

# WTH-40/C/3P+NPE-275

Requirement class to VDE 0675	C
Requirement class to EN 61643-11	Type 2
Requirement class to IEC61643-1	Class II
Location of use:	Branch sub-distribution boards
Protection modes:	L-N,N-PE
Protective element:	MOV GDT
Surge discharge ratings:	$I_{max} = 40kA$
Housing:	Modular design

## Technical data

Type	WTH-40/C/3P+NPE-275	
In accordance with	IEC 61643-1	
Max. continuous operating voltage (AC/DC)	$U_c$	275/350V 255V (NPE)
Nominal discharge current (8/20)	$I_n$	20kA 25kA (NPE)
Max. discharge current (8/20)	$I_{max}$	40kA 65kA (NPE)
Voltage protection level	$U_p$	<1.5kV <1.0kV (NPE)
Residual voltage at 5kA (8/20)	$U_{res}$	<1.0kV <0.3kV (NPE)
Follow current	$I_f$	NO 100A RMS (NPE)
Response time	$t_A$	< 25ns < 100ns (NPE)
Thermal protection		YES NO (NPE)
Terminal screw torque		Max. 3.5Nm
Back-up fuse (if mains > 80A)		80A gL NO (NPE)
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		4TE

Ordering code	501 365
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### How to name our products

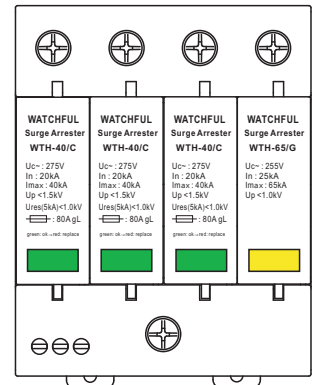
Example:



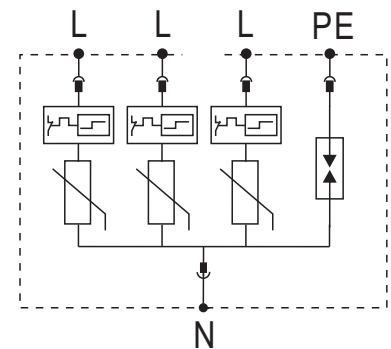
More:	$U_c$ (AC)	$U_c$ (DC)	$U_p$	$U_{res}$ (5kA)	Ordering code
<b>WTH-40/C/3P+NPE-75</b>		100V			501 337
<b>WTH-40/C/3P+NPE-115</b>		150V			
<b>WTH-40/C/3P+NPE-150</b>		200V			501 351
<b>WTH-40/C/3P+NPE-275</b>		350V	1.5kV	1.0kV	501 365
<b>WTH-40/C/3P+NPE-320</b>		400V			501 386
<b>WTH-40/C/3P+NPE-385</b>		500V			501 407
<b>WTH-40/C/3P+NPE-420</b>		600V			501 428
<b>WTH-40/C/3P+NPE-550</b>		700V			
<b>WTH-40/C/3P+NPE-690</b>		800V			

## Three-phase Lightning & Surge Arrester

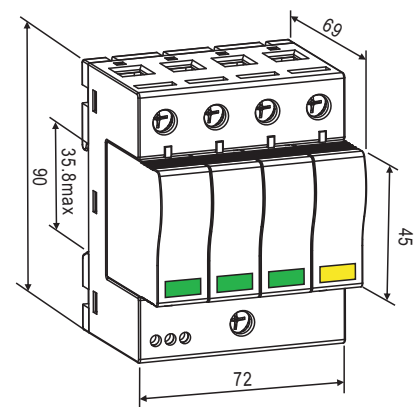
$I_{max} = 40kA (8/20)$



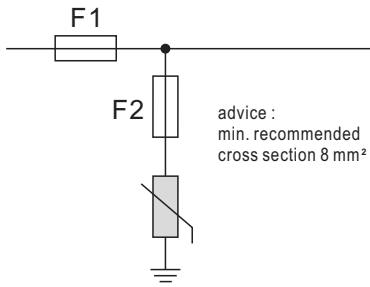
## Connection diagram



## Dimensions



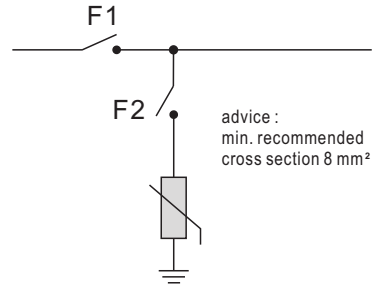
## Selection of back-up fuse



$$F1 > 80A gL \Rightarrow F2 = 80A gL$$

$$F1 \leq 80A gL \Rightarrow \cancel{F2}$$

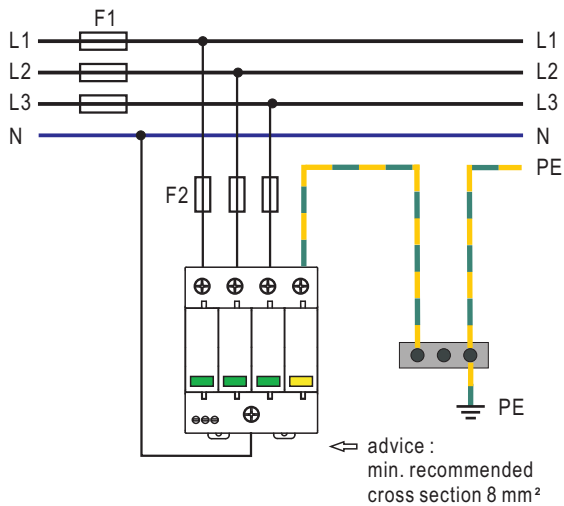
## Selection of back-up circuit-breaker



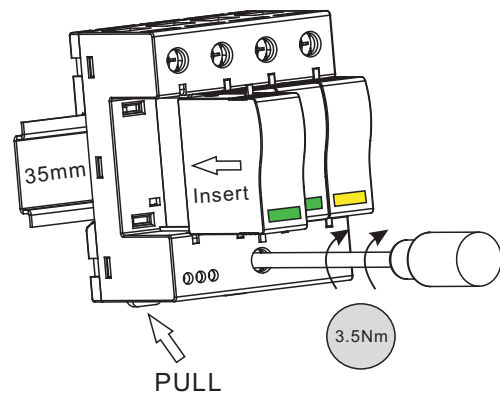
$$F1 > 40A \Rightarrow F2 = 40A$$

$$F1 \leq 40A \Rightarrow \cancel{F2}$$

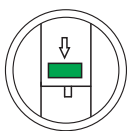
## Connections



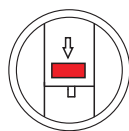
## installation



## Fault Indication



green : OK



red : fault (replace)

replace

