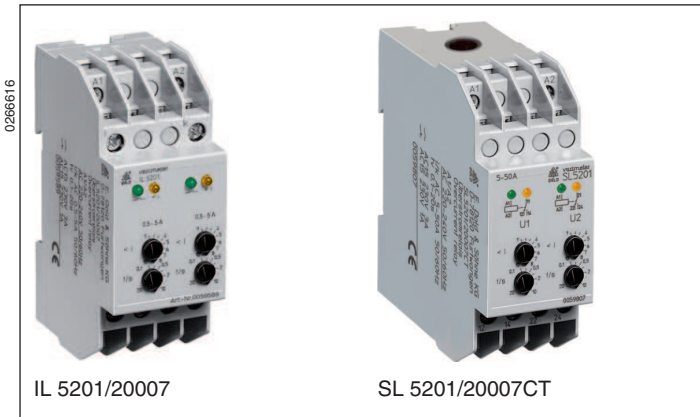


VARIMETER

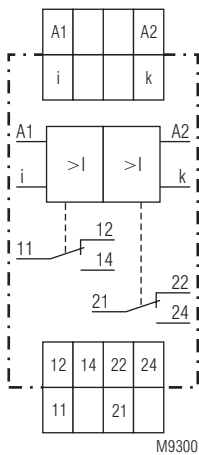
Overcurrent Relay

IL 5201/20007, SL 5201/20007CT



- According to IEC/EN 60 255, DIN VDE 0435-303
- 2 independent relays in once enclosure
- 2 measuring ranges from 0.5 to 5 A
- Adjustable response values
- Fixed hysteresis
- Adjustable switching delay
- Closed circuit operation
- LED indicators
- with auxiliary voltage
- galvanic separation between Auxiliary Circuit and Measuring Circuit
- **2 models available:**
 - IL 5201:** 63 mm deep with terminals near to the bottom to be mounted in consumer units or industrial distribution systems according to DIN 43 880
 - SL 5201:** 100 mm deep with terminals near to the top to be mounted in cabinets with mounting plate and cable ducts
- Width: 35 mm

Circuit Diagram



Approvals and Marking



Application

Overcurrent detection in single phase or 3-phase voltage systems

Indicators

LEDs green: on, when supply voltage connected
 LEDs yellow: on, when output relay active

Technical Data

Measuring Circuit

Measuring ranges
 IL 5201/20007: 2 separate Measuring Circuits 0.5 ... 5 A adjustable
 SL 5201/20007CT: 2 separate Measuring Circuits 5 ... 50 A adjustable

Nominal frequency: 50 ... 400 Hz

Thermal continuous current ambient-temperature:
 20 A / 50°C
 15 A / 60°C

Temperature influence: ≤ 0.05 % / K

Reaction time: see characteristic switching delay

Internal resistance: < 5 mΩ

Setting Ranges

Setting of response value: infinitely variable at measuring range
Hysteresis: approx. 4 % of setting range, factory set fixed value

Repeat accuracy: ≤ ± 1 %

Time delay tv: 0.1 ... 20 s adjustable

Auxiliary Circuit

Auxiliary voltage U_H: AC 220 ... 240 V

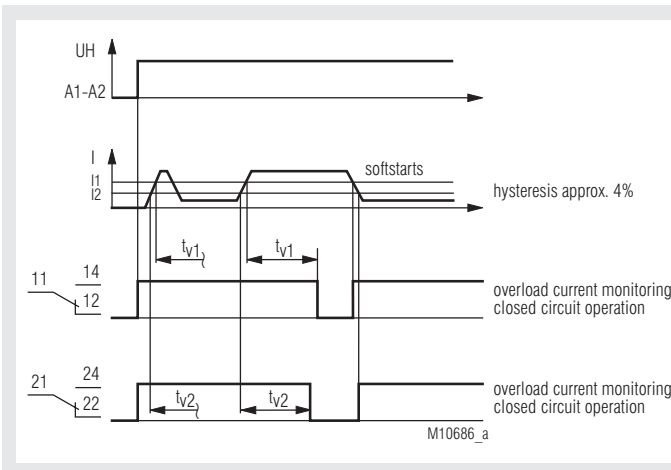
Voltage range: 0.8 ... 1.1 U_H

Nominal consumption: 2 x 2.3 VA

Nominal frequency: 50 / 60 Hz

Frequency range: ± 5 %

Function Diagram



Technical Data

Output

Contacts:	2 x 1 changeover contacts	
thermal current I_{th}:	2 x 5 A	
Switching capacity to AC 15		
NO contact:	3 A / AC 230 V	IEC/EN 60 947-5-1
NC contact:	1 A / AC 230 V	IEC/EN 60 947-5-1
Electrical life to AC 15 at 1 A, AC 230 V		
NO contact:	3 x 10 ⁵ switch. cycl.	IEC/EN 60 947-5-1
Short circuit strength max. fuse rating:	4 A gL	IEC/EN 60 947-5-1
Mechanical life:	> 50 x 10 ⁶ switching cycles	

General Data

Nominal operating mode:	continuous operation	
Temperature range:	- 20 ... + 60°C	
Clearance and creepage distance rated impuls voltage / pollution degree:		IEC 60 664-1
Auxiliary voltage-contacts:	4 kV/2	
Auxiliary voltage-measur. circuit:	6 kV/2	
Measuring circuit-contacts:	6 kV/2	
The contacts are not designed for voltage systems with 400 / 690 V		
EMC		
Electrostatic discharge (ESD):	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation:	10 V/m	IEC/EN 61 000-4-3
Fast transients:	4 kV	IEC/EN 61 000-4-4
Surge voltage between		
wires for power supply:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
interference suppression:	Limit value class B	EN 55 011
Degree of protection:		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
Housing:	thermoplastic with VO behaviour accroding to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm frequency 10 ... 55 Hz, IEC/EN 60 068-2-6 20 / 060 / 04 IEC/EN 60 068-1	
Climate resistance:	EN 50 005	
Terminal designation:	EN 50 005	
Wire connection:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² stranded wire with sleeve DIN 46 228-1/-2/-3/-4	
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1 DIN rail IEC/EN 60 715	
Mounting:		
Weight		
IL 5201/20007:	approx. 124 g	
SL 5201/20007CT:	approx. 245 g	

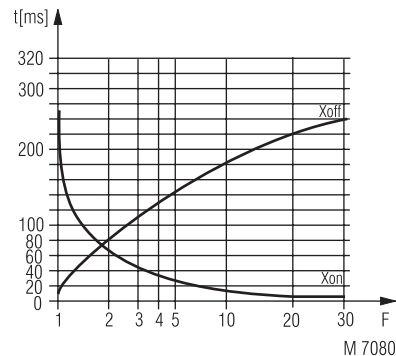
Dimensions

IL 5201/20007:	35 x 90 x 63 mm
SL 5201/20007CT:	35 x 90 x 100 mm

Standard Types

IL 5201/20007	AC 220 ... 240 V	50/60 Hz	0,5 ... 5 A
Article number:	0059589		
<ul style="list-style-type: none"> • single phase • 2 adjustable measuring ranges up to 5 A • Closed circuit operation • Auxiliary voltage U_H AC 220 ... 240 V • 2 x 1 changeover contacts • Width: 35 mm 			
SL 5201/20007CT	AC 220 ... 240 V	50/60 Hz	5 ... 50 A
Article number:	0059807		
<ul style="list-style-type: none"> • single phase • 2 adjustable measuring ranges up to 50 A • Closed circuit operation • Auxiliary voltage U_H AC 220 ... 240 V • 2 x 1 changeover contacts • Width: 35 mm 			

Characteristic



Switching delay

The characteristic shows the switching delay depending on the values of X_{on} - X_{off} when switching the current on or off. A slow current change reduces the delay.

$$F = \frac{I_{\text{applied}}}{I_{\text{setting}}}$$