# **SWD Series**

## **Door Switch**



#### **■** Features

- ◆ Fully sealed, ATEX explosion-proof certification
- ◆ Two options for controlling lamp load high current switch and control signal load micro current switch
- ◆ Universal quick installation method
- ◆ Various shapes of operation buttons
- ◆ Widely used in refrigeration appliances and equipment such as heat pumps, air conditioners , dehumidifiers, refrigerators, etc.

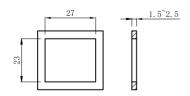
## **■** Application

- ♦ Home Appliances
- ◆Electronic Devices

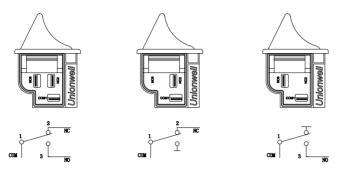
## **■**Parameters

Operating Speed			7.5~500mm/s	
Operating Frequency		Mechanical	60 times/min	
		Electrical	20 times/min	
Insulation Resistance			≥100MQ (DC 500V Insulation resistance)	
Contact Resistance (Initiative)	Terminals type		≤100mΩ	
	Between terminals		AC1000V,50/60HZ,1min.	
Voltage Resistance	Between terminals and uncharge dmetal perts		AC1500V,50/60HZ,1min.	
Viberation durability	NO Transformation action		10-55Hz 1.5mm Double amplitude	
Service Life	Electrical		2.5A 125/250VAC 25T85µ 5E4 6A 125/250VAC 25T85µ 1E4 0.1A 125/250VAC 0.1A 30VDC 25T85µ 5E4	
	Mechanical		300,000 cycles(60 cycles/Min)	
Protection Level			IEC IP67/IEC IP40	
ATEX proof and Certificate Number			Ex S 20 ATEX 107202 0001U 3 G EX nC    C Gc	
PTI			450V	
Storage Temperature			-25∼+85°C	
Storage Humidity			85%RH Max	

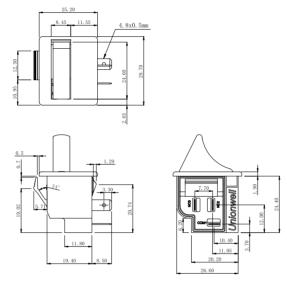
## ■ Mounting Hole Dimensions(Unit:mm)



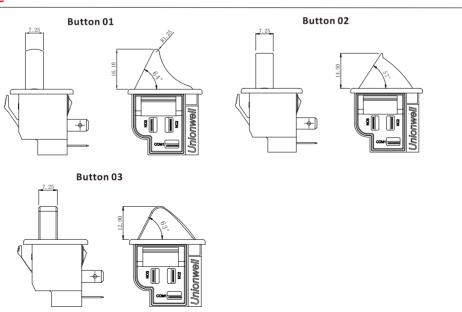
# **■** Circuit Configuration



# ■Dimensions(mm)

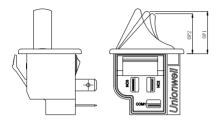


# **■**Button Type



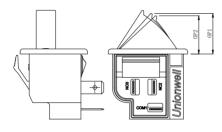
# Operating Characteristics

## SWD-□□□BA01



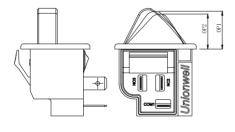
Parameters					
OF Max. (gf)	OP1 NC-OFF (mm)	OP2 NO-ON (mm)	TTP Min. (mm)		
400	16±2	14.3±2.5	4		

SWD-□□□BA02



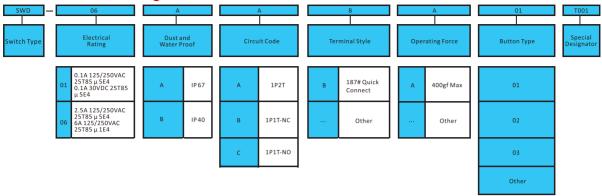
Parameters					
OF Max. (gf)	OP1 NC-OFF (mm)	OP2 NO-ON (mm)	TTP Min. (mm)		
400	14.2±2	11.2±2.5	2		

SWD-□□□BA03



Parameters						
OF Max. (gf)	OP1 NC-OFF (mm)	OP2 NO-ON (mm)	TTP Min. (mm)			
400	12.9±2	10.5±2.5	3.5			

## **SWD Door Switch Ordering Instruction**





## **■** Certifications and marks

The code has been obtained

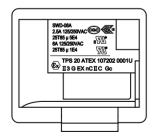
ATEX Certification number TPS 20 ATEX 107202 0001U

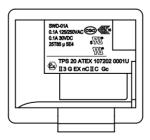
UL CUL Certification number E513673

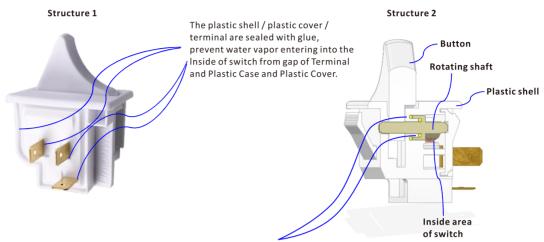
**ENEC Certification number ENEC-03199** 

CQC Certification number The certification is expected to be issued on June 20

SWD series certification marks are as follows







Seal oil is used for the rotating shaft and plastic shell prevent the water vapor on the button side entering the inside area of switch; (Patent structure)

#### What are the benefits of SWD Door Switch that has obtained ATEX certification for our customers?

- 1. Clause 22.116 of the standard IEC60335-2-40:2018 edition stipulates that electrical and electronic components (such as switches) that used in environments with potentially leaking refrigerant dangerous gases (such as refrigerants) must meet the requirements of the IEC60079-15:2010 edition, our ATEX certified SWD switch can meet the requirements of this standard. Meanwhile this standard requires that non-ATEX certified switches cannot be used on home appliances that have a potentially leaking refrigerant gas environment.
- 2. Refrigeration appliance parts suppliers that use switches, such as supply to refrigerators, ice maker, etc., when choosing ATEX certified switches, they can supply their products to appliance manufacturers without re-applying ATEX certification, which greatly saves the cost and time of development.
- 3. Manufacturing the equipment and parts with ATEX directives that meet the basic health and safety requirements, this is a win-win situation for both end consumers and manufacturers, and it will make your products safer in the market and more favored by consumers.
- 4. Electrical equipment manufactured for use in hazardous environments and intended for sale in the EU market must obtain ATEX certification. The ATEX directive is designed to ensure the free circulation of goods throughout the EU market.

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#### **Type Examination Certificate**

Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 2014/34/EU (2)

Type Examination Certificate Number: (3)

(1)



#### TPS 20 ATEX 107202 0001 U Rev. 00

(4) Component: Door Switch - Type: SWD series

(5) Manufacturer: Guangdong Unionwell Electronics Co., Ltd.

No.532# Office Building, Huizhou Industrial Transfer Park, Longmen (6) County, 516899 Huizhou City, Guangdong Province, China

(7) This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to

TÜV SÜD Product Service GmbH certifies that this component has been found to comply with the Essential Health and Safety Requirements refulling to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports with no. 64.105.19.30940.01

Compliance with the Essential Health and Safety Requirements has been assured by (9) compliance with:

#### EN IEC 60079-0:2018 EN 60079-15:2010

- (10) The sign "U" placed after the certificate number indicates that the certificate must not be mistaken with a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of equipment or protective system.
- This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:



Certification Body. München, 16.01.2020

Ing. Frank Zhu, MSc.

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Certificates without signature shall not be valid. The Certificates may only be circulated in full including its schedule(s). Extracts or alterations are subject to approval by TÜV SÜD Product Service GmbH. In case of dispute, the German text shall prevail. The document is administrated under the following number: EX8A 107202 0001 Rev. 00