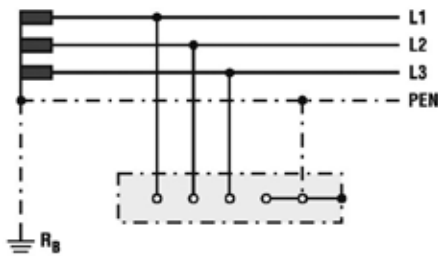


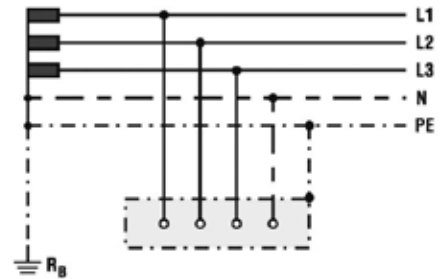
## Surge arresters – ETITEC

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 thermal 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.

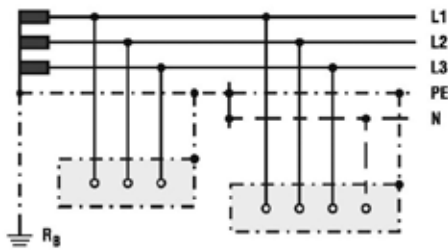
### Common power distribution systems (Europe)



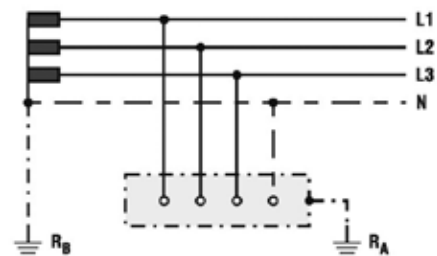
TN-C system



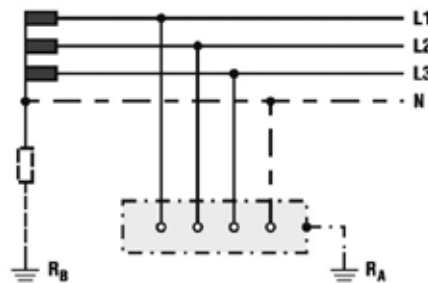
TN-S system



TN-C-S system



TT system



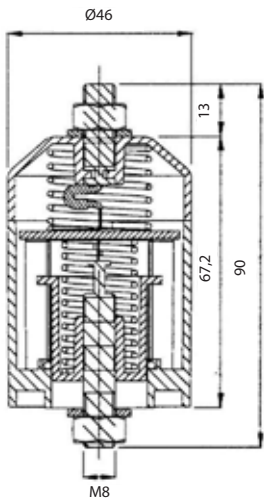
IT system

## Surge arresters group A

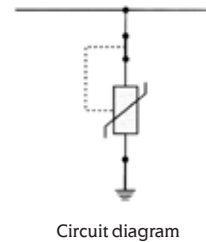
**ETITEC A** are surge arresters for outdoor mounting. Group A overvoltage protection is in accordance with VDE class C. This protection corresponds to IEC category II. Protection is provided on power lines and is capable of discharging enormous pulse currents. In case of permanent arrester damage thermal protection will be activated. The protective component interrupts the circuit and a red plug indicates a faulty device (type A). After activation of disconnecting device earth conductor is visibly separated (type AQ).

**ETITEC A** contains a decoupling device, which protects a module against short circuit condition and also signals a failure – a red plug springs out of the casing.

**ETITEC AQ** contains a decoupling device, which protects a module against short circuit condition. The earth conductor is visibly separated.



Technical data ETITEC A		
Type	275/10; 275/15	440/10; 440/15
In accordance with	IEC-61643-1	
Category IEC / VDE	II / C	
Max. continuous operating voltage (AC/DC) $U_c$	280/350 V	440/580 V
Nominal discharge current (8/20) $I_n$	10 kA; 15 kA	10 kA; 15 kA
Max. discharge current (8/20) $I_{max}$	20 kA; 30 kA	20 kA; 30 kA
Protection level at $I_n$ (8/20)	1,2 kV	2,2 kV
Response time $t_A$	<25 ns	
Thermal decoupler	✓	
Torque	max. 3,5 Nm	
Temperature range	-30°C ... +80°C	
Mounting	outdoors	
Casing material	nylon P66 V-0	



Technical data ETITEC AQ		
Type	280/10; 280/15	440/10; 440/15
In accordance with	IEC-61643-11	
Category IEC / VDE	II/C	
Max. continuous operating voltage (AC/DC) $U_c$	280/350 V	440/580 V
Nominal discharge current (8/20) $I_n$	10 kA; 15 kA	10 kA; 15 kA
Max. discharge current (8/20) $I_{max}$	25 kA; 30 kA	25 kA; 30 kA
Protection level $U_p$ - at $I_n$ (8/20)	1,2, 1,3 kV	1,6, 1,8 kV
Follow current $I_f$	✗	
Response time $t_A$	< 25 ns	
Residual current at $U_c$ IPE	< 2 mA	
Thermal decoupler	✓	
Torque	max. 3.5 Nm	
Short-circuit withstand	25kA / 50 Hz	
Temperature range	-40°C... +80°C	
Cross-section of connection wire	L/N	M8
	PE	multi-strand 6 mm
Mounting	outdoors	
Casing material	thermoplastic; extinguishing degree UL 94 V-0	

