	88 256 4
					120 min (Max.display time: 1 h 53 min)		88 256 405	88 256 4
					5 h (Max.display time: 4 h 43 min)		88 256 406	88 256 4
					15 h (Max.display time: 14 h 10 min)		88 256 407	88 256 4
					30 h (Max.display time: 28 h 20 min)		88 256 408	88 256 4
 55	Faston connectors 6.35 mm	A	Relay	2 x 16 A timed changeover	5 min (Max.display time: 4 min 40s)	127 / 230 V ~ 50 Hz	88 256 506	88 256 5
					15 min (Max.display time: 14 min)		88 256 507	88 256 5
					30 min (Max.display time: 28 min)		88 256 508	88 256 5
					60 min (Max.display time: 56 min)		88 256 509	88 256 5
					120 min (Max.display time: 1 h 53 min)		88 256 510	88 256 5
					5 h (Max.display time: 4 h 43 min)		88 256 511	88 256 5
					15 h (Max.display time: 14 h 10 min)		88 256 512	88 256 5
					30 h (Max.display time: 28 h 20 min)		88 256 513	88 256 5
 55	Faston connectors 6.35 mm	A	Relay	3 x 16 A timed changeover	5 min (Max.display time: 4 min 40s)	127 / 230 V ~ 50 Hz	88 256 906	88 256 9
					15 min (Max.display time: 14 min)		88 256 907	88 256 9
					30 min (Max.display time: 28 min)		88 256 908	88 256 9
					60 min (Max.display time: 56 min)		88 256 909	88 256 9
					120 min (Max.display time: 1 h 53 min)		88 256 910	88 256 9
					5 h (Max.display time: 4 h 43 min)		88 256 911	88 256 9
					15 h (Max.display time: 14 h 10 min)		88 256 912	88 256 9
					30 h (Max.display time: 28 h 20 min)		88 256 913	88 256 9

The timer accessories guide is available on the product data sheets which can be downloaded from the website www.crouzet.com

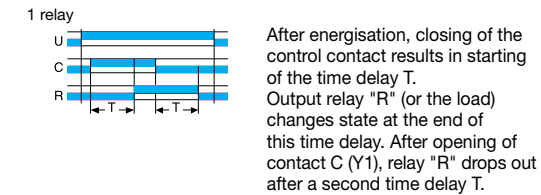
Function diagrams

Generic functions

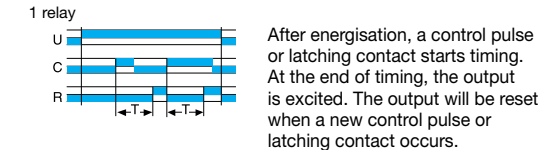
• A function: Delay on energisation



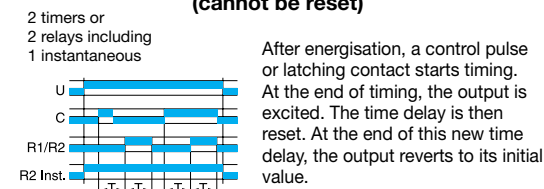
• Ac function: Timing after closing and opening of control contact



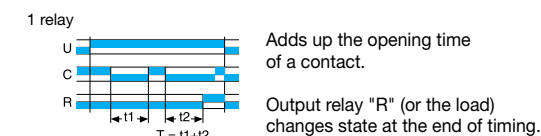
• Ad function: Delay on energisation (cannot be reset)



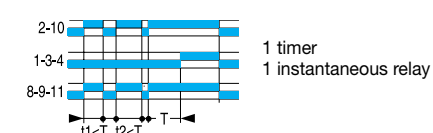
• Ah function: Single shot flip-flop (cannot be reset)



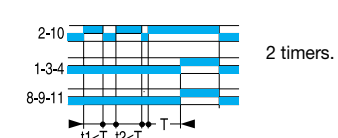
• At function: Timing on energisation with memory



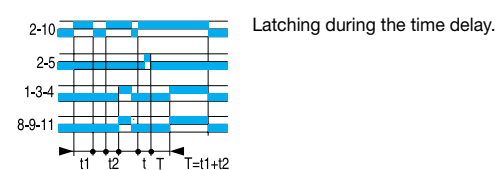
• A1 function: Delay on energisation



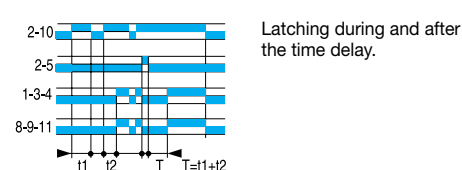
• A2 function: Delay on energisation



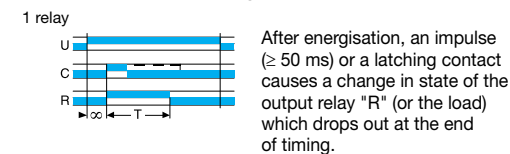
• AM function: Delay on energisation



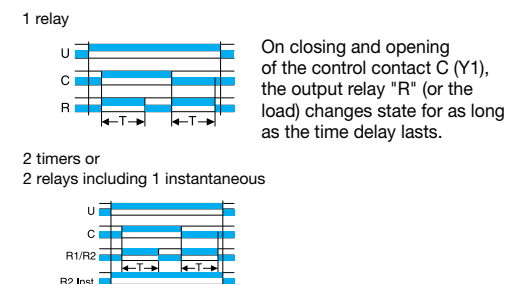
• AMt function: Delay on energisation



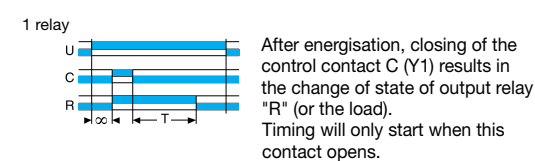
• B function: Timing on impulse (one shot) - Shaping (cannot be reset)



• Bw function: Pulse output (adjustable)

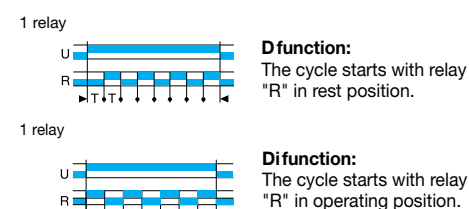


• C function: Timing after impulse True delay off (without auxiliary power supply)



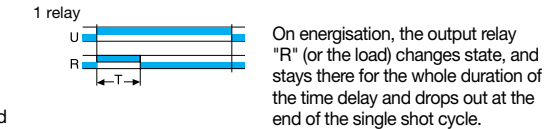
• D or Di functions: Symmetrical flashing

Repetitive cycle which alternately sets the output relay "R" (or the load) to operating and rest position for equal periods of time.

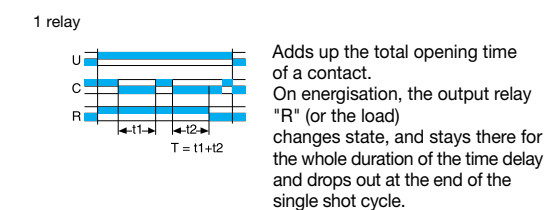


U : Supply
R : Output relay or load
T : Timing
 ∞ : Infinity
C (Y1) : Command

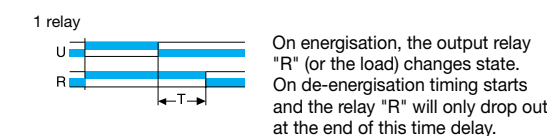
• H function: Timing on energisation - Pulse output (adjustable)



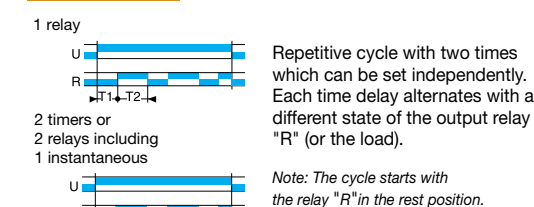
• Ht function: Delay on energisation with memory



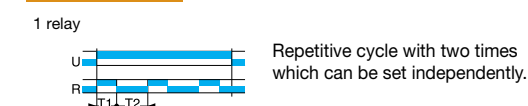
• K function: Delay on de-energisation True delay off (without auxiliary power supply)



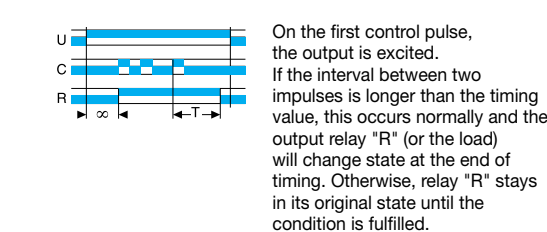
• L function: Asymmetrical flashing



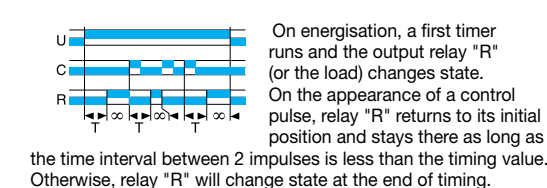
• Li function: Asymmetrical flashing



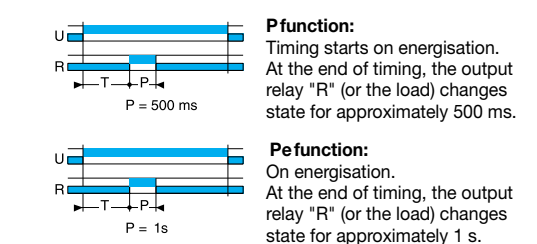
• N function: "Safe-guard"



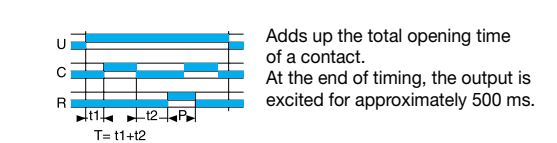
• O function: "Delayed safe-guard"



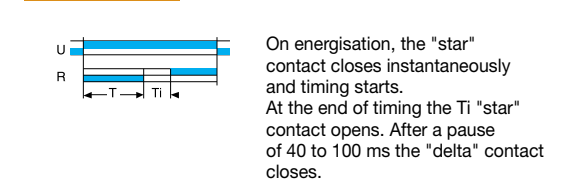
• P and Pe functions: Impulse counter (delay on)



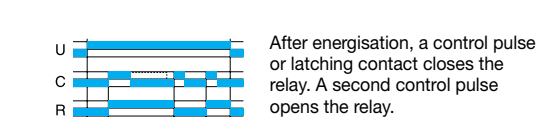
• Pt function: Impulse counter (delay on)



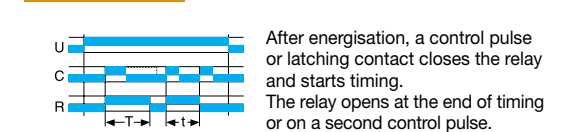
• Q function: "Star-delta" starting



• TL function: Impulse relay



• Tt function: Timed impulse relay



• W function: Timing after pulse on control contact

