

# WTH-40/C/1P+NPE-275

Single-phase  
Lightning & Surge Arrester  
 $I_{max} = 40kA (8/20)$

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/1P+NPE-275	
In accordance with	IEC 61643-1	
Max. continuous operating voltage (AC/DC)	<b>Uc</b>	275/350V 255V (NPE)
Nominal discharge current (8/20)	<b>In</b>	20kA 25kA (NPE)
Max. discharge current (8/20)	<b>I<sub>max</sub></b>	40kA 65kA (NPE)
Voltage protection level	<b>Up</b>	<1.5kV <1.0kV (NPE)
Residual voltage at 5kA (8/20)	<b>U<sub>res</sub></b>	<1.0kV <0.3kV (NPE)
Follow current	<b>I<sub>f</sub></b>	NO 100A RMS (NPE)
Response time	<b>t<sub>A</sub></b>	< 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		2TE

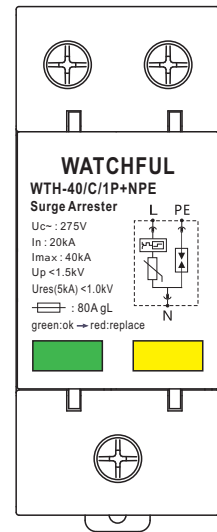
Ordering code	501 363
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### How to name our products

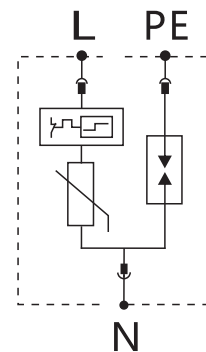
Example:



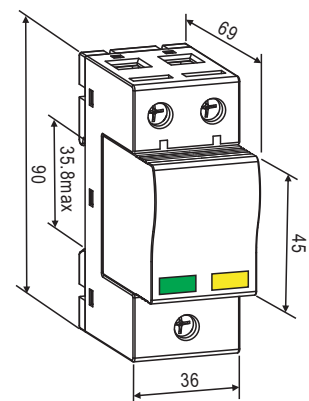
More:	Uc(AC)	Uc(DC)	Up	Ures(5kA)	Ordering code
<b>WTH-40/C/1P+NPE-75</b>	100V				501 170
<b>WTH-40/C/1P+NPE-115</b>	150V				
<b>WTH-40/C/1P+NPE-150</b>	200V				501 349
<b>WTH-40/C/1P+NPE-275</b>	350V		1.5kV	1.0kV	501 363
<b>WTH-40/C/1P+NPE-320</b>	400V				501 384
<b>WTH-40/C/1P+NPE-385</b>	500V				501 405
<b>WTH-40/C/1P+NPE-420</b>	600V				501 426
<b>WTH-40/C/1P+NPE-550</b>	700V				
<b>WTH-40/C/1P+NPE-690</b>	800V				



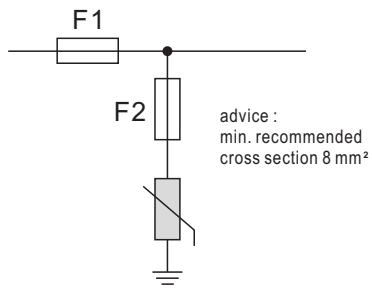
## Connection diagram



## Dimensions



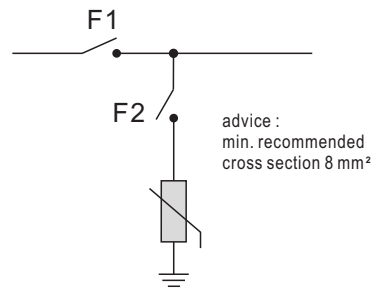
## Selection of back-up fuse



$F1 > 80A_{gL} \Rightarrow F2 = 80A_{gL}$

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

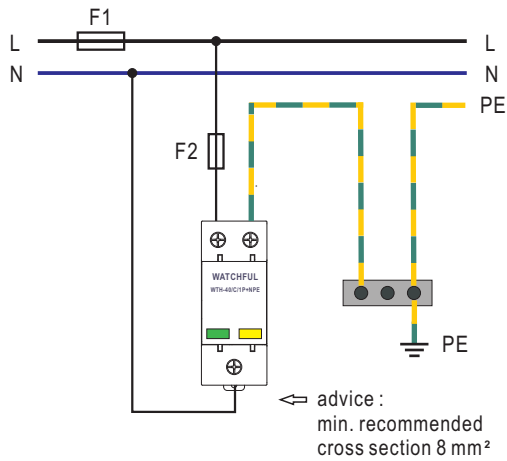
## Selection of back-up circuit-breaker



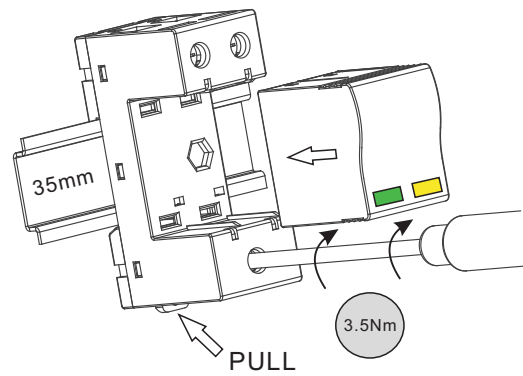
$F1 > 40A \Rightarrow F2 = 40A$

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

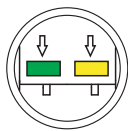
## Connections



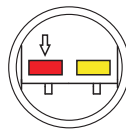
## Installation



## Fault Indication



Green and yellow : OK



red : fault (replace)

replace

