

Control Stations & Switches: Switches, Circuit Breakers and "Break Glass" Call Points

SWE Series: 16 and 20 A Switches – Increased Safety



16 A Version - Type 1



16 A Version - Type 2



20 A Version

Compliance Data:

ATEX - IEC:

Zone 1 & 2, 21 & 22	ATEX	II 2 GD	IEC	CE
Ex de IIC	T6	Ex tD A21	T80°C	IP66 - IK09 or IK10

Electrical Data:

Voltage	Amperage			
Up to 690 V	Up to 20 A			

Operating Temperature:

16 A	20 A	
-20°C to +40°C	-20°C to +40°C	



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SWE Series: 16 and 20 A Switches – Increased Safety

Zone 1 & 2 - 21 & 22

II 2 GD

ATEX / IEC

IP66 - IK09 or IK10

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:

- 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 x 18 mm)

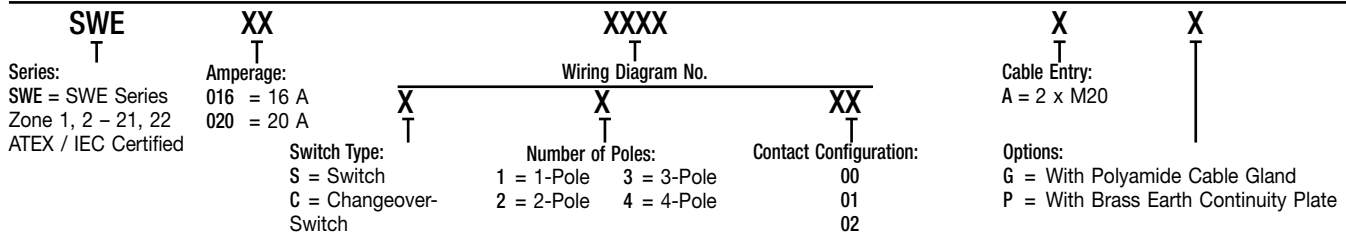
20 Amp version:

- 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 dia. 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 x 18 mm)

Standard Material of Fixtures:

- 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.

Catalog Number Logic:



Ordering Information:

16 A Switch - Type 1

Padlockable handle.
Two M20 polyamide cable glands (cable dia. 6.5 to 14.5 mm) on the bottom.

Switch Type	Wiring Diagram No.	Type	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
Changeover switch	C101	1	0.53	2.00	SWE016C101AG	098614
2-pole	S201	1	0.53	2.00	SWE016S201AG	098608

16 A Twist Button - Type 2

Non-padlockable handle.
Two M20 clearance holes on the bottom.

Switch Type	Wiring Diagram No.	Type	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
Changeover switch	C100	2	0.50	2.00	SWE016C100A	098631
2-pole	S200	2	0.50	2.00	SWE016S200A	098632

20 A Switch

Padlockable handle.
Two M20 polyamide cable glands (cable dia. 6.5 to 14.5 mm) on the bottom.

Switch Type	Wiring Diagram No.	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
Changeover switch	C100	1.00	2.00	SWE020C100AG	096250
2-pole	S202	1.00	2.00	SWE020S202AG	096251
3-pole	S301	1.00	2.00	SWE020S301AG	096260
4-pole	S401	1.00	2.00	SWE020S401AG	096261

Switching Arrangement:

16 A Switch

C101	Contacts			S201	Contacts		
	Positions 11-12	23-24			Positions 13-14	23-24	
0	X			0			
1		X		1	X	X	X

16 A Twist Button

C100	Contacts			S200	Contacts	
	Positions 1-2	3-4			Positions 3-4	3-4
0	X			0		
1		X		1	X	X

20 A Switch

C100	Contacts			S202	Contacts		
	Positions 1-2	3-4			Positions 1-2	3-4	
0	X			0			
1		X		1	X	X	X

S301	Contacts			
	Positions 1-2	3-4	5-6	
0				
1	X	X	X	X

X Closed contact

S401	Contacts				
	Positions 1-2	3-4	5-6	7-8	
0					
1	X	X	X	X	X

Control Stations & Switches: Switches, Circuit Breakers and "Break Glass" Call Points

SWE Series: 16 and 20 A Switches – Increased Safety

Zone 1 & 2 - 21 & 22

⊕ II 2 GD

ATEX / IEC

IP66 - IK09 or IK10

Technical Data:

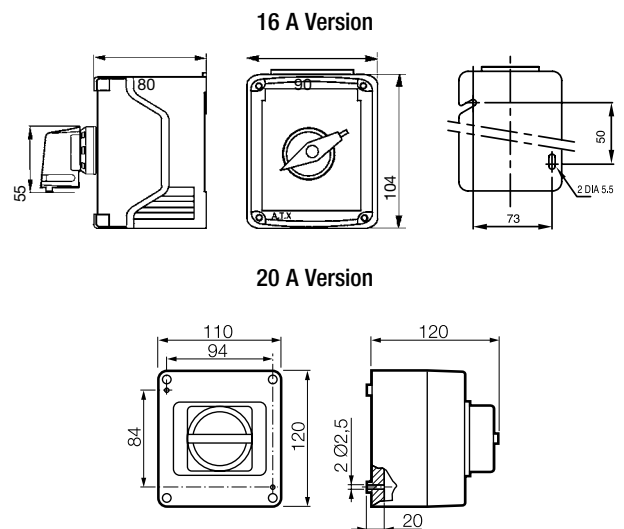
Main Contacts	16 Amps Type 1		16 Amps Type 2		20 Amps	
Rated Insulation Voltage	750 V		500 V		500 V	
Rated Operating Voltage	690 Vac 1 / 110 V DC 1		500 V		500 V	
Rated Operating Current	16 A		16 A		20 A	
Switching capacity:						
AC 1	16 A	690 V	16 A	500 V	-	
AC 12	-		16 A	400 V	-	
AC 14	-		10 A	400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

(*) 2 contacts connected in series

Compliances:

Hazardous Area	Gas	Dust
Certified Type	PCE	
Zones	1-2	21-22
Conforming to ATEX 94/9/CE	CE 0081 ⊕ II 2 G	CE 0081 ⊕ II 2 D
Symbol of Protection ATEX	Ex de IIC	Ex tD A21
Symbol of Protection IEC		
T Rating	T6	-
Surface Temperature	-	T80°C
Ambient Temperature	-20°C to +40°C	
CE Declaration of Conformity	50221	
ATEX Certificate	LCIE 00 ATEX 60472	
IEC Certificate	LCIE Ex 00.017	
Other Certifications	GOST	
Index of Protection (solid and liquid)	IP66	
Impact Resistance (shock)	IK10 (Polyester) / IK09 (Polyamide)	

Dimensions (mm):



Standards:

Ex standards	EN / IEC 60079-0; 60079-1; 60079-7; 61241-0; 61241-1
Product standards	EN / IEC 60947-1; 60947-3; 60947-5
EMC standards	EN / IEC 55015; 61547
Other standards	EN / IEC 60529 (IP); 62262 (IK)

Control Stations & Switches: Switches, Circuit Breakers and "Break Glass" Call Points

SWE Series: 40, 63 and 160 A Switches – Increased Safety



40 A / 63 A Version



160 A Version

CONTROL STATIONS & SWITCHES

Compliance Data:

ATEX - IEC:



Zone 1 & 2, 21 & 22	ATEX	II 2 GD	IEC	CE
Ex de IIC	T5 or T4	Ex td A21	T95°C or T130°C	IP66 - IK10

Electrical Data:

Voltage	Amperage			
Up to 690 V	Up to 160 A			

Operating Temperature:

40 A and 63 A -20°C to +55°C	160 A -30°C to +55°C	
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Control Stations & Switches: Switches, Circuit Breakers and "Break Glass" Call Points

SWE Series: 40, 63 and 160 A Switches – Increased Safety

Zone 1 & 2 - 21 & 22

II 2 GD

ATEX / IECEx

IP66 - IK10

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:

63 Amp version:

- Padlockable handle in position "O" using max. 4 padlocks (max. handle dia. 8 mm and min. 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 to 25 mm)
 - 1 x M20 blanking plug
 - Yellow laminated plastic label with black lettering (65 x 18 mm)

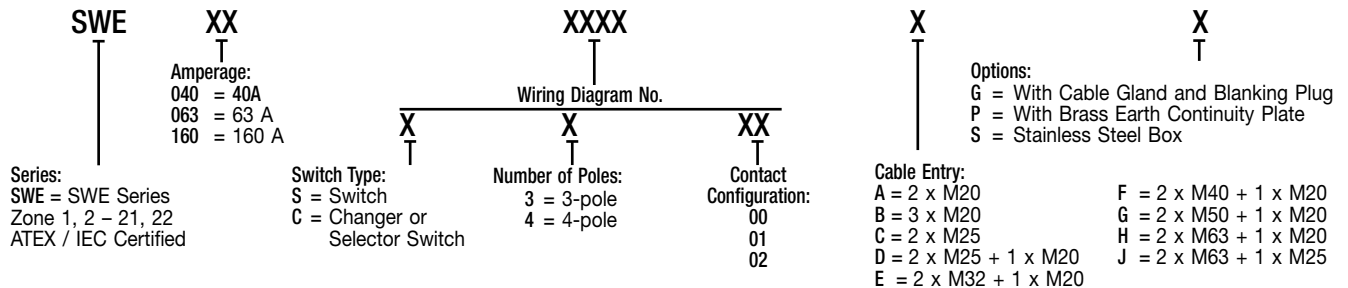
160 Amp version:

- 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 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.

Catalog Number Logic:



Ordering Information:

Polyester Box:

63 A Switch – 2 x M32 + 1 x M20

Switch Type	Wiring Diagram No.	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
3-pole switch	S302	8	14.5	SWE063S302EG	096269
4 Pole Switch	S402	8	14.5	SWE063S402EG	096270

160 A Switch – 2 x M63 + 1 x M25

Switch Type	Wiring Diagram No.	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
3-pole switch	S302	16	75	SWE160S302JG	096271
4 Pole Switch	S402	16	75	SWE160S402JG	096272

Stainless Steel Box:

160 A Switch – 2 x M63 + 1 x M25

Switch Type	Wiring Diagram No.	Weight (kg)	Volume (dm ³)	Catalog Number	Old Catalog Number
4-pole switch	S402	25	75	SWE160S402JS	–

Switching Arrangements:

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

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

Control Stations & Switches: Switches, Circuit Breakers and "Break Glass" Call Points

SWE Series: 40, 63 and 160 A Switches – Increased Safety

Zone 1 & 2 - 21 & 22

⊕ II 2 GD

ATEX / IECEx

IP66 - IK10

Technical Data:

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

(*) 2 contacts connected in series per pole

Compliances:

Hazardous Area	Gas	Dust
Certified Type	CAe (Polyester box)	
Zones	1-2	21-22
Conforming to ATEX 94/9/CE	CE 0081 ⊕ II 2 G	CE 0081 ⊕ II 2 D
Symbol of Protection ATEX	Ex de IIC	Ex tD A21
Symbol of Protection IEC		
T Rating	T5 at +40°C T4 at +55°C	-
Surface Temperature	-	T95°C at +40°C T130°C at +55°C
Ambient Temperature	-30°C to +55°C, -20°C to +55°C (40 A & 63 A)	
CE Declaration of Conformity	50235	
ATEX Certificate	LCIE 02 ATEX 6248X	
IECEx Certificate	LCI 04.0016X	
Other Certifications	GOST	
Index of Protection (solid and liquid)	IP66	
Impact Resistance (shock)	IK10	

Hazardous Area	Gas	Dust
Certified Type	JBe (Stainless steel box)	
Zones	1-2	21-22
Conforming to ATEX 94/9/CE	CE 0081 ⊕ II 2 G	CE 0081 ⊕ II 2 D
Symbol of Protection ATEX	Ex de IIC	Ex tD A21
Symbol of Protection IEC		
T Rating	T5 at +40°C T4 at +55°C	-
Surface Temperature	-	T95°C at +40°C T130°C at +55°C
Ambient Temperature	-30°C to +55°C	
CE Declaration of Conformity	50232	
ATEX Certificate	LCIE 02 ATEX 6118X	
IECEx Certificate	LCIE Ex 02.010X	
Other Certifications	GOST	
Index of Protection (solid and liquid)	IP66	
Impact Resistance (shock)	IK10	

Standards:

Ex standards	EN / IEC 60079-0; 60079-1; 60079-7; 61241-0; 61241-1
Product standards	EN / IEC 60947-1; 60947-3
EMC standards	EN / IEC 55015; 61547
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SWE Series: 40, 63 and 160 A Switches – Increased Safety

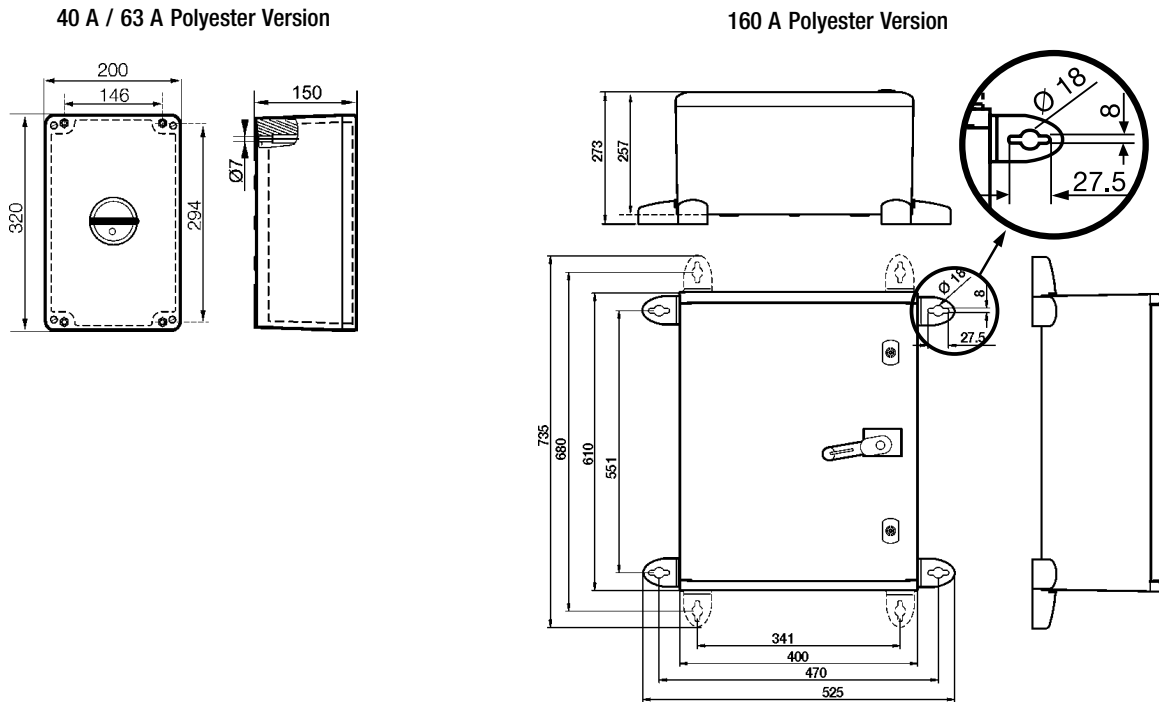
Zone 1 & 2 - 21 & 22

⊕ II 2 GD

ATEX / IECEx

IP66 - IK10

Dimensions (mm):



160 A Stainless Steel Version

