

| Conductor cross-section<br>[mm <sup>2</sup> ] | Number of single conductors, rigid, single-wire CU conductor |   |   |   |   |
|-----------------------------------------------|--------------------------------------------------------------|---|---|---|---|
|                                               | 1                                                            | 2 | 3 | 4 | 5 |
| 1,5                                           | ✓                                                            | ✓ | ✓ | ✓ | ✗ |
| 2,5                                           | ✓                                                            | ✓ | ✓ | ✗ | ✗ |
| 4                                             | ✓                                                            | ✓ | ✓ | ✗ | ✗ |
| 6                                             | ✓                                                            | ✓ | ✗ | ✗ | ✗ |
| 10                                            | ✓                                                            | ✓ | ✗ | ✗ | ✗ |
| 16                                            | ✓                                                            | ✗ | ✗ | ✗ | ✗ |
| 25                                            | ✓                                                            | ✗ | ✗ | ✗ | ✗ |

Remark: When you use more than 2 cables you have to be careful how those cables are inserted, due to insure proper pressure on each cable

| Conductor cross-section<br>[mm <sup>2</sup> ] | Number of single conductors, flexible Cu conductors with cable ferrule |   |   |   |   |   |
|-----------------------------------------------|------------------------------------------------------------------------|---|---|---|---|---|
|                                               | 1                                                                      | 2 | 3 | 4 | 5 | 6 |
| 1,5                                           | ✓                                                                      | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2,5                                           | ✓                                                                      | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4                                             | ✓                                                                      | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6                                             | ✓                                                                      | ✓ | ✓ | ✗ | ✗ | ✗ |
| 10                                            | ✓                                                                      | ✓ | ✗ | ✗ | ✗ | ✗ |
| 16                                            | ✓                                                                      | ✗ | ✗ | ✗ | ✗ | ✗ |
| 25                                            | ✓                                                                      | ✗ | ✗ | ✗ | ✗ | ✗ |

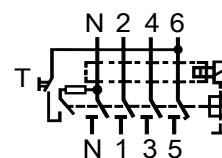
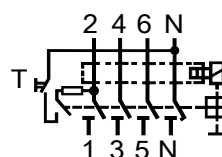
Combination of rigid single-wire and flexible multi-wire Cu conductors is not allowed

## A and AC type residual current circuit breaker EFI-P4(R) & EFI-4

### Technical data EFI-P4(R) Instantaneous type AC & A, EFI-4 Instantaneous type AC & A

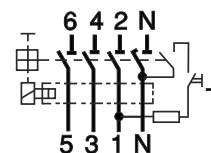
| Type                                             | EFI-P4, EFI-P4R 16-63A        | EFI-4 80A, EFI-P4 R 100A, 125A                                                |
|--------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------|
| <b>Electrical</b>                                |                               |                                                                               |
| Rated Voltage $U_n$                              | 400/415V AC                   | 400V AC                                                                       |
| Rated current $I_n$                              | 16, 25, 40, 63A               | 80, 100, 125A                                                                 |
| Rated frequency $f_n$                            | 50/60Hz                       | 50Hz                                                                          |
| Rated insulation voltage $U_i$                   | 440V                          | 440V                                                                          |
| Rated impulse withstand voltage (1,2/50μs)       | 4kV                           | 4kV                                                                           |
| Peak withstand current (8/20μs)                  | 400A                          |                                                                               |
| Electrical isolation                             | > 4mm contact space           |                                                                               |
| Rated residual operating current $I_{\Delta n}$  | 0,03; 0,1; 0,3 & 0,5A         |                                                                               |
| Rated conditional short-circuit current $I_{cn}$ | 10kA                          | 10kA                                                                          |
| Rated making and breaking capacity $I_m$         | 630A                          | 800A ( $I_n=80A$ ); 1250A ( $I_n=100, 125A$ )                                 |
| Max back-up fuse for short circuit protection    | 63A gG                        | 80A ( $I_n=80A$ ); 125A ( $I_n=100, 125A$ )                                   |
| Voltage range test circuit                       | 150-264V                      | 150-264V                                                                      |
| Min. operating voltage                           | voltage independent           | voltage independent                                                           |
| Insulating class                                 | B                             | B                                                                             |
| Standards                                        | IEC/EN 61008                  | IEC/EN 61008                                                                  |
| Mechanical Endurance (cycles)                    | > 10.000                      | > 4.000                                                                       |
| Electrical endurance (cycles)                    | > 4.000                       | > 2.000                                                                       |
| Shock resistance acc. to                         | IEC/EN 61008-1                | IEC/EN 61008-1                                                                |
| Resistance to vibrations acc. To IEC 60068-2-7   | 5g (10, 60 & 500Hz)           | 5g (10, 60 & 500Hz)                                                           |
| <b>Mechanical</b>                                |                               |                                                                               |
| Frame size                                       | 45mm                          | 45mm                                                                          |
| Device height                                    | 68mm (DIN rail acc to EN6071) |                                                                               |
| Device width                                     | 72mm (4 x Module Units)       | 72mm (4 x Module Units)                                                       |
| Degree of protection                             | IP20                          | IP20                                                                          |
| Upper and lower terminals                        | open mounted/lift terminals   |                                                                               |
| Terminal capacity                                | 1-25mm <sup>2</sup>           | 1-25mm <sup>2</sup> ( $I_n=80A$ ),<br>1-50mm <sup>2</sup> ( $I_n=100, 125A$ ) |
| Terminal screw                                   | M5 (Pozidrive PZ2)            | M5 (80A), M6 (100-125A) (Pozidrive PZ2)                                       |
| Terminal torque                                  | max. 3Nm                      | max 2,5Nm (80A); max 5,0Nm (100&125A)                                         |
| Busbar thickness                                 | 0,8 - 2 mm                    | 0,8 - 2 mm                                                                    |
| Operating temperature                            | -25°C ... +55°C               | -25°C ... +55°C                                                               |
| Storage and transport temperature                | -40°C ... +70°C               | -35°C ... +60°C                                                               |
| Resistance to climatic conditions                | IEC/EN 61008                  | acc. to IEC 60068-2-30: 28 cycles (55°C, 95% relative humidity)               |
| Contact position indicator                       | mechanical red/green          |                                                                               |
| Mounting position                                | any                           |                                                                               |
| Mounting on the rail                             | 35mm acc to EN50022           |                                                                               |
| Supply possibility                               | top or bottom                 |                                                                               |

EFI-P4, EFI-P4R 16 - 63A

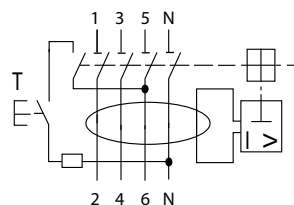


Version with N-pole on the left

EFI-4 80A



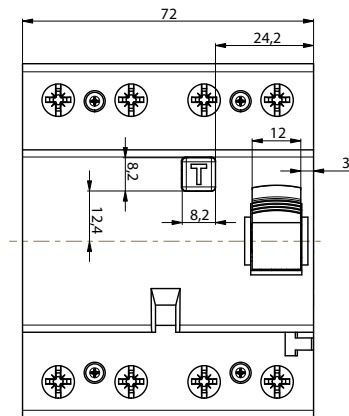
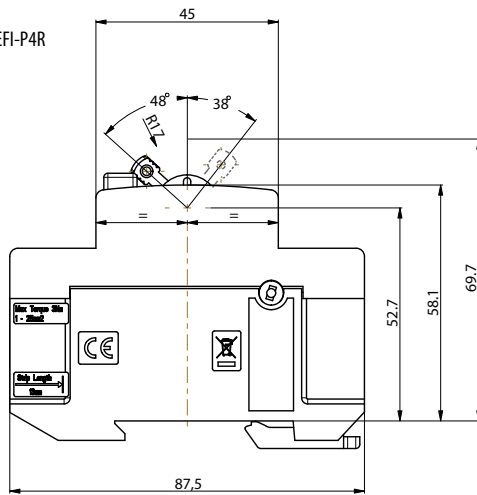
EFI-P4R 100 A, 125A



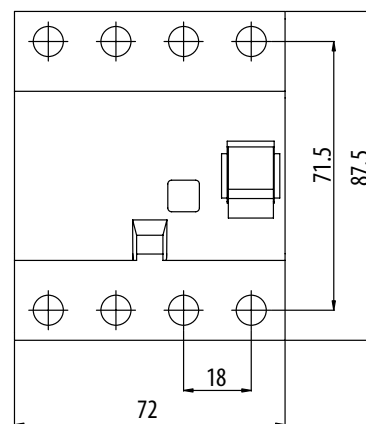
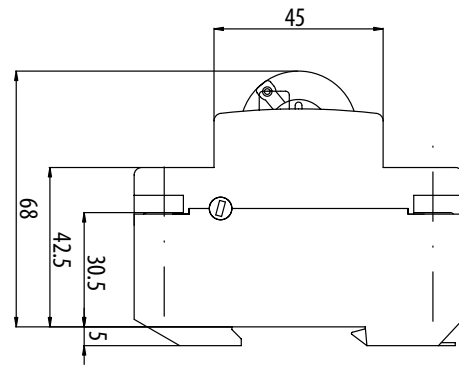
| $I_n$ [A] | Power dissipation EFI-P4<br>P/pole [W] |
|-----------|----------------------------------------|
| 16        | 0,48-0,62                              |
| 25        | 1,27-1,52                              |
| 40        | 4,14-5,00                              |
| 63        | 2,45-3,00                              |
| 80        |                                        |
| 100       | 7,35-7,65                              |
| 125       | 10,7-11,3                              |

## Technical data

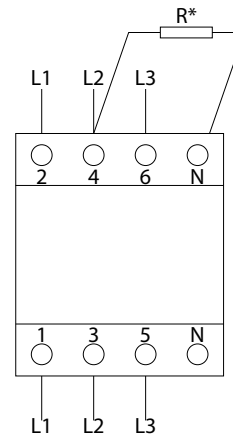
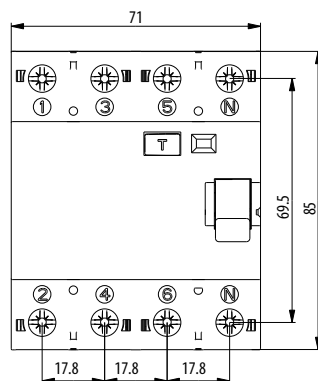
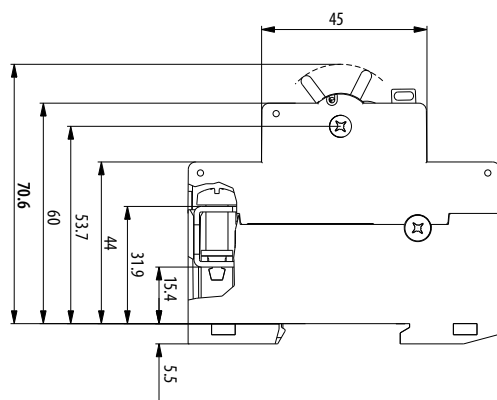
EFI-P4, EFI-P4R



EFI-4 80A, G/KV, S



EFI-P4 R 100&125A



RCD EFI-P4 Type in 3-phase system without neutral conductor:

- 30mA:  $R=2k\Omega/1W/500V$
- 100mA:  $R=1k\Omega/1W/500V$
- 300mA:  $R=470\Omega/2W/500V$
- 500mA:  $R=270\Omega/3W/500V$

\* Resistor (R) has to be connected between N and 2 or L3 as to ensure proper functionality of the test button.