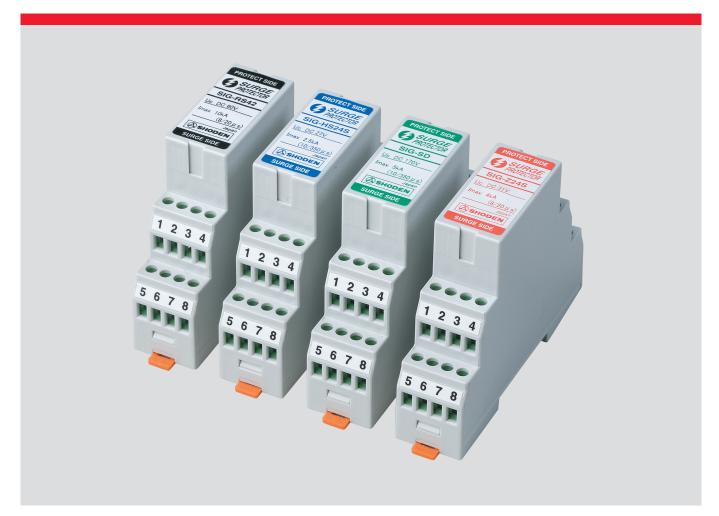


## **Example 2** Lightning Protection

Lightning surge protection unit for signaling system

# **SIG** series



# High performance lightning surge protection unit for Signal transmission system adapted to FA-network.

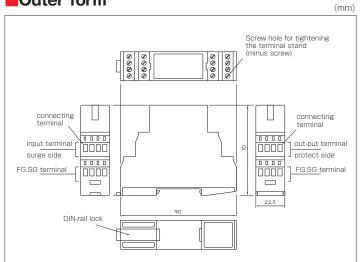
FA-network density and area in the large-scale factories are going to be more higher and larger. This trend brings more often damage caused by lightning surge entered through PLC-communication cables, instrument-connecting and measuring cables, control cables etc. to the networks, starting from " things damage " like damage to equipments, leading up to the worst case " factory closing damage " due to production line stop. In the recent years damage due to lightning surges became more severe.

SIG-series is adaptable to the various signal cables for PLC-communication, instrument -connecting and measurement control etc. and has an excellent capability for voltage suppression and high current handling (direct lightning strike wave form  $10/350\mu s$  2.5kA) and guarantees stable system operation.

- $\bullet$  High performance surge protection unit adapted to direct lightning strike wave form (10/350 $\mu$ s 2.5kA)
- Adapted to the various signal cables for PLC-communication, instrument-connecting, measurement, control etc.
- Terminal stand form, press-contact is no more needed
- Adapted to DIN-rail

## **SIG** series

#### Outer form





### Specifications

Type		SIG-RS*	SIG-HS12	SIG-HS24	SIG-SD	SIG-Z12S	SIG-Z24S
Application		RS-485、 Application for sequencer etc.	for Photo MOS, Photo coupler 4-20mA,the equipments with low voltage withstanding		for general telephone line	for DC12V control power supply	for DC24V control power supply
Max. continuously usable voltage Uc		DC60V	DC13.5V	DC27V	DC180V	DC14V	DC31V
Transmission frequency band		DC~2MHz	DC~10kHz	DC~10kHz	DC~5MHz	-	-
Insertion loss		less than 1.0dB			less than 1.5dB	-	-
Dc resistance		less than 0.1Ω	5Ω±10%		less than 20Ω	less than 0.1Ω	
Voltage protection level Up 1.2/50 $\mu$ s 10kV	between wires	less tha	less than 25V less than 50		less than 200V	less than 60V	less than 120V
	to the earth	less than 400V	less than 50V	less than 100V	less than 400V	less than 60V	less than 120V
Impulse current withstanding	In 8/20μs	10kA			20kA	4kA	
	limp 10/350μs	2.5kA			5kA	-	
Applied cable		Single wire:φ 0.5mm-1.5mm Twisted wire:φ 0.5mm²-2.5mm²					
Environmental conditions		Temperature:-10℃~+60℃ Moisture:less than 95%(no condensation)					

 $<sup>\ \ \, \</sup>mbox{$\%$}$  SIG-RS is divided into 2 types : SIG-RS42 (for 2 cores) and SIG-RS44 (for 4 cores)

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