DATA SHEET

load-shedding relays

RLR 1

for avoiding current peaks

Article number 09980283

Function

Load-shedding relays switch off a connected consumer when another consumer connected via the coil input is switched on. Therefore, simultaneous operation of powerful consumers such as night storage heaters and continuous-flow heaters can be avoided, preventing surges. Devices from the RLR series have one potential-free NC relay with a housing width of just one module width unit. In comparison to the RLR 1, the RLR 2 has an additional drop-off delay for the operation of electronic continuous-flow heaters.

Features

coil input up to 5.3 A, potential-free relay as NC contact up to 1 A, drop delay 0 (RLR 1) or 2 mains half-waves (RLR 2), module width just 1 unit (17.5 mm), protection class IP20

Mounting

quick fastening to mounting rail, any installation position

Applications

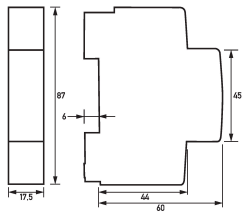
The load-shedding relays can be used anywhere where the simultaneous operation of powerful electrical consumers is undesired and a consumer operating over a long time can be switched off, e.g. for night storage heaters and continuous-flow heaters.

Technical Data

Technical Data	RLR 1
Series	RLR 1
max. Surveillance current	43 A
Number of (n.o, n.c.,change-over)	0|1|0
Tripping delay	20 ms
Switch-on threshold range shading current	3.1 A ... 5.3 A
Overload factor	2.3 (for ≤ 10 s)
Operating voltage (AC)	230 V
	control input
Rated voltage (AC)	230 V
Rated current In	6.7 A ... 39 A
Rated power	0.5 VA ... 4 VA
Specification	relays
Rated voltage (AC)	400 V
Rated current (AC)	1 A
Rated power	max. 250 VA
Switching frequency	max. 30 1/min
Allowed utilization category	AC-1, AC-15, AC-3
Rated voltage AC-15 (fix)	250 V
min. Rated current 12/24 V	0.01 A
min. Rated current 230 V	0.01 A
max. Rated current AC-15	0.5 A

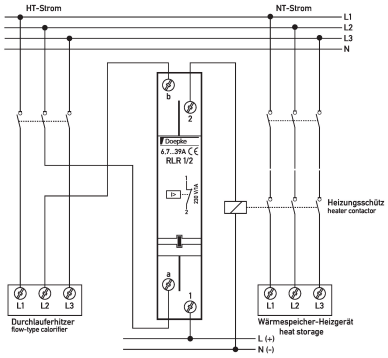
Technical Data	RLR 1
Rated voltage AC-1 (fix)	250 V
max. Rated current AC-1	1 A
Rated voltage AC-15 (fix)	250 V
max. Rated current AC-15	0.5 A
	screw-type terminal bottom (coil input)
Cross section solid	1-wire: 2.5 mm² ... 16 mm²
Cross section stranded	1-wire: 2.5 mm² ... 16 mm²
	screw-type terminal top (load circuit)
Cross section solid	1-wire: 0.75 mm² ... 4 mm²
Cross section stranded	1-wire: 0.75 mm² ... 4 mm²
	General data
Duty cycle	continuous operation (Duty cycle ≤ 100 %)
Operating position	optional
Mechanical endurance	min. 100 · 10⁶ switching cycles
Electrical endurance	min. 1 · 10⁶ switching cycles
Ambient temperature	-20 °C ... 40 °C
Housing type	distribution board housing
Installation type	Mounting rail (35 mm)
Housing material	polycarbonate (PC)
Protection class	IP40
Width	17.5 mm
Height	87 mm
Depth	65 mm
Installation depth	60 mm
Module widths	1
Weight	0.089 kg
Design requirements/Standards	EN 60715

Dimensions



Dimensional drawing Group view

Wiring example



Wiring diagram