

# **Automatic timers RT1X**

Electronic timers RT10, RT12, RT14, RT15 and RT16

Timing function controlled by the supply connection

RT10: Delay on operate RT12: Interval timer

RT14: Symmetrical recycler RT15: One-shot timer

**RT16: Delay on release** 

1- or 2-pole relay output

DC supply or AC supplies up to 230 VAC

Made in accordance with the **(€** and EMC regulations



C-mac<sup>®</sup> timers type RT10, RT12, RT14, RT15 and RT16 covers all the basic timing function, used in a countless number of applications.

All units have automatic function, which means the time function starts, when the supply voltage is connected and/or disconnected.

#### **Common technical data:**

**Supply, AC:** 24, 115 and 230 VAC +/- 10%

**Supply frequency:** 40-70 Hz

**Isolation voltage:** supply - internal - output: 3.75 kV

**Supply, DC:** 24 VAC/DC +/- 10%

Note: With this type of supply, there is no galvanic isolation between supply and internal electronics.

**Power consumption:** 2,5 VA

**Operation temp.:**  $-20^{\circ}\text{C to } +60^{\circ}\text{C}$ 

**Humidity:** 0 - 90% RH, non-condensing

**Indications:** 

Green LED: Supply voltage connected Red LED: Relay active (not on RT16).

**Time adjustment:** 2,5 - 100 % of the range

Internal or eksternal 0-1 M $\Omega$  potentiometer, dependent on type.

(RT15: fixed time, no adjustment)

Accuracy, scale: 5 %.

Repeatability: 0,1 %

Reset of time and/or relay: for more than 0,2 sec.

RT16: Supply voltage interruption for more than 0,2 sec.

Supply voltage connection for more than 0.2 sec.

Max. load, relay: 1-pole 8 A - 250 VAC

2-pole: 5 A - 250 VAC,

ohmic load

### EMC og safety regulations.

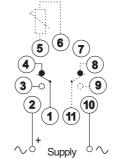
Emmision: EN 50 081 - 1 Immunity: EN 50 082 - 2 Safety: EN 60 730

**Approvals:** The units are produced in accordance with the CE og low voltage regulations.

All units are supplied with either 1- or 2-pole relay output, or with 2 separate relays, (relay 1, pins 1-3-4, has the normal time function, and relay 2, pins 8-9-11, indicates that the supply voltage is applied).

# **Specifications RT10, RT12 and RT16.**

#### **Connections:**



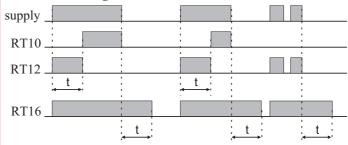
#### Note:

Connections 8-9-11: 2-pole version only

Connections 5-6: Only versions with eksternal potentiometer

(not RT16)

### Functional diagram:



Time ranges: 0,08 - 3 sec 0,4 - 15 sec

1,5 - 60 sec

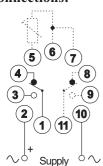
0,1 - 3 min (RT16 only) 0,25 - 10 min (not RT16) 1,5 - 60 min (not RT16)

0,25 - 10 hours (not RT16)



# **Specifications RT14.**

#### **Connections:**



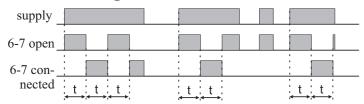
#### Note:

Connections 8-9-11: 2-pole version only

Connections 5-6: Only versions with eksternal potentiometer

Connections 6-7: Start position, see diagram

Functional diagram:



Time ranges:

0,08 - 3 sec

0,4 - 15 sec

1,5 - 60 sec

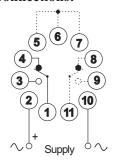
0,25 - 10 min

1,5 - 60 min

0,25 - 10 hours

# **Specifications RT15.**

## **Connections:**

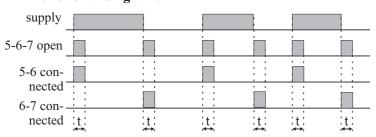


## Note:

Connections 8-9-11: 2-pole version only

Connections 5-6-7: pulse funktion, see diagram

Functional diagram:



Pulse length (t): 0,5 sec. +/- 20%

# **Ordering guide:**

 Supply
 Type number

 24 VAC/DC
 RT1X-y-2-024-zzz

 24 VAC
 RT1X-y-1-024-zzz

 115 VAC
 RT1X-y-1-115-zzz

 230 VAC
 RT1X-y-1-230-zzz

X = Timer type

RT10: delay on operate

RT12: interval timer

RT14: symmetrical recycler

RT15: one-shot

RT16: delay on release

y = output relay

1: 1-pole

2: 2-pole

4: 2 separate relays

zzz = time range

see table for each type

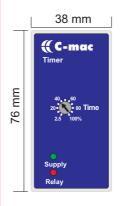
Ordering example:

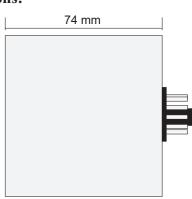
RT12-2-1-230-10M

For versions with external potentiometer an E is added to the type number (RT10, RT12 and RT14 only)

ex: RT10E-2-1-230-60S

# **Mechanical dimensions:**





## Materials and weight:

**Housing:** NORYL-SE-1, grey, self-extinguishing

Housing bottom: NORYL SE-1, GFN-2, black,

self-extinguishing

**Terminals:** Nickel-plated brass

Weight: 140 g

