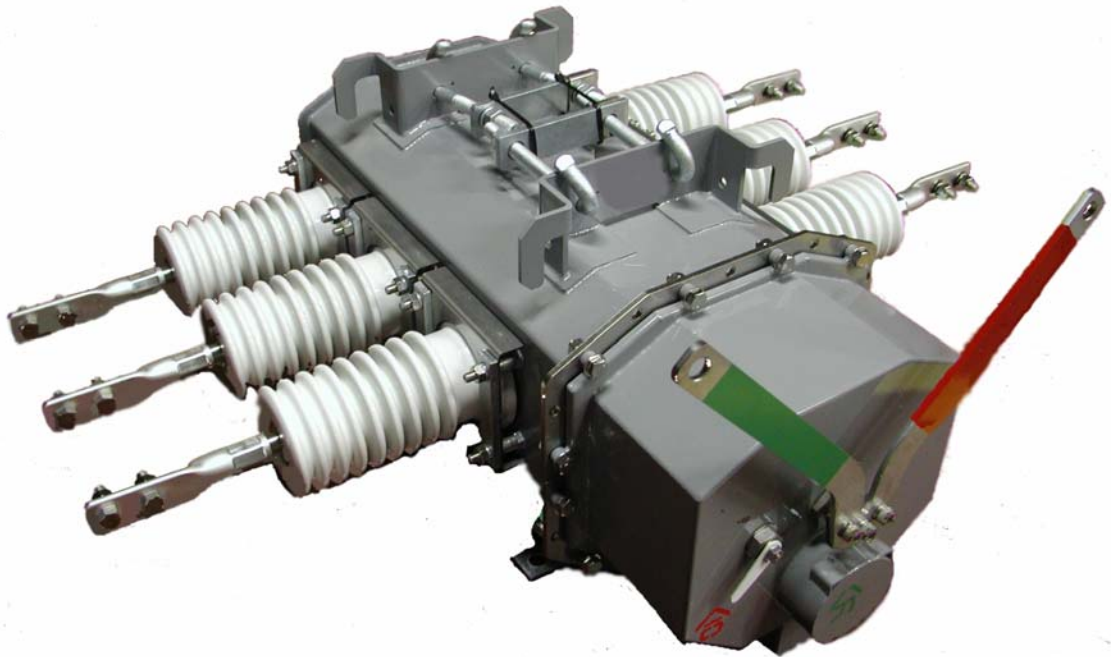


# Overhead Gas Switch

(Automatic, Manual)

Type: CNCG-601U

---



Automatic



Manual

The handle tip form  
will be changed

# Contents

---

Product Overview-----	<b>2</b>
Features-----	<b>3</b>
Appearance and Dimensions---	<b>5</b>
Performance-----	<b>7</b>
Installation-----	<b>8</b>

# Product Overview

CNCG-601H is a switchgear in which NKE technologies accumulated through over 30 years of manufacturing are concentrated.

By leveraging the technologies and knowhow cultivated in the Japan market, CNCG-601U achieved high performance and reliability yet compact in size and light in weight.

CNCG-601U conforms to the following standards.

## Ratings

Rated Voltage		12KV
Rated Current		630A
Rated Frequency		50Hz
Weight	Automatic	198 lbs (90 Kgs) LBS (Switch) 43 lbs (19.5Kgs) ( Controller & Cable)
	Manual	176 lbs (80 Kgs)
Type		Automatic, Manual

Automatic



Manual



Controller,  
Cable



# Features

## 1. Light and Compact

Optimized phase spacing and terminal structure with excellent arc-suppression performance made the switch light and compact.

	Automatic	Manual
Body length	33.58" (853 mm)	28.07" (713 mm)
Switch weight	198.4lbs (90 Kgs)	176.4lbs (80 Kgs)

Compact and efficient automation mechanism minimized increase in size of the automatic switch.

## 2. Maintenance-free

**Corrosion-resistance stainless steel is used for the body and durable porcelain for bushings.**

Main circuit is contained with gas in the sealed case and maintenance-free. (Tig welding ensures secure sealing)

IP67 water and dust proof property was achieved by excellent design and use of good packings.

**Mechanical endurance operation is over 5000 times.**

## 3. SF6 gas with excellent insulation and arc-suppression performance

SF6 gas ensures stable and reliable switching performance.

Active alumina filled in the body absorbs cracked gas generated by arcing and assures long-term stable performance.



Automatic switch



Automatic switch

#### 4. Reliable operability (Manual)

Handle operation is not speed-dependent. Switching can be properly done independent of the operator.

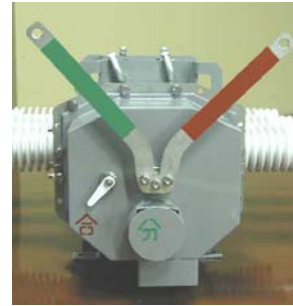


Manual switch

#### 5. Excellent operation mechanism (Automatic)

**During automatic operation, the handle is not operable for safety.**

Both opening and closing can be done with one handle.



Automatic switch

#### 6. Easy-to-read indication

"Open"-"Closed" condition is shown also on the switch body bottom. It is easy to check the condition from the ground.



Automatic switch

#### 7. Automation mechanism (Automatic)

The automation controller used for CNCG-601H is compact and reliable.

The connector is also reliable.

**Automatic switching is done at high speed, less than 2 seconds.**



Automatic switch



Controller



#### 8. Safety

Use of over pressure release device.

**Handle lock during pressure drop**

**Gas pressure drop indication readable from the ground**



Gas release device

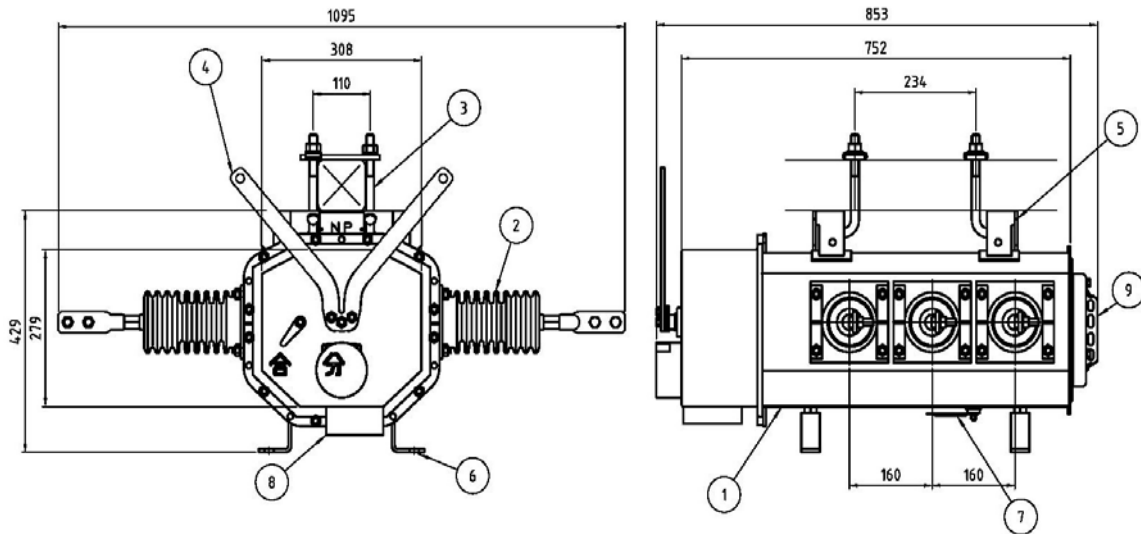


Low pressure indication  
□ up: manual  
□ down: automatic

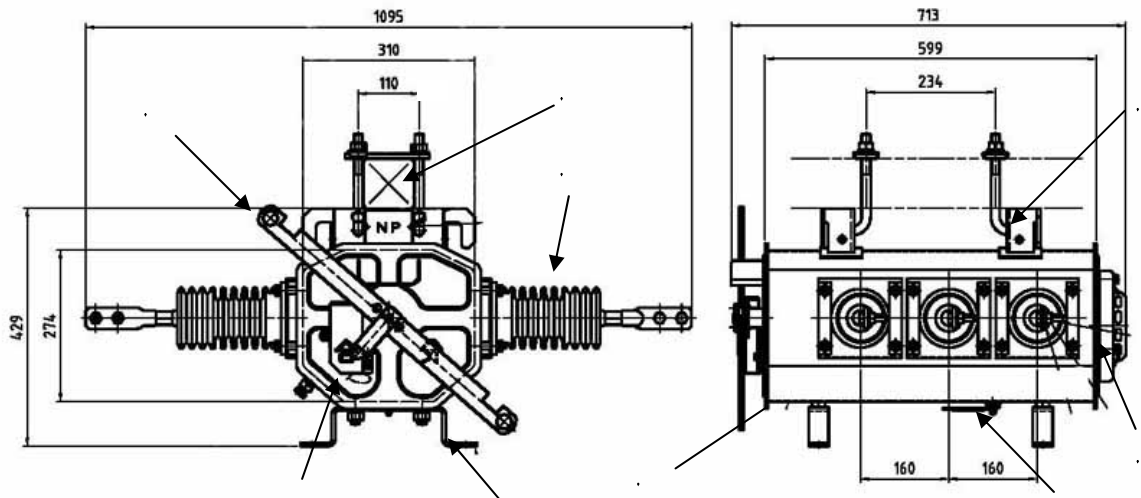
# Appearance and Dimensions

## Automatic switch

The handle tip form will be changed



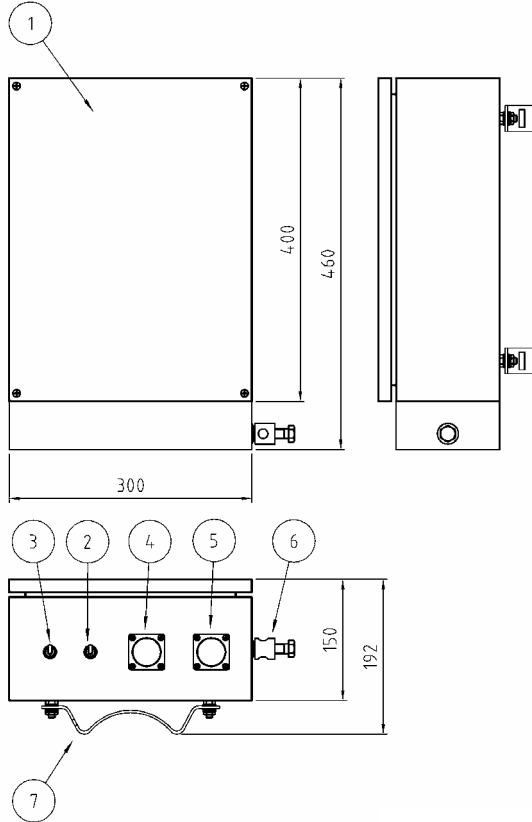
## Manual switch



No	name	quan tity	material	No	name	qua ntit y	material
1	Tank	1	Stainless	6	leg	2	Iron stell
2	bushing	6	porcelain	7	Position indicator	1	Stainles s
3	Mounting bracket & hardware	4	Iron steel	8	Low pressure indicator	1	Stainles s
4	handle	1	Iron steel	9	Over Pressure release device	1	
5	Lifting eyes	2	Iron steel				

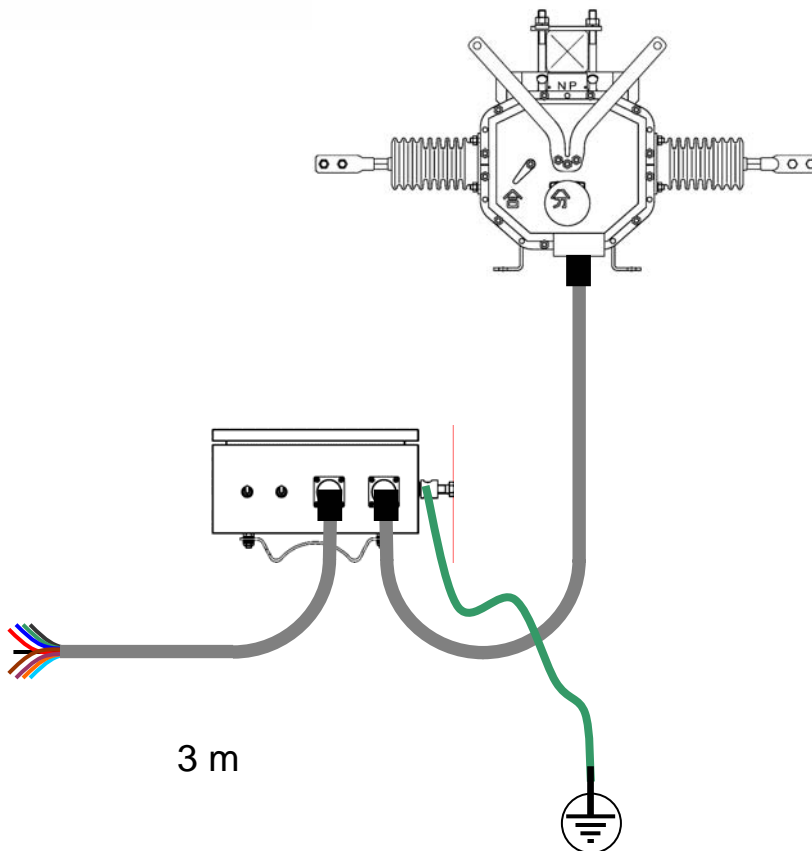
# Appearance and Dimensions

## Controller



Controller will be modified to adapt into SACADA interface

This is under planning



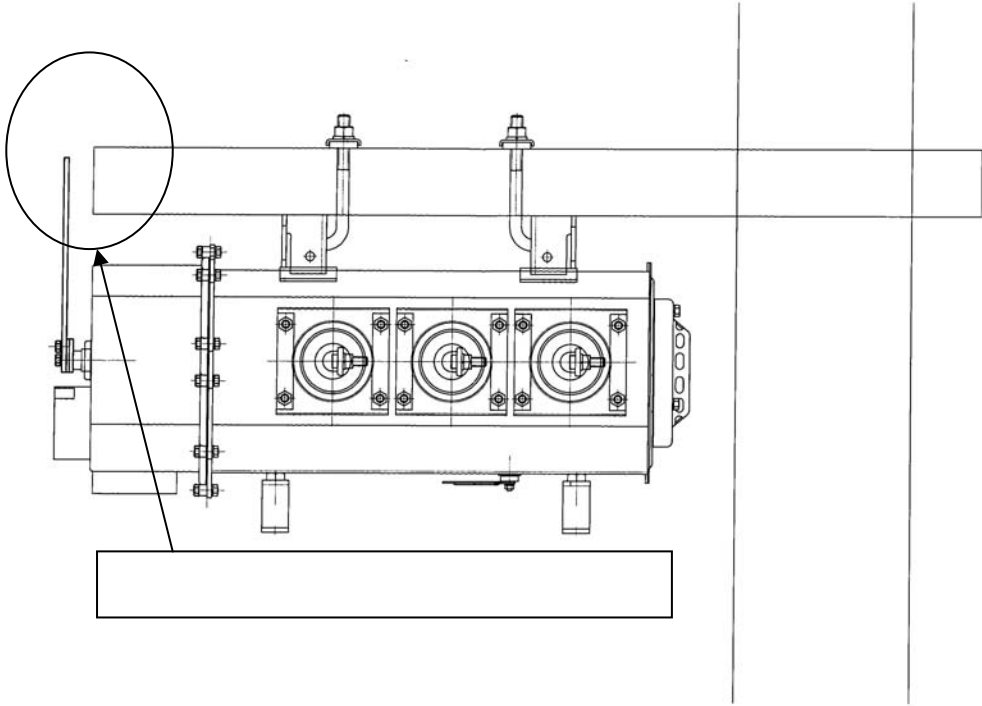
# Performance

Manufacturer	Nippon Kouatsu Electric Co. Ltd.	
Type	CNCG-601U	
	<b>IEC</b>	<b>ANSI</b>
Rated Voltage	12 .V	15.5 kV
Rated Current	630 A	600 A
Rated Frequency	50 Hz	60 Hz
BIL	75 / 85 .V	110 KV
1 sec. current	12 .A	12 KV
Making current	20 .A	20KA
Rated gas pressure	7.251 psi.G (0.05 Mpa.G)	

	<b>Automatic</b>	<b>Manual</b>
Weight	198.4lbs (90 Kgs) (Switch body)	176.4lbs (80 Kgs)
Protection degree (Water/ dust proofness)	IP67 (Both switch body and controller)	IP67
Time required for opening	Less than 2 seconds	—
Time required for closing	Less than 2 seconds	—
Relative gas leak rate	0.5%/ year	



# Installation



.....



# 日本高压电气

- Head Office/ 35, Fukahazama, Nagakusa-cho,  
Obu-shi, Aichi-ken, 474-0052, Japan  
Phone: +81 (0) 562 45 6061 Fax: +81 (0) 562 45 6168
- <http://www.nkeco.co.jp/>



ISO9001 / 14001