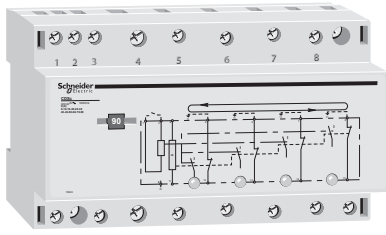


CDSc cyclic threshold load-shedding contactor single-phase



cat. No. : 15906  

the CDSc has been designed with your needs in mind

CDSc use means

- load-shedding and reconnection of up to four non-priority circuits.
- the electrical installation is divided into 5 parts including :
 - 1 priority circuit, which is never interrupted.
E.g. : lighting, power outlets, electric range, refrigerator, etc.
 - 4 non-priority circuits which are interrupted by load-shedding if the total load consumption exceeds the current setting on the incoming circuit breaker.
E.g. : electric heating or hot water heater circuits.

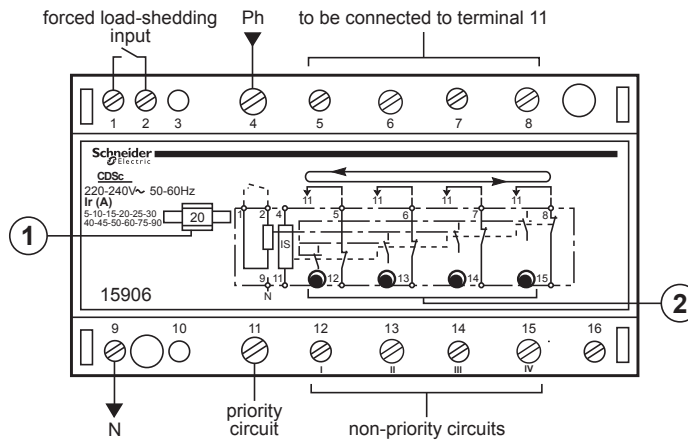
CDSc applications mean

- power consumption is kept below the installed load or the subscribed power on the electricity board contract, optimizing consumption and avoiding the tripping of the line protective device or incoming circuit breaker.

discovering your CDSc

Legend

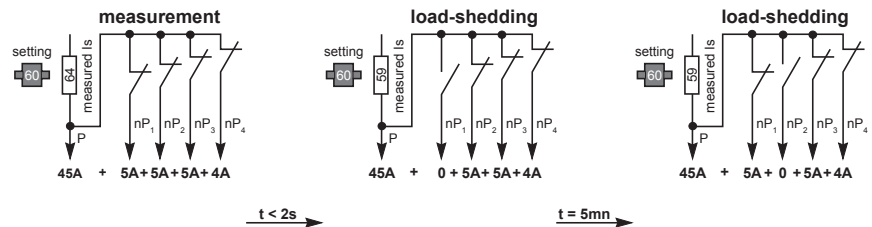
- 1 - Setting.
- 2 - Indicating light illuminated = circuit off (shed).



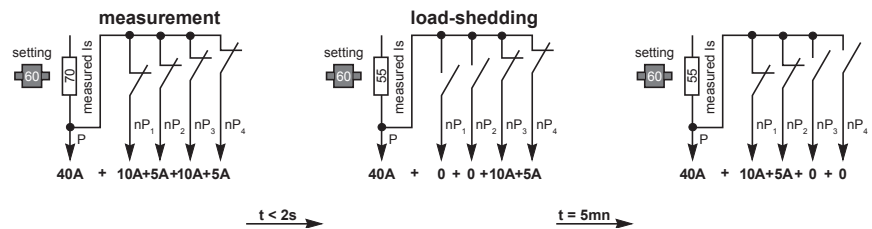
CDSc operating principle means

- the CDSc monitors your consumption, automatically disconnecting one or more non-priority circuits when the set threshold is exceeded.
- load-shedding circuit selection based on cascading followed by rotation (i.e. cyclic load-shedding), as illustrated in the example below.
 - shed circuits are indicated by a yellow light.
- after a time delay of approximately 5 minutes, the shed circuits are automatically reconnected and remain on if the overload has been cleared. If the overload persists, another load-shedding cycle is initiated.
- the four non-priority circuits may also be disconnected simultaneously by either a forced load-shedding order (via a volt-free contact connected to terminals 1 and 2), by a control relay or by a time switch such as the IH, IHP, ect.

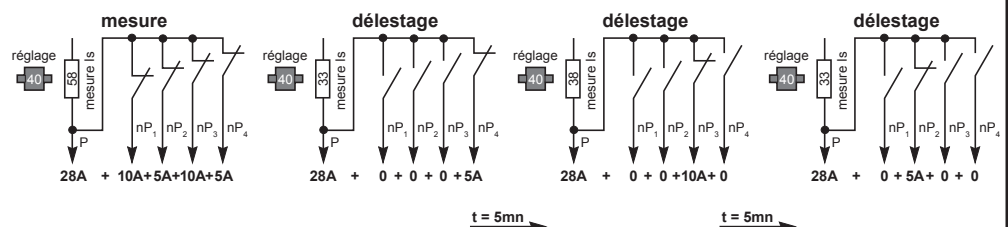
Example 1 : rotation of non-priority circuits.



Example 2 : cascading + rotation of non-priority circuits.



Example 3 : cascading + rotation of non-priority circuits.

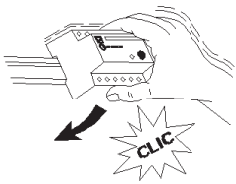


installing your CDSc

CAUTION

- Non-priority outputs must not be directly connected:
 ■ Non-priority outputs must be relayed using contactors.

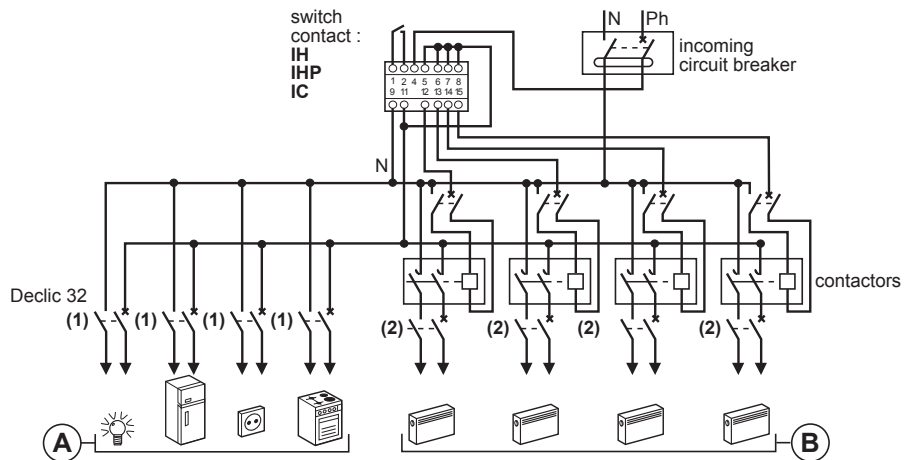
Fixing



- by clipping onto a 35 mm DIN rail.
- by two 4 mm diameter screws onto any panel (in any position).

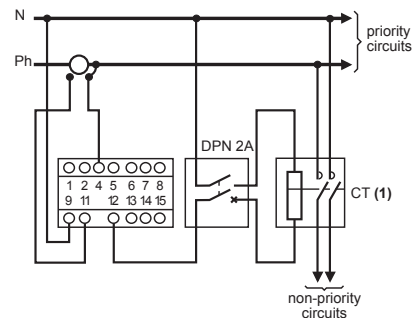
- (1) Determine the circuit breaker ratings in terms of the cable cross-sectional areas.
- (2) Calculate the contactor ratings in terms of the load power ratings.

- A** Non-sheddable priority loads.
B Sheddable non-priority loads.



setting your CDSc

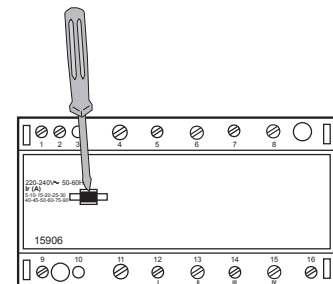
- to shed currents greater than 90A, the CDSc must be used together with current transformer.



- (1) Calculate the contactor ratings in terms of the load power ratings.

- Set the selector to the secondary current of the CT used, ie. generally 5A.

- using a screwdriver, set the selector to the required rating (generally the rating of the incoming circuit breaker).
- the selector setting can be sealed in each position.



technical data

- input voltage : 220V $\sim \pm 15\%$ – 240V $\sim \pm 6\%$
- frequency : 50/60Hz.
- power consumption : 4VA maxi.
- current ratings :
 - priority circuit : 90A $\cos \varphi = 1$
 - non-priority circuits (volt-free) : 2A $\cos \varphi = 1$
- settings : 5, 10, 15, 20, 25, 30, 40, 45, 50, 60, 75, 90A

- load-shedding time : less than 2s at 1.1 Ir.
- load reconnection delay : 5 mn 30s.
- connection terminal capacities :
 - priority circuit : (2,5 à 50 mm² solid cable) – 35 mm² (flex),
 - non-priority circuit, neutral and forced input terminals : 1.5 to 10 mm² (solid and flexible cable).
- temperature range : – 25°C to + 60°C.
- dimensions : 16 width modules (1 module = 9 mm).
- weight : 0,60 kg. (approx.).

Schneider Electric Industries SAS
 35, rue Joseph Monier
 CS 30323
 F - 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439
 Capital social 896 313 776 €
 www.schneider-electric.com

726 057BE

Ce produit doit être installé, raccordé et utilisé en respectant les normes et/ou les règlements d'installation en vigueur.

En raison de l'évolution des normes et du matériel, les caractéristiques et cotes d'encombrement données ne nous engagent qu'après confirmation par nos services.

This product must be installed, connected and used in compliance with prevailing standards and/or installation regulations.

As standards, specifications and designs change from time to time, always ask for confirmation of the information given in this publication.

© 01-2011 Schneider Electric - All rights reserved.