

INDUCED LIGHTNING DETECTION ARRESTERS

SIGNAL ARRESTER (2-WIRE SIGNAL)

UV-2 SERIES



(Mounted on FSTT)



Indication after detecting operation
UV-2-1 (24×43.5×15m)



Mounted on TRS)

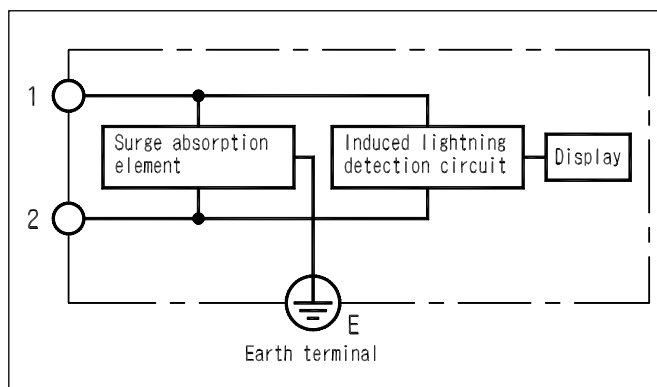
Use

This device is an indoor installation type arrester that can absorb voltage of induced lightning surge caused on a signal line by lightning discharge, thus protects connected instruments.

Features

1. Detects induced lightning occurred, changes the color of front indication from black to red to notify the operation of arrester and keeps the indication red after detection.
2. Exchange time for arrester is easily understandable because the operation result of arrester is visible.
3. Power source-free type.
4. Because the device can be installed in terminals directly, not only it is space saving, but also reduction of man-hour for wiring is possible.

Block diagram



Performance and common specifications

Spark over voltage	Line	DC130V
	Earth	DC65V
Clamping voltage	Line	500V (at 1,000A)
	Earth	250V (at 1,000A)
Response time		0.1μs
Discharge withstand current rating		1, 000A (8×20μs) IMAX=2, 500A 2 times
Leakage current	Line	60μA (at DC130V)
	Earth	60μA (at DC65V)
Maximum line voltage		DC130V
Induced lightning detection level		Detection voltage 1, 000-2, 000V (1.2×50μs) 1 time Detection current 200A 1 time
Operating temperature & humidity range		-10- + 55 , 5-90%RH
Storage temperature range		-40- + 70
Appearance color		Munsell N1.5 (black)
Weight		20g

Precautions

In the case of using a magnetized driver at the time of wiring work, though display may move to some extent, there is no problem in operation. The display possibly changes if an object with strong magnetism is brought close to the device.

- A discharge element in the device may initiate a discharge and causes defective withstand voltage of the device if a withstand voltage test of the panel having the device installed in was carried out. Detach the device from the panel before implementing a withstand voltage test.

Related equipment

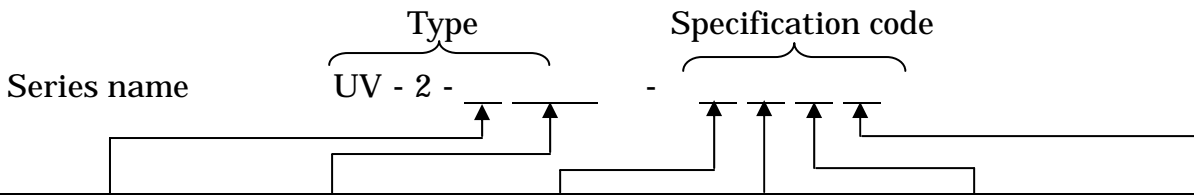
- Tentative name: arrester checker
Arrester life diagnosis function
Detection indication reset function

INDUCED LIGHTNING DETECTION ARRESTERS

SIGNAL ARRESTER (2-WIRE SIGNAL)

UV-2 SERIES

Specification code



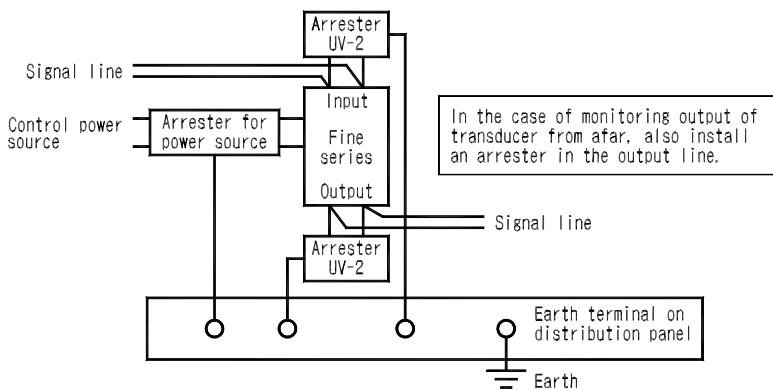
Series name	Clamping voltage	Model compatible for installation	Protection circuit	Length of earth lead wire	Handling of earth lead terminal	Shape of terminal joint
UV-2	1:250V	E1: Small sized plug-in Fine series One-output type	1: input circuit protection 2: output circuit protection	1: 40mm (Standard) 2: 0.5m	1: with crimping terminal (Crimping terminal used: Maker: Nippon Tanshi Co., Ltd. Type: VDAV-1.25-4)	1: U shape
		E2: Small sized plug-in Fine series Two-output type	1: input circuit protection	3: 1.0m		2: circular hole shape
		FL: Rack-in RS series	1: input circuit protection 2: output circuit protection	Z: by specification	2: without crimping terminal	

Example of use

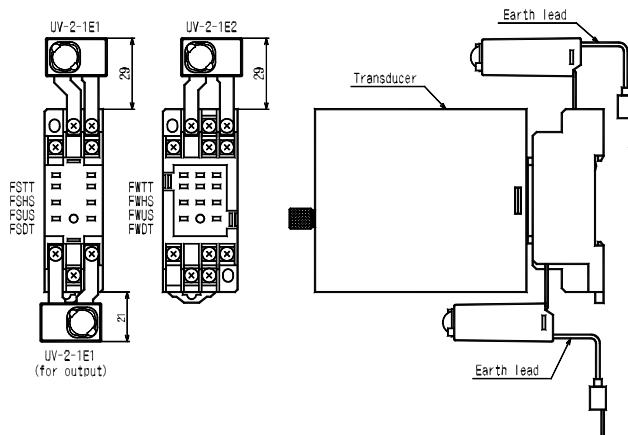
To enhance the effectiveness, please connect the ground wire in the shortest way.

Small sized plug-in Fine series

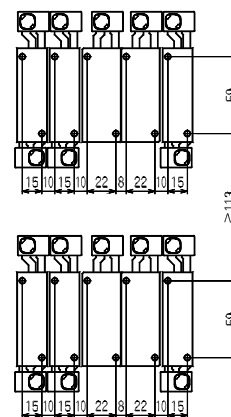
Because there is no earth terminal on small-sized plug-in arrester, connect earth lead of arrester to earth terminal of distribution panel in the shortest way before using it.



State diagram



Multiple unit installation



Cautions on installation

It can not be installed in output side of small-sized two-output type. Use DA series signal arrester.

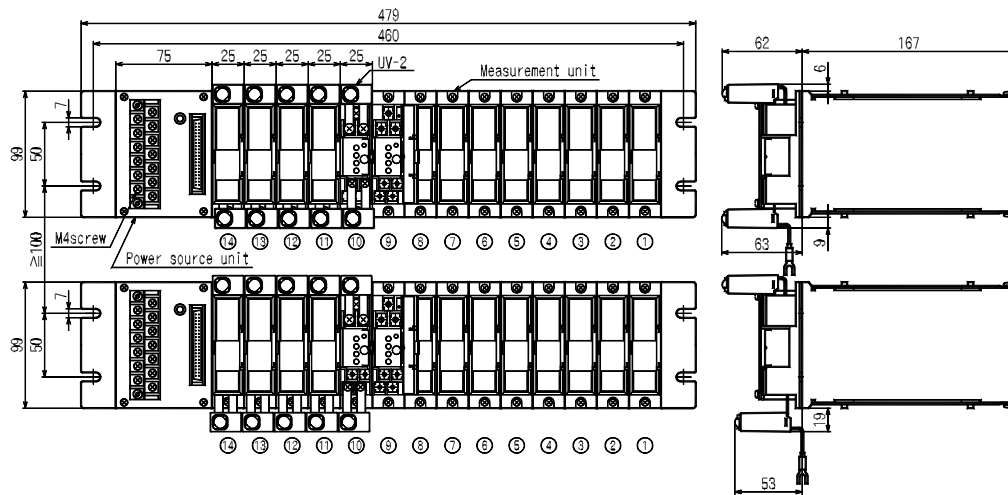
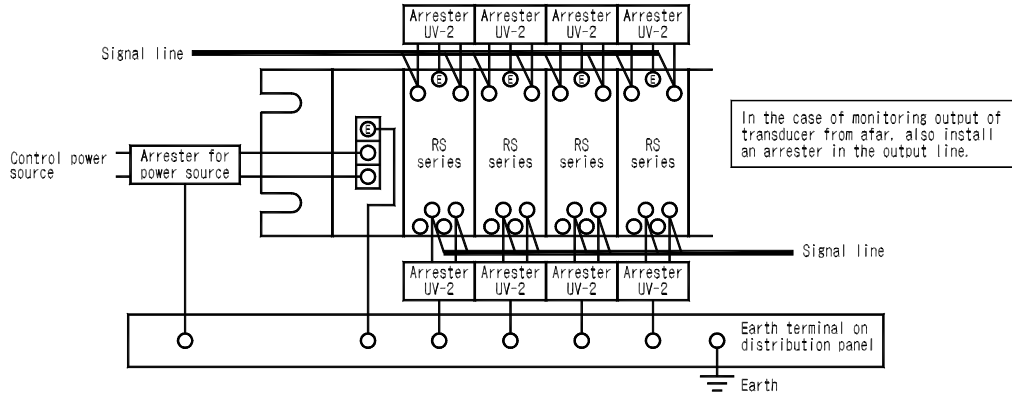
INDUCED LIGHTNING DETECTION ARRESTERS

SIGNAL ARRESTER (2-WIRE SIGNAL)

UV-2 SERIES

Rack-in transducer

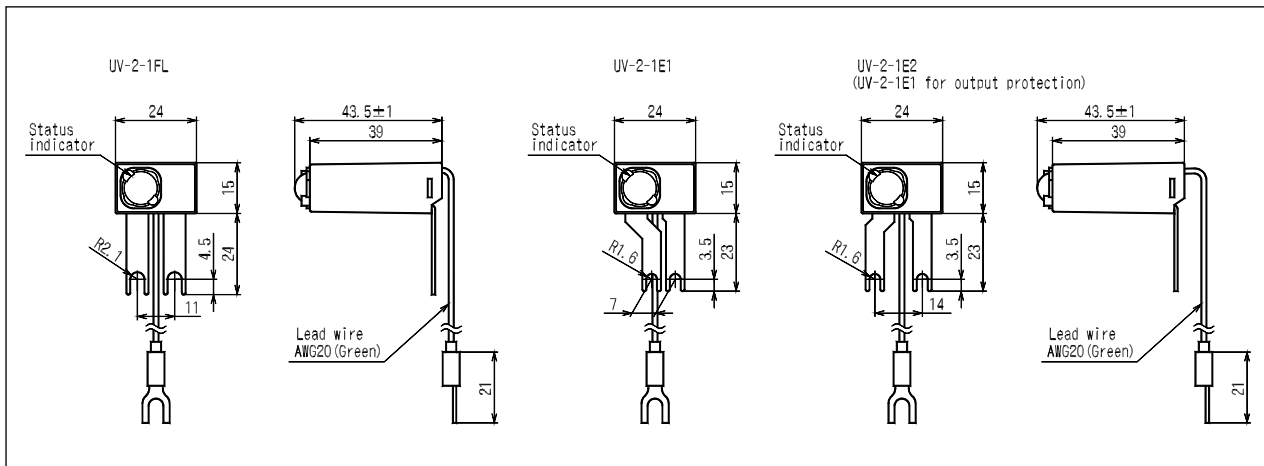
On the input side of rack-in transducer, connect earth lead of arrester to earth terminal (E) of each unit. In the case of installing on the output side, connect to earth terminals of distribution panel in the shortest way. In this case, connect it to the same earth terminal (E) to which earth terminal of power source unit is connected.



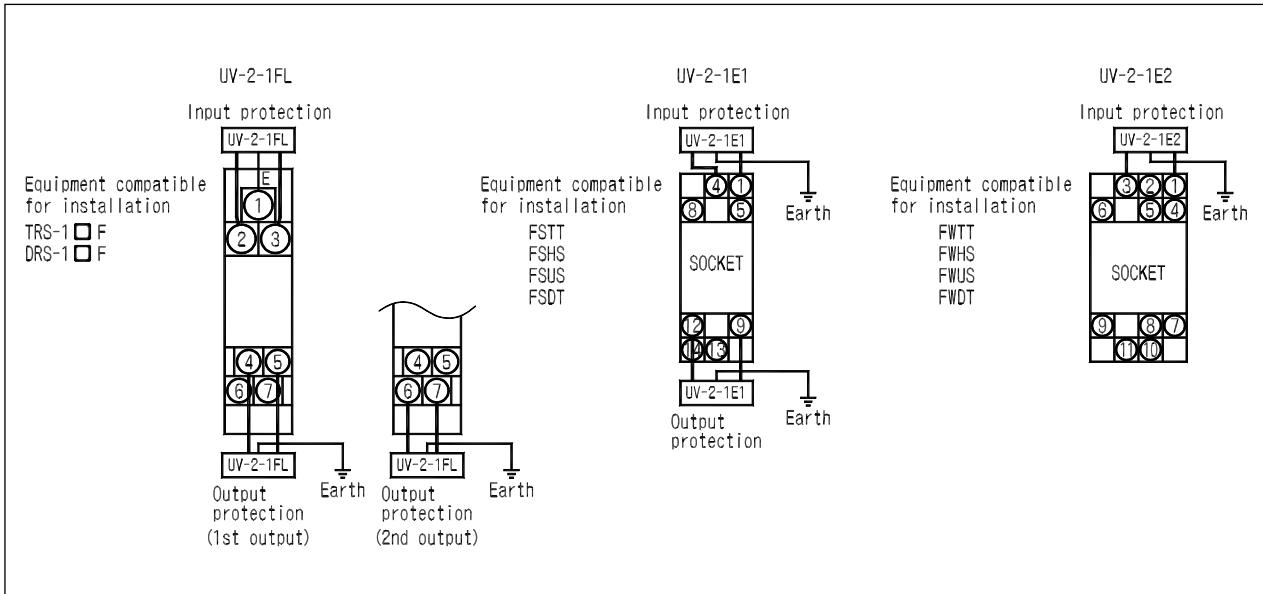
Cautions on installation

It can only be installed in either one of 1st and 2nd output of small-sized two-output type rack-in transducer. Also, in the case of multiple unit installation in a rack case, connect all transducers collectively to either 1st or 2nd terminals.

Dimensions



Connection diagram



Model compatible for installation

Compatible product	Type	Arrester type	Input	Output
Small sized plug-in transducer	FSTT	UV-2-1E1		
	FSHS			
	FSUS			
	FSDT			
	FWTT	UV-2-1E2		x
	FWHS			x
	FWUS			x
	FWDT			x
Rack-in transducer	TRS-11F	UV-2-FL		
	TRS-12F			*1
	TRS-13F			
	TRS-14F			x
	DRS-11F			
	DRS-12F			*1
	DRS-14F			x

*1: Can only be installed in either one of 1st and 2nd output of small-sized two-output type rack-in transducer.

Purchase specifications

Specifications

Type Specification code

UV - 2 - 1 E 1 1 1 1 1

Type name
 Specification code
 Quantity

Please specify the length in the case that specification code of earth wire is Z.