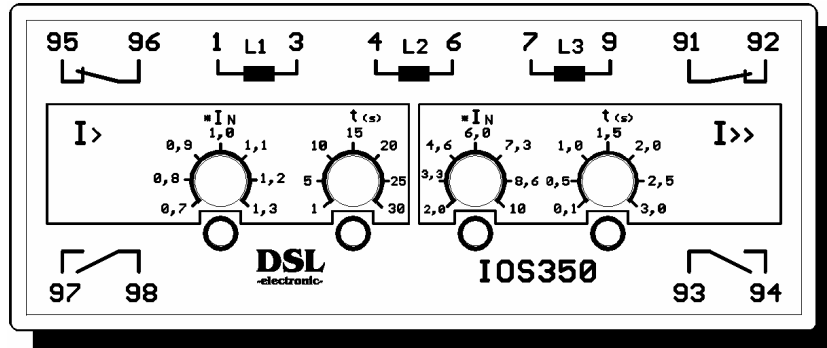


Independent Overcurrent / Shortcircuit-time relay

**IOS350 (5A)
 IOS310 (1A)**



Application

The independent overcurrent time relay IOS350/310 is made use of for overload and short-circuit protection measures, especially for generators.

Function

The unit monitors the actual value of an alternating current. When a setting value is going to be exceeded, a timing circuit will be started. Upon expiration of the delay time, the output relay will be activated. The independent overcurrent time relay IOS350/310 draws its own power supply from the input signal; it does not need any separate auxiliary voltage supply. The "triggering time" is independent of the level of the actual value. As a consequence, the unit is particularly suitable as a protection unit for time-selective protection systems. Due to the consequent utilization of the existing technology, the two functions "overcurrent protection" and "short -circuit protection" could be integrated in one housing. For the manufacturer of switching gears, this results in considerable switchgear space and wiring expenditure savings.

Overcurrent function circuit with: 0.7 to 1.3 x rated current and delay time 1.0 to 30 sec
 Short -circuit function circuit with : 2.0 to 10 x rated current and delay time 0.1 to 3.0 sec

Technical Data

Type	Independent overcurrent / shortcircuit time relay IOS350 (5A) und IOS310 (1A)
Construction	Plastic housing on 35 mm hat rail acc. to DIN EN 50022
Material of housing	Bayblend FR 1439/0240 modified ABS with burning protection UL 94 VO
Dimensions, Weight	104x68x110mm (WxHxD), appr. 0,8 kg
Power consumption	appr. 2,5 VA from measuring signal
Repeat accuracy	1%
On period	100 % with 1,2 * rated current
Rated current	5A (IOS350), 1A (IOS310), 40 - 60Hz, 400Hz on request
Overcurrent resistant	10 times rated current for 1 second
Contact rating	5A/250VAC , 5A/30VDC , 0,01 Ohms , 10 ⁵ switchings
Isolating voltage	3750V (Coil-contact), 1200V (open contact)
Connecting terminals	Potentialfree, for wire connection up to 2,5 mm ²
Type of protection	Housing IP 40 , Terminals IP 20 (VDE 0106T100/VBG4)
Ambient temperatures	-10 °C bis +55°C, 95% Hum
Mains isolating	EN 60 742 (Safety transformers)
General regulations	EN 50 178 (Electrical units in power current installation)
Radio interference	EN 55 022/B
EMV	EN 61000 and EN V 50 140
Installation position	Any
Maintenance	Maintenancefree