

Independent Overcurrent / Shortcircuit-time relay

**IOS35G (5A)
 IOS31G (1A)**



Application

The independent overcurrent time relay IOS35G 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 IOS35G 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 : 1.5 to 2.7 x rated current and delay time 0.1 to 3.0 sec

Technical Data

Type	Independent overcurrent / shortcircuit time relay IOS35G (5A) und IOS31G (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 (IOS35G), 1A (IOS31G), 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