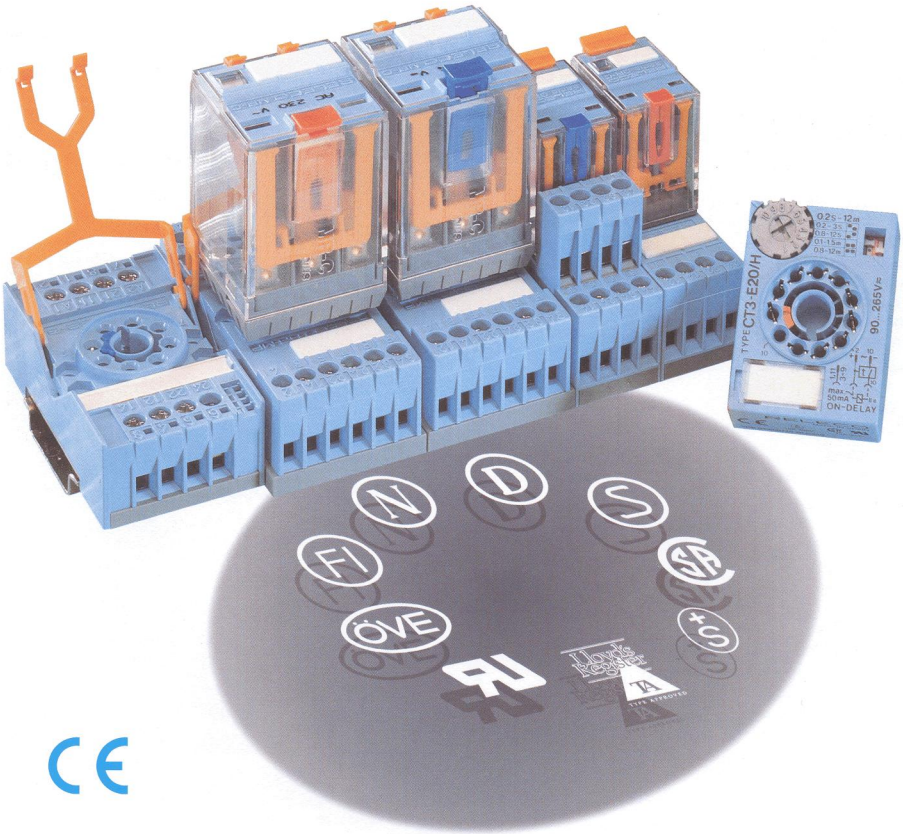
Short Form Catalogue MR-C QR-C

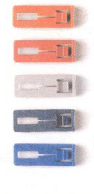
RELECO

DESIGN & FUNCTION
IN PERFECT HARMONY



CE

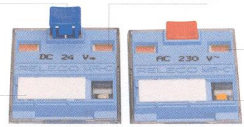
Benefits of the new C Plus system



Five colours for an easier identification of coil voltage

red:
230 Vac (120 Vac)*
dark red:
others Vac
grey:
Vac/dc
dark blue:
others Vdc
blue:
24 Vdc

* North America



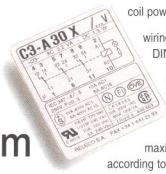
Push-to-test pull-to-lock button (PTPL™)

Double window for the mechanical identification

Marking label (can be marked with plotter)

Coil voltage marked on the top face of the relay

LED



comprehensive technical label

coil power

wiring diagram with sequential and DIN numbers

electric diagram showing all additions to the coil

maximum switching capacity according to EN 60947 (IEC 947)

Approvals

GENERAL INFORMATION

Electrical and Mechanical Life
Designed to withstand 100.000 operations at full rated load and more than 20 x 10^6 mechanical operations (measured at 6.000 operations/hour). Periodical Laboratory life tests give values higher than 100 x 10^6 operations.
The maximum switching frequency is 1.200 operations/hour at max. rated load and 6.000 operations/hour at 50% of max. load.

Materials and Temperatures
All parts are made of high perfomance, self extinguishing materials for electrical equipment which can withstand temperatures up to 130°C without deformation.
Operating and storage temperatures are respectively –20 … +60°C and –20 … +100°C

Coil
The temperature rise in the coil when permanently energized, at nominal voltage, is 45°C max. at AC and 35°C max. at DC.
All coils are calculated to withstand a permanent connection at maximum ambient temperature of 60°C and 1,10 x nominal voltage.
Coil inrush power (AC relays only) is approx. 1,80 x nominal power.

Standard Voltages
AC 24, 48, 115 (110 … 120), 230 V
DC 12, 24, 48, 110, 120-125, 220 V
All other voltages available upon request.

Protection Class
IP40 for relays and Time Cubes.

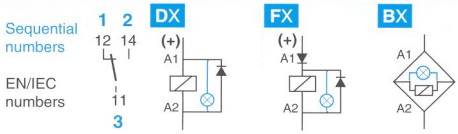
Socket Terminal Block
Suitable for cables on diametres from 2,25 mm² down to 0,14 mm².

Approvals (according to model)
UL (USA), CSA (Canada), SEV (Switzerland), NEMKO (Norway), SETI (Finland), SEMKO (Sweden), DEMKO (Denmark), ÖVE (Austria), LLOYD'S (UK).
Comply with EN 60 947/4 & 5 (IEC 947)
All approval values available upon request.

Mounting
Universal mounting: DIN-46277 rail and panel.

Standard Packing
10-pieces recyclable carboard box.

TECHNICAL DATA



Contacts Max. switching cap. (poll. 3 - industrial)

Coil Nominal power AC / DC

Coil operating voltage

Operating times Max. Pull-in / Drop-out

Other executions

Remanence (Magnetic latching)

Sensitive

Twin contacts for low level signal

Open contacts

Double make contact

Double make contact with magnetic blow out

Sockets

for DIN rail

for panel **–L** / for PCB **–P** / for PCB with flange **–PO**

PART NUMBER KEY

C3 - A 3 0 D X / AC230 V

Model

Types

Number of poles

Contact material

0 = Standard (except on C9)

9 = Gold-flashed contact 0.2µ Au

8 = Gold-plated contact 10µ Au (except on C9)

4 = Sensitive MR-C's

Low Level - C9 and bifurcated contacts relays

1 = Gold-flashed contact with 0.2µ Au (standard on C9)

2 = Gold-plated contact with 10µ Au

X - LED (option)*

Addition to the coil

D - Free wheeling diode (FWD)

F - FWD and polarity diode

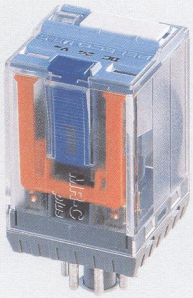
B - Rectifier bridge (max. 60 V)

R - RC protection (MRC Plus only)

Voltage

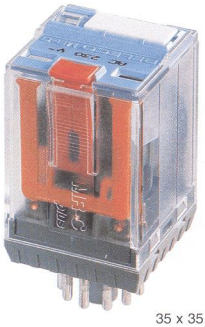
* Not available for:
- Latching relay
- Sensitive relay
- RC protection

Standard 8-pin C2-A20 X /...v



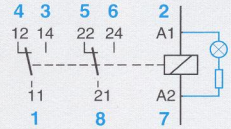
35 x 35 x 58 mm

Standard 11-pin C3-A30 X /...v



35 x 35 x 58 mm

C2-A20 X



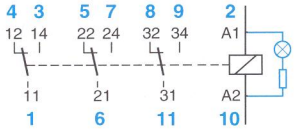
10 A / 250 V AC1	2500 VA
2,2 VA	1,3 W
0,80 x U_N	1,1 x U_N
16 ms	8 ms

Model	
C2-T21 X	1 mA@ 5V... 6 A/250 V AC1
C2-G20 X	110 W / 1 A @ 110 V DC1

S2-S **S2-B**

S2-L **S2-PO**

C3-A30 X



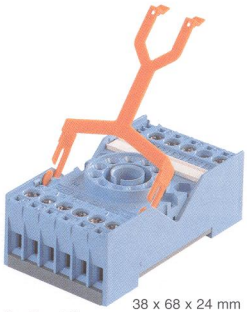
10 A / 250 V AC1	2500 VA
2,2 VA	1,3 W
0,80 x U_N	1,1 x U_N
16 ms	8 ms

Model	
C3-R20	**ON** 2,5 VA/W **OFF** 0,5 VA/W
C3-S (250 mW) / **C3-E** (500 mW) / **C3-N** (800 mW)	
C3-T31 X	1 mA @ 5V...6 A / 250 V AC1
C3-G30 X	110 W / 1 A @ 110 V DC1
C3-X10 X	7 A @ 110 V / 1,2 A @ 220 V DC1
C3-M10 X	10 A DC1 / 2 A DC13 @ 220 V

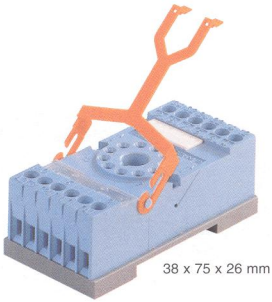
S3-S **S3-B** **S3-MP**

S3-L **S3-PO**

38 x 80 x 25 mm



38 x 68 x 24 mm



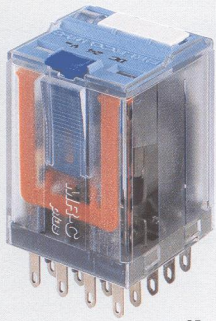
38 x 75 x 26 mm

Optional relay/socket Coding Ring

8 pin	**S2-S**	8 pin	**S2-B**
11 pin	**S3-S**	11 pin	**S3-B**

11 pin **S3-MP**

Plug-in 4-pole, 10A — C4-A40 X /...v



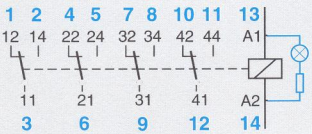
35 x 35 x 52 mm

Flat blade, 16A — C5-A30 X /...v

Note: 1, 2 or 3 contacts

35 x 35 x 56 mm

C4-A40 X



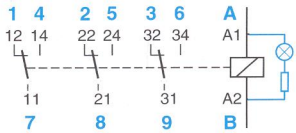
10 A / 250 V AC1			2000 VA
2,4 VA		1,4 W	
0,80 x U_N		1,1 x U_N	
20 ms		8 ms	

Model		
C4-R30	**ON** 2,5 VA/W **OFF** 0,5 VA/W	
C4-X20	7 A @ 110 V DC1 / 1,2 A @ 220 V DC1	

S4-B

S4-L **S4-P** **S4-PO**

C5-A30 X

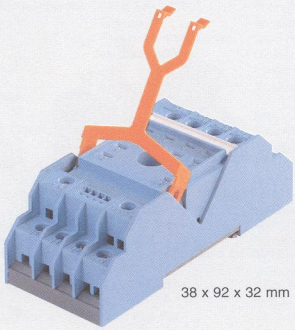


16 A / 500 V AC1			3600 VA
2,4 VA		1,4 W	
0,80 x U_N		1,1 x U_N	
20 ms		10 ms	

Model	
C5-R20	**ON** 2,5 VA/W **OFF** 0,5 VA/W
C5-G30 X	110 W / 1 A @ 110 V DC1
C5-X10 X	7 A @ 110 V / 1,2 A @ 220 V DC1
C5-M10 X	10 A DC1 / 2 A DC13 @ 220 V

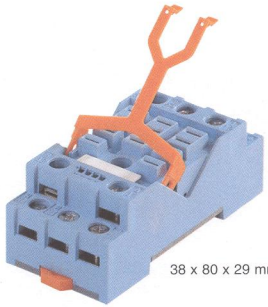
S5-S

S5-L **S5-P** **S5-PO**



38 x 92 x 32 mm

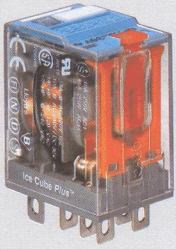
S4-B



38 x 80 x 29 mm

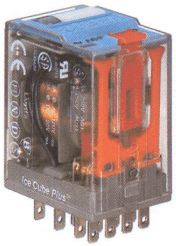
S5-S

Miniature 2-pole, 10A — C7-A20 X /...v



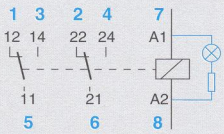
21 x 28 x 37.5 mm

Miniature 4-pole — C9-A41 X /...v



21 x 28 x 37.5 mm

C7-A20 X

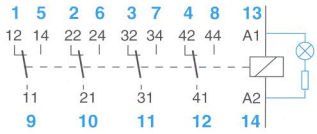


10 A / 250 V AC1		2500 VA
1,5 VA	1 W	
0,80 x U_N	1,1 x U_N	
16 ms	8 ms	

Model	
NEW **C7-A10 X**	16 A / 250 V AC1
C7-T21 X	1 mA @ 5 V... 6 A / 250 V AC1
C7-G20 X	0,8 A @ 110 V / 0,4 A @ 220 V DC1
C7-X10 X	6 A @ 110 V / 1 A @ 220 V DC1
NEW **C7-W10 X**	High inrush current 500 A for 2,5 ms 6A @ 250 V AC5 a/b (lámpara)

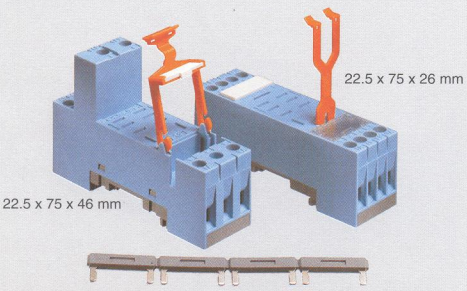
S7-M	**S7-16** (For C7-A10)	**S7-IO** (Input-Output)
S7-L	**S7-P**	**S7-PO**

C9-A41 X



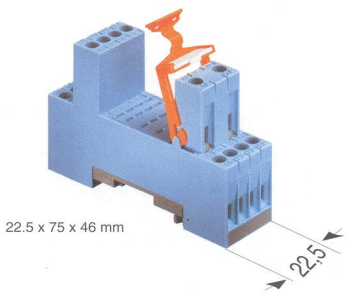
3 A / 250 V AC1	150 V (Poll 2)	700 VA
1,5 VA	1 W	
0,80 x U_N	1,1 x U_N	
10 ms	6 ms	

Model		
C9-R21	**ON** 1,5 VA /W	**OFF** 0,3 VA /W
C9-E21	0,8 VA	500 mW



S7-M
S7-IO (Input-Output)
S7-16 (For C7-A10)

S7-BB
(Bridge bar for S7 - IO)



S9-M

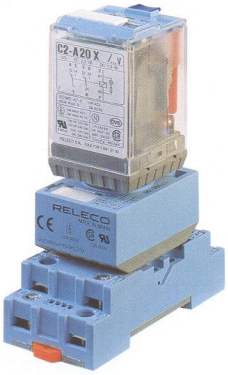
Time Cube CT2 (8 pin) and CT3 (11 pin)

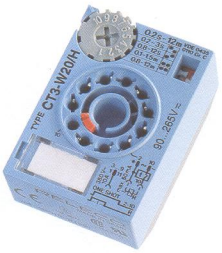
The Time Link

Releco's Timer module, the Time Cube, connects any brand of 8 and 11-pin relay and socket, transforming standard relays into timer relays.

Installation could not be easier. Remove the relay, insert the Time Cube in the socket and replace the relay. Easy as 1-2-3.

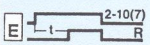
The Time Cube adds only 25 mm. to the overall height of the relay. Just enough height to spot the relay, with special timer function, into your board.





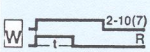
Types

On delay



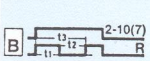
After driving by 2-10 (2-7), (R) energizes accoding to (t). (R) falls back again when 2-10 (2-7) switches out.

One shot leading edge



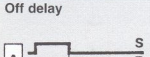
After driving by 2-10 (2-7), (R) energizes immediately according to (t), (R) falls back again when 2-10 (2-7) switches out prematurely.

Blinker



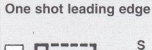
After driving by 2-10 (2-7), (R) energizes and falls back periodic intermittently for the set time lag t1 and t_2. $t1 = t_2$, $t = 1/t_3$.

Off delay



After driving by (S), (R) energizes immediately. After switching out of (S), (R) releases according to (t).

One shot leading edge



After driving by (S), (momentary or continuous), (R) energizes immediately according to (t).

Operating voltage ranges

H : 90 to 265 Vac/dc
L : 20 to 65 Vac/dc (75 Vdc)
S : 9,5 to 18 Vdc

U : 180 to 265 Vac/dc
M: 90 to 150 Vac/dc
L : 20 to 65 Vac/dc (75 Vdc)
S : 9,5 to 18 Vdc

Part Number Key

CT3-E20/H

Model
CT2: 8-pin
CT3: 11-pin

Types
E, W, B, A, K

Operating voltage ranges
H, L, S, U, M

Time range
20, 25

Time range

20 0,2s-12 min.

Partial range	Switch
0,2 - 3 s	
0,8 - 12 s	
0,1 - 1,5 min.	
0,8 - 12 min.	

25 0,8s-30 min.

Partial range	Switch
0,8 - 8 s	
3 - 30 s	
0,4 - 4 min.	
3 - 30 min.	

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RELECO

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