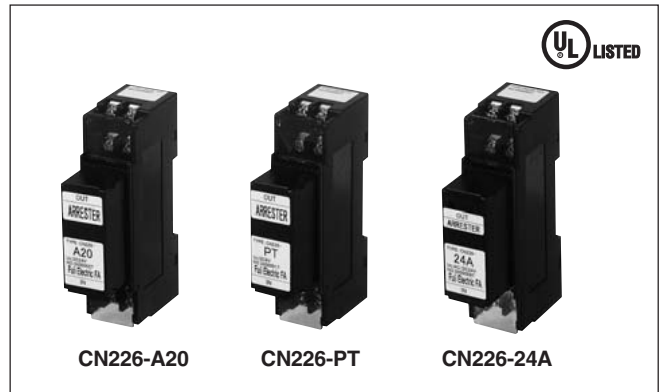


CN226 series arresters (surge protective devices) for signal line and control circuit

■ Features

- Highly effective surge suppression using protection method combining gas discharge tube, varistor, and avalanche diode.
- Large surge discharge current
- Fast response to surges reduces influence on device.
- A comprehensive lineup to suit all kinds of signal line applications (e.g., transducers, remote terminals, and sensors).
- Simple mounting to IEC rail.
- The arrester mounts to the terminal block using a plug-in connection for simple inspection and replacement. Signal lines are not opened even if the arrester is removed.



■ Specifications

• For signal line circuit

| Type | CN226-A20 | CN226-A50 | CN226-TC | CN226-PT | CN226-PM | CN226-SP | CN226-24 | CN226-48 | CN226-100 | |
|-------------------------------|--------------------------|-----------|--------------|------------------------|-------------------|------------|------------------|----------|-----------|-----------|
| Application | 4-20mA | 10-50mA | Thermocouple | Resistance thermometer | Potentiometer | Slow pulse | 24V DC | 48V DC | 100V DC | |
| Rated voltage | 24V DC | 48V DC | 5V DC | 8V DC | 5V DC | 12V DC | 24V DC | 48V DC | 100V DC | |
| Rated current | 100mA | | | | | | 200mA | | | |
| Leakage current | 5μA max. | | 10μA max. | 2μA max. | 10μA max. | | 5μA max. | | | |
| Reference voltage (1mA) | L-L | 30V min. | 61V min. | 6.7V min. | 11V min. | 6.7V min. | 14V min. | 30V min. | 60V min. | 150V min. |
| Discharge voltage (1mA) | L-E | 150V min. | | | | | | | | 180V min. |
| Clamping voltage (1,000A) | L-L | 40V max. | 100V max. | 14V max. | 22V max. | 14V max. | 25V max. | 55V max. | 130V max. | 700V max. |
| | L-E | 300V max. | | | | | | | | 800V max. |
| Internal resistance | 10Ω ±10% (Single) | | | 2Ω ±10% (Single) | 10Ω ±10% (Single) | | 1Ω ±10% (Single) | | | |
| No. of ports | 2-port, combination type | | | | | | | | | |
| Response time | 0.1μs max. | | | | | | | | | |
| Max. discharge current 8/20μs | L-L | 5,000A | | | | | | | | |
| | L-E | 10,000A | | | | | | | | |

• For control power supply circuit

| Type | CN226-24A | CN226-48A | CN226-100A | |
|-------------------------------|--------------------------|-----------|------------|-----------|
| Application | 24V AC/DC | 48V AC/DC | 100V AC/DC | |
| Rated voltage | 24V AC/DC | 48V AC/DC | 100V AC/DC | |
| Rated current | 2A | | | |
| Leakage current | 10μA max. | | | |
| Reference voltage (1mA) | L-L | 40V min. | 84V min. | 180V min. |
| Discharge voltage (1mA) | L-E | 300V min. | | 350V min. |
| Clamping voltage (1,000A) | L-L | 250V max. | 400V max. | |
| | L-E | 400V max. | | 800V max. |
| Internal resistance | - | | | |
| No. of ports | 1-port, combination type | | | |
| Response time | 0.1μs max. | | | |
| Max. discharge current 8/20μs | L-L | 2,000A | | 5,000A |
| | L-E | 2,000A | | 5,000A |

■ Type number nomenclature

CN226 - □

Application circuit

- A20: 4 to 20mA
- A50: 10 to 50mA
- TC: Thermocouple
- PT: Resistance thermometer
- PM: Potentiometer
- SP: Slow pulse

- 24: Signal circuit 24V DC
- 48: Signal circuit 48V DC
- 24A: Control power supply circuit 24V AC/DC
- 48A: Control power supply circuit 48V AC/DC
- 100A: Control power supply circuit 110V AC/DC

Basic type

■ Ambient conditions

- Ambient operating temperature: -20 to 50°C (No condensation)
- Relative operating humidity: 45% to 85% (No condensation)
- For indoor use

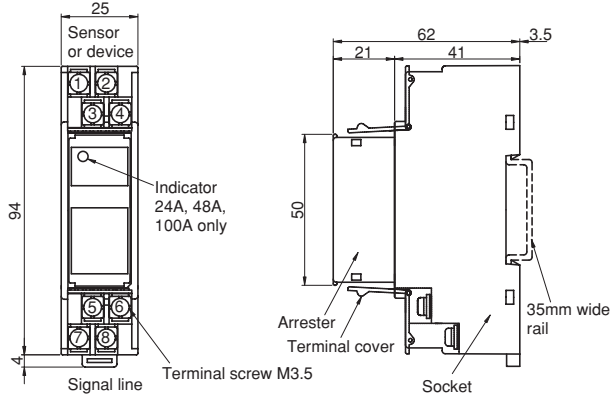
■ Ordering information

Specify the following:

1. Type number or ordering code

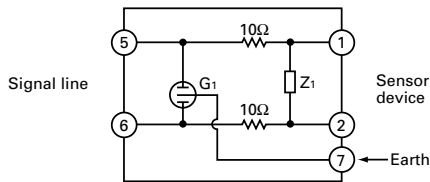
Arresters CN226 series

■ Dimensions, mm

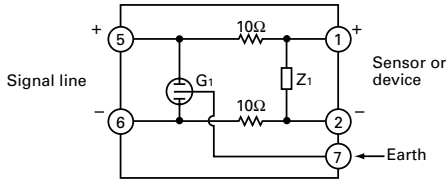


■ Internal circuit diagrams

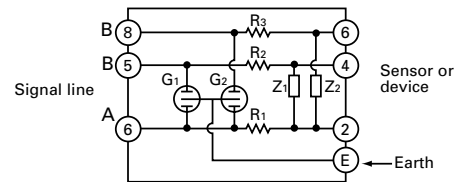
4-20mA, 10-50mA



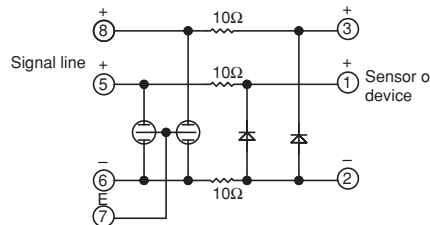
Thermocouple



Resistance thermometer

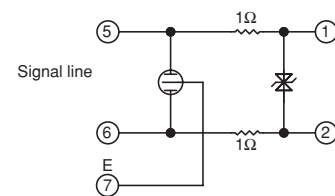


Potentiometer, slow pulse



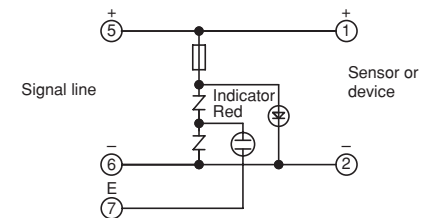
Signal line

24V, 48V DC

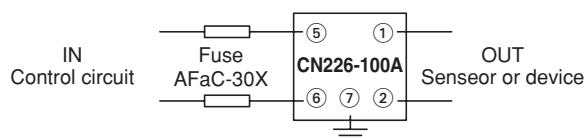
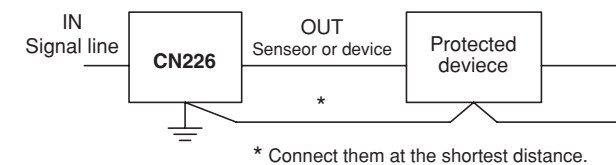


Control power supply

48V, 100V AC/DC



■ Examples of application effects



Note: When using an arrester CN226-100A, use a FUJI current-limiting fuse AFaC-30X for disconnection and short-circuit protection.

Note for thermocouple CN226-TC

