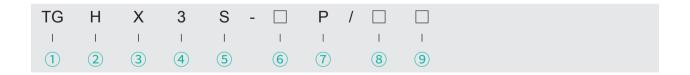


#### 1 Overview

TGHX3S-63P is a DC rotary switch disconnector suitable for rated operating voltage up to DC1100V and rated operating current up to 50A; it is primarily used in the DC side of photovoltaic inverters provide connection and isolation functions for the system.

The product complies with the GB/T 14048.1, GB/T 14048.3, IEC 60947-1, and IEC 60947-3 standard, and has obtained CCC certificate, CE certificate, TUV certificate, and Australian certification certificate.

## 2 Type Designation



1	Enterprise code	
2	Switch disconnector	
3	Rotary switch	
4	Design No.	
5	Upper plate welded manual operating mechanism	
6	Conventional thermal current	63: 63A
7	Photovoltaic application field	
8	Connection code	
9	Installation method	M: Panel mounted
_		

#### 3 Normal Working Conditions and Installation Conditions

- 3.1 Normal Working Conditions and Installation Conditions
- 3.1.1 Ambient air temperature: The upper limit of the temperature shall not exceed +85°C, and the lower limit shall not be lower than -40°C; (when out of the standard working temperature, please contact the manufacturer for selection)
- 3.1.2 Atmospheric conditions: The atmosphere air is clean (there is no explosive medium, and there is no gas and dust in the medium that is sufficient to cause metal corrosion and damage to the insulation); the relative humidity of the atmosphere shall not exceed 50% when the ambient air temperature is +40°C, and a higher relative humidity is allowed at lower temperatures (for example: when the temperature is +20°C, the relative humidity shall not exceed 90%); appropriate measures should be taken for condensation occurred on the surface of the product due to temperature changes.
- 3.1.3 Installed in a place where there is medium without explosion hazard, and there is no gas or conductive dust sufficient in the medium to cause metal corrosion and damage to the insulation;
- 3.1.4 Installed in a place where there is no significant impact vibration and no rain and snow attacks.
- 3.2 Normal installation conditions
- 3.2.1 Installation category: Class III, Class IV;
- 3.2.2 Installation environment pollution degree: Level 2;
- 3.2.3 Changed to protection grade: IP20 (except for terminals);
- 3.2.4 Wiring method: Upper plate welded

# **TENGEN**

# **TGHX3S-63P Series Switch Disconnector**

## 4 Key Technical Parameters

## 4.1 Rated current of switch disconnectors

Table 2

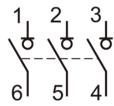
Model	Use category	Rated voltage DC (V)	480	600	800	1000	1100
TGHX3S-63P	DC-PV2	Rated current (A)	45	32	20	12.5	8.5
	DC-PV1		1	50	40	30	23

#### 4.2 Switch disconnector certification parameters

Table 3

Parameter name	Type / Unit	Specific parameter	Remarks
Frame current	Α	63	
Insulation voltage	V	DC 1100	
Rated impulse withstand voltage	kV	8	
Rated short time withstand current Icw	kA/1s	0.76	
Rated short circuit making capacity Icm	kA	1.4	
Mechanical life	Times	13000	
Electrical life	Times	300	
Operating torque	N.m	1.6~2.2	
Wiring area (recommended)	mm²	See Table 9 of GB/T 14048.1	
Wiring method	U		
Protection grade	Machine:		

# 5 Wiring Method (Wiring Diagram)



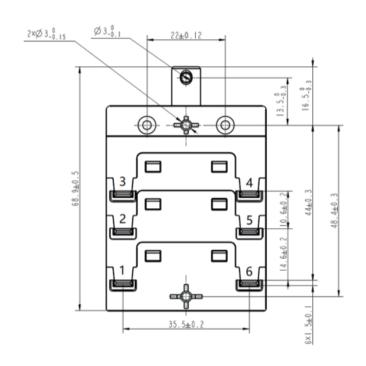
$$\begin{bmatrix} 1 & 2 & 3 & 4 \\ 0 & 0 & 0 & 0 \\ 8 & 7 & 6 & 5 \end{bmatrix}$$

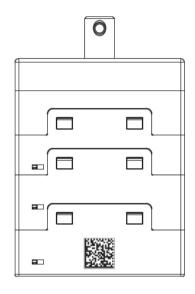
TGHX3S-63P/3M Wiring diagram

TGHX3S-63P/4M Wiring diagram

#### 6 Outline Dimensions and Installation Dimensions

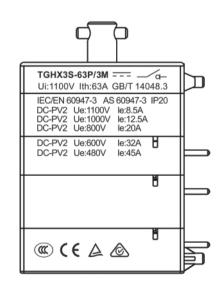
#### 6.1 TGHX3S-63P/3M

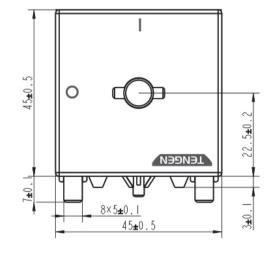




Front view







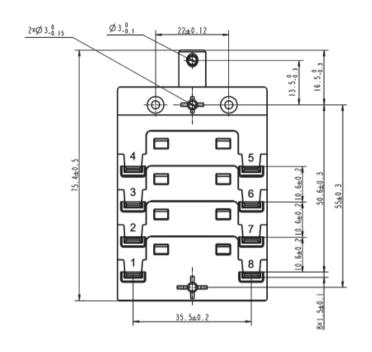
Side view Top view

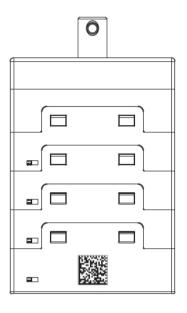
32

# **TENGEN**

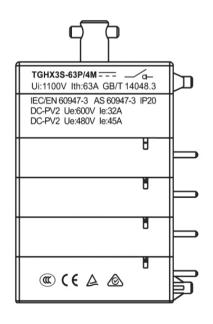
# **TGHX3S-63P Series Switch Disconnector**

#### 6.2 TGHX3S-63P/4M

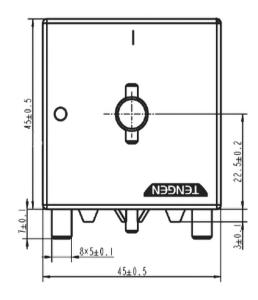




Front view



Back view



Side view

Top view

#### 7 Packaging and Storage

#### 7.1 Switch disconnector product packaging

Table 4

Number of product packing boxes						
No.	Spec.	Number of boxes				
1	TGHX3S-63P/3M	70 sets / box				
2	TGHX3S-63P/4M	70 sets / box				

## 7.2 Transportation and storage

Products packaged in boxes should be stored in warehouses where there is a good air circulation, the relative humidity does not exceed 80%, the temperature is not higher than +85°C and not lower than -40°C, and there is no acidic, alkaline or other corrosive gases in the surrounding air. Under the above conditions, the storage period shall not exceed 3 years from the date of production. Environmental protection requirements comply with the RoHS2.0 Directive.

In order to protect the environment, when this product or its components are scrapped, please dispose it properly as industrial waste, or send it to the recycling station for classification, disassembly, recycling and reuse in accordance with relevant national regulations.

Please carefully read this Specification before the installation, operation, run, maintenance, and inspection, and install and operate this product properly in accordance with this Specification.

#### 10 Ordering Notice

Please specify the following items when ordering:

- Product name, such as TGHX3S-63P/3M switch disconnector;
- Frame current, such as 63: 63A:
- Installation method, such as M: Panel mounted;
- Rated voltage: 800: 800V;
- Product quantity, such as 100 sets

Ordering example: TGHX3S-63P/3M 800V, 100 sets.