

# WTH-65/B+C/R/1P-275

|                                  |                          |
|----------------------------------|--------------------------|
| Requirement class to VDE 0675    | B+C                      |
| Requirement class to EN 61643-11 | Type 1+2                 |
| Requirement class to IEC61643-1  | Class I+II               |
| Location of use:                 | Main distribution boards |
| Protection modes:                | L/N-PE,L-PE,L-N          |
| Protective element:              | High Energy MOV          |
| High surge discharge ratings:    | $I_{imp}=2.5kA (10/350)$ |
| Housing:                         | Compact design           |

## Technical data

| Type                                      | WTH-65/B+C/R/1P-275                                      |          |
|---|--|----------|
| In accordance with                        | IEC 61643-1  |          |
| Max. continuous operating voltage (AC/DC) | $U_c$  | 275/350V |
| Nominal discharge current (8/20)          | $I_n$  | 30kA     |
| Max. discharge current (8/20)             | $I_{max}$  | 65kA     |
| Pulsed current (10/350)                   | $I_{imp}$  | 2.5kA    |
| Voltage protection level                  | $U_p$  | <1.7kV   |
| Residual voltage at 5kA (8/20)            | $U_{res}$  | <1.0kV   |
| Follow current                            | $I_f$  | NO       |
| Response time                             | $t_A$  | < 25ns   |
| Thermal protection                        | YES  |          |
| Terminal screw torque                     | Max. 3.5Nm   |          |
| Back-up fuse (if mains > 125A)            | 100AgL   |          |
| Temperature range                         | - 40°C ... + 80°C  |          |
| Terminal cross section                    | 35mm <sup>2</sup> (solid) / 25mm <sup>2</sup> (stranded) |          |
| Din Rail EN60715                          | 35mm top-hat rail  |          |
| Protection rating                         | IP 20  |          |
| Housing material                          | thermoplastic; extinguishing degree UL 94 V-0            |          |
| Dimensions DIN 43880                      | 1.1TE  |          |
| <b>Ordering code</b>                      | <b>501 553</b>   |          |

### How to name our products

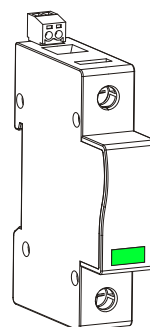
Example:



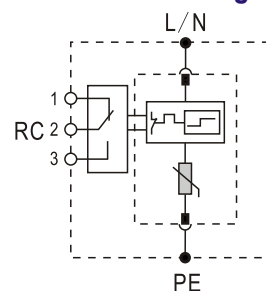
| More:               | U <sub>c</sub> (AC) | U <sub>c</sub> (DC) | U <sub>p</sub> | U <sub>res</sub> (5kA) | Ordering code |
|---------------------|---------------------|---------------------|----------------|------------------------|---------------|
| WTH-65/B+C/R/1P-75  | 100V                |                     |                |                        | 501 525       |
| WTH-65/B+C/R/1P-115 | 150V                |                     |                |                        |               |
| WTH-65/B+C/R/1P-150 | 200V                |                     |                |                        | 501 539       |
| WTH-65/B+C/R/1P-275 | 350V                |                     | 1.7kV          | 1.0kV                  | 501 553       |
| WTH-65/B+C/R/1P-320 | 400V                |                     |                |                        | 501 574       |
| WTH-65/B+C/R/1P-385 | 500V                |                     |                |                        | 501 595       |
| WTH-65/B+C/R/1P-420 | 600V                |                     |                |                        | 501 616       |
| WTH-65/B+C/R/1P-550 | 700V                |                     |                |                        |               |
| WTH-65/B+C/R/1P-690 | 800V                |                     |                |                        | 501 690       |

## Single-pole Lightning & Surge Arrester

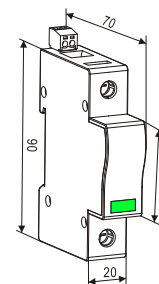
$I_{max}=65kA (8/20)$   
 $I_{imp}=2.5kA (10/350)$



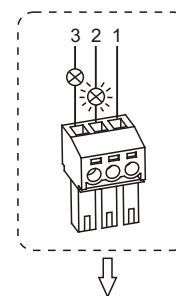
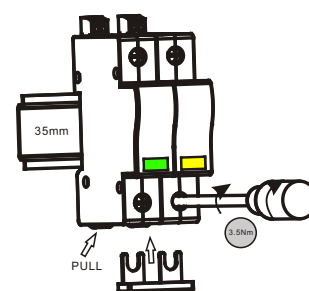
## Connection diagram



## Dimensions

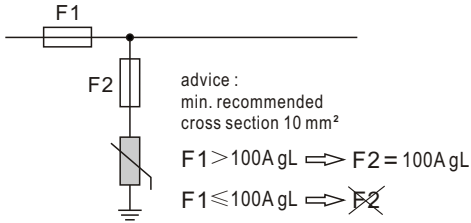


## Installation

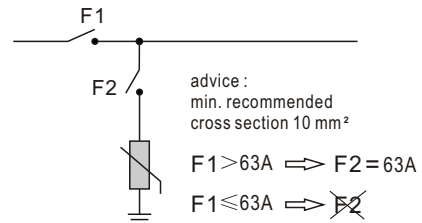


Terminal cross section: 1.5mm<sup>2</sup> (max)  
 U<sub>max</sub>: AC125V I<sub>max</sub>:1A

## Selection of back-up fuse



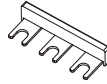
## Selection of back-up circuit-breaker



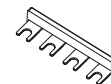
## Packaging dimensions



Type: WTH-2P/65  
Ordering code: 502 130

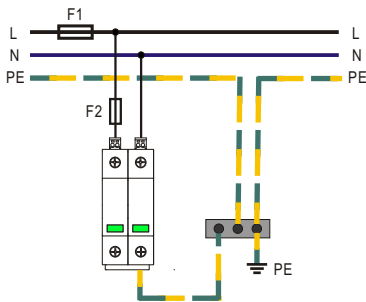


Type: WTH-3P/65  
Ordering code: 502 131

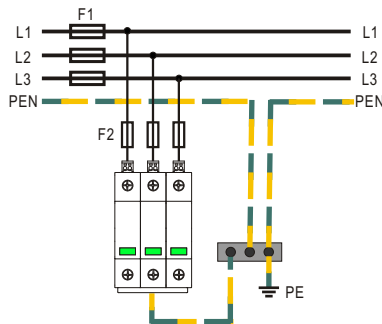


Type: WTH-4P/65  
Ordering code: 502 132

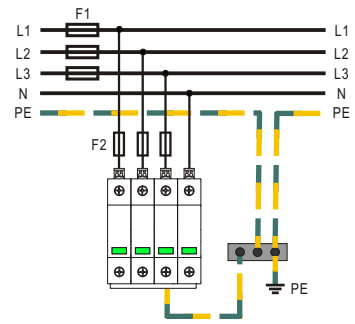
## Connections



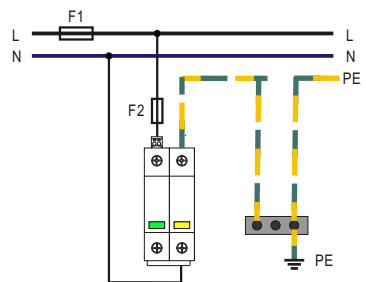
2P



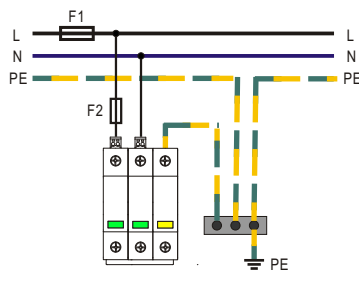
3P



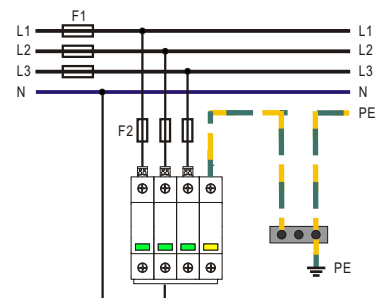
4P



1P+NPE

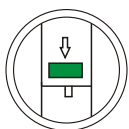


2P+NPE

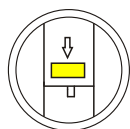


3P+NPE

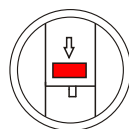
## Fault Indication



green : OK

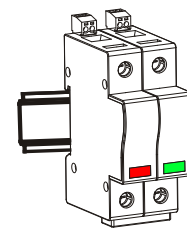


yellow : OK



red : fault (replace)

replace



# WTH-65/G/1P-255



|                                  |                          |
|----------------------------------|--------------------------|
| Requirement class to VDE 0675    | B+C                      |
| Requirement class to EN 61643-11 | Type 1+2                 |
| Requirement class to IEC61643-1  | Class I+II               |
| Location of use:                 | Main distribution boards |
| Protection modes:                | N-PE                     |
| Protective element:              | High Energy GDT          |
| High surge discharge ratings:    | $I_{max} = 65kA (8/20)$  |
| Housing:                         | Compact design           |

## Technical data

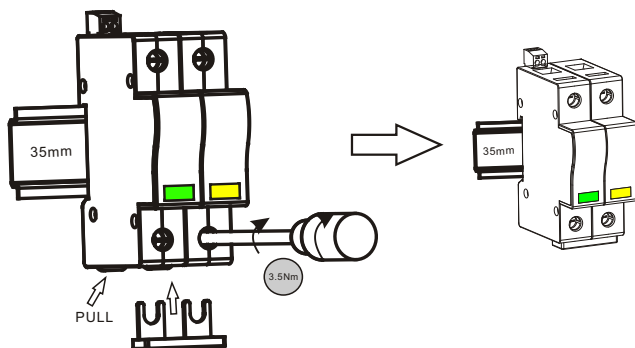
| Type                                      | WTH-65/G/1P-255  |          |
|---|--|----------|
| In accordance with                        | IEC 61643-1  |          |
| Max. continuous operating voltage (AC/DC) | $U_c$  | 255V     |
| Nominal discharge current (8/20)          | $I_n$  | 30kA     |
| Max. discharge current (8/20)             | $I_{max}$  | 65kA     |
| Pulsed current (10/350)                   | $I_{imp}$  | 2.5kA    |
| Voltage protection level                  | $U_p$  | < 1.0kV  |
| Follow current                            | $I_f$  | 100A RMS |
| Response time                             | $t_A$  | 100ns    |
| Terminal screw torque                     | Max. 3.5Nm   |          |
| Temperature range                         | - 40°C ... + 80°C  |          |
| Terminal cross section                    | 35mm <sup>2</sup> (solid) / 25mm <sup>2</sup> (stranded) |          |
| Din Rail EN60715                          | 35mm top hat rail  |          |
| Protection rating                         | IP 20  |          |
| Housing material                          | thermoplastic; extinguishing degree UL 94 V-0            |          |
| Dimensions DIN 43880                      | 1.1TE  |          |
| Fault Indication                          | No   |          |

|               |         |
|---------------|---------|
| Ordering code | 502 018 |
|---------------|---------|

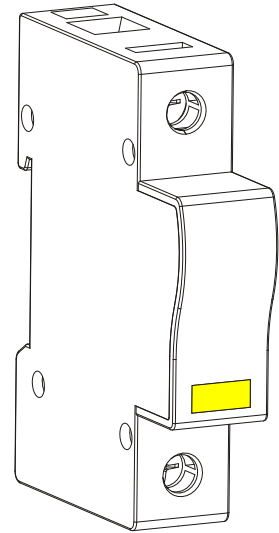
## Installation

### Example:

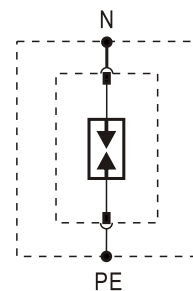
### WTH-65/B+C/1P+NPE



## Single-pole N-PE Lightning & Surge Arrester $I_{max} = 65kA (8/20)$



## Connection diagram



## Dimensions

