CITEL 2CP

Type 1 Surge Protector Single and 3-phase

Iimp 12.5 kA

DUM125
DUT125

DUM125 is a single-phase Type 1 AC Surge Protector Device (SPD) designed to be connected at the entrance of the electrical installation. This SPD provides an efficient protection against direct and indirect effects and is particularly useful in a high lightning density area where the risk of heavy surge current or even direct strike is high (e.g.: buildings equipped with lightning rods).

The DUM125 provides a common mode protection (between L/PE and N/PE). The DUT125 version (made of 2 DUM125) is designed for 3-phase+N AC networks.

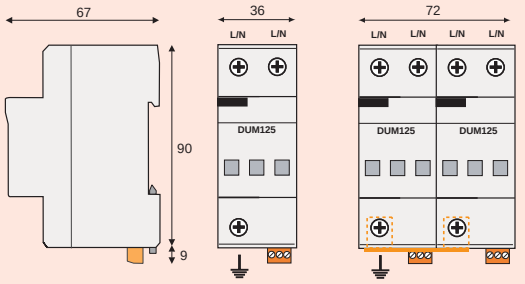
This SPD is designed to withstand a 12.5 kA lightning current (10/350 µs impulse). It is based on «multi-MOV» diagram : this technology allows a very discharge capability and the best behaviour possible on AC network (no follow current).

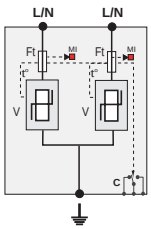
The DUM125 fits on DIN rail and is connected in parallel on the AC network to be protected.

To meet standards, DUM125 includes a thermal disconnection mechanism, fault indicator and an internal microswitch for remote signalling.

- **Single and 3-phase Type 1 AC SPD**
- **Iimp : 12.5 kA (10/350 µs)**
- **Imax : 100 kA (8/20 µs)**
- **Internal disconnections, status indicators and remote signalling**
- **Complies EN 61643-11, IEC 61643-1 and UL1449 ed.2**

Dimensions and Diagram





DUM125

V : High-energy varistor network
Ft : Thermal fuse
C : Remote signaling contact
t° : Thermal disconnection system
MI : Disconnection indicator

Characteristics

Single phase network **3-phase + neutral network**		**DUM125-400** **DUT125-400**	**DUM125-120** **DUT125-120**
AC network		230/400V	120/208V
Mode de connexion		L/PE	L/N, L/PE
AC system		IT, TT, TN	TT, TN
Max. operating voltage	Uc	400 Vac	150 Vac
Temporary overvoltage withstand	U_T	400 Vac	150 Vac
Operating current *Leakage current at Uc*	Ic	< 2 mA	< 2 mA
Follow current	If	none	none
Nominal discharge current *15 x 8/20 µs impulse*	In	40 kA	40 kA
Max. discharge current *max. withstand 8/20 µs*	Imax	100 kA	100 kA
Max. lightning current by pole *max. withstand 10/350 µs*	Iimp	12.5 kA	12.5 kA
Total lightning current *max. withstand 10/350 µs*	Itotal	25 kA (DUM125) 50 kA (DUT125)	25 kA (DUM125) 50 kA (DUT125)
Residual voltage (at Iimp)	Ures	1.5 kV	0.5 kV
Protection level (at In)	Up	2 kV	1 kV
Admissible short-circuit current		25000 A	25000 A
Associated disconnection devices			
Thermal disconnector		internal	
Fuses		Fuses type gG - 125 A max. *(see Note 1)*	
Installation ground fault breaker		Type «S» or delayed	
Mechanical characteristics			
Dimensions		see diagram	
Connection		by screw terminal : 6-35 mm² / by bus	
Disconnection indicator		1 mechanical indicator by pôle	
Remote signaling of disconnection		output on changeover contact	
Mounting		symmetrical rail 35 mm	
Operating temperature		-40/+85 °C	
Protection class		IP20	
Housing material		Thermoplastic PEI UL94-5VA	
Standards compliance			
NF EN 61643-11	France	Parafoudre Basse Tension - Essais Classe I et II	
IEC 61643-1	International	Low Voltage SPD - Test Class I and II	
EN 61643-11	Europe	Parafoudre Basse Tension - Essais Classe I et II	
UL1449 ed.2	USA	Low Voltage TVSS	

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