

NVS (Neutral Voltage Sensor)

The Purposes of Installing NVS:

NVS is one of the highest reliability protection methods which is able to detect capacitor failure from the very beginning stage to perform a contact output.

When same single phase capacitors are connected by single star(3pcs) or double star(6pcs), no voltage apply on the neutral during normal operation due to no potential difference between capacitors. Neutral voltage sensing can detect an earlier failure even from ONE element failure inside of a capacitor unit.

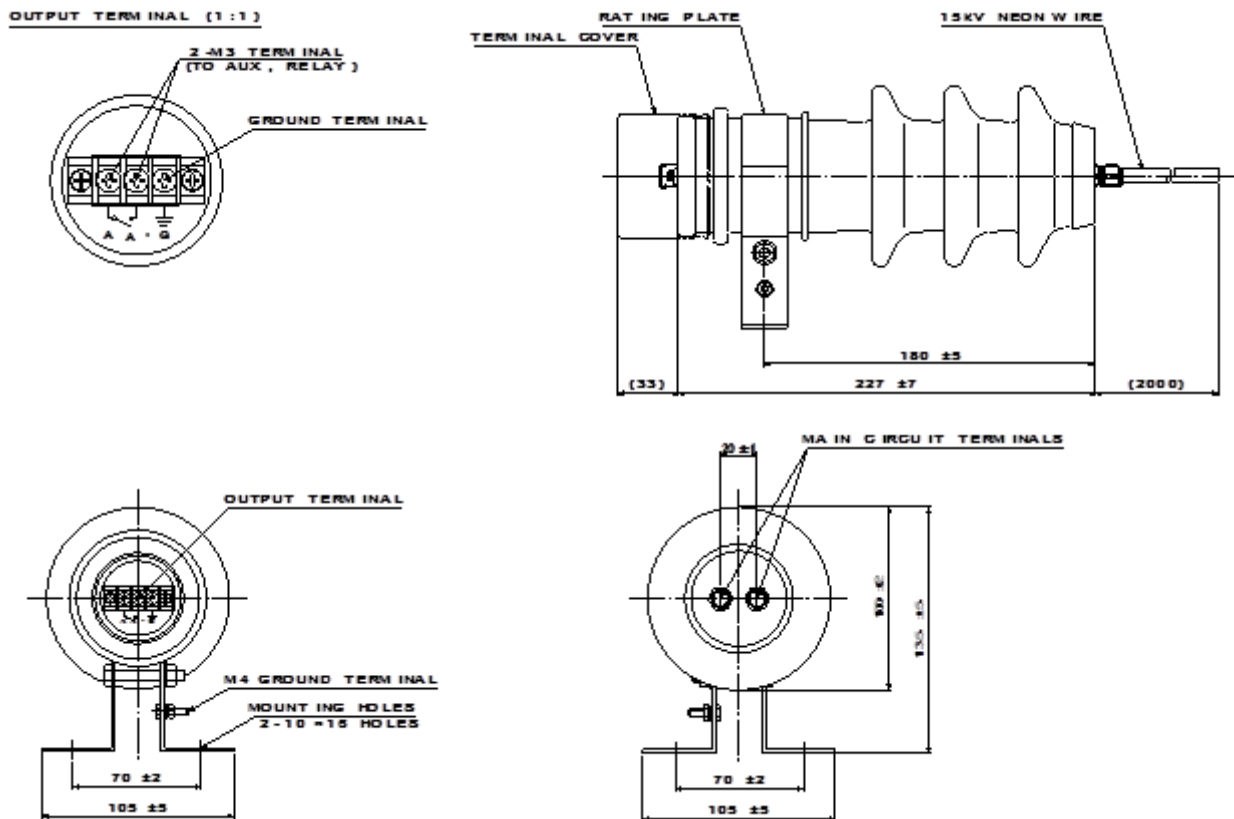
Note) The contents of this brochure issued in November, 2017 are subject to change without notice.

■ **General specifications**

Neutral Voltage Sensor

Installation	Indoor-use
Operating Ambient Temperature	-20 °C to +50 °C
Circuit Voltage	3300V/6600V +10/-10%
Insulation Strength	AC22/60kV (Class 6A)
Frequency	50/60Hz
Contact Rating, Form	AC/DC100V 0.1A, 1a
Minimum Operating Voltage	AC230V
Test Voltage	AC22kV for 1 minute Main circuit terminals to jointed terminal's (A-A') to ground
	AC2kV for 1 minute Jointed terminals A-A' to ground
Weight	2.5kg

■ **NVS Dimensional Drawings**

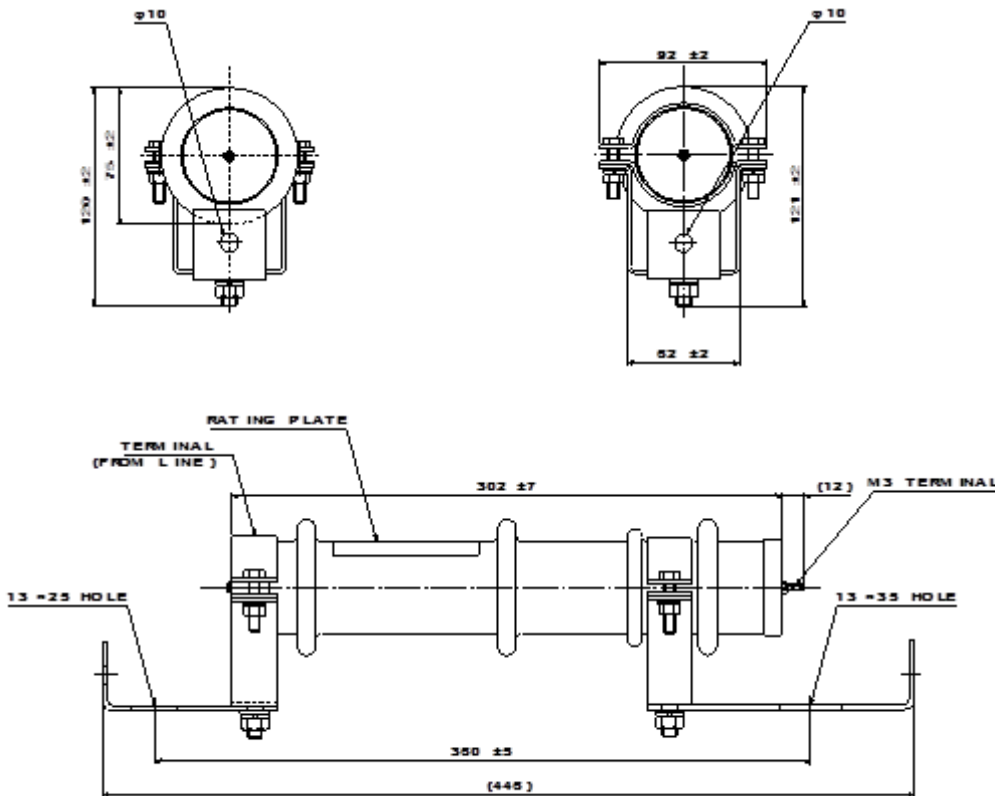


■ **General specifications**

Resistors for NVS

Connection		Single Star (SY)	Double Star (WY)
Installation		Indoor-use	Indoor-use
Circuit Voltage (Continuity/Phase)		3300/6600V+10/-10%	3300/6600V+10/-10%
Short Time Permissible V(1min./Phase)		4400/8800V+10/-10%	2200/4400V+10/-10%
Instantaneous Permissible V (0.1Sec./Phase)		5000/10000V	2500/5000V
Resistance		6MΩ+1/-1%	2MΩ+1/-1%
Energy Consumption (Three Phase)	Circuit V	Considering reactance (L=6%, 13%)	Considering reactance (L=6%, 13%)
	3300V	2.4W(@3790V)	0W(@3790V)
	6600V	9.6W(@7590V)	0W(@7590V)
Weight		2.2kg	2.2kg

■ **Resistor Dimensional Drawings**



■ **Operating Voltage and Time**

Applied Voltage (Failure Voltage)	Contact	
	Operating starting time	Holding Time (Closing)
AC230V ~ 300V	Initial Operation	0.1 Sec. or More
AC300V ~ 500V	6 ~ 18 Sec.	
AC500V ~ 800V	4 ~ 7 Sec	
AC800V ~ 1600V	1 ~ 3 Sec.	
AC1600V ~ 2300V	0.5 ~ 2 Sec.	

■ **Connection Diagram**

