

SG-770 Hardware User Guide *Ver 1.0*

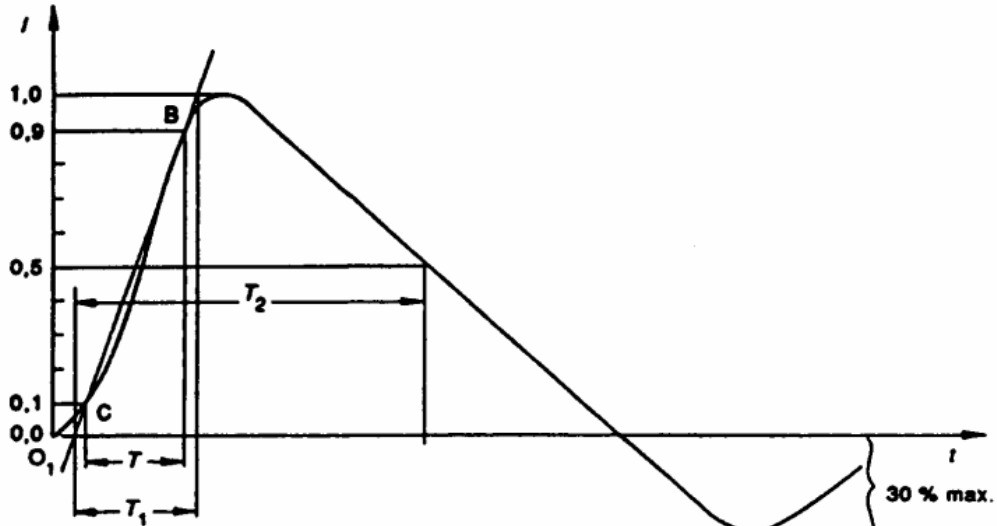
Last Modified 18/03/2009

SG-770 Specifications

Specifications

General	
Standards	IEC 61000-4-5, IEC 61000-4-12
Input Channels	7
Input Signal Type	Voltage, Current, Thermocouple, RTD, RS-485
Max. Line Voltage	30 VDC
Protection Performance	
Surge Waveform	IEC 61000-4-5 <i>ref. Figure 3</i> IEC 61000-4-12 <i>ref. Figure 4</i>
Max. Surge Voltage	Line to Earth: +/- 6000 V max.
Environment	
Operating temperature	-25 °C ~ 75 °C
Storage temperature	-30 °C ~ 75 °C
Humidity	5 to 95% RH, non-condensing

Surge Waveform Type

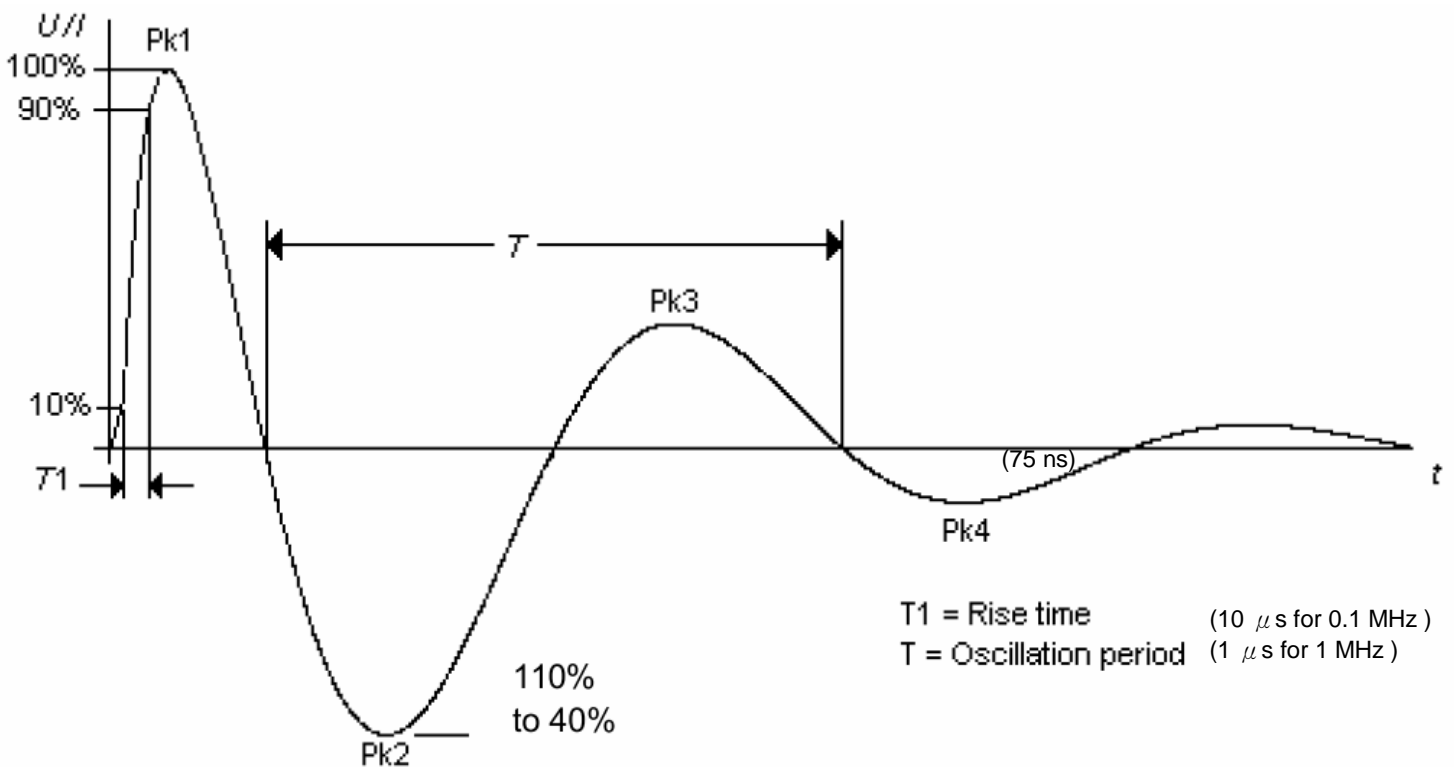


IEC 099/95

Front time: $T_1 = 1,25 \times T = 8 \mu\text{s} \pm 20 \%$

Time to half-value: $T_2 = 20 \mu\text{s} \pm 20 \%$

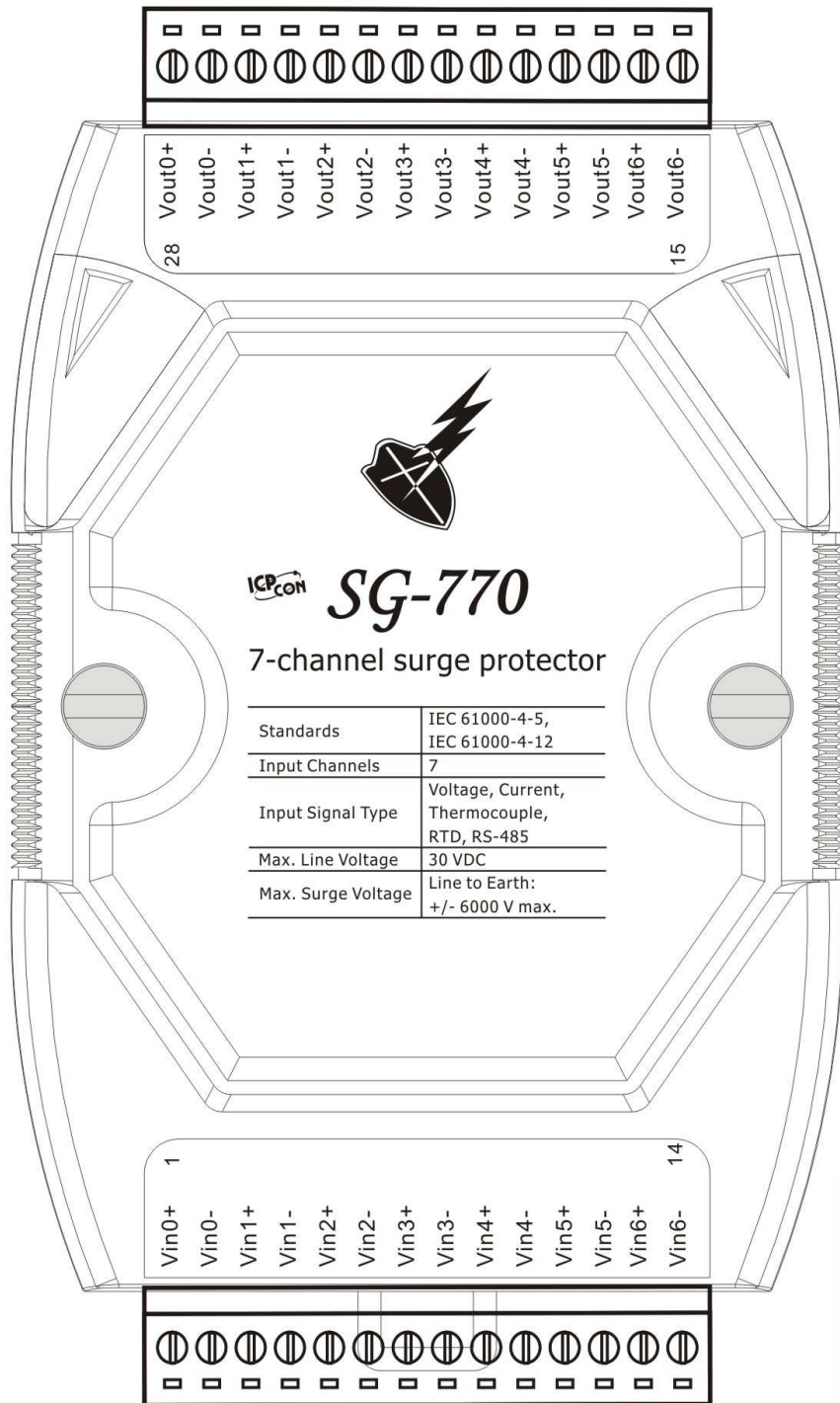
Figure 3 — Waveform of short-circuit current (8/20 μs)
(waveform definition according to IEC 60-1)



T_1 = Rise time (10 μs for 0.1 MHz)
 T = Oscillation period (1 μs for 1 MHz)

Figure 4 – Waveform of IEC-61000-4-12

SG-770 Pin Assignment



- Vin0+ 1
- Vin0-
- Vin1+
- Vin1-
- Vin2+
- Vin2-
- Vin3+
- Vin3-
- Vin4+
- Vin4-
- Vin5+
- Vin5-
- Vin6+ 14
- Vin6-

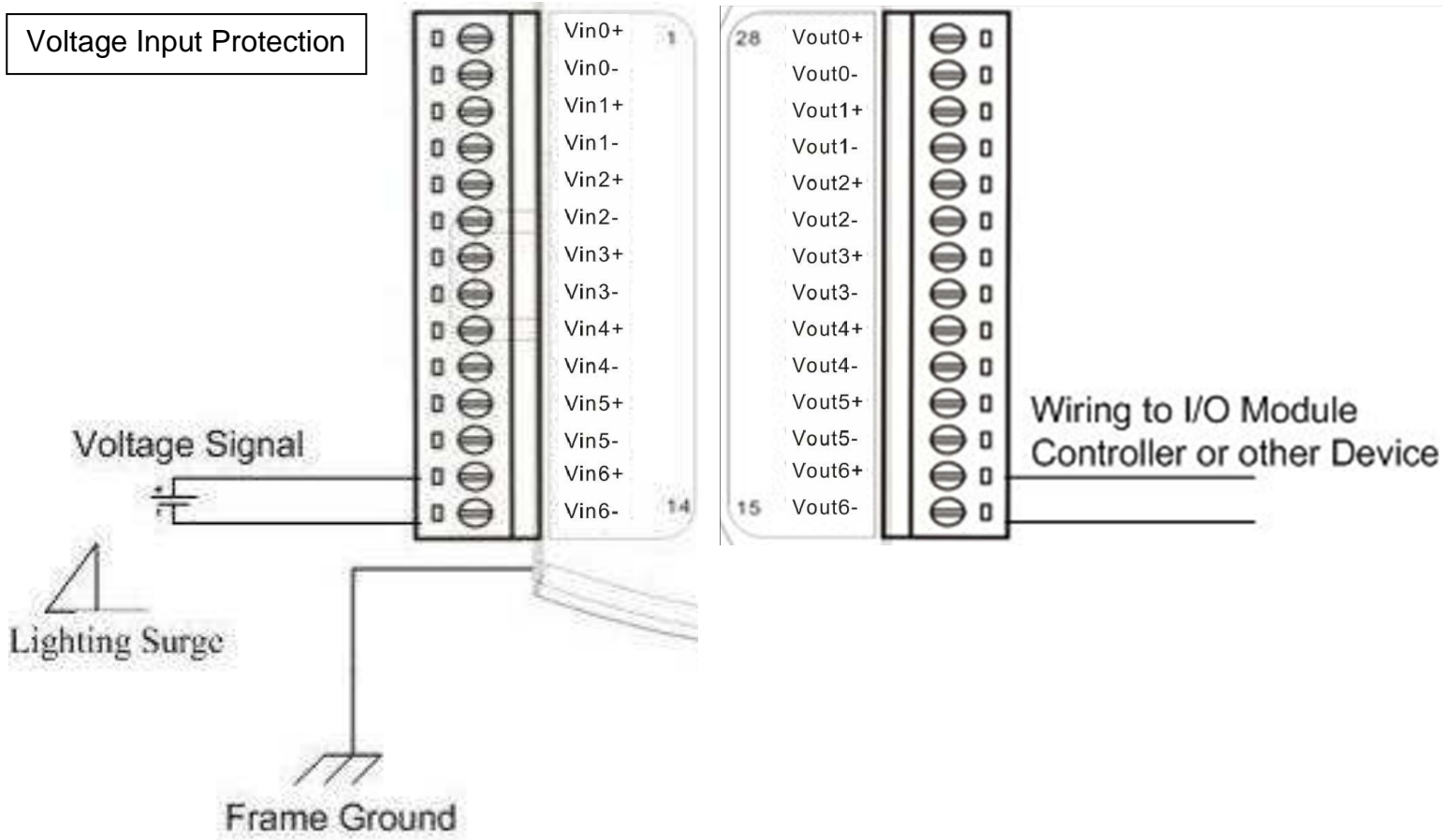
- 28 Vout0+
- Vout0-
- Vout1+
- Vout1-
- Vout2+
- Vout2-
- Vout3+
- Vout3-
- Vout4+
- Vout4-
- Vout5+
- Vout5-
- Vout6+ 15
- Vout6-

ICP CON **SG-770** 7-channel surge protector

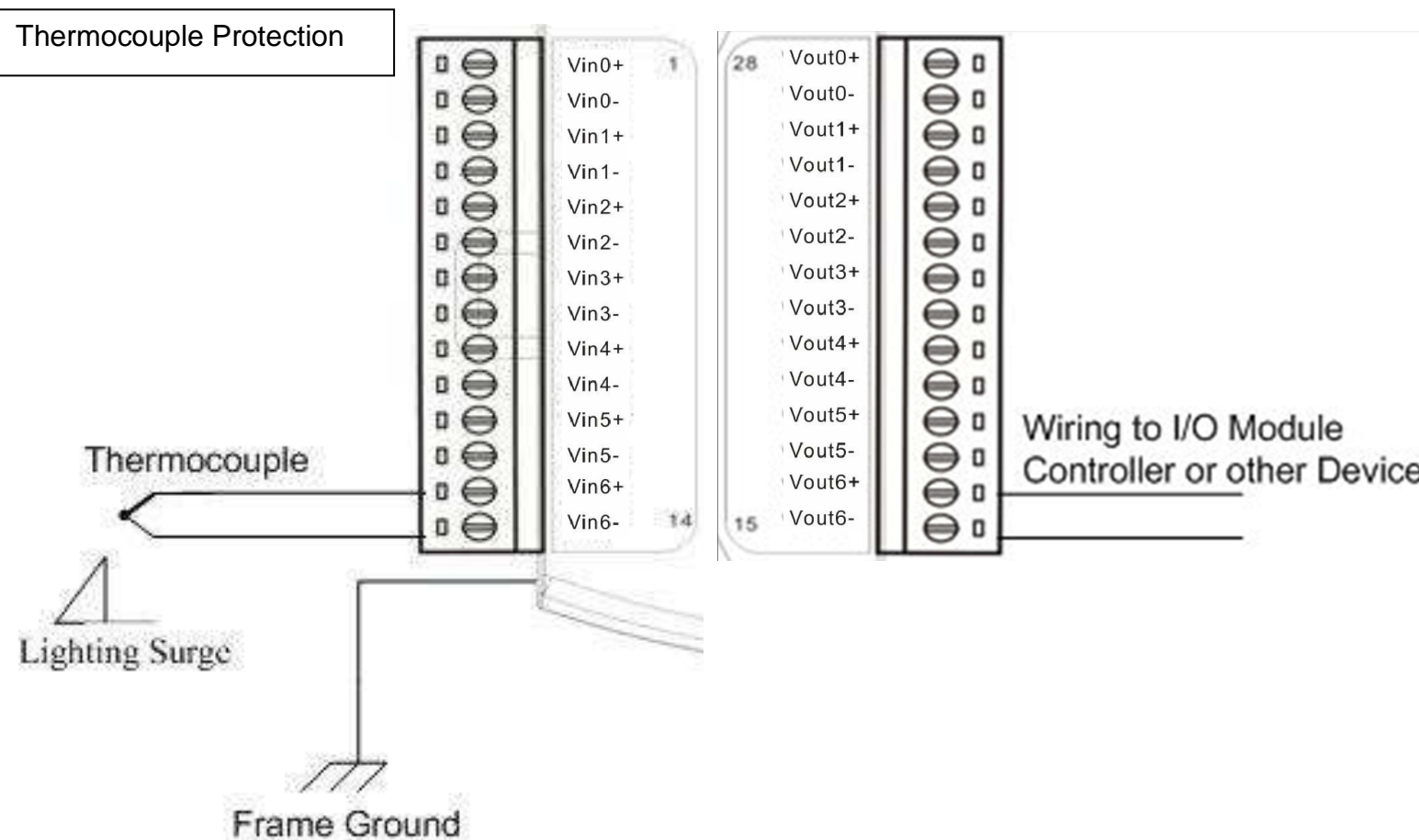
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SG-770 Wire Connection Type

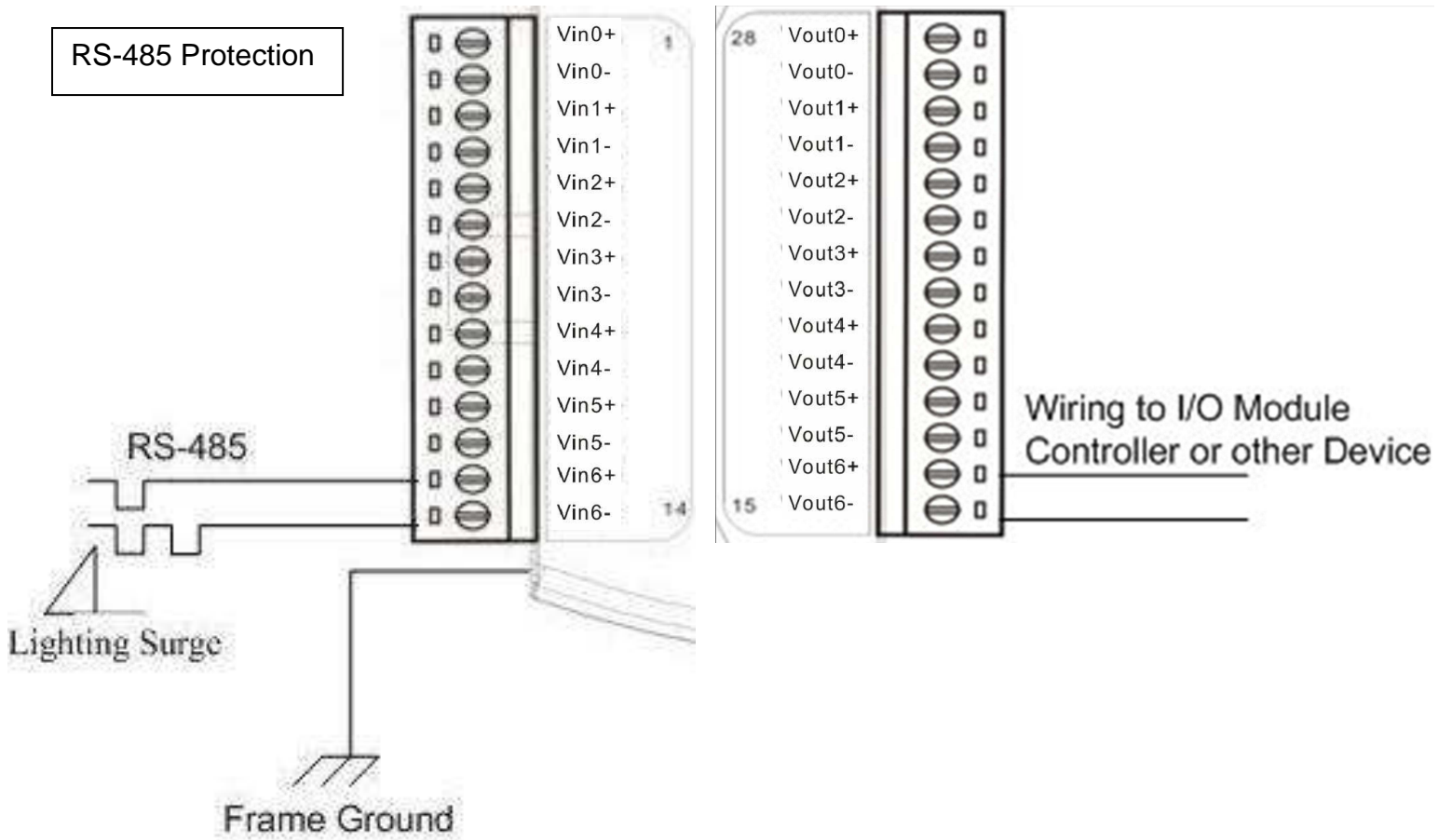
Voltage Input Protection



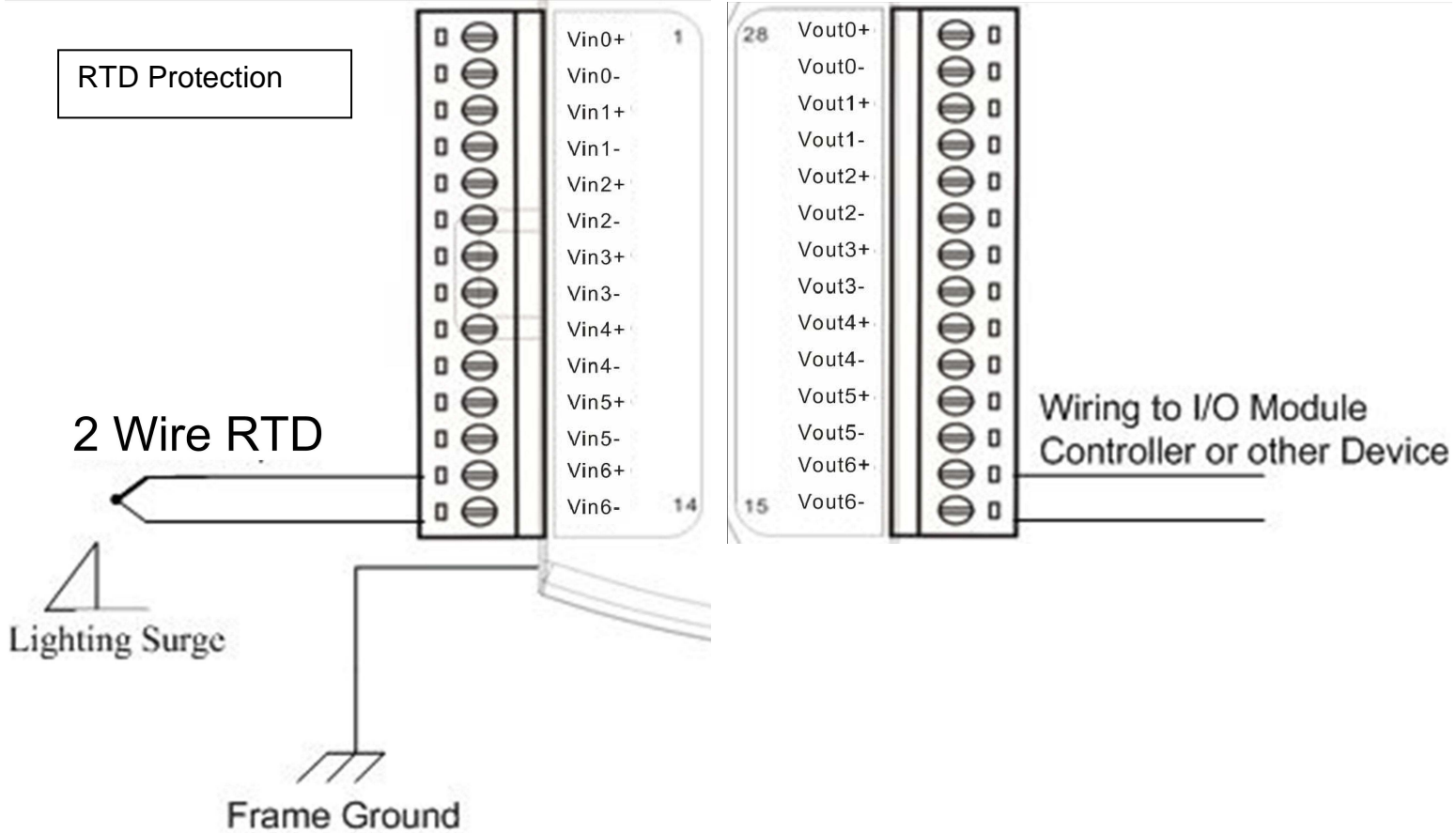
Thermocouple Protection



RS-485 Protection



RTD Protection



Current Input Protection

