

- Non intrusive current detection**

threshold detection from 0.2Aac to 500Aac predefined by the sensor

- Remote split core current sensor**

type Tio, pass-through diameter of 8,12,17,24 or 36mm

The threshold is predefined in sensor.

No adjustment is necessary

- Static relay output**

potential free closing contact

60V, 0.5A switching capacity

temporised from 0.025 to 60 seconds

- Application**

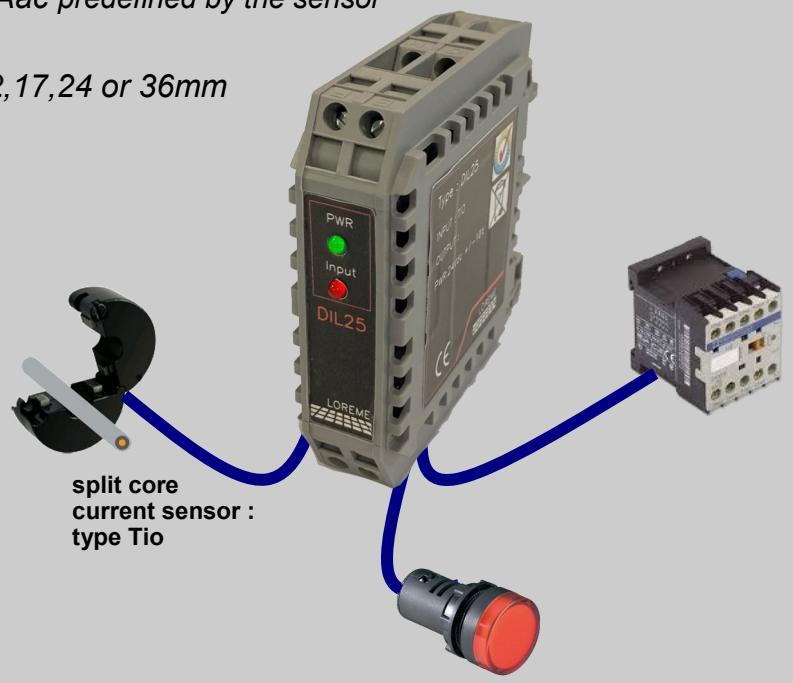
machine start-up detection,

Overcurrent detection, workbench

- DIL25CA : 24Vdc power supply**

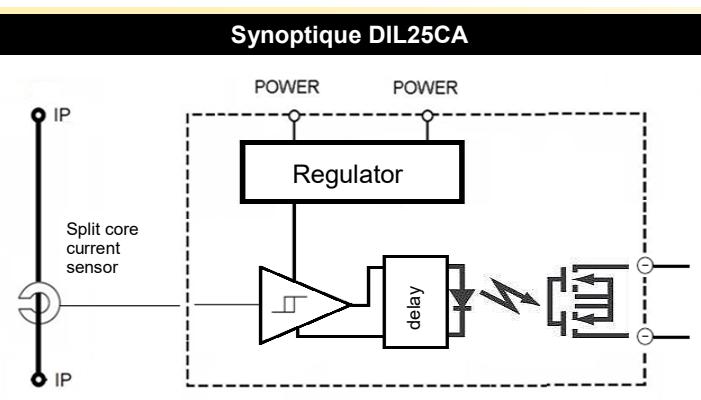
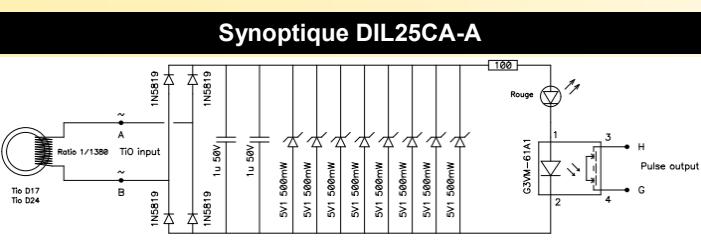
- DIL25CA-A : Self-powered**

- DIN rail mounting**



The DIL25CA is a threshold relay alternating current. It allows to economically solve the detection of starting up or overcurrent of equipment. Its split core current sensor can be implemented in an existing installation without modification. The sensor define the current threshold.

The static relay output can drive a lamp indicator, a relay or a PLC input.



**Associated current sensor: Tio d8 mA**

[http://www.loreme.fr/fichetech/Tio\\_eng.pdf](http://www.loreme.fr/fichetech/Tio_eng.pdf)



**Description :**

- Current input on remote split core current sensor. Type: Tio
- Threshold detection defined by the sensor (marking on sensor)
- 60V, 0.5A not polarized static relay output
- Output activated if primary current detected
- Detection delay < 20 ms ( primary current presence )
- Release delay from 0.025s to 60s ( 0.1 second by default ) in primary current absence

**Characteristics :**

- long term repeatability : better than 0.5 % / year.
- Operating temperature : up to 65°C
- Resistant to shocks and vibrations.

**Feature :**

- Green LED indicator for main supply (only DIL25CA)
- Red LED indicator for threshold detection
- symmetrical DIN rail mounting according to EN50022
- Wiring on screw terminals (wire: 2.5 mm<sup>2</sup>)
- Isolation : power supply / relay
- Protection rating : IP 20 + conformal coating

**Version and order code:**

**Request a quote**

**DIL25CA-T :** - Current detection relay ( threshold define by sensor )  
- T: release delay. Adjusted in factory  
(0.025s by default. Up to 1 minute)

**DIL25CA-A:** - Self-powered, current detection relay  
(threshold define by sensor)

**Tios d8-A** : 8 mm hole voltage output split core CT (30A threshold max)  
**Tios d12-A** : 12 mm hole voltage output split core CT (90A threshold max)  
**Tios d17-A** : 17 mm hole voltage output split core CT (160A threshold max)  
**Tios d24-A** : 24 mm hole voltage output split core CT (250A threshold max)  
**Tios d36-A** : 34 mm hole voltage output split core CT (500A threshold max)

**-A :** Current threshold to define (from 0.2Aac to 500Aac)

**INPUT**

current transformer sensor (Tio type), threshold: 0.2Aac to 500Aac.  
Internal protection against peak current with transient voltage suppressor diode

Overcurrent max. 2x In of selected CT sensor

**OUTPUT**

Static output with MOSFET transistor (isolated)  
Switching capacity : 60Vac-dc, 500mAac-dc  
Standard activation delay : <20ms  
Standard release delay : 100ms  
25ms to 60s on request

**POWER SUPPLY**

DIL25CA : 12Vdc ... 35Vdc, consumption < 10mA  
DIL25CA-A : self-powered with signal of current sensor

**ENVIRONMENT**

Operating temperature : -20 to 65 °C  
Storage temperature : -40 to +85 °C  
Influence on current threshold: < 0.02 % / °C  
Humidity : 85 % non condensing

Protection rating: (according to EN 60 529) IP 20

Weight: 100 g  
Dielectric strength (power supply / relay) 1500 Vac continuous  
MTBF (MIL HDBK 217F) > 4 000 000 Hrs @ 25°C  
Life time > 300 000 Hrs @ 30°C

**Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE**

Immunity standard for industrial environments EN 61000-6-2	Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

EN 55011

group 1  
class A**WIRING AND OUTLINE DIMENSIONS DIL25CA and DIL25CA-A**