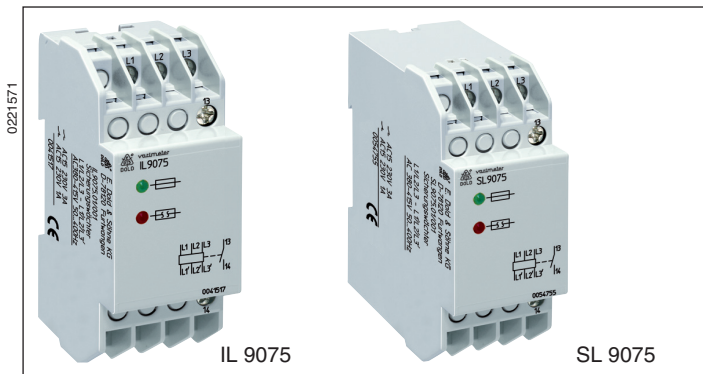


VARIMETER

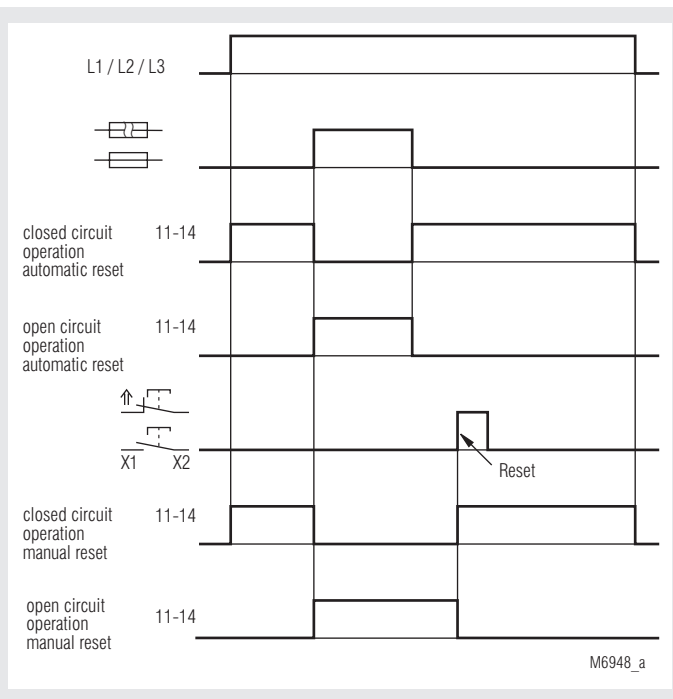
Fuse Monitor

IL 9075, IP 9075, SL 9075, SP 9075



- According to IEC/EN 60 255, DIN VDE 0435-303
- Recognizes fuse failures in three-phase mains up to 3 AC 690 V
- Can be used for all types and sizes of fuses
- Independent of phase sequence
- Signals even if loads are switched off
- No malfunction on
 - asymmetrical mains
 - mains with harmonic waves
 - motors producing feedback
- Shorter response time than with motor circuit-breakers
- Green LED for intact fuses
- Red LED for fuse failure
- As option: open/closed circuit operation in the case of IP 9075 programmable via X4-X5 or X3-X4
- As option: with manual reset function and remote reset, programmable via X1-X2
- As option: 1 NO contact or 2 changeover contacts
- **Devices available in 2 enclosure versions:**
 - I-model:** depth 59 mm, with terminals at the bottom for installation systems and industrial distribution systems according to DIN 43 880
 - S-model:** depth 98 mm, with terminals at the top for cabinets with mounting plate and cable duct
- IL 9075, SL 9075: width 35 mm
- IP 9075, SP 9075: width 70 mm

Function Diagram



Approvals and Marking



Applications

Fuse monitoring in the three-phase mains, e.g. for automatic switching-off and switch-on blockage of three-phase motors in the event of one or more phase fuses failing.

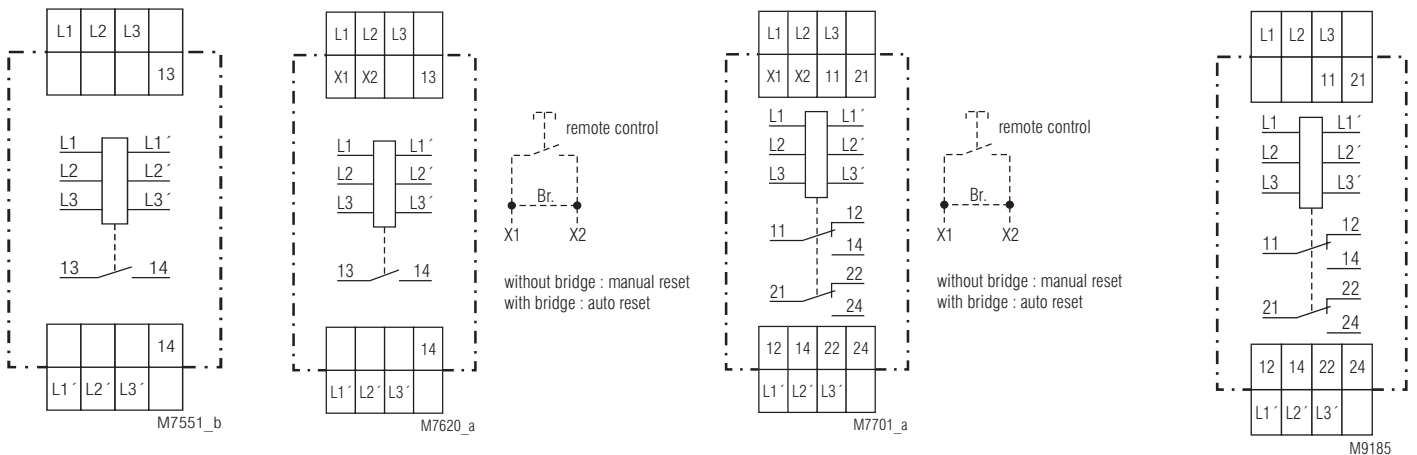
Indicators

green LED: for healthy fuse
red LED: for blown fuse

Notes

The internal resistance of the fuse monitor's measuring path is in the MOhm range, meaning that the regulations as regards touch voltage are fulfilled if a fuse is not present or if it is faulty (IEC 974-1, internal resistance > 2000 Ohm/V).

Circuit Diagrams



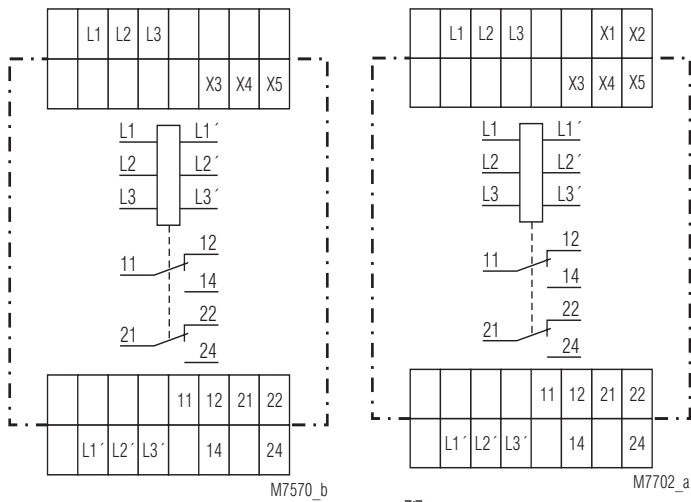
IL 9075.01,
SL 9075.01

IL 9075.01/01_
SL 9075.01/01_

IL 9075.12/01_
SL 9075.12/01_

IL 9075.12/001,
SL 9075.12/001

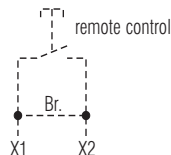
Circuit Diagrams



IP 9075.12, SP 9075.12

M7570_b

M7702_a



without bridge : manual reset
with bridge : auto reset

IP 9075.12/010, SP 9075.12/010

Technical Data

Input

Nominal voltage U_N :

IL/SL 9075.01/_ _ _ :	3 AC 110 ... 127 V
	3 AC 220 ... 240 V
	3 AC 380 ... 415 V
	3 AC 400 ... 440 V
IL/SL 9075.12/_ _ _ :	3 AC 110 V
	3 AC 230 V
	3 AC 400 V
IP 9075, SP 9075:	3 AC 480 ... 550 V, 600 ... 690 V
Voltage range:	0.8 ... 1.1 U_N

Nominal consumption:

IL 9075, SL 9075:	2.0 VA (on L2 / L3)
IP 9075, SP 9075:	3.0 VA (on L1 / L2)

Nominal frequency:

50 ... 400 Hz

Internal resistance of the measuring paths:

> 2000 Ω/V

Permissible feedback:

max. 90 %

Output

Contacts

IL/SL 9075.01/_ _ _ :	1 NO contact
IL/SL 9075.12/_ _ _ :	2 changeover contacts
IP/SP 9075.12/_ _ _ :	2 changeover contacts

Response/release time:

closed circuit operation

IL/SL 9075._ _/001:	< 50 ms
IL/SL 9075._ _/011:	< 50 ms
IP/SP 9075:	< 50 ms

open circuit operation

IL/SL 9075._ _ :	< 500 ms
IL/SL 9075._ _/010:	< 500 ms
IP/SP 9075:	< 500 ms

Output nominal voltage:

max. AC 250 V

Thermal current I_{th} :

4 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

Technical Data

Electrical life

to AC 15 at 1 A, AC 230 V

IL/SL 9075:

1.5 x 10⁵ switching cycles

IP/SP 9075:

2.5 x 10⁵ switching cycles

Short circuit strength

max. fuse rating:

4 A gL IEC/EN 60 947-5-1

Mechanical life:

> 10⁸ switching cycles

General Data

Operating mode:

Continuous operation

Temperature range:

- 20 ... + 60 °C

Clearance and creepage distances

rated impuls voltage /

pollution degree:

4 kV / 2 IEC 60 664-1

EMC

Electrostatic discharge:

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 voltages

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 V0 behaviour

according to UL subject 94

Vibration resistance:

Amplitude 0.35 mm,

frequency 10 ... 55 Hz IEC/EN 60 068-2-6

Climate resistance:

20 / 060 / 04 IEC/EN 60 068-1

Terminal designation:

2 x 2.5 mm² solid or

2 x 1.5 mm² stranded ferruled

DIN 46 228-1/-2/-3/-4

Wire fixing:

Flat terminals with self-lifting

clamping piece IEC/EN 60 999-1

Mounting:

DIN rail IEC/EN 60 715

Weight:

IL 9075: 130 g

SL 9075: 157 g

IP 9075: 255 g

SP 9075: 304 g

Dimensions

Width x height x depth

IL 9075: 35 x 90 x 59 mm

SL 9075: 35 x 90 x 98 mm

IP 9075: 70 x 90 x 59 mm

SP 9075: 70 x 90 x 98 mm

Standard Types

IL 9075.01/001 AC 380 ... 415 V 50 ... 400 Hz
 Article number: 0041517 stock item
 SL 9075.01/001 AC 380 ... 415 V 50 ... 400 Hz
 Article number: 0054755
 Closed circuit operation
 Automatic reset
 1 NO contact
 Nominal voltage U_N : AC 380 ... 415 V
 Width: 35 mm

Variants

For rated voltages up to 3 AC 400 resp. 440 V:
 IL 9075. __ : open circuit operation, automatic reset
 IL 9075. __ /001 : closed circuit operation, automatic reset
 IL 9075. __ /010 : open circuit operation, manual reset
 IL 9075. __ /011 : closed circuit operation, manual reset

For rated voltages up to 3 AC 690 V,
 open/closed circuit operation, settable:
 IP 9075.12 : automatic reset
 IP 9075.12/010 : manual reset or automatic reset settable

Ordering example for variants

IL 9075 .01 / _ _ _ AC 380 ... 415 V 50 ... 400 Hz

Nominal frequency
 Nominal voltage
 Variant, if required
 Contact
 Type

Specification for Tender for IL 9075, SL 9075

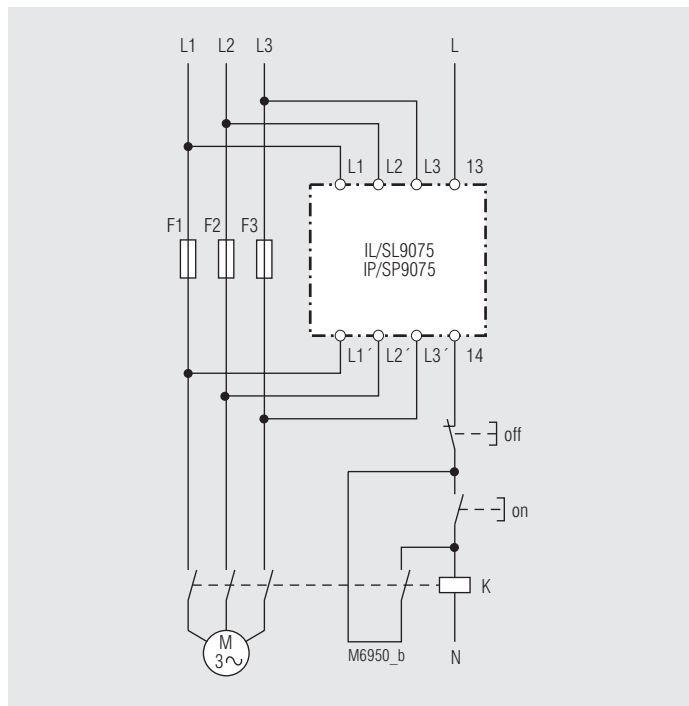
Fuse monitor according to IEC/EN 60 255, VDE 0435, to be mounted in distribution boxes, detects blown fuses in voltage systems up to 690 V (IL/SL 9075 only up to 415 V), can be used for all types of fuses and line circuit breakers also when load is switched off, 1 NO contact, energized on fault, 2 LED indicators, width 35 mm
 Type IL 9075.01
 Manufacturer E. DOLD & SÖHNE KG

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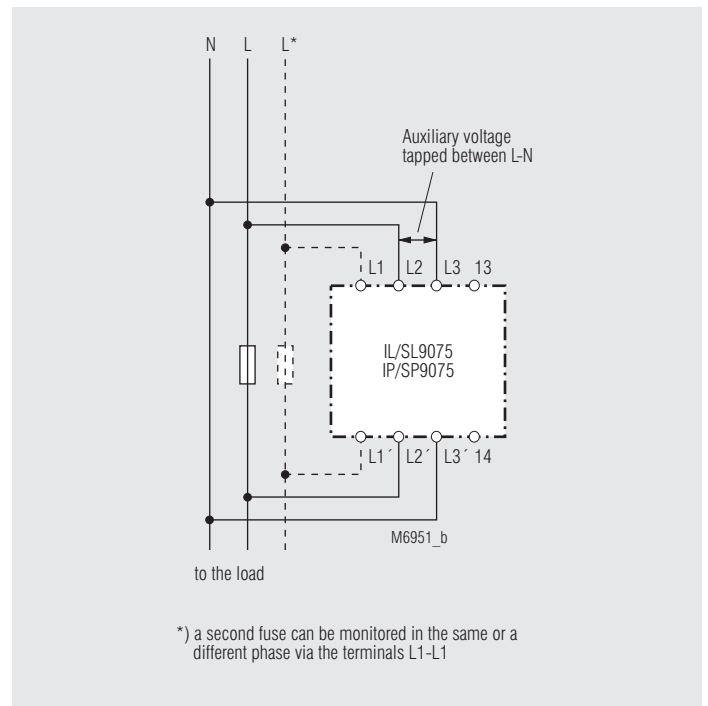
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 Manufacturer E. DOLD & SÖHNE KG

Connection Examples



Fuse monitoring in the 2-phase mains, e.g. for motor protection with IL 9075/001 or with IP 9075, closed circuit operation, jumper X3-X4



Fuse monitoring in the alternating current mains

*) a second fuse can be monitored in the same or a different phase via the terminals L1-L1

