## Protection Load protection









## TOWSP-DC/C40/2 Surge Arresters

### IEC 61643-11 EN 61443-11

- Each surge arrester in the range has a specific application:
- ☐ Incoming protection (type 2):
- ☐ The TOWSP-C40/1 is recommended for a high risk level Secondary protection (type 2 or 3):
- The TOWSP-D10/1 ensures secondary protection of loads to be protected and is placedin
- to be protected are at a distance of more than 10 m from the incoming surge arrester.

The TOWSP surge arresters with "r" indication have remote transfer of the information: "cartridge to be replaced".

TOWSP withdrawable surge arresters allow quick replacement of damaged cartridges. Type 2 surge arresters are tested with a 8/20 as current wave.

Type 3 surge arresters are tested with a 1.2/50 as and 8/20 as combined wave.

#### Main

Product or component type	Surge arresters	
Device applicantion	Load Protection	
Operating frequency	50/60 Hz	
Operating voltage (Ue)	1000V (+/- 10 %) DC	
Permanent operating current (Ic)	<1 mA	
Response time	< 25 ns	
Short circuit withstand (Isccr)	50 kA (50 Hz)	

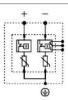
Complementary		
Surge arrester class type	Type 2	
Surge arrester technology	MOV	
[In] nominal discharge current	20 kA	
[lmax] maximum discharge current	40 kA	
[Ucpv] maximum continuous operating voltage	Differential mode : 1000 V L+/LCommon mode : 1000 V L+/PE Common mode : 1000 V L-/PE	
[Up] voltage protection level	<= 3.9 kV type 2 common mode L+/PE <= 3.9 kV type 2 common mode L-/PE <= 3.9 kV type 2 differential mode L+/L	
Disconnector device type	Integrated disconnector	
Local signalling	Flag color: white/red	
Signalling circuit voltage	AC : 250 V 50/60 Hz	
Signalling output current	0.25 A	
Mounting mode	Clip-on	
Mounting support	DIN rail	
9 mm pitches	6	

#### Environment

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Standards	EN 50539-11 : 2013 UTE C 61740-51
Product certifications	CE
IP degree of protection	On front face : IP40 On terminal : IP20
IK degree of protection	IKO3
Relative humidity	595 %
Operating altitude	2000 m
Ambient air temperature for operation	-2560 °C
Ambient air temperature for storage	-4085 °C

#### Catalogue numbers

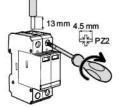
Rated discharge	Nominal discharge Type of protect	tion Network
current (Imax)	current (In)	Network



		Incoming	Secondaring
TOWSP-C40			
40 kA	1E I.A	TOLION 040 10 10	
High risk level	15 kA	TOWSP-C40/2/D	C
10 kA			
Secondary protection:	2.5 kA		TOWSP-D10/2
placed near the loads to be protected when they are at a	2.5 64		10W3F-DIO/2
distance of more than 10 m from the incoming surge arrester			

#### Connection

Type	Tightening torque	Copper cables		
		Rigid	Flexible or ferrule	







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TOWSP-D20	2.5 N.m	2.5 to 25 mm <sup>2</sup>	4 to 16 mm <sup>2</sup>	

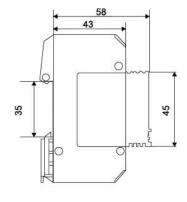
## Weight (g)

Surge Arrester		
Туре	TOWSP-C40/2/DC	
2P	260	

#### Contractual warranty

Warranty period	2 Years
N13333314 Tel. (10 € 1 F1313 e 21 F1313 e 21 F131	

#### Dimensions (mm)





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## IEC 61643-11

#### EN 61443-11

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- ☐ Incoming protection (type 2):
- ☐ The TOWSP-C40/1 is recommended for a high risk level Secondary protection (type 2 or 3):
- The TOWSP-D10/1 ensures secondary protection of loads to be protected and is placedin
   □ Cascade with the incoming surge arresters. This surge arrester is required when the loads to be protected are at a distance of more than 10 m from the incoming surge arrester.

The TOWSP surge arresters with "r" indication have remote transfer of the information: "cartridge to be replaced".

TOWSP withdrawable surge arresters allow quick replacement of damaged cartridges. Type 2 surge arresters are tested with a 8/20 as current wave.

Type 3 surge arresters are tested with a 1.2/50 as and 8/20 as combined wave.

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Product or component type	Surge arresters	
Device applicantion	Load Protection	
Operating frequency	50/60 Hz	
Operating voltage (Ue)	1000V (+/- 10 %) DC	
Permanent operating current (Ic)	<1 mA	
Response time	< 25 ns	
Short circuit withstand (Isccr)	50 kA (50 Hz)	
Complementary		

Type 2	
MOV	
20 kA	
40 kA	
Differential mode : 1000 V L+/LCommon mode : 1000 V L+/PE Common mode : 1000 V L-/PE	
<= 3.9 kV type 2 common mode L+/PE <= 3.9 kV type 2 common mode L-/PE <= 3.9 kV type 2 differential mode L+/L	
Integrated disconnector	
Flag color: white/red	
AC : 250 V 50/60 Hz	
0.25 A	
Clip-on	
DIN rail	
6	
	MOV  20 kA  40 kA  Differential mode: 1000 V L+/LCommon mode: 1000 V L+/PE  Common mode: 1000 V L-/PE  <= 3.9 kV type 2 common mode L+/PE  <= 3.9 kV type 2 common mode L-/PE  <= 3.9 kV type 2 differential mode L+/L  Integrated disconnector  Flag color: white/red  AC: 250 V 50/60 Hz  0.25 A  Clip-on  DIN rail

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#### Catalogue numbers

Rated discharge	Nominal discharge	Type of protection	Notwork
current (Imax)	current (In)	509 19	Network



		Incoming	Secondaring
TOWSP-C40			
40 kA High risk level	15 kA	TOWSP-C40/3/DC	
10 kA			
Secondary protection: placed near the loads to be protected when they are at a distance of more than 10 m from the incoming surge arrester.	2.5 kA	TOWSP-D10/3	

#### Connection

Туре	Tightening torque	Copper cables		
		Rigid	Flexible or ferrule	
13 mm 4.5 mm	n PZ2			
TOWSP-D20	2.5 N.m	2.5 to 25 mm <sup>2</sup>	4 to 16 mm <sup>2</sup>	
Weight (g)				
Surge Arrester				
Туре		TOWSP-C40/3/DC		
3P		300		

2 Years

# Dimensions (mm)

Warranty period

Contractual warranty

