



## SINGLE AND MULTI-POLE SURGE ARRESTERS

CLASS III / (D)

$U_{oc} / I_{sc} = 10 \text{ kV} / 5 \text{ kA}$  per pole (1.2/50, 8/20)

MODULAR HOUSING



## ISPRO D(R) 10



The ISPRO D series of overvoltage surge protective devices has been developed to protect against indirect lightning discharges and induced voltages. It is intended to provide protection in zones 2 - 3 as per IEC 62305.

The plug-in module / base design facilitate replacement of a failed module without the need to remove system wiring etc. ISPRO D consists of a high performance varistor block with thermal disconnection device.

Category IEC/EN/VE	Class III/Type 3/D
Location of use	Branch sub-distribution boards
Protection modes	L/N -PE
Protective element	MOV
Surge discharge ratings	Uoc /Isc = 10kV/5kA
Housing	Modular design



### Technical data

Type	ISPRO D(R) 10/xxx						
	150	275	320	385	440		
Standards			IEC-61643-1				
Max. continuous operating voltage (AC/DC)	$U_c$	V	150/200	275/350	320/420	385/500	440/580
Combination wave (1.2/50, 8/20)	$I_n$	kA	10kV/5kA				
Max. discharge current (8/20)	$I_{max}$	kA	10kA				
Protection level at $U_{oc} / I_{sc}$	$U_p$	kV	< 0.8	< 1.2	< 1.2	< 1.6	< 2.0
Follow current	$I_t$	A <sub>RMS</sub>	NO				
Response time	$t_A$	ns	< 25				
Residual current at $U_c$	$I_{PE}$	mA	< 1,5				
Thermal protection			YES				
Terminal screw torque		Nm	max. 4.5				
Back-up fuse gL (if mains > 125 A)		A	125gL				
Short-circuit withstand current		kA	10kA/50Hz				
Temperature range		°C	-40 ... +80				
Terminal cross section	solid	mm <sup>2</sup>	35				
	stranded		25				
Mounting EN 60715			35 mm top-hat rail				
Degree of protection			IP 20				
Housing material			thermoplastic; extinguishing degree UL 94 V-0				
Dimensions DIN 43880			1TE				
Weight per unit		kg	0,124	0,130	0,130	0,131	0,132



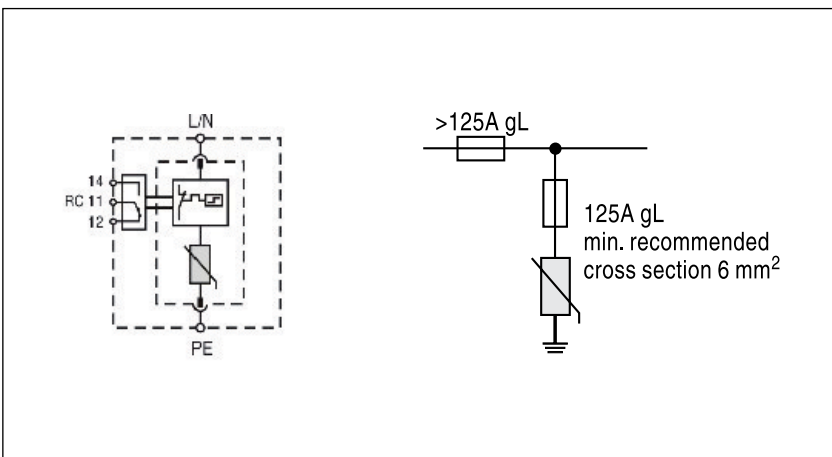
## ISPRO D(R) 10

ISPRO DR 10/xxx (with remote contacts)							
Remote contacts			YES				
Contact ratings	250 V	A	0,5				
	125 V		3				
Terminal cross section		mm <sup>2</sup>	max. 1.5				
Remote terminal torque		Nm	0.25Nm				
Weight per unit		kg	0,129	0,135	0,135	0,136	0,137
Packing dimensions (single unit)			108 x 74 x 24				

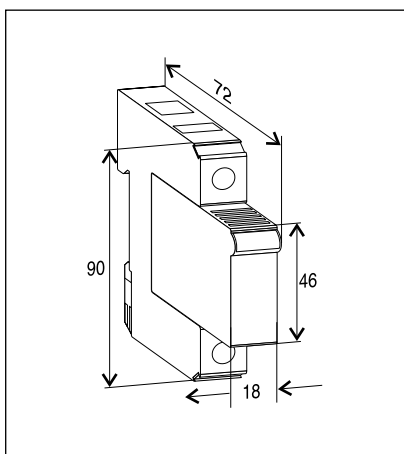
### Connection diagram

ISPRO DR 10/XXX

Selection of back-up fuse



### Dimensions



### Accessory part for ISPRO D(R) 10/xxx

Type	Module ISPRO D(R) 10/xxx				
	150	275	320	385	440



## ISPRO DM(R) (2+0)



The ISPRO DM series of overvoltage surge protective devices has been developed to protect against indirect lightning discharges and induced voltages. It is intended to provide protection in zones 2 - 3 as per IEC 62305.

The plug-in module / base design facilitate replacement of a failed module without the need to remove system wiring etc.

ISPRO DM consists of two performance varistor blocks with thermal disconnection devices configured to provide multi-pole protection to L-PE and N-PE in one enclosure.

Category IEC/EN/VE	Class III/Type 3/D
Location of use	Branch sub-distribution boards
Protection modes	L/N -PE
Protective element	MOV
Surge discharge ratings	Uoc /Isc = 10kV/5kA/pole
Housing	Modular design



### Technical data

Type	ISPRO DM(R) 10/xxx(2+0)						
	150	275	320	385	440		
Standards	IEC-61643-1						
Max. continuous operating voltage (AC/DC)	$U_c$	V	150/200	275/350	320/420	385/500	440/580
Combination wave (1.2/50, 8/20))	$I_n$	kA	10kV/5kA per pole				
Max. discharge current (8/20)	$I_{max}$	kA	10kA per pole				
Protection level at $I_n$	$U_p$	kV	< 0.8	< 1.2	< 1.2	< 1.6	< 2.0
Follow current	$I_f$	$A_{RMS}$	NO				
Response time	$t_A$	ns	< 25				
Residual current at $U_c$	$I_{PE}$	mA	< 1.5				
Thermal protection			YES				
Terminal screw torque	Upper terminals		max.2				
	Lower terminals		max. 3.5				
Back-up fuse gL (if mains > 63 A)			63A gL				
Short-circuit withstand current			10kA/50Hz				
Temperature range			-40 ... +80				
Terminal cross section	Upper terminals		35				
	Lower terminal		25				
Mounting EN 60715			35 mm top-hat rail				
Degree of protection			IP 20				
Housing material			thermoplastic; extinguishing degree UL 94 V-0				
Dimensions DIN 43880			1TE				
Weight per unit	kg		0,136	0,140	0,150	0,153	0,155



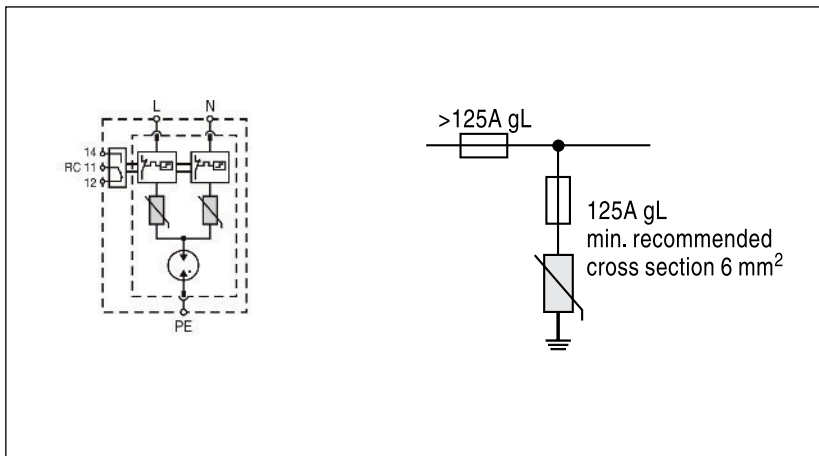
## ISPRO DM(R) (2+0)

ISPRO DR 10/xxx (with remote contacts)							
Remote contacts				YES			
Contact ratings	250 V	A	0,5				
	125 V		3				
Terminal cross section		mm <sup>2</sup>	max. 1.5				
Remote terminal torque		Nm	0.25Nm				
Weight per unit		kg	0,141	0,145	0,155	0,158	0,160

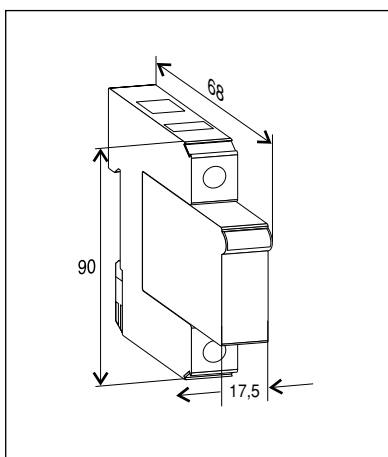
### Connection diagram

ISPRO DMR 10/XXX

Selection of back-up fuse



### Dimensions



### Accessory part for ISPRO DM (R) 10/xxx (2+0)

Type	Module ISPRO DM(R) 10/xxx (2+0)				
	150	275	320	385	440



## ISPRO DMG(R) (2+0)



The PROTEC DMG series of overvoltage surge protective devices has been developed to protect against indirect lightning discharges and induced voltages. It is intended to provide protection in zones 2 - 3 as per IEC 62305.

The plug-in module / base design facilitate replacement of a failed module without the need to remove system wiring etc. ISPRO DMG consists of two performance varistor blocks with thermal disconnection devices and galvanic isolation N to PE for TT single phase networks.

Category IEC/EN/VDE	Class III/Type 3/D
Location of use	Branch sub-distribution boards
Protection modes	L/N -PE
Protective element	MOV and GDT
Surge discharge ratings	$U_{oc} / I_{sc} = 10kV/5kA/pole$
Housing	Modular design



### Technical data

Type			ISPRO DMG(R) (2+0)
			320
Standards			IEC-61643-1
Max. continuous operating voltage (AC/DC)	$U_c$	V	320/420
Combination wave (1.2/50, 8/20))	$I_n$	kA	10kV/5kA per pole
Max. discharge current (8/20)	$I_{max}$	kA	10kA per pole
Protection level at $I_n$	$U_p$	kV	< 1.0
Follow current	$I_t$	$A_{RMS}$	NO
Response time	$t_A$	ns	100
Residual current at $U_c$	$I_{PE}$	mA	/
Thermal protection			YES
Terminal screw torque	Upper terminals	Nm	max.2
	Lower terminals		max. 3.5
Back-up fuse gL (if mains > 63 A)		A	63A gL
Short-circuit withstand current		kA	10kA/50Hz
Temperature range		°C	-40 ... +80
Terminal cross section	Upper terminals	mm <sup>2</sup>	6mm <sup>2</sup> (solid) / 4mm <sup>2</sup> (stranded)
	Lower terminal		35mm <sup>2</sup> (solid) / 25mm <sup>2</sup> (stranded)
Mounting EN 60715			35 mm wide mounting rail in accordance with EN 60715
Degree of protection			IP 20
Housing material			thermoplastic; extinguishing degree UL 94 V-0
Dimensions DIN 43880			1TE
Weight per unit		kg	0,118



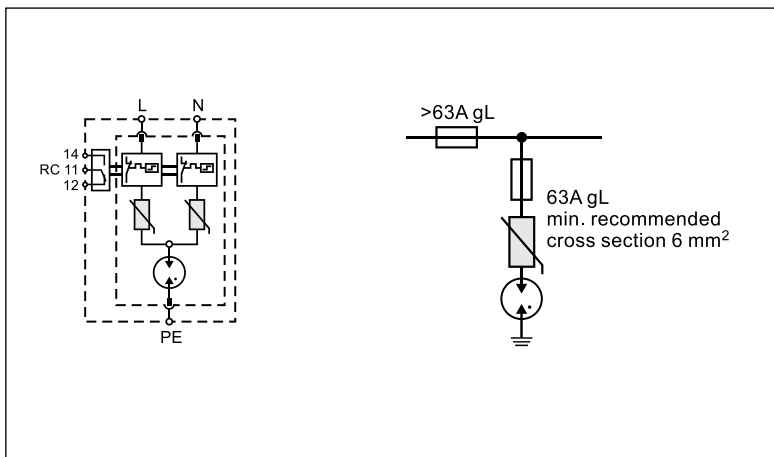
## ISPRO DMG(R) (2+0)

ISPRO DMGR 10/xxx (with remote contacts)			
Remote contacts			YES
Contact ratings	250 V	A	0,5
	125 V		3
Terminal cross section		mm <sup>2</sup>	max. 1.5
Remote terminal torque		Nm	0.25
Weight per unit		kg	0,123

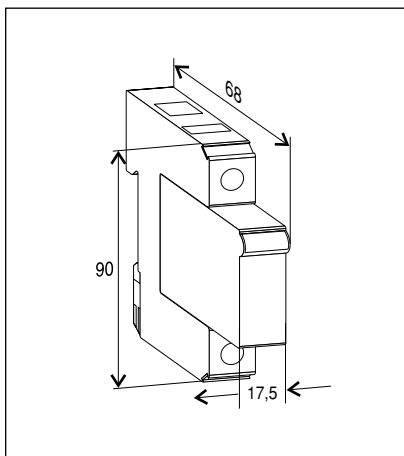
### Connection diagram

ISPROT DMGR 20

Selection of back-up fuse



### Dimensions



### Accessory part for ISPRO DMG(R) (2+0)

Type	Module ISPRO DMG(R) 10/xxx (2+0)
	320

