

## Description Dynameco Control Unit Typ DCU-C1-8

This control unit was developed specially to trigger the **DYNAMECO extinguishing-sequence generators**.

### 1. Control Unit

The control unit contains a control board and several module boards. The exact number of module boards will depend on how many extinguishing-sequence generators are connected. The contacts on the terminal strips are made with 6.3 x 0.8 flat-pin connecting receptacles.

### 2. The functions of the individual connections are as follows:

- a) 2 x batt. +; 2 x batt. –  
Supply voltage  $24\text{ V} \pm 20\%$ , or  $12\text{ V} \pm 20\%$   
(The supply voltage required must be specified when the customer orders the system)
- b) red +, blue –  
Supply voltage for external components. Max. current: 0.2 A
- c) yellow "Alarm"  
Alarm output: "Open collector" with dropping resistor limited to 30 V / 0.02 A is actuated when an alarm is signalled.
- d) grey "Released"  
Release output: "Open collector" with dropping resistor limited to 30 V / 0.02 A is actuated when the extinguishing-sequence generators are triggered.
- e) green "Operating"  
Output for the "Operating" report  
"Open collector" with dropping resistor limited to 30 V / 0.02 A is actuated when the unit is ready for operation. If there is a fault, the output LED flashes.
- f) violet "Fault"  
Output for "Fault" reports  
"Open collector" with dropping resistor limited to 30 V / 0.02 A is actuated when the unit is ready for operation.
- g) Depending on the version supplied, connections can be provided for one to eight extinguishing-sequence generators.  
The extinguishing-sequence generators are triggered by a pulse lasting 100 ms. The generators are triggered one after the other.

Min. current required for a release: 1.75 A.

(The number of extinguishing-sequence generators required must be specified when the customer orders the system.)

Control Unit DCU-C1	1 piece	Dynameco ...	E02
Control Unit DCU-C2	2 pieces	Dynameco ...	E02
Control Unit DCU-C3	3 pieces	Dynameco ...	E02
Control Unit DCU-C4	4 pieces	Dynameco ...	E02
Control Unit DCU-C5	5 pieces	Dynameco ...	E02
Control Unit DCU-C6	6 pieces	Dynameco ...	E02
Control Unit DCU-C7	7 pieces	Dynameco ...	E02
Control Unit DCU-C8	8 pieces	Dynameco ...	E02

Type VTK 1 ... distribution boxes can be connected up in place of extinguishing-sequence generators if the system is to be used to protect a very large room.

Up to eight Dynameco extinguishing-sequence generators can then be connected up to each distribution box. That means the system can be used to trigger as many as 64 extinguishing-sequence generators.

### 3. The following faults are monitored:

- a) Minimum supply voltage  
When this fault occurs, the "Operating" and the "Fault" outputs can no longer be actuated.
- b) Break in the "Release of extinguishing agent" connection  
The LED at the "Operating" output flashes and the "Fault" output can no longer be actuated.
- c) Break in the connection to the extinguishing-sequence generators  
The LED at the "Operating" output flashes and the "Fault" output can no longer be actuated.

### 4. Functional sequence when the extinguishing-sequence generators release extinguishing agent

A release of extinguishing agent into the area protected by the fire alarm system is triggered by the Control and Release Panel (BMZ ...)

The alarm output is actuated.

After a delay period set by the manufacturer (this period must be specified when the system is ordered), the extinguishing-sequence generators are triggered one after the other. The triggering pulse has a duration of 100 milliseconds.

This procedure is repeated until the 24V (12V) supply voltage is either briefly interrupted or switched off completely. See drawing no. 3.06099.

### 5. System ready for operation

The Control Unit becomes fully functional only after the "Operating" output and the "Fault" output have been actuated.