

Threshold relay for AC current DSL35LCA



- **AC current control**
Up to 500Aac 50Hz/ 60Hz /400Hz
RMS measure for all input type,
PWM, phase angle variation,
wave train, signal with high harmonics content
- **DSL35LCA - peak** : peak detection
- **Measure input by split-core current transformer**
- **1000 pts LED display for measurement**
- **2 thresholds adjustable by the front face**
threshold, delays, hysteresis
- **2 relays output 10A changeover contact**
- **DIN rail mounting**



The DSL35LCA is a threshold relay with current measurement. Compact it is designed to resolve economically problems of monitoring or protection. The LED display allows a fine setting of threshold and fast control of measure.

Applications:

- Protection, control, monitoring of electric load.

Input:

- Current up to 500Aac, frequency range of 40 to 500Hz.
- Measure with split core current transformer (500mVac output)
- This transformers are available in range 5A, 16A, 32A, 63A, 120A, 250A and 500A. Another range on request
- Current transformer ratio configurable
- Integration time configurable

DSL35LCA-peak

- : signal acquisition time of 500us,
- Threshold on the instantaneous absolute value,
- reaction time < 1ms, relay response time < 20ms

Front face:

- Measure display : 7 segments, 3 digits (1100pts), green LED, 10 mm height
- Over-range detection (display "Hi")
- 2 green LEDs for alarms status indication
- 2 push buttons (under the cover) for setting and configuration
- One serial link allowing the firmware update via an USB link (USB / jack 3.5 cable provide separately)

Relays:

- Free potential changeover contact,
- Threshold, sense of alarm, hysteresis, delays are setting with the front face buttons.

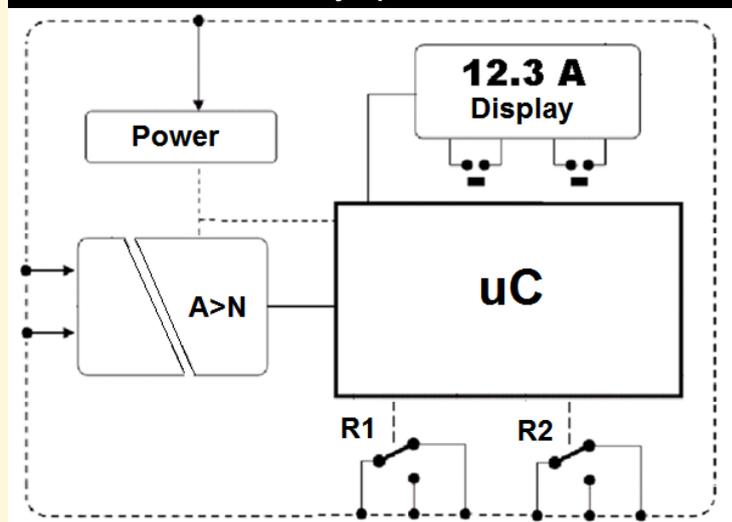
Features:

- long term stability 0.1% / year
- Operating temperature up to 65°C
- Great EMC performance.

Implementation:

- Symmetrical DIN rail mounting according to EN50022
- Wiring by spring terminals block. max : 1 mm²
or by screw terminals block. max: 2.5 mm²
- Isolation : power supply / input / relays
- Protection rating IP20 + Conformal coating

Synoptic:



Current transformer mV output

http://www.loreme.fr/.../Tio_eng.pdf

http://www.loreme.fr/.../TioL_eng.pdf

Remote split core current transformer
Very low profile, non intrusive
remote distance up to 30 meters
Measure up to 500 Aac



Version and order code:

[Request a quote](#)

- DSL35LCA/R1:** - version with 1 threshold, 1 relay output
- DSL35LCA/R2:** - version with 2 threshold, 2 relay output
- DSL35LCA-Peak:** - Peak detection version

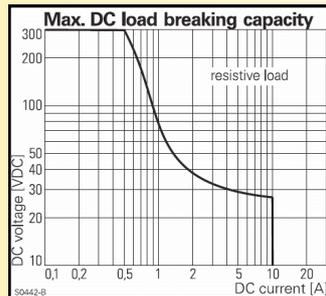
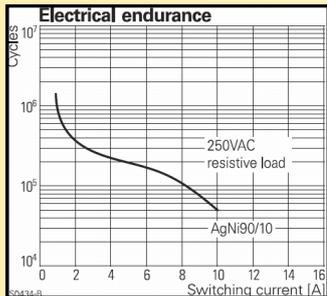
input : 333mVac or 500mVac for external split core transformer (TIO)

INPUT

TYPE	RANGE	ACCURACY
input for external CT	500mVac	+/-0.5%
input Impedance	> 10KOhms	
power consumption	negligible	
overload	20 rated current / 10s	
measure rating	continuous, programmable filter	
frequency	40 to 500Hz	

RELAY

changeover contact	: 1500 Vac
switching power	: 10 A / 250V
response time	: 20ms (peak) , 200ms to 60seconds
tripping repeatability	: +/- 0.2%
minimum detection threshold	: 2% of full range



POWER SUPPLY

20 to 265Vac-dc standard or 11 to 30Vac-dc
power consumption < 1.5VA

ENVIRONMENT

operating Temperature	-20 to 65 °C
storage Temperature	-40 to 85 °C
influence (% of full scale)	0.02 % / °C
humidity	85 % (not condensed)
protection rating (according to EN 60529)	IP20
weight	150 g
MTBF (MIL HDBK 217F)	> 3 000 000 Hrs @ 25°C
Life time	> 200 000 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 55011 group 1 class A
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	



WIRING AND OUTLINE DIMENSIONS:

