

## Technical characteristics

### Han-Modular® SP SO DM2

Nominal voltage( $U_N$ )*	24 V
Max. continuous operating voltage (d.c.) ( $U_C$ )*	33 V
Max. continuous operating a.c. voltage ( $U_C$ )	23 V
Nominal current at 70 °C ( $I_L$ )	0.5 A
Impulse Category	D1, C1, C2, C3
D1 Lightning impulse current (10/350 $\mu$ s) per line ( $I_{imp}$ )	1 kA
C1, C2 Total nominal discharge current (8/20 $\mu$ s) ( $I_n$ )	20 kA
C1, C2 Nominal discharge current (8/20 $\mu$ s) per line ( $I_n$ )	5 kA
Voltage protection level line-line for $I_n$ C2 ( $U_p$ )	$\leq 55$ V
Voltage protection level line-PG for $I_n$ C2 ( $U_p$ )	$\leq 650$ V
Voltage protection level line-line for 1kV / $\mu$ s C3 ( $U_p$ )	$< 45$ V
Voltage protection level line-PG for 1kV / $\mu$ s C3 ( $U_p$ )	$< 500$ V
Series impedance per line	1.8 Ohm
Cut-off frequency line-PG ( $f_G$ ) / 50 Ohm	5.5 MHz
Capacitance line-line (C)	$< 1$ nF
Capacitance line-PG (C)	$< 20$ pF
Operating temperature range ( $T_U$ )*	-40 °C ... +85 °C
Degree of protection*	IP20
Dimensions	34.2x54.59x 14.65 mm (WxLxH)
Wire connection method*	Push In
Pluggabel into*	Plug module SP PL DM2
Enclosure Material*	Polycarbonate
Cross-sectional area, solid*	AWG 24 - 16; 0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup>
Cross-sectional area, flexible*	AWG 24 - 16; 0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup> (without ferrule)
Stripping length*	min. 8 mm
Mounting*	Han-Modular® Hinged Frame
Colour*	RAL 7032
Test standards	IEC 61643-21 / EN 61643-21
UL approval / flammability class.*	UL497B / UL94 V-0
Shock and vibration*	IEC 60068-2-6 / IEC 60068-2-29
Equipotential bonding	via earthed hinged frame ( $\geq 6$ mm <sup>2</sup> / $\leq$ AWG 10)

## Specifications and approvals

Compliant with UL 497 B





Differential mode-2 channels

## Features

- Surge protection for two pairs of balanced signals
- Protects symmetric signals interfaces with electrical isolation
- Fits in Han® Modular connector system
- Nominal voltage: 24VDC
- Nominal current: 0.5A

## General description

The surge protection module protects up to 2 pairs of balanced signals interfaces with electrical isolation against lightning strikers or overvoltage. Preferred field of application is the protection of analogue signal interfaces like for 0/4-20mA or differential signals.

The equipotential bonding will be led via the earthed hinged frame of the Han-Modular® system.

Identification	Part number	Drawing	Dimensions in mm
Han-Modular® SP PL DM2, male	09 80 000 0100		
Han-Modular® SP SO DM2, female	09 80 003 0200		
		<p>Basic circuit diagram</p>	