DK-DCM Surge Protective Device
Product Manual

1. Brief Introduction

DK-DCM Surge Protective Device adopts heat resisting plastic as the housing material. The main signal circuit module can be separated from the base. With features of easy installation and maintenance, dust-proof, anti-corrosion, it is used in the signal transmission equipment front-end. It can prevent the equipment from the permanent damage or winking out caused by induced over-voltage, over-current and other induced surge voltage. It is suitable for the any voltage classes surge protection of analog signal, switching signal, data signal, communication line, remote telemetry signals instrumentation equipment and PLC cabinet, especially for control signal, data transmission line, and monitoring signal in electric power, factory, and petrochemical industry.

2. Working Principle

DK-DCM Surge Protective Device is a series connection surge protective device. When the signal transmission is working normally, the lightning protection device inside the product is presenting a high electric resistance status. When there is over-voltage or over-current in the circuit lines, the lightning protection device will present a low electric resistance status within a nanosecond level respond. That makes the over-voltage be limited in a low level. And the follow current value could be zero after the over-voltage. So that protect the equipment from the damage caused by over-voltage.

3. Working Circumstance

a. Working Temperature: -25^{0}C～＋70^{0}C.
b. Storage Temperature: -40^{0}C～＋85^{0}C.
c. Relative Humidity: ≤95%.

Inside the room or places which there isn't rain or snow.

4. Data Sheet

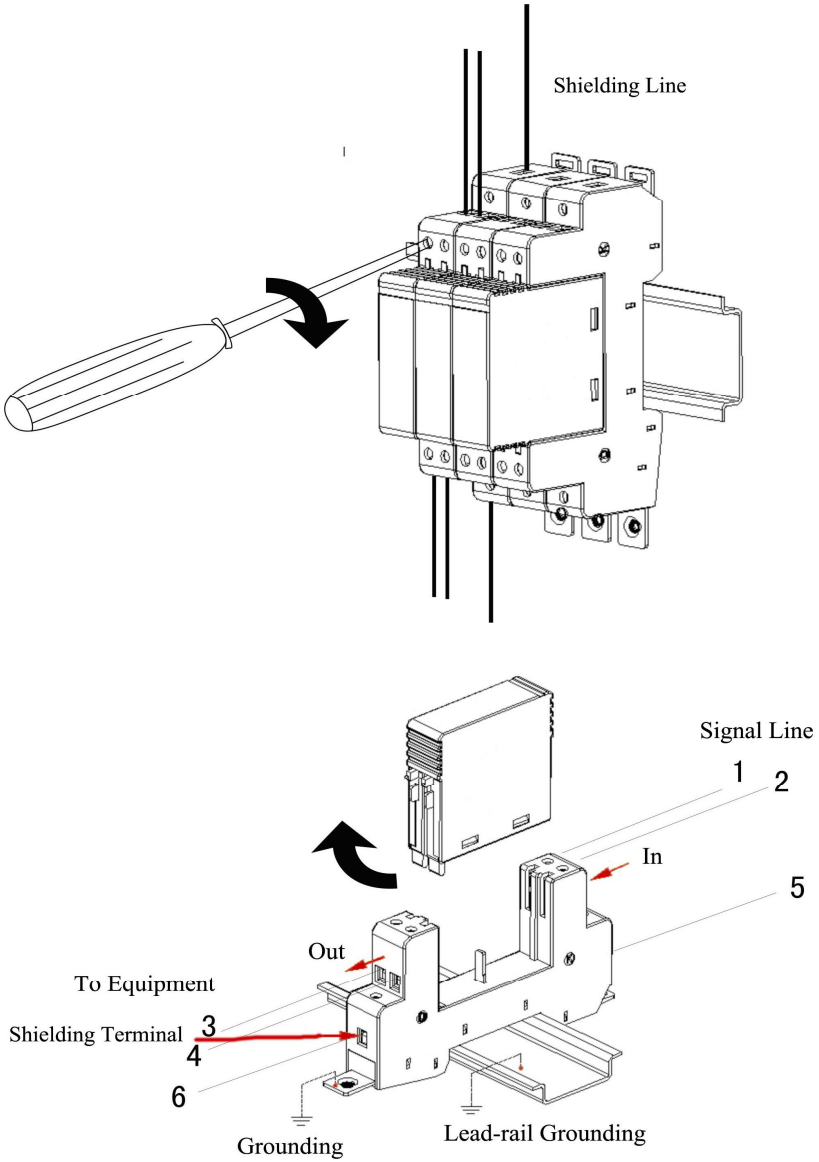
Item No.	DK-DCM 12	DK-DCM 24	DK-DCM 48	DK-DCM 200
Working Voltage Un	DC 12V	DC 24V	DC 48V	DC 200V
L-L Voltage Protection Level	≤40V	≤60V	≤100V	≤150V
Limiting Voltage(10/700us)	≤70V	≤90V	≤150V	≤300V
Analog	0~20mA			
Switching Value	2A			
Nominal Discharging Currents In(8/20us)	5kA			
Max. Discharging Currents Imax(8/20us)	10 kA			
Transmission Rate(bit/s)	2M			
Respond Time	≤1ns			
Housing Material	Plastic UL94-V0			
Shell Protection Level	IP20			
Inset Loss	0.5dB			
Impedance (Omega)	10Ω			
Weight	0.08 kg			
Weir Sectional Surface	Max 2.5sq.m ㎡			
Installation Support	35mm rail lead			
Dimension	106*65*14mm			
Certificate	CE			

5. Installation and Cautions

a. This product shall be installed as the front-end of the transmission equipment. And it shall be series connected with the equipment need protection.

b. Peeling the signal line and put the metal core line into the DK-DCM connecting terminal, and then use the screwdriver fix the signal. The in (from signal line) and out (to equipment) signal line shall be connected separately, shall not be connected inversely. If there is Shielding Line, please connect the Shielding Line with the Shielding Line Connection Terminal on the DK-DCM, and used the screwdriver to fix it.

c. The grounding line cross section area shall be no less than 4mm^2, and the grounding line shall be the shorter the better.



Installation Instruction