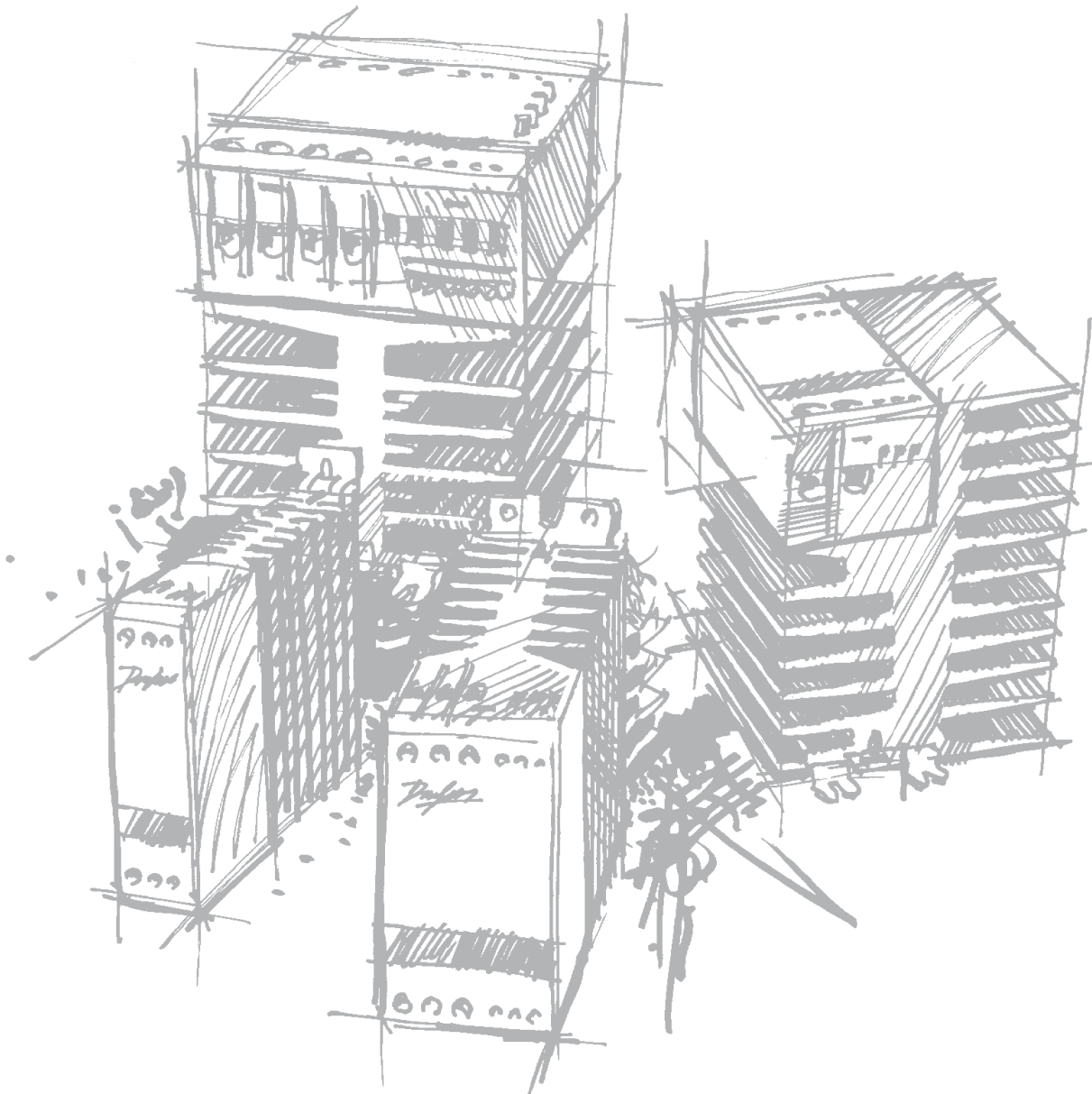




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CI-tronic™ auxiliary module  
Type ACM-1

## Introduction



ACM-1 is an auxiliary module for monitoring the status of a connected motor controller or electronic contactor.

Typical application is control of bypass contactor for soft starters when full-on voltage is detected.

## Features

- Full on monitoring of motor controllers ac, 50/60 Hz
- Function monitoring of electronic contactors
- Dual voltage range, 230 V ac or 400-600 V
- Relay output, 5A 250 V ac or 3A 24 V dc
- 22.5 mm module for DIN rail mounting
- LED status indication
- IP20 protection

## Ordering

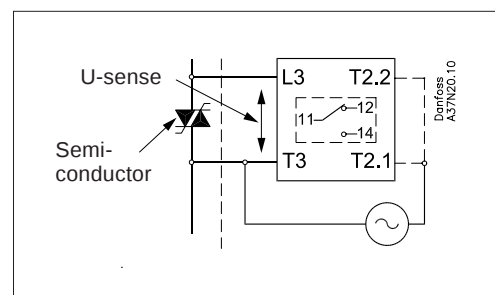
| Operational voltage              | Type  | Code no.        |
|----------------------------------|-------|-----------------|
| 208 - 240 V ac<br>380 - 600 V ac | ACM-1 | <b>037N0085</b> |

## Technical data

### Specifications

|                                         |                        |                                                                      |
|-----------------------------------------|------------------------|----------------------------------------------------------------------|
| Operational voltage                     | T2.1 - T3<br>T2.2 - T3 | 208 - 240 V ac, max. 10 VA 1.5 W<br>380 - 600 V ac, max. 35 VA 2.5 W |
| Relay output                            |                        | 5A 250 V ac (AC-22) or 3A 24 V dc (DC 22)                            |
| Control voltage                         | max.                   | 250 V ac                                                             |
| Rated insulation voltage                |                        | Ui: 600 V                                                            |
| Rated impulse withstand voltage         |                        | Uimp: 4 kV                                                           |
| Installation category                   |                        | III                                                                  |
| Degree of protection / pollution degree |                        | IP 20/3                                                              |

If the voltage across the semiconductor T3 and L3 is lower than 2 V ac, the relay output is activated. The relay output will open again when the sense voltage is higher than 2.5 V ac.

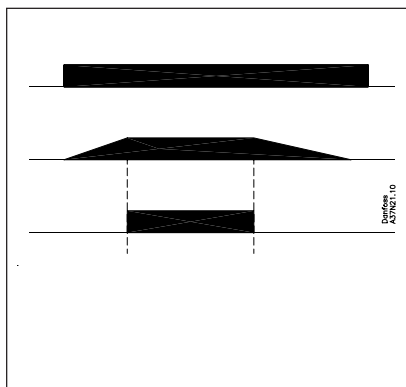


### Functional diagram

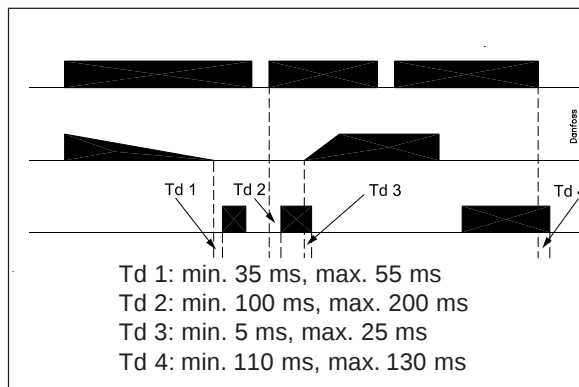
Supply voltage T2.x - T3

Motor voltage L3 - T3

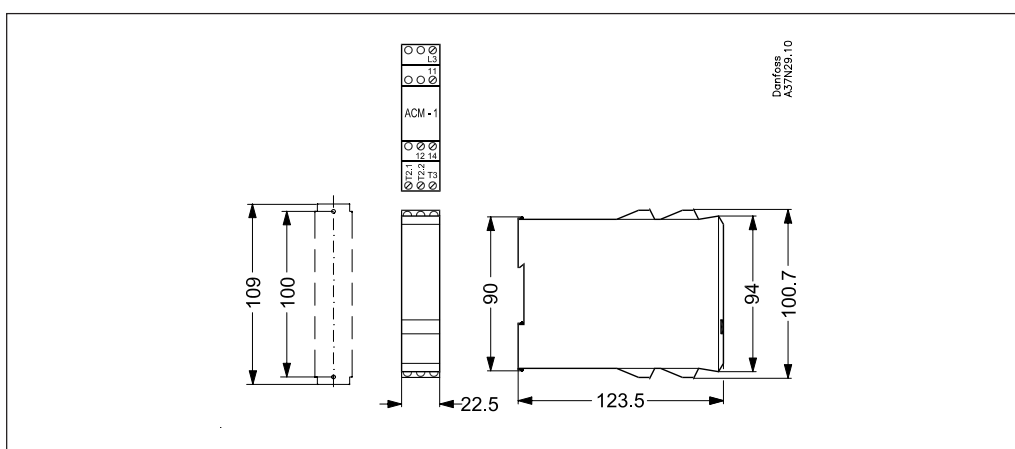
Relay output 11 - 12/14



### Timing diagram

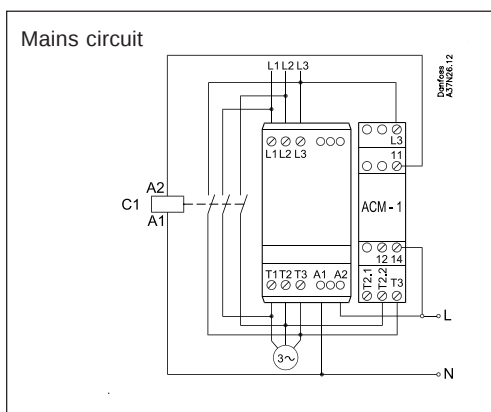


### Dimensions

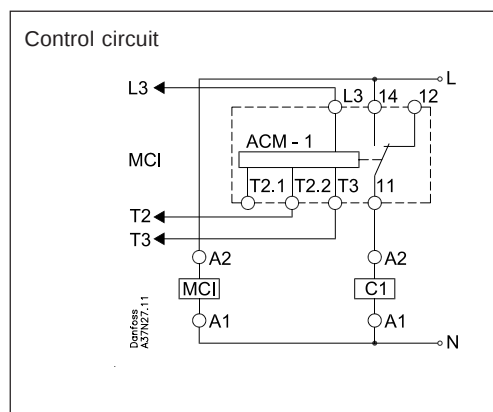


### Application examples

#### Control of bypass contactor



When the control signal A1-A2 is supplied to the soft starter ramp-up is initiated. When the ramp-time has elapsed the output relay in the ACM-1 will switch the bypass contactor on for limiting the power dissipation in the soft starter.

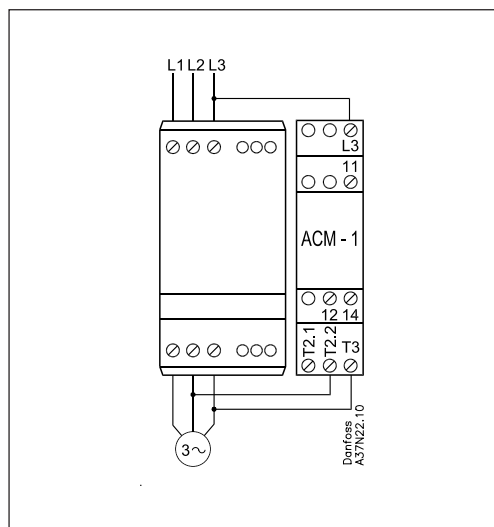


When the control voltage is switched off the bypass contactor will drop instantaneously before the semiconductors are switched off. In this application the contactor can be selected on the basis of the thermal current (AC-1).

*MCI /TCI*

*3 ph, 400 - 600 V ac*

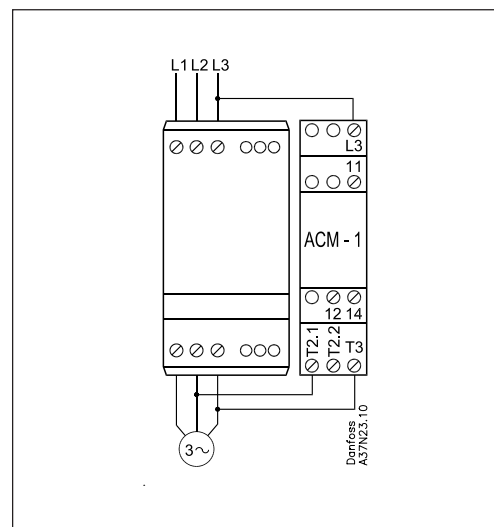
*Full-ON monitoring*



*MCI /TCI*

*3 ph, 208-240 V ac*

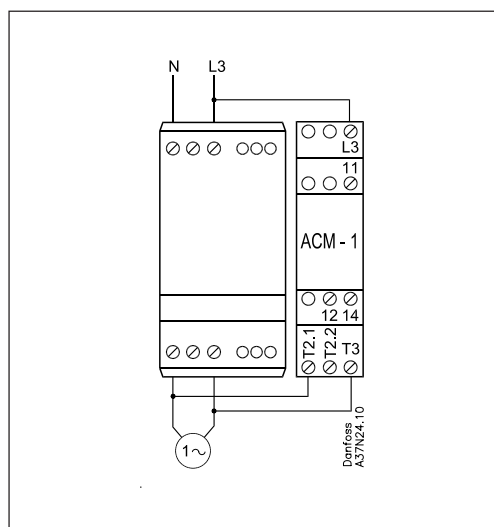
*Full-ON monitoring*



*TCI*

*1 ph, 208-240 V ac*

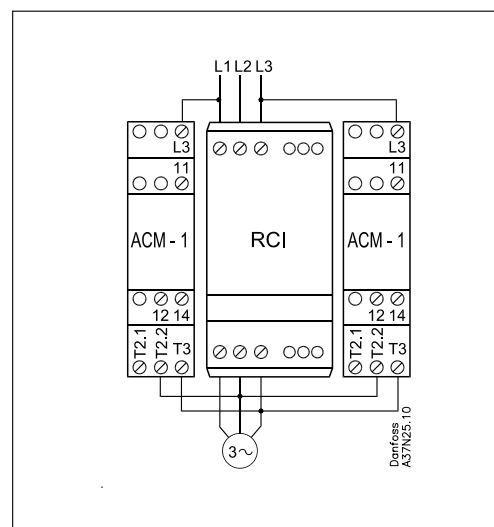
*Full-ON monitoring*



*RCI*

*3 ph, 400 V ac*

*ON monitoring*



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