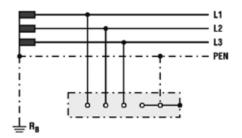


## Surge arresters – ETITEC

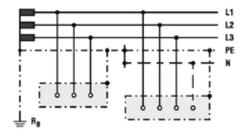
ETITEC surge arresters are intended for protection of electrical installations and devices against overvoltage effects, which may occur in atmospheric discharges and switching overvoltages. The main part of surge arrester is ZnO non-linear varistor. Its main characteristic is ohmic nonlinearity, which depends strongly on the applied voltage at the clamps. All arresters have modular construction, a special feature is interchanging varistor part and visual signalization for varistor thermical failure. The signalization performed with a red flag, which appears when failure occurs. The models with RC mark are equipped with auxiliary contacts for signalization.

ETI also provides SPD protection for PV systems - see Green Protect catalogue.

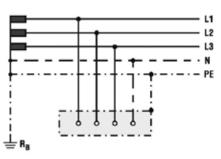
## Common power distribution systems (Europe)



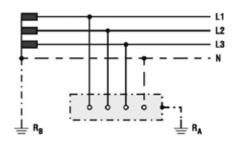
TN-C system



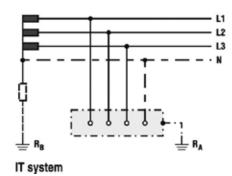
TN-C-S system



TN-S system



TT system





## Surge arresters group C

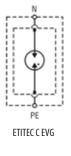
ETITEC C is surge arrester for indoor application. Group C surge protection is in accordance with VDE class C. This protection corresponds to IEC category II. The protection is made on the subdistribution box, as the second level of  $protection\,against\,overvoltage\,indirect\,lightning\,strikes.\,In\,case\,of\,permanent\,arrestor\,damage,\,thermal\,protection$  $is \ activated \ which \ signalize \ faulty \ arrester. \ ETITEC\ C\ 255/20\ G\ is \ an \ overvoltage \ arrester \ with \ gas\ discharge \ tube \ for \ an \ overvoltage \ arrester \ with \ gas\ discharge \ tube \ for \ overvoltage \ arrester \ with \ gas\ discharge \ tube \ for \ overvoltage \ arrester \ with \ gas\ discharge \ tube \ for \ overvoltage \ arrester \ with \ gas\ discharge \ tube \ for \ overvoltage \ arrester \ with \ gas\ discharge \ tube \ for \ overvoltage \ arrester \ overvoltage \ arrester \ overvoltage \ arrester \ overvoltage \ over$  $protection\,against\,indirect\,lightning\,strikes.\,It\,is\,used\,as\,a\,galvanic\,separation\,between\,N-PE\,conductor\,in\,TT\,network\,against\,indirect\,lightning\,strikes.\,It\,is\,used\,as\,a\,galvanic\,separation\,between\,N-PE\,conductor\,in\,TT\,network\,against\,indirect\,lightning\,strikes.\,It\,is\,used\,as\,a\,galvanic\,separation\,between\,N-PE\,conductor\,in\,TT\,network\,against\,indirect\,lightning\,strikes.\,It\,is\,used\,as\,a\,galvanic\,separation\,between\,N-PE\,conductor\,in\,TT\,network\,against\,indirect\,lightning\,strikes.\,It\,is\,used\,as\,a\,galvanic\,separation\,between\,N-PE\,conductor\,in\,TT\,network\,against\,indirect\,lightning\,strikes.\,It\,is\,used\,as\,a\,galvanic\,separation\,between\,N-PE\,conductor\,in\,TT\,network\,against\,indirect\,lightning\,strikes.\,It\,is\,used\,as\,a\,galvanic\,separation\,between\,N-PE\,conductor\,in\,TT\,network\,against against agains$ 

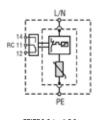
\*Note: First number of designation 1+0, 2+0, 3+1 etc. indicates the number of varistors. Second one means the following: number 0 indicates there is no gas discharge tube, number 1 indicates there is.

## Advantages:

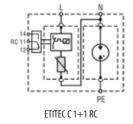
- indication window of faulty device
- remote signalisation
- mounting on top hat fixing DIN rail
- connection up to 35mm<sup>2</sup>
- high discharge currents
- high degree of protection
- varistor is the protective element
- metal snapper, new way of mounting on DIN
- rail (easier, quicker)
- new round-off shape

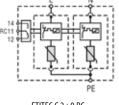
Туре	275/20	440/20
In accordance with	IEC-61643-1	
Category IEC / VDE	II/C	
Max. continuous operating voltage (AC/DC) $\rm U_{\rm c}$	275/350 V	440/580 V
Nominal discharge current (8/20) I	20 kA	
Max. discharge current (8/20) I max	40 kA	
Charge		
Protection level Up - at In (8/20)	1,4 kV	2,2 kV
Follow current I <sub>f</sub>	-	
Response time t <sub>A</sub>	< 25 ns	
Residual current at Uc IPE	< 1,5 mA	
Thermal decoupler	✓	
Torque		
Back-up fuse (if mains > 125A)	125 A gL	
Short-circuit withstand	25 kA / 50 Hz	
Temperature range	- 40°C+80°C	
Cross-section of connection wire	single-strand 35 mm <sup>2</sup> ; multi- strand 25 mm <sup>2</sup>	
Mounting	indoors on top hat fixing rail 35 mm	
Degree of protection	IP 20	
Casing material	thermoplastic; extinguishing degree UL 94 V-0	
Dimensions	DIN 43880 1 TE	
Additional data for ETITEC C-RC		
Remote signalisation	✓	
Switching capability	AC: 250V/0.5A; 125V/3A	
Cross-section of connection wire	max. 1.5 mm²	
	0,25 Nm	





ETITEC C 1+0 RC

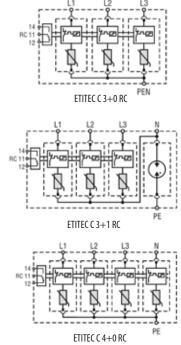


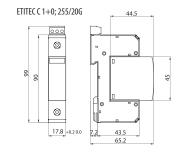


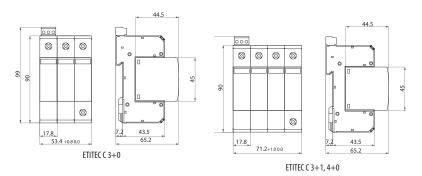
ETITEC C 2+0 RC

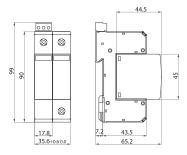


Technical data ETITEC C		
Туре	ETITEC C 255/20 G	
In accordance with	IEC-61643-1	
Category IEC / VDE	II/C	
Max. continuous operating voltage (AC/DC) U <sub>c</sub>	255 V	
Nominal discharge current (8/20) I	20 kA	
Max. discharge current (8/20) I	40 kA	
Protection level Up - at In (1,2/50)	1,2 kV	
Follow current I <sub>f</sub>	> 100 A	
Response time t <sub>A</sub>	< 100ns	
Torque	max. 4.5 Nm	
Temperature range	- 40°C+80°C	
Cross-section of connection wire	single-strand 35 mm²; multi-strand 25 mm²	
Mounting	indors on top hat fixing rail 35mm	
Degree of protection	IP 20	
Casing material	thermoplastic; extinguishing degree UL 94 V-0	
Dimensions	DIN 43880 1 TE	









ETITEC C 1+1; 2+0