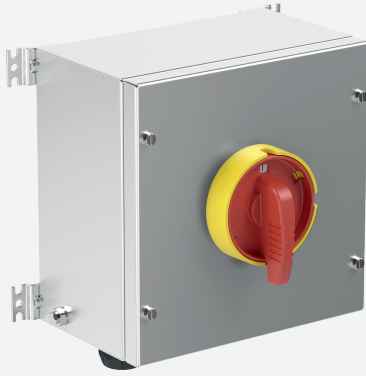


# Safety Switches Ex e

## SAF.\*



- Installation in Zone 1, Zone 2, Zone 21 and Zone 22
- Ex db eb and Ex tb certified
- Various contact configurations and pole numbers
- Glass reinforced polyester (GRP) or stainless steel enclosures
- Padlockable switch
- Labeling '0 - I'
- Function-adequate cable gland configurations
- Degree of protection: IP 66



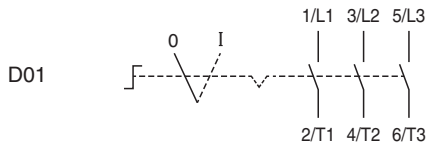
### Function

DIS\* switch disconnectors and SAF\* safety switches guarantee safe disconnection of machines from the mains power supply during cleaning, maintenance and repair. They can be utilized in hazardous areas up to zone 1 / 21. Various main and auxiliary contact configurations cover many switching requirements.

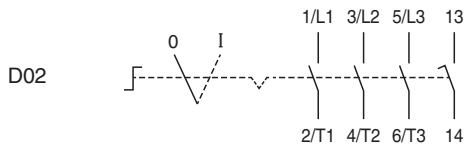
Enclosure variants are available in high-quality stainless steel and rugged GRP material.

According to IEC 62626-1 the enclosure cover of SAF\* variants can only be opened when the switch is in ON position.

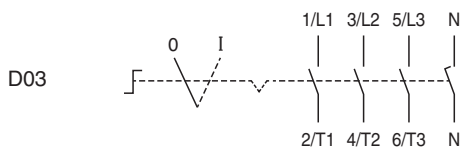
### Connection Assignment



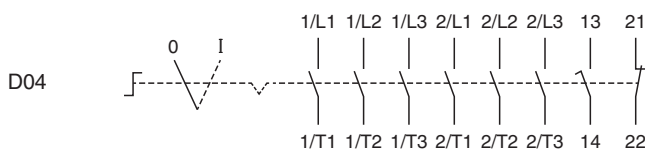
	1/L1	3/L2	5/L3
0			
I	X	X	X
	2/T1	4/T2	6/T3



	1/L1	3/L2	5/L3	13
0				
I	X	X	X	X
	2/T1	4/T2	6/T3	14



	1/L1	3/L2	5/L3	N
0				
I	X	X	X	X
	2/T1	4/T2	6/T3	N



	1/L1	1/L2	1/L3	2/L1	2/L2	2/L3	13	21
0								
I	X	X	X	X	X	X	X	X
	1/T1	1/T2	1/T3	2/T1	2/T2	2/T3	14	22

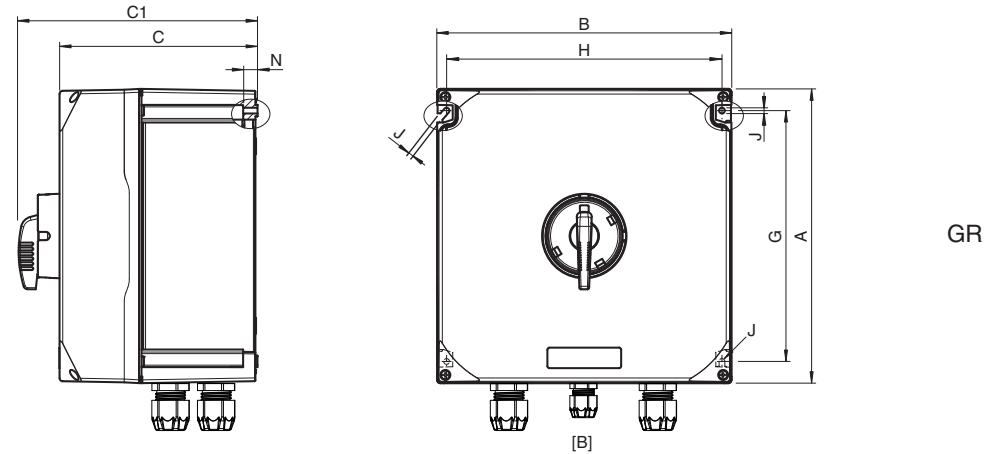
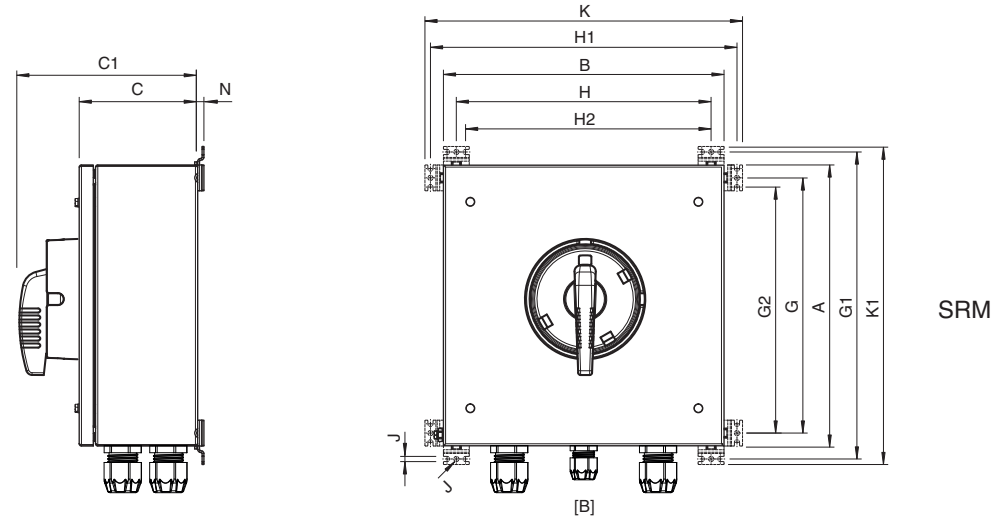
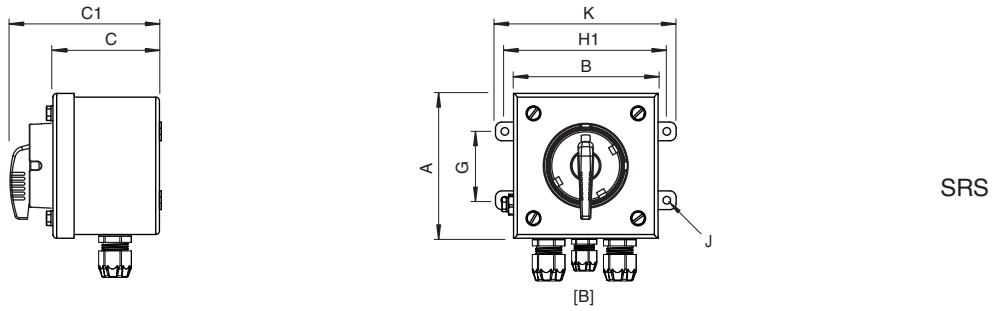
Release date: 2025-04-04 Date of issue: 2025-04-04 Filename: t1187183\_eng.pdf

## Technical Data

<b>Electrical specifications</b>	
Operating voltage	690 V max.
Rated impulse withstand voltage	6 kV
Rated frequency	50/60 Hz
Short circuit current limitation	recommended: 25 A : 35 A, gG 40 A : 63 A, gG
Operating current	25 A max. or 40 A max.
Terminal capacity	see data table
Rated insulation voltage	800 V
Function	switch disconnector
Color	red-yellow
Contact configuration	see data table
Switching configuration	2 position changeover with left OFF
Usage category	see data table
Number of poles	see data table
Auxiliary contacts	see data table
Auxiliary contacts usage category	see data table
Operator action	engage - engage
Lockable	in 'OFF' position threefold padlockable
Labeling	0 - I
<b>Mechanical specifications</b>	
Enclosure range	see table
Enclosure cover	fully detachable
Cover fixing	stainless steel A4 (V4A) hexagonal head screws or stainless steel combination Phillips and slotted screw
Screws	M6
Number	4
Tightening torque	3.5 Nm
Cover seal	foamed silicone
Safety	cover detachable only when operator in 'ON' position with SAF.* variants
Degree of protection	IP66
Cable entry	see data table
Defined entry area	face B
Material	
Enclosure	carbon loaded, antistatic glass-fiber reinforced polyester (GRP) or AISI 316L, (1.4404) stainless steel
Finish	inherent color black or brushed
Mass	see data table
Dimensions	see data table
Tightening torque	
Nut torque at enclosure (SW1)	see datasheets of cable glands
Mounting	see data table
Grounding	GRP none as standard stainless steel M6 internal/external brass nickel-plated grounding bolt
<b>Ambient conditions</b>	
Ambient temperature	-40 ... 55 °C (-40 ... 131 °F) @ T4
<b>Data for application in connection with hazardous areas</b>	
EU-type examination certificate	CML 16 ATEX 3009X
Marking	⊕ II 2 GD Ex db eb IIC T* Gb Ex tb IIIC T** °C Db T4/T130 °C @ Ta +55 °C
<b>International approvals</b>	
IECEx approval	IECEx CML 16.0008X
UKCA approval	CML 22 UKEX 2550X



Dimensions and Enclosure Details



Dimension values see data table.

Image and drawing are generic for this device type and may deviate from the specific variant.

Release date: 2025-04-04 Date of issue: 2025-04-04 Filename: t187183\_eng.pdf

## Dimensions

Type	Enclosure series	External dimensions [mm]						Mounting [mm]							Mass approx. [kg]	
		A	B	C	C1	K	K1	G	G1	G2	H	H1	H2	N		J
<b>Switch disconnectors in GRP enclosures</b>																
DIS.P.025.3P.GR	GR	179	179	104	154	-	-	126	-	-	156	-	-	18	7	2.1
DIS.P.025.3PN.GR	GR	179	179	104	154	-	-	126	-	-	156	-	-	18	7	2.2
DIS.P.025.3P.1NO.GR	GR	179	179	104	154	-	-	126	-	-	156	-	-	18	7	2.2
DIS.P.025.6P.1NO.1NC.GR	GR	179	359	166.5	216.5	-	-	156	-	-	336	-	-	18	7	4.3
DIS.P.040.3P.GR	GR	179	359	166.5	216.5	-	-	156	-	-	336	-	-	18	7	4.8
DIS.P.040.3PN.GR	GR	179	359	166.5	216.5	-	-	156	-	-	336	-	-	18	7	4.85
DIS.P.040.3P.1NO.GR	GR	179	359	166.5	216.5	-	-	156	-	-	336	-	-	18	7	4.85
DIS.P.040.6P.1NO.1NC.GR	GR	359	359	241.5	291.5	-	-	306	-	-	336	-	-	18	7	9
<b>Switch disconnectors in stainless steel enclosures</b>																
DIS.S.025.3P.SR	SRS	156	156	94	144	185	-	95	-	-	-	170	-	1.5	6.1	2.5
DIS.S.025.3PN.SR	SRS	156	156	94	144	185	-	95	-	-	-	170	-	1.5	6.1	2.5
DIS.S.025.3P.1NO.SR	SRS	156	156	94	144	185	-	95	-	-	-	170	-	1.5	6.1	2.5
DIS.S.025.6P.1NO.1NC.SR	SRM	260	260	160	210	310	310	225	295	212.5	225	295	212.5	8.5	7	6.5
DIS.S.040.3P.SR	SRM	260	260	160	210	310	310	225	295	212.5	225	295	212.5	8.5	7	6.3
DIS.S.040.3PN.SR	SRM	260	260	160	210	310	310	225	295	212.5	225	295	212.5	8.5	7	6.3
DIS.S.040.3P.1NO.SR	SRM	260	260	160	210	310	310	225	295	212.5	225	295	212.5	8.5	7	6.3
DIS.S.040.6P.1NO.1NC.SR	SRM	260	260	220	270	310	310	225	295	212.5	225	295	212.5	8.5	7	7
<b>Safety switches in GRP enclosures</b>																
SAF.P.025.3P.1NO.GR	GR	179	179	104	154	-	-	126	-	-	156	-	-	18	7	2.2
SAF.P.040.3P.1NO.GR	GR	179	359	166.5	216.5	-	-	156	-	-	336	-	-	18	7	4.85
<b>Safety switches in stainless steel enclosures</b>																
SAF.S.025.3P.1NO.SR	SRS	156	156	91.5	144	185	-	95	-	-	-	170	-	1.5	6.1	2.5
SAF.S.040.3P.1NO.SR	SRM	260	260	160	210	310	310	295	225	212.5	225	295	282.5	8.5	7	6.3

Values might differ slightly due to manufacturing tolerances.

**Electrical Data**

Type	Operating current [A max.]	Main contacts			Auxiliary contacts	
		Contact configuration	Diagram	Usage category	Contact configuration	Usage category
<b>Switch disconnectors in GRP enclosures</b>						
DIS.P.025.3P.GR	25	3x NO	D01	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	-	-
DIS.P.025.3PN.GR	25	4x NO	D02	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	-	-
DIS.P.025.3P.1NO.GR	25	3x NO	D03	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A
DIS.P.025.6P.1NO.1NC.GR	25	6x NO	D03	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	1x NO delayed, advanced opening / 1x NC	AC11: 500 V AC - 20 A
DIS.P.040.3P.GR	40	3x NO	D01	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	-	-
DIS.P.040.3PN.GR	40	4x NO	D02	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	-	-
DIS.P.040.3P.1NO.GR	40	3x NO	D03	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A
DIS.P.040.6P.1NO.1NC.GR	40	6x NO	D04	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	1x NO delayed, advanced opening / 1x NC	AC11: 500 V AC - 20 A
<b>Switch disconnectors in stainless steel enclosures</b>						
DIS.S.025.3P.SR	25	3x NO	D01	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	-	-
DIS.S.025.3PN.SR	25	4x NO	D02	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	-	-
DIS.S.025.3P.1NO.SR	25	3x NO	D03	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A
DIS.S.025.6P.1NO.1NC.SR	25	6x NO	D04	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	1x NO delayed, advanced opening / 1x NC	AC11: 500 V AC - 20 A
DIS.S.040.3P.SR	40	3x NO	D01	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	-	-
DIS.S.040.3PN.SR	40	4x NO	D02	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	-	-
DIS.S.040.3P.1NO.SR	40	3x NO	D03	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A
DIS.S.040.6P.1NO.1NC.SR	40	6x NO	D04	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	1x NO delayed, advanced opening / 1x NC	AC11: 500 V AC - 20 A
<b>Safety switches in GRP enclosures</b>						
SAF.P.025.3P.1NO.GR	25	3x NO	D02	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A
SAF.P.040.3P.1NO.GR	40	3x NO	D02	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A
<b>Safety switches in stainless steel enclosures</b>						
SAF.S.025.3P.1NO.SR	40	3x NO	D02	AC23: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A AC3: 690 V AC - 16 A / 500 V AC - 20 A / 400 V AC - 25 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A
SAF.S.040.3P.1NO.SR	40	3x NO	D02	AC23: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A AC3: 690 V AC - 32 A / 500 V AC - 40 A / 400 V AC - 40 A	1x NO delayed, advanced opening	AC11: 500 V AC - 20 A

Release date: 2025-04-04 Date of issue: 2025-04-04 Filename: t187183\_eng.pdf

## Terminal Configuration and Cable Entries

Type	Main terminals		Grounding terminals		Cabel entries Face B					
	Capacity [mm <sup>2</sup> ]	Torque [Nm]	Capacity [mm <sup>2</sup> ]	Torque [Nm]	M20 qty.	M20 Clamping range	M25 qty.	M25 Clamping range	M32 qty.	M32 Clamping range
<b>Switch disconnectors in GRP enclosures</b>										
DIS.P.025.3P.GR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	-	-	2	9 ... 17	-	-
DIS.P.025.3PN.GR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	1	6 ... 12	2	9 ... 17	-	-
DIS.P.025.3P.1NO.GR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	1	6 ... 12	2	9 ... 17	-	-
DIS.P.025.6P.1NO.1NC.GR	2x 1.5 ... 4	2	2x 1.5 ... 4	3.5	1	6 ... 12	4	9 ... 17	-	-
DIS.P.040.3P.GR	2x 6 ... 10	3.5	2x 6 ... 10	3.5	-	-	-	-	2	14 ... 24
DIS.P.040.3PN.GR	2x 6 ... 10	3.5	2x 6 ... 10	3.5	1	6 ... 12	-	-	2	14 ... 24
DIS.P.040.3P.1NO.GR	2x 6 ... 10	3.5	2x 6 ... 10	3.5	1	6 ... 12	-	-	2	14 ... 24
DIS.P.040.6P.1NO.1NC.GR	2x 6 ... 10	3.5	2x 6 ... 10	3.5	1	6 ... 12	-	-	4	14 ... 24
<b>Switch disconnectors in stainless steel enclosures</b>										
DIS.S.025.3P.SR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	-	-	2	10 ... 18	-	-
DIS.S.025.3PN.SR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	1	6 ... 12	2	10 ... 18	-	-
DIS.S.025.3P.1NO.SR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	1	6 ... 12	2	10 ... 18	-	-
DIS.S.025.6P.1NO.1NC.SR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	1	6 ... 12	4	10 ... 18	-	-
DIS.S.040.3P.SR	2x 6 ... 10	2	2x 6 ... 10	3.5	-	-	-	-	2	14 ... 24
DIS.S.040.3PN.SR	2x 6 ... 10	2	2x 6 ... 10	3.5	1	6 ... 12	-	-	2	14 ... 24
DIS.S.040.3P.1NO.SR	2x 6 ... 10	2	2x 6 ... 10	3.5	1	6 ... 12	-	-	2	14 ... 24
DIS.S.040.6P.1NO.1NC.SR	2x 6 ... 10	2	2x 6 ... 10	3.5	1	6 ... 12	-	-	4	14 ... 24
<b>Safety switches in GRP enclosures</b>										
SAF.P.025.3P.1NO.GR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	1	6 ... 12	2	9 ... 17	-	-
SAF.P.040.3P.1NO.GR	2x 6 ... 10	3.5	2x 6 ... 10	3.5	1	6 ... 12	-	-	2	14 ... 24
<b>Safety switches in stainless steel enclosures</b>										
SAF.S.025.3P.1NO.SR	2x 1.5 ... 4	2	2x 1.5 ... 4	2	1	6 ... 12	2	9 ... 17	-	-
SAF.S.040.3P.1NO.SR	2x 6 ... 10	2	2x 6 ... 10	3.5	1	6 ... 12	-	-	2	14 ... 24

For details please refer to individual product datasheets.

For further configurations please contact Pepperl+Fuchs.