

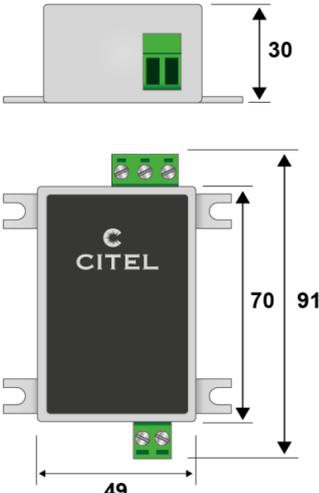
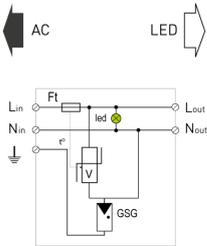
MLP1-230L-P/20K

Specially developed spd with combined protection for 2-phase power supply (control phase):



- ✦ Many variants available depending on application
- ✦ With screw terminals or cable wiring
- ✦ IP65 versions
- ✦ For protection class I or II application
- ✦ Developed for Uoc: 20 kV and I_{max}: 20 kA for highest outdoor requirements according to IEEE & ANSI
- ✦ Optical error signalling
- ✦ Certified EN 61643-11 and IEC 61643-11



	Electrical Characteristics	
	SPD type	IEC 2+3
	Network	220-240 V Single-phase
	AC system	TT-TN
	Nominal line voltage	U _n 230-277 Vac
	Max. AC operating voltage	U _c 320 Vac
	Max. frequency	f max. 10 MHz
	Max. load current @25°C	I _L 5 A
	Temporary Over Voltage (TOV) Characteristics - 5 sec. Without disconnection	UT 335 Vac withstand
	Temporary Over Voltage (TOV) Characteristics - 120 mn Without disconnection or with safety disconnection	UT 440 Vac disconnection
	Residual Current Leakage current to Ground	I _{pe} None
	Follow current	I _f None
	Nominal discharge current 15 x 8/20 μs impulses	I _n 10 kA
	Max. discharge current max. withstand @ 8/20 μs by pole	I _{max} 20 kA
	Total Maximum discharge current max. total withstand @ 8/20 μs	I _{max} Total 20 kA
	Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs	U _{oc} 20 kV
	Withstand on overvoltages IEEE C62.41.1	10 kV / 10 kA
	Protection mode(s)	Common/Differential mode
	Protection level L/N @ I _n (8/20μs)	U _p L/N 1.5 kV
	Protection level L/PE @ I _n (8/20μs)	U _p L/PE 1.5 kV
	Protection level CM/DM @ I _n (8/20μs)	U _p mc/md 1.5 kV / 1.5 kV
	Admissible short-circuit current	I _{sc} 10 000 A
	Mechanical Characteristics	
	Technology	MOV+GDT
	Connection to Network	By screw terminal: 1.5mm ² max.
	Mounting	On plate
	Housing material	Thermoplastic UL94 V-0
	Operating temperature	T _u -40/+85°C
	Protection rating	IP20
	Failsafe mode	Disconnection and AC line cut-off
	Disconnection indicator	LED green OFF and AC network cut-off
	Operating indicator	Green Led ON
	Remote signaling of disconnection	No
	Dimensions	See diagram
Disconnectors		
	Thermal disconnector	Internal
	Installation ground fault breaker	Type 'S' or delayed
Standards		
	Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 ed.5
	Certification	KEMA
Part number		
721213		