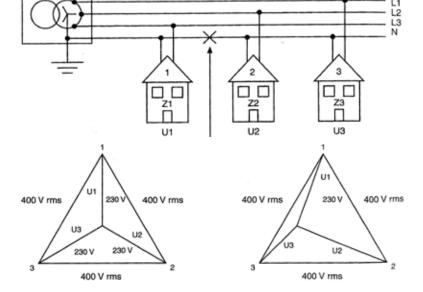


Residual current circuit breakers with integral overcurrent protection LIMAT-DN

Why do overvoltages in the net appear?

If the neutral line is broken and the loads Z2 and Z3 are not equal instead of correct voltage diagram (left) a disfiguration appears (right).



The solution is LIMAT with overvoltage protection.

Overvoltage protection:

Tripping voltage: $270 \pm 10 \text{ V}$

Tripping time: $\leq 0.2 \text{ s}$

No tripping at U = 300 V and $t \le 0.05 \text{s}$ Tripping at $45 \pm 5 \text{ V}$ on neutral line

Tripping, if line and neutral conductor are changed;

optical indication

Tripping, if neutral or earth conductor is broken;

optical indication

Technical data	
Rated voltage U _n	230/400 V AC
Rated current I	6 – 50 A
Rated frequency f _n	50 / 60 Hz
Tripping characteristic	B, C
Rated residual current I	100, 300 mA
Type of residual current tripping	AC, A
Rated short- circuit capacity $I_{\rm cn}$	10 kA; ln ≤ 40 A 6 kA; ln ≥ 50 A
Energy limiting class	3
Terminals	1 – 25 mm², max. 3 Nm
Mounting position	any
Standards	IEC 61009, EN 61009

Signalisation	
₱ PE , L - N	PE conductor is interrupted or misconnection of line (L) and neutral (N) conductor, RCBO switch off
>270 V, 45±5 V (U _{PE-II})	overvoltage of 270 \pm 10 V in anz phase or neutral conductor voltage 45 \pm 5 V (U $_{\text{PE-N}}$), RCBO switch off
○ • N	neutral conductor (N) is interrupted, RCBO switch off, after re/connection of neutral conductor signalling switch off

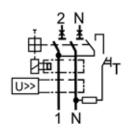
Meaning of symbols

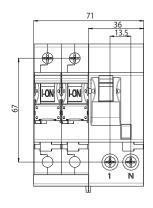
light emission
no light emission

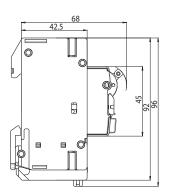
81



LIMAT2-DN

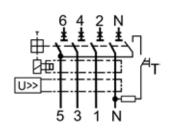


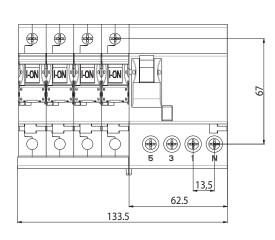


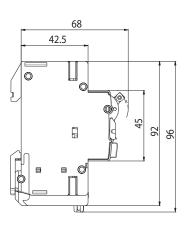


- Two protected poles (thermal and electromagnetic)
- Residual current protection
- Overvoltage protection:
 - Tripping voltage: 270 ± 10 V
 - Tripping time: ≤ 0,2 s
 - No tripping at U = 300 V and $t \le 0.05 \text{ s}$
 - Tripping at 45 ± 5 V on neutral line
 - Tripping, if line and neutral conductor are changed; optical indication
 - Tripping, if neutral or earth conductor is broken; optical indication
- Width of product: 4 modules.

LIMAT4-DN







- Four protected poles (thermal and electromagnetic)
- Residual current protection
- Overvoltage protection:
 - Tripping voltage: $270 \pm 10 \text{ V}$
 - Tripping time: \leq 0,2 s
 - No tripping at U = 300 V and $t \le 0.05s$
 - Tripping at $45 \pm 5 \text{ V}$ on neutral line
 - Tripping, if line, and neutral conductor are changed; optical indication
 - $\hbox{-} Tripping, if neutral or earth conductor is broken; optical indication \\$
- Width of product: 7,5 modules.