

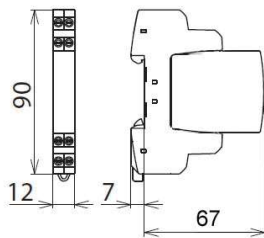


PROSURGE DM.. data network surge arrester are designed for universal 1 or 2-pairs data lines against the damaging from surges and spikes caused by lightning and other electrical sources, suitable for use in category location B, C (ANSI/IEEE C62.41) or directly at the upstream near the protected devices.

Technical Features

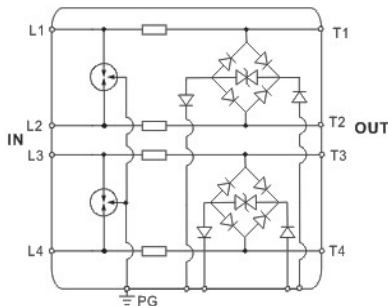
- Data network protector in according with UL497b, IEC61643-21:2012;
- 12mm pluggable surge protector for DIN-Rail mounting
- Signal transmission is not interrupted when exchanging module
- Two-stage protection circuit. Limit the transients with gas discharge tubes and transzorb diodes
- Earthing is possible on DIN rail
- Different model are suitable to use for universal 4-20mA current loop, TTL, analog telephone line, measurement system and high-frequency bus and data transmission systems etc.

- Dimension drawing

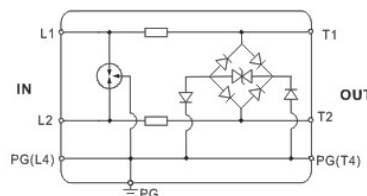


Model		DM-05/M4N1	DM-12/M4N1	DM-24/M4N1	DM-48/M4N1
Lines Protected		2-Pair			
Nominal Voltage (Vdc)	Un	5V	12V	24V	48V
Max. Continuous Operating Voltage (Vdc/Vac)	Uc	6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V
C2 Nominal Discharge Current (8/20µs)	In	10kA			
Lightning Impulse Current (10/350µs)	Iimp	2.5kA			
Voltage Protection Level	@C2 (8/20µs) Up	≤30V(L-L); ≤30V(L-G)	≤45V(L-L); ≤45V(L-G)	≤55V(L-L); ≤55V(L-G)	≤100V(L-L); ≤100V(L-G)
	@C3 (1KV/µs) Up	≤24V(L-L); ≤24V(L-G)	≤38V(L-L); ≤38V(L-G)	≤48V(L-L); ≤48V(L-G)	≤75V(L-L); ≤75V(L-G)
Rated Load Current	IL	1A			
Cut-off Frequency	fG	100 MHz			
Series Impedance per Line	R	0,68 Ω			

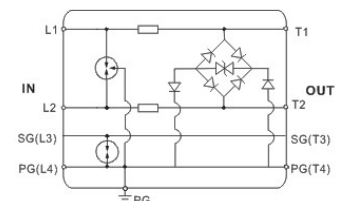
- Basic circuit diagram



For 2-pair data line
DM-.../M4N1



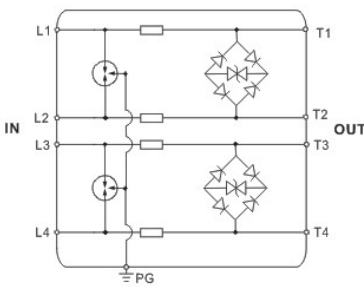
For 1-pair data line
DM-.../M2N1



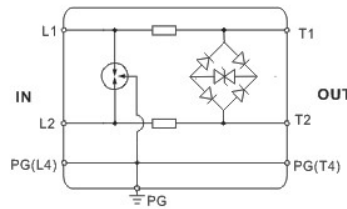
For 1-pair+shield data line
DM-.../M2N3

Model		DM-05/M4N2	DM-12/M4N2	DM-24/M4N2	DM-48/M4N2
Lines Protected		2-Pair			
Nominal Voltage (Vdc)	Un	5V	12V	24V	48V
Max. Continuous Operating Voltage (Vdc/Vac)	Uc	6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V
C2 Nominal Discharge Current (8/20µs)	In	10kA			
C2 Total nominal Discharge Current (8/20µs)		20kA			
Lightning Impulse Current (10/350µs)	Iimp	2.5kA			
Voltage Protection Level	@C2 (8/20µs) Up	≤30V(L-L); ≤500V(L-G)	≤45V(L-L); ≤500V(L-G)	≤55V(L-L); ≤500V(L-G)	≤100V(L-L); ≤500V(L-G)
	@C3 (1kV/µs) Up	≤24V(L-L); ≤600V(L-G)	≤38V(L-L); ≤600V(L-G)	≤48V(L-L); ≤600V(L-G)	≤75V(L-L); ≤600V(L-G)
Rated Load Current	IL	1A			
Cut-off Frequency	fG	100 MHz			
Series Impedance per Line	R	0.68 Ω			

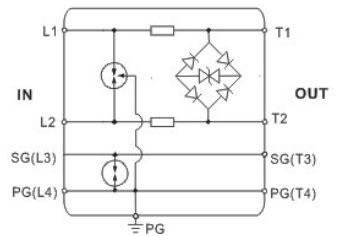
• Basic circuit diagram



For 2-pair data line
DM-.../M4N2



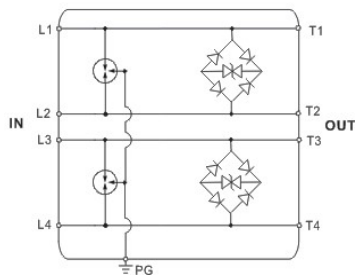
For 1-pair data line
DM-.../M2N2



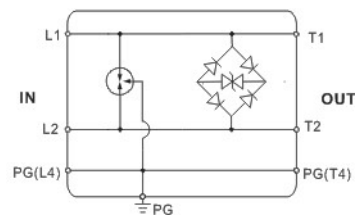
For 1-pair+shield data line
DM-.../M2N4

Model		DM-05/M4N6	DM-12/M4N6	DM-24/M4N6	DM-48/M4N6
Lines Protected		2-Pair			
Nominal Voltage (Vdc)	Un	5V	12V	24V	48V
Max. Continuous Operating Voltage (Vdc/Vac)	Uc	6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V
C2 Nominal Discharge Current (8/20µs)	In	10kA			
C2 Total nominal Discharge Current (8/20µs)		20kA			
Lightning Impulse Current (10/350µs)	Iimp	2.5kA			
Voltage Protection Level	@C2 (8/20µs) Up	≤30V(L-L); ≤500V(L-G)	≤45V(L-L); ≤500V(L-G)	≤55V(L-L); ≤500V(L-G)	≤100V(L-L); ≤500V(L-G)
	@C3 (1kV/µs) Up	≤24V(L-L); ≤600V(L-G)	≤38V(L-L); ≤600V(L-G)	≤48V(L-L); ≤600V(L-G)	≤75V(L-L); ≤600V(L-G)
Rated Load Current	IL	2A			
Cut-off Frequency	fG	100 MHz			
Series Impedance per Line	R	0 Ω			

• Basic circuit diagram



For 2-pair data line
DM-.../M4N6

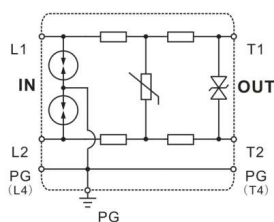


For 1-pair data line
DM-.../M2N6



Model		DM-12/M2N5	DM-24/M2N5	DM-48/M2N5	DM-110/M2N5
Lines Protected		1-Pair			
Nominal Voltage (Vdc)	Un	12V	24V	48V	110V
Max. Continuous Operating Voltage (Vdc/Vac)	Uc	15V/10.6V	33V/23.3V	54V/38.1V	170V/120V
C2 Nominal Discharge Current (8/20µs)	In	10kA			
C2 Total Nominal Discharge Current (8/20µs)		20kA			
Lightning Impulse Current (10/350µs)	Iimp	2.5kA			
Voltage Protection Level	@C2 (8/20µs) Up	≤25V(L-L); ≤750V(L-G)	≤50V(L-L); ≤750V(L-G)	≤100V(L-L); ≤750V(L-G)	≤260V(L-L); ≤750V(L-G)
	@C3 (1kV/µs) Up	≤19V(L-L); ≤650V(L-G)	≤45V(L-L); ≤650V(L-G)	≤70V(L-L); ≤650V(L-G)	≤230V(L-L); ≤650V(L-G)
Rated Load Current	IL	1A			
Cut-off Frequency	fG	2 MHz			
Series Impedance per Line	R	1.36 Ω			

- Basic circuit diagram



For 1-pair data line

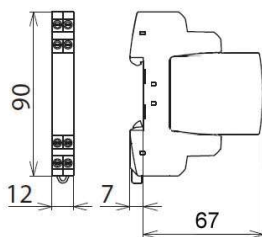
DM-./M..N7 data network protector is with **failure indication and fault-current** protection inside to make protection module replacement timely and prevent failure or even destruction of signal or communication system.

These modules are suitable for digital I/O signal or analog power surge protection.

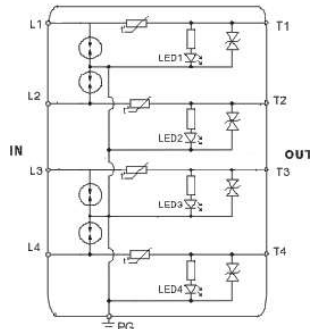


Model		DM-05/M4N7	DM-12/M4N7	DM-24/M4N7	DM-48/M4N7
Lines Protected		2-Pair			
Nominal Voltage (Vdc)	Un	5V	12V	24V	48V
Max. Continuous Operating Voltage (Vdc/Vac)	Uc	6V/4.2V	15V/10.6V	33V/23.3V	54V/38.1V
C2 Nominal Discharge Current (8/20µs)	In	10kA			
C2 Total Nominal Discharge Current (8/20µs)		20kA			
Lightning Impulse Current (10/350µs)	Iimp	2.5kA			
Voltage Protection Level	@C2 (8/20µs) Up	≤30V(L-L); ≤500V(L-G)	≤45V(L-L); ≤500V(L-G)	≤55V(L-L); ≤500V(L-G)	≤100V(L-L); ≤500V(L-G)
	@C3 (1kV/µs) Up	≤24V(L-L); ≤600V(L-G)	≤38V(L-L); ≤600V(L-G)	≤48V(L-L); ≤600V(L-G)	≤75V(L-L); ≤600V(L-G)
Rated Load Current	IL	1A			
Cut-off Frequency	fG	2 MHz			
Series Impedance per Line	R	PTC			

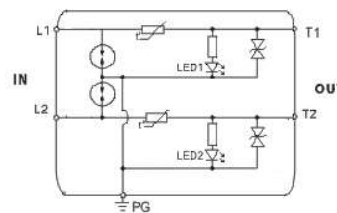
- Dimension drawing



- Basic circuit diagram



For 2-pair data line
DM-./M4N7



For 1-pair data line
DM-./M2N7