

SWE Series 16 and 20 Amp Switches

Increased Safety

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Applications

- Designed to prevent operation in explosive atmospheres during connect and disconnect operation of lighting and light power loads.
- For use in hazardous areas where ignitable vapors, gases or highly combustible dusts are present.
- For installation in chemical and petrochemical plants, refineries and other process industries.

Features

- Available up to 690 Volts, and up to 20 Amps
- 16 Amp version:
 - Two bottom M20 clearance holes.
 - Switch mechanism fixed at the bottom of the box.
 - Termination:
 - Type 1: 2.5 mm²
 - Type 2: 2.5 mm² flexible, 4 mm² solid
 - Internal earth:
 - 2 x 2.5 mm² terminals
 - Supplied with:
 - 1 x white self-adhesive laminated plastic label with black lettering – 58 mm x 18 mm
- 20 Amp version:
 - Two M20 threaded entries on the bottom of the box.
 - Switch mechanism fixed on the bottom of the box.
 - Padlockable handle in position 0 using maximum 4 padlocks
 - maximum handle diameter 8 mm and minimum 15 mm length.
 - Termination:
 - 2.5 mm² flexible/4 mm² solid
 - Internal earth:
 - 2 x 4 mm² terminals
 - Supplied with:
 - 1 x yellow self-adhesive laminated plastic label with black lettering – 65 mm x 18 mm

Standard Materials

- 16 Amp version:
 - Polyamide box.
 - A2 stainless steel coarse pitch screws (1 and a half turn).
 - Polyamide cable glands.
 - Nickel plated brass locknuts.
- 20 Amp version:
 - Polyester box
 - A2 stainless steel captive screws.
 - Polyamide cable glands.

Certifications and Compliances

◆ATEX Certification

- **Certification Type PCe**
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex de IIC
 - Temperature class: T6
 - Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C
 - Ambient Temperature: -20 °C to +40 °C
 - CE Declaration of Conformity: 50221
 - ATEX Certificate: LCIE 00 ATEX 60472
 - Index of Protection according EN/IEC 60529: IP66

① Inmetro certification available on special request only. Contact your local sales for more information.



16 A Version – Type 1



16 A Version – Type 2



20 A Version

◆EURASEC Certification

- **Certification Type PCe**
 - EURASEC RU C-FR. ГБ 05.B.00911

◆Others Certification ①

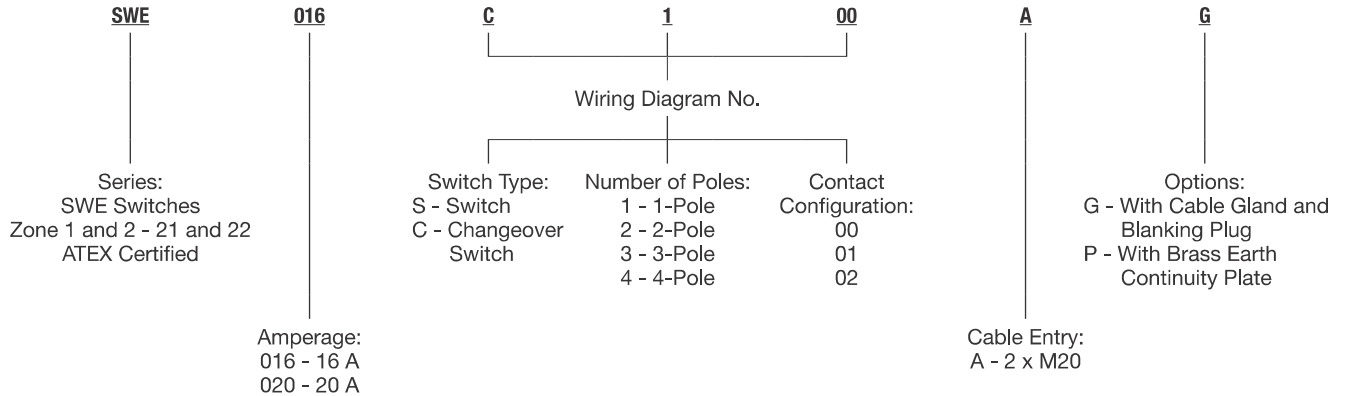
- **Certification Type PCe**
 - INMETRO Certificate: BVC 11.0640-X

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Catalog Numbering Guide



Switch Type	Wiring Diagram No.	Type	Weight kg	Volume dm ³	Catalog Number
16 Amp Switch – Type 1 – Padlockable handle – Two M20 polyamide cable glands (cable dia. 6.5 to 14.5 mm) on the bottom					
Changeover switch	C101	1	0.53	2	SWE016C101AG
2-pole	S201	1	0.53	2	SWE016S201AG
16 Amp Twist Button - Type 2 – Non-padlockable handle – Two M20 clearance holes on the bottom					
Changeover switch	C100	2	0.50	2	SWE016C100A
2-pole	S200	2	0.50	2	SWE016S200A
20 Amp Switch – Padlockable handle – Two M20 polyamide cable glands (cable dia. 6.5 to 14.5 mm) on the bottom					
Changeover switch	C100	–	1	2	SWE020C100AG
2-pole	S202	–	1	2	SWE020S202AG
3-pole	S301	–	1	2	SWE020S301AG
4-pole	S401	–	1	2	SWE020S401AG

Shaded catalog numbers are normally stocked items. All other items are made to order

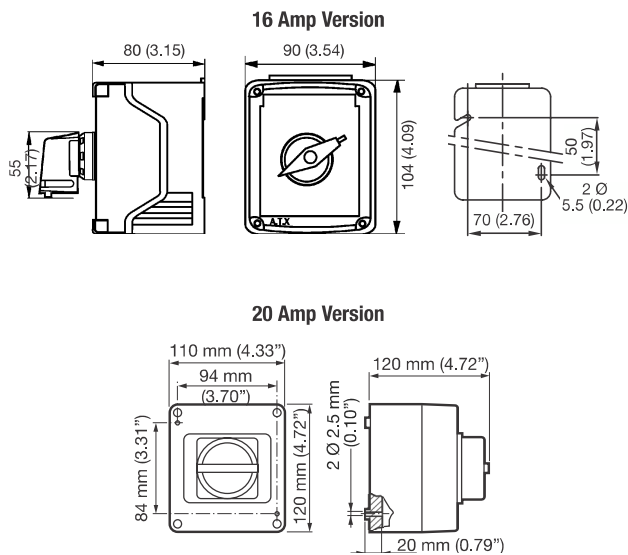
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Gas (G) and Dust (D)

Main Contacts	16 Amps Type 1	16 Amps Type 2	20 Amps
Rated Insulation Voltage	750 V	500 V	500 V
Rated Operating Voltage	690 Vac/110 Vdc	500 V	500 V
Rated Operating Current	16 Amp	16 Amp	20 Amp
Switching Capacity			
AC 1	16 Amp, 690 V	16 Amp, 500 V	—
AC 12	—	16 Amp, 400 V	—
AC 14	—	10 Amp, 400 V	—
AC 15	16 Amp, 415 V	6 Amp, 500 V	—
AC 21	—	—	16 Amp, 500 V
AC 23	—	—	16 Amp, 400 V
AC 3	08 Amp, 500 V	—	—
AC 3	04 Amp, 690 V	—	—
DC 1	10 Amp, 24 V	—	—
DC 1	06 Amp, 60 V	—	—
DC 1	06 Amp, 110 V ①	—	—
DC 13	—	1 Amp, 110 V	—
DC 13	—	2 Amp, 24 V	—
Termination (flexible/solid)	2.5 mm ² /4 mm ²	2.5 mm ²	2.5 mm ² /4 mm ²

Dimensions in Millimeters



Switching Arrangement X Denotes "Closed Contact"

16 Amp Switch

C101

Positions	Contacts	
	11–12	23–24
0	X	
1		X

S201

Positions	Contacts	
	13–14	23–24
0		
1	X	X

16 Amp Twist Button

C100

Positions	Contacts	
	1–2	3–4
0	X	
1		X

S200

Positions	Contacts	
	3–4	3–4
0		
1	X	X

20 Amp Switch

C100

Positions	Contacts	
	1–2	3–4
0	X	
1		X

S202

Positions	Contacts	
	1–2	3–4
0		
1	X	X

S301

Positions	Contacts		
	1–2	3–4	5–6
0			
1	X	X	X

S401

Positions	Contacts			
	1–2	3–4	5–6	7–8
0				
1	X	X	X	X

① 2 contacts connected in series.

SWE Series 40, 63 and 160 Amp Switches

Increased Safety

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Applications

- Designed to prevent operation in explosive atmospheres during connect and disconnect operation of power loads.
- For use in hazardous areas where ignitable vapors, gases or highly combustible dusts are present.
- For installation in chemical and petrochemical plants, refineries and other process industries.

Features

- Available up to 690 Volts, and up to 160 Amps
- 63 Amp version:
 - Padlockable handle in position “O” using max. 4 padlocks [maximum handle diameter 8 mm and minimum 15 mm length].
 - 3 or 4-pole switch mechanism with one ‘NO’ early break auxiliary contact.
 - Main contact termination: 35 mm².
 - Auxiliary contact termination: 2.5 mm².
 - Supplied with:
 - Cable entries:
 - 1 x M32 clearance on top
 - 1 x M32 and 1 x M20 clearance on bottom
 - Supplied with:
 - 2 x M32 polyamide cable glands – cable 10 mm to 25 mm.
 - 1 x M20 blanking plug
 - 1 x yellow self-adhesive laminated plastic label with black lettering – 65 mm to 18 mm.
- 160 Amp version:
 - Hinged door.
 - Closed with plastic double bar locks (key supplied).
 - Supplied with 4 fixing lugs.
 - Padlockable handle in position “O”.
 - 3 or 4-pole switch mechanism with one ‘NO’ early break auxiliary contact.
 - Main contact termination: 120 mm².
 - Auxiliary contact termination: 2.5 mm².
 - Supplied with:
 - Cable entries:
 - 1 x M63 clearance on top
 - 1 x M63 and 1 x M25 clearance on bottom
 - Supplied with:
 - 2 x M63 polyamide cable glands – cable 36 mm to 44 mm.
 - 1 x M25 blanking plug

Standard Materials

- Polyester (GRP) box.
- 316L stainless steel box.
- A2 stainless steel captive screws.
- Polyamide cable glands and blanking plugs.
- Nickel plated brass locknut.

Certifications and Compliances

◆ATEX/ IECEx Certification

- **Certification Type: CAe (Polyester box)**
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex de IIC
 - Temperature class: T5 at +40 °C, T4 at +55 °C.



40 A/63 Amp Version



160 Amp Version

- Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C at +40 °C, T130 °C at +55 °C.
- Ambient Temperature:
 - 20 °C to +55 °C (40 A and 63 A)
 - 30 °C to +55 °C (160 A)
- CE Declaration of Conformity: 50235
- ATEX Certificate: LCIE 02 ATEX 6248X
- IECEx Certificate: IECEx LCI 04.0016X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10
- **Certification Type: JBe (Stainless steel box)**
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex de IIC
 - Temperature class: T5 at +40 °C, T4 at +55 °C
 - Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C at +40 °C, T130 °C at +55 °C
 - Ambient Temperature:
 - 20 °C to +55 °C (40 A and 63 A)
 - 30 °C to +55 °C (160 A)
 - CE Declaration of Conformity: 50232
 - ATEX Certificate: LCIE 02 ATEX 6118X
 - IECEx Certificate: IECEx LCI 11.0008X
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10
- ◆EURASEC Certification
 - **Certification Type: CAe (Polyester box)**
 - EURASEC RU C-FR. ГБ 05.В.00911
 - **Certification Type: JBe (Stainless steel box)**
 - EURASEC RU C-FR. ГБ 05.В.00911
- ◆Others Certification ①
 - **Certification Type: CAe (Polyester box)**
 - INMETRO Certificate: BVC 12.0421-X

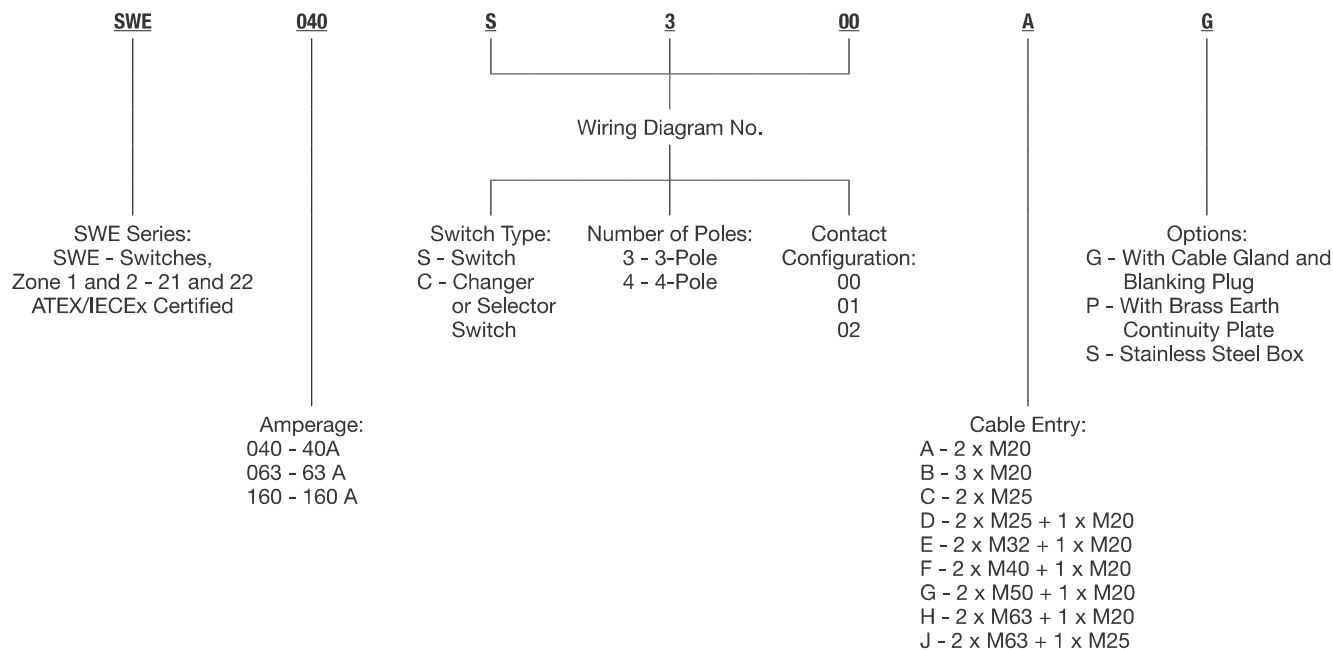
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Zone 1 and 2 - 21 and 22
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Catalog Numbering Guide



Controls

CALL POINTS STATIONS AND AUDIO SIGNALING DEVICES - INCREASED SAFETY

Switch Type	Wiring Diagram No.	Weight kg	Volume dm ³	Catalog Number
63 A Switch - 2 x M32 + 1 x M20 - Polyester Box				
3-pole switch	S302	8	14.5	SWE063S302EG
4 Pole Switch	S402	8	14.5	SWE063S402EG
160 A Switch - 2 x M63 + 1 x M25 - Polyester Box				
3-pole switch	S302	16	75	SWE160S302JG
4 Pole Switch	S402	16	75	SWE160S402JG
160 A Switch - 2 x M63 + 1 x M25 - Stainless Steel Box				
4-pole switch	S402	25	75	SWE160S402JS

Switching Arrangement - X Denotes "Closed Contact"

S302

Positions	Aux	Contacts		
		1	2	3
0				
1	X	X	X	X

S402

Positions	Aux	Contacts			
		1	2	3	4
0					
1	X	X	X	X	X

SWE Series 40, 63 and 160 Amp Switches

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Gas (G) and Dust (D)

Main Contacts	63 Amps	160 Amps
Rated Insulation Voltage	690 Vac	690 Vac
Rated Operating Voltage	690 Vac	690 Vac
Rated Operating Current	63 Amp	160 Amp
Rated Surge Voltage	6 KV	8 KV
Switching Capacity		
AC 21 A/AC 22 A	63 Amp, 230 V to 690 V	160 Amp, 400 V to 690 V
	15 kW, 230 V	
AC 23 A	22 kW, 400 V	80 kW, 400 V
	30 kW, 500 V	110 kW, 500 V
	18,5 kW, 690 V	55 kW, 690 V
AC 3	11 kW, 230 V	
	18,5 kW, 400 V	90 kW, 400 V
	22 kW, 500 V	70 kW, 500 V
	15 kW, 690 V	
DC 21	—	160 Amp, 220 V ① 160 Amp, 440 V ①
DC 22	—	160 Amp, 220 V ① 100 Amp, 440 V ①
DC 23	—	160 Amp, 220 V ① 63 Amp, 440 V ①
Auxiliary Contacts		
Rated Insulation Voltage	400 V	230 V
Rated Operating Voltage	400 V	230 V
Rated Operating Current	10 Amp	10 Amp
Switching Capacity		
AC 15	6 Amp, 230 V 4 Amp, 400 V	6 Amp, 230 V
Others		
Termination (flexible/solid)	35 mm ²	120 mm ²

① 2 contacts connected in series per pole.

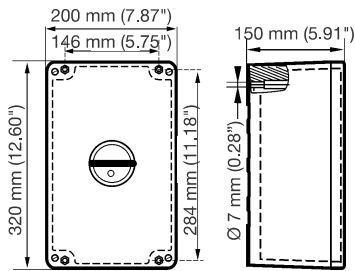
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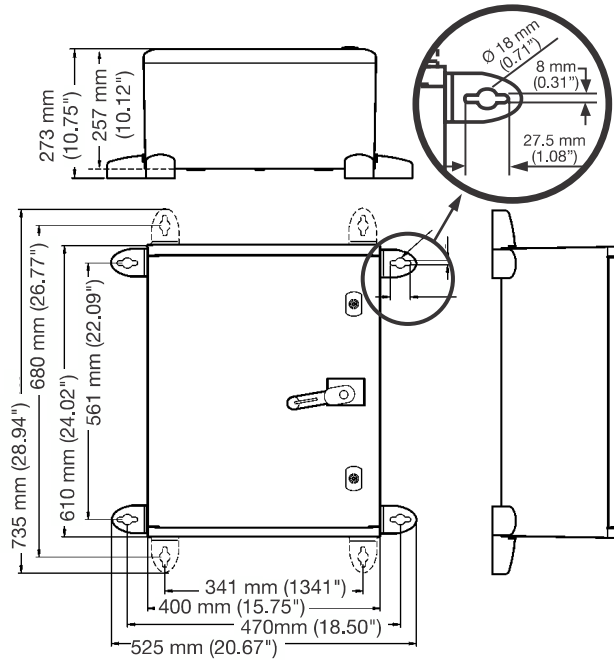
Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Dimensions in Millimeters

40 Amp/63 Amp Polyester Version



160 Amp Polyester Version



160 Amp Stainless Steel Version

