

# Safety Switches

## Series 8537



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00653E00

- > 3- and 6-pole switches  
12 / 16, 25, 40, 63 / 80, 125 / 160, 250, 315, 400, 500 A
- > Motor switching capacity AC-3 and AC-23 acc. to IEC 60947-3, EN 60947, DIN VDE 0660 part 107
- > With or without upstream contact
- > Positive opening operation of the main contacts
- > Isolating switches acc. to DIN VDE 0660
- > Can be padlocked in "OFF" position
- > Rotary handle with clear switch position
- > High level of corrosion resistance in external components
- > Marked with signal orange label "Safety Switch"



Safety switches ensure the obligatory isolation of electrical power during cleaning, maintenance and repair of the equipment. Other methods of isolation, e.g. removal of fuses or disconnection of motors, which require qualified electricians, are unnecessary.

E7


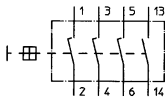
		ATEX / IECEx								Class I (NEC 505) (NEC 506)								Class I Class II Class III					
Zone		0	1	2	20	21	22	Zone		0	1	2	20	21	22	Division		1	2	1	2	1	2
For use in			x	x		x	x	For use in			x					For use in			x				

**WebCode 8537A**

## Safety Switches 12 / 16 A

### Series 8537

#### Selection Table

Version	Circuit diagram	Cable entries	Order number	Weight kg
12 / 16 A, 3-pole  <small>01703E00</small>	 <small>08787E00</small>	2 x 8161/5-M25 1 x 8161/5-M20	<b>8537/2-701-7000</b>	0.962

#### Explosion Protection

##### Marking

IECEX	
Gas explosion protection	Ex de ia IIC T6, T5
Dust explosion protection	Ex tD A21 IP65 T80°C, T95°C
Europe (ATEX)	
Gas explosion protection	⊕ II 2 G Ex ed IIC T6
Dust explosion protection	⊕ II 2 D IP65 T80°C (marking on type label possible)

##### Certificates

IECEX	
Gas explosion protection	IECEX PTB 06.0073
Dust explosion protection	IECEX PTB 06.0073
Europe (ATEX)	
Gas explosion protection	PTB 02 ATEX 1033
Dust explosion protection	PTB 02 ATEX 1033
Other certificates	China (CQST Ex), India (PESO), Kazakhstan (JSC), Russia (CTB), Belarus (Gospromnadzor)

# Safety Switches 12 / 16 A

## Series 8537

### Technical Data

#### Ambient conditions

Ambient temperature - 20 ... + 40 °C  
others on request

#### Mechanical data

Degree of protection IP66  
Enclosure material Polyester resin  
Enclosure cover In "ON" position removable, in "OFF" position interlocked  
Handle In 0-position 3-times padlockable,  
Colour: Handle black, protective collar black  
Special version: Protective handle red, collar yellow

#### Mounting / Installation

Cable entries Standard: In polyamide, Series 8161  
Special: In metal

#### Main contacts

##### Electrical data

Rated operational voltage 690 V AC  
Rated insulation voltage 750 V  
Rated impulse withstand voltage 6 kV  
Rated operational current 12 / 16 A  
Switching capacity according to IEC/EN 60947-3; DIN VDE 0660, part 107

U <sub>e</sub>	AC 3		AC 23	
	I	P	I	P
230 V ~	16 A	4.0 kW	16 A	4.0 kW
400 V ~	16 A	7.5 kW	16 A	7.5 kW
500 V ~	16 A	7.5 kW	16 A	7.5 kW
690 V ~	16 A	11.0 kW	16 A	11.0 kW

Service life of electrical / mechanical parts > 10<sup>5</sup> operations

Max. short-circuit protection 25 A (16 A at I<sub>e</sub> = 12 A, 690 V AC), triggering characteristics: gG acc. to IEC/EN 60291-1

##### Mounting / Installation

Terminals 2.5 / 4 mm<sup>2</sup> finely stranded / solid wire

#### Auxiliary contacts

##### Electrical data

Rated operating voltage 400 V AC  
Rated operational current 6 A

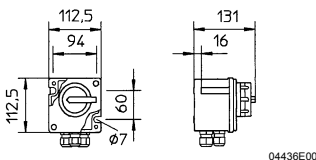
##### Mechanical data

Switch 1 NO (ON delayed - OFF advanced)

##### Mounting / Installation

Terminals 2.5 / 4 mm<sup>2</sup> finely stranded / solid wire

### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations


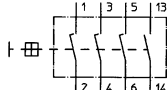

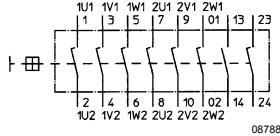


8537/2-701, 12 / 16 A, 3-pole

## Safety Switches 16 A

### Series 8537

#### Selection Table

Version	Circuit diagram	Cable entries	Order number	Weight kg
16 A, 3-pole  01705E00	 08787E00	2 x 8161/5-M25 1 x 8161/5-M20	<b>8537/2-702-7000</b>	1.300
16 A, 6-pole  01201E00	 08788E00	4 x 8161/5-M25 1 x 8161/5-M20	<b>8537/2-802-8000</b>	2.300

#### Explosion Protection

##### Marking

###### IECEX

Gas explosion protection	Ex de ia IIC T6, T5
Dust explosion protection	Ex tD A21 IP65 T80°C, T95°C

###### Europe (ATEX)

Gas explosion protection	⊕ II 2 G Ex ed IIC T6
Dust explosion protection	⊕ II 2 D IP65 T80°C (marking on type label possible)

##### Certificates

###### IECEX

Gas explosion protection	IECEX PTB 06.0073
Dust explosion protection	IECEX PTB 06.0073

###### Europe (ATEX)

Gas explosion protection	PTB 02 ATEX 1033
Dust explosion protection	PTB 02 ATEX 1033

###### Other certificates

China (CQST Ex), India (PESO), Kazakhstan (JSC), Russia (CTB), Belarus (Gospromnadzor)

# Safety Switches 16 A

## Series 8537

### Technical Data

#### Ambient conditions

Ambient temperature	- 20 ... + 40 °C others on request
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#### Mechanical data

Degree of protection	IP66
Enclosure material	Polyester resin
Enclosure cover	In "ON" position removable, in "OFF" position interlocked
Handle	In 0-position 3-times padlockable, Colour: Handle black, protective collar black Special version: Protective handle red, collar yellow

#### Mounting / Installation

Cable entries	Standard: In polyamide, Series 8161 Special: In metal
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#### Main contacts

Electrical data	
Rated operational voltage	690 V AC
Rated insulation voltage	750 V
Rated impulse withstand voltage	6 kV
Rated operational current	16 A
Switching capacity	according to IEC/EN 60947-3; DIN VDE 0660, part 107

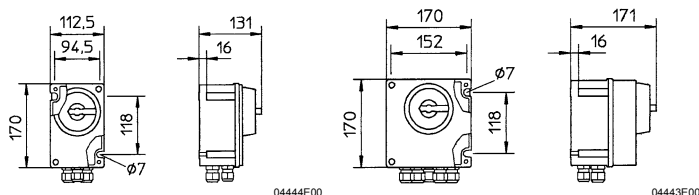
U <sub>e</sub>	AC 3		AC 23	
	I	P	I	P
230 V ~	16 A	4.0 kW	16 A	4.0 kW
400 V ~	16 A	7.5 kW	16 A	7.5 kW
500 V ~	16 A	10.0 kW	16 A	10.0 kW
690 V ~	16 A	13.0 kW	16 A	13.0 kW

Service life of electrical / mechanical parts	> 10 <sup>5</sup> operations
Max. short-circuit protection	35 A, triggering characteristics: gG acc. to IEC/EN 60291-1
Mounting / Installation	
Terminals	4 / 6 mm <sup>2</sup> finely stranded / solid wire

#### Auxiliary contacts

Electrical data	
Rated operating voltage	500 V AC
Rated operational current	10 A
Mechanical data	
Switch	3-pole: 1 NO (ON delayed - OFF advanced) 6-pole: 2 NO (1 x ON delayed - OFF advanced / 1 x switching normally)
Mounting / Installation	
Terminals	4 / 6 mm <sup>2</sup> finely stranded / solid wire

### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations




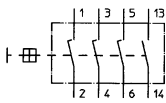

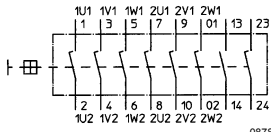
8537/2-702, 16 A, 3-pole

8537/2-802, 16 A, 6-pole

# Safety Switches 25 A

## Series 8537

### Selection Table

Version	Circuit diagram	Cable entries	Order number	Weight kg
25 A, 3-pole  <small>01201E00</small>	 <small>08787E00</small>	2 x 8161/5-M32 1 x 8161/5-M20	<b>8537/2-703-7000</b>	1.844
25 A, 6-pole  <small>01704E00</small>	 <small>08788E00</small>	4 x 8161/5-M25 1 x 8161/5-M20	<b>8537/2-803-8000</b>	3.600

### Explosion Protection

#### Marking

IECEX	
Gas explosion protection	Ex de ia IIC T6, T5
Dust explosion protection	Ex tD A21 IP65 T80°C, T95°C
Europe (ATEX)	
Gas explosion protection	⊕ II 2 G Ex ed IIC T6
Dust explosion protection	⊕ II 2 D IP65 T80°C (marking on type label possible)

#### Certificates

IECEX	
Gas explosion protection	IECEX PTB 06.0073
Dust explosion protection	IECEX PTB 06.0073
Europe (ATEX)	
Gas explosion protection	PTB 02 ATEX 1033
Dust explosion protection	PTB 02 ATEX 1033
Other certificates	China (CQST Ex), India (PESO), Kazakhstan (JSC), Russia (CTB), Belarus (Gospromnadzor)

# Safety Switches 25 A

## Series 8537

### Technical Data

#### Ambient conditions

Ambient temperature - 20 ... + 40 °C  
others on request

#### Mechanical data

Degree of protection IP66  
Enclosure material Polyester resin  
Enclosure cover In "ON" position removable, in "OFF" position interlocked  
Handle In 0-position 3-times padlockable,  
Colour: Handle black, protective collar black  
Special version: Protective handle red, collar yellow

#### Mounting / Installation

Cable entries Standard: In polyamide, Series 8161  
Special: In metal

#### Main contacts

##### Electrical data

Rated operational voltage 690 V AC  
Rated insulation voltage 750 V  
Rated impulse withstand voltage 6 kV  
Rated operational current 25 A  
Switching capacity according to IEC/EN 60947-3; DIN VDE 0660, part 107

U <sub>e</sub>	AC 3		AC 23	
	I	P	I	P
230 V ~	25 A	5.5 kW	25 A	5.5 kW
400 V ~	25 A	11.0 kW	25 A	11.0 kW
500 V ~	25 A	15.0 kW	25 A	15.0 kW
690 V ~	25 A	22.0 kW	25 A	22.0 kW

Service life of electrical / mechanical parts > 10<sup>5</sup> operations  
Max. short-circuit protection 50 A, triggering characteristics: gG acc. to IEC/EN 60291-1  
Mounting / Installation  
Terminals 6 / 10 mm<sup>2</sup> finely stranded / solid wire

#### Auxiliary contacts

##### Electrical data

Rated operating voltage 500 V AC  
Rated operational current 10 A

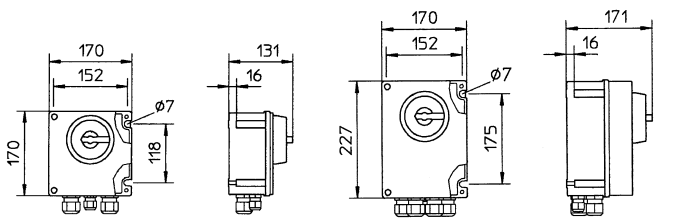
##### Mechanical data

Switch 3-pole: 1 NO (ON delayed - OFF advanced)  
6-pole: 2 NO (1 x ON delayed - OFF advanced / 1 x switching normally)

##### Mounting / Installation

Terminals 4 / 6 mm<sup>2</sup> finely stranded / solid wire

### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations




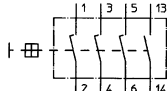

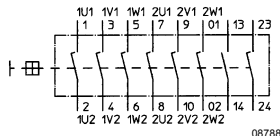
8537/2-703, 25 A, 3-pole

8537/2-803, 25 A, 6-pole

# Safety Switches 40 A

## Series 8537

### Selection Table

Version	Circuit diagram	Cable entries	Order number	Weight kg
40 A, 3-pole  01202E00	 08787E00	2 x 8161/5-M40 1 x 8161/5-M20	<b>8537/2-705-7000</b>	3.500
40 A, 6-pole  01203E00	 08788E00	4 x 8161/5-M40 1 x 8161/5-M20	<b>8537/2-805-8000</b>	6.400

### Explosion Protection

#### Marking

IECEX	
Gas explosion protection	Ex de ia IIC T6, T5
Dust explosion protection	Ex tD A21 IP65 T80°C, T95°C
Europe (ATEX)	
Gas explosion protection	⊕ II 2 G Ex ed IIC T6
Dust explosion protection	⊕ II 2 D IP65 T80°C (marking on type label possible)

#### Certificates

IECEX	
Gas explosion protection	IECEX PTB 06.0073
Dust explosion protection	IECEX PTB 06.0073
Europe (ATEX)	
Gas explosion protection	PTB 02 ATEX 1033
Dust explosion protection	PTB 02 ATEX 1033
Other certificates	China (CQST Ex), India (PESO), Kazakhstan (JSC), Russia (CTB), Belarus (Gospromnadzor)



# Safety Switches 40 A

## Series 8537

### Technical Data

#### Ambient conditions

Ambient temperature - 20 ... + 40 °C  
others on request

#### Mechanical data

Degree of protection IP66  
Enclosure material Polyester resin  
Enclosure cover In "ON" position removable, in "OFF" position interlocked  
Handle In 0-position 3-times padlockable,  
Colour: Handle black, protective collar black  
Special version: Protective handle red, collar yellow

#### Mounting / Installation

Cable entries Standard: In polyamide, Series 8161  
Special: In metal

#### Main contacts

##### Electrical data

Rated operational voltage 690 V AC  
Rated insulation voltage 750 V  
Rated impulse withstand voltage 6 kV  
Rated operational current 40 A  
Switching capacity according to IEC/EN 60947-3; DIN VDE 0660, part 107

U <sub>e</sub>	AC 3		AC 23	
	I	P	I	P
230 V ~	40 A	11.0 kW	40 A	11.0 kW
400 V ~	40 A	22.0 kW	40 A	22.0 kW
500 V ~	40 A	30.0 kW	40 A	30.0 kW
690 V ~	40 A	37.0 kW	40 A	37.0 kW

Service life of electrical / mechanical parts > 10<sup>5</sup> operations  
Max. short-circuit protection 80 A, triggering characteristics: gG acc. to IEC / EN 60291-1  
Mounting / Installation  
Terminals 16 mm<sup>2</sup> finely stranded / solid wire  
25 mm<sup>2</sup> stranded

#### Auxiliary contacts

##### Electrical data

Rated operating voltage 500 V AC  
Rated operational current 10 A

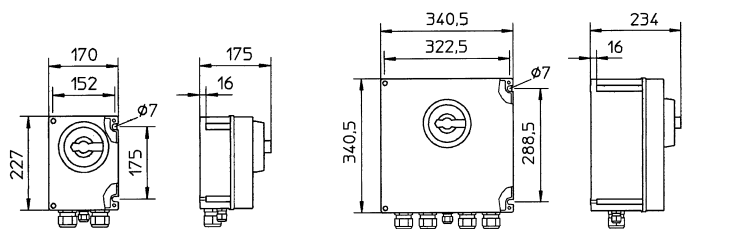
##### Mechanical data

Switch 3-pole: 1 NO (ON delayed - OFF advanced)  
6-pole: 2 NO (1 x ON delayed - OFF advanced / 1 x switching normally)

##### Mounting / Installation

Terminals 4 mm<sup>2</sup> finely stranded / solid wire

### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations




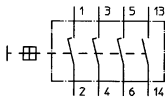

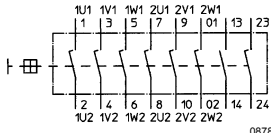
8537/2-705, 40 A, 3-pole

8537/2-805, 40 A, 6-pole

## Safety Switches 63 / 80 A

### Series 8537

#### Selection Table

Version	Circuit diagram	Cable entries	Order number	Weight kg
63 / 80 A, 3-pole  <small>01200E00</small>	 <small>08787E00</small>	2 x 8161/5-M50 1 x 8161/5-M20	<b>8537/2-706-7000</b>	5.769
63 / 80 A, 6-pole  <small>01204E00</small>	 <small>08788E00</small>	2 x 8161/5-M50 2 x 8161/5-M40 1 x 8161/5-M20	<b>8537/2-806-8000</b>	10.100

#### Explosion Protection

##### Marking

###### IECEX

Gas explosion protection Ex de ia IIC T6, T5  
 Dust explosion protection Ex tD A21 IP65 T80°C, T95°C

###### Europe (ATEX)

Gas explosion protection Ⓔ II 2 G Ex ed IIC T6  
 Dust explosion protection Ⓔ II 2 D IP65 T80°C  
 (marking on type label possible)

##### Certificates

###### IECEX

Gas explosion protection IECEX PTB 06.0073  
 Dust explosion protection IECEX PTB 06.0073

###### Europe (ATEX)

Gas explosion protection PTB 02 ATEX 1033  
 Dust explosion protection PTB 02 ATEX 1033

###### Other certificates

China (CQST Ex), India (PESO), Kazakhstan (JSC), Russia (CTB), Belarus (Gospromnadzor)

# Safety Switches 63 / 80 A

## Series 8537

### Technical Data

#### Ambient conditions

Ambient temperature - 20 ... + 40 °C  
others on request

#### Mechanical data

Degree of protection IP66  
Enclosure material Polyester resin  
Enclosure cover In "ON" position removable, in "OFF" position interlocked  
Handle In 0-position 3-times padlockable,  
Colour: Handle black, protective collar black  
Special version: Protective handle red, collar yellow

#### Mounting / Installation

Cable entries Standard: In polyamide, Series 8161  
Special: In metal

#### Main contacts

##### Electrical data

Rated operational voltage 500 V AC (80 A) / 690 V AC (63 A)  
Rated insulation voltage 750 V  
Rated impulse withstand voltage 6 kV  
Rated operational current 63 / 80 A  
Switching capacity according to IEC/EN 60947-3; DIN VDE 0660, part 107

U <sub>e</sub>	AC 3		AC 23	
	I	P	I	P
230 V ~	80 A	22.0 kW	80 A	22.0 kW
400 V ~	80 A	37.0 kW	80 A	37.0 kW
500 V ~	80 A	55.0 kW	80 A	55.0 kW
690 V ~	63 A	55.0 kW	63 A	55.0 kW

Service life of electrical / mechanical parts > 10<sup>5</sup> operations

Max. short-circuit protection 63 A: 100 A, triggering characteristics: gG acc. to IEC/EN 60291-1  
80 A: 125 A, triggering characteristics: gG acc. to IEC/EN 60291-1

##### Mounting / Installation

Terminals 35 mm<sup>2</sup> finely stranded / solid wire

#### Auxiliary contacts

##### Electrical data

Rated operating voltage 500 V AC  
Rated operational current 10 A

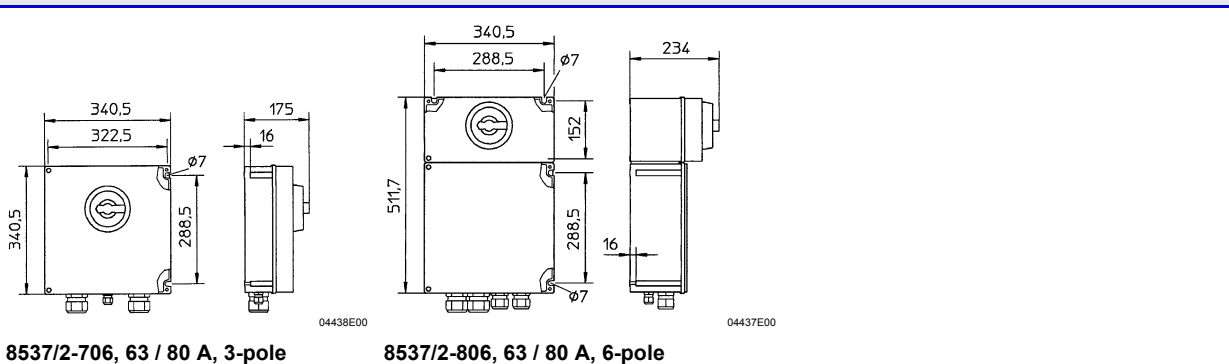
##### Mechanical data

Switch 3-pole: 1 NO (ON delayed - OFF advanced)  
6-pole: 2 NO (1 x ON delayed - OFF advanced / 1 x switching normally)

##### Mounting / Installation

Terminals 4 mm<sup>2</sup> finely stranded / solid wire




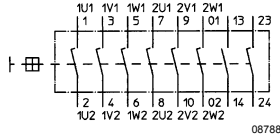
### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



# Safety Switches 125 / 160 A

## Series 8537

### Selection Table

Version	Circuit diagram	Cable entries	Order number	Weight kg
125 / 160 A, 3-pole  <small>01390E00</small>	 <small>08787E00</small>	1 x flange plate for 2 cables $\varnothing$ 13 mm ... 60 mm 1 x 8161/5-M20	<b>8537/2-709-7000</b>	27.000
125 / 160 A, 6-pole  <small>01389E00</small>	 <small>08788E00</small>	2 x flange plate for 2 cables $\varnothing$ 13 mm ... 60 mm 1 x 8161/5-M20	<b>8537/2-809-8000</b>	47.000

### Explosion Protection

#### Marking

##### IECEX

Gas explosion protection

Ex de ia IIC T6, T5

Dust explosion protection

Ex tD A21 IP65 T80°C, T95°C (only with cable glands Series 8161)

##### Europe (ATEX)

Gas explosion protection

⊕ II 2 G Ex ed IIC T6, T5

Dust explosion protection

⊕ II 2 D IP65 T80°C  
(marking on type label possible)  
(only with cable glands Series 8161)

#### Certificates

##### IECEX

Gas explosion protection

IECEX PTB 06.0073

Dust explosion protection

IECEX PTB 06.0073 (only with cable glands Series 8161)

##### Europe (ATEX)

Gas explosion protection

PTB 02 ATEX 1033

Dust explosion protection

PTB 02 ATEX 1033 (only with cable glands Series 8161)

# Safety Switches 125 / 160 A

## Series 8537

### Technical Data

#### Ambient conditions

Ambient temperature - 20 ... + 40 °C  
others on request

#### Mechanical data

Degree of protection IP54  
Enclosure material Polyester resin  
Enclosure cover In "ON" position removable, in "OFF" position interlocked  
Handle In 0-position 3-times padlockable,  
Colour: Handle black, protective collar black  
Special version: Protective handle red, collar yellow

#### Main contacts

Electrical data  
Rated operational voltage 500 V AC (160 A) / 690 V AC (125 A)  
Rated insulation voltage 750 V  
Rated impulse withstand voltage 6 kV  
Rated operational current 125 / 160 A  
Switching capacity according to IEC/EN 60947-3; DIN VDE 0660, part 107

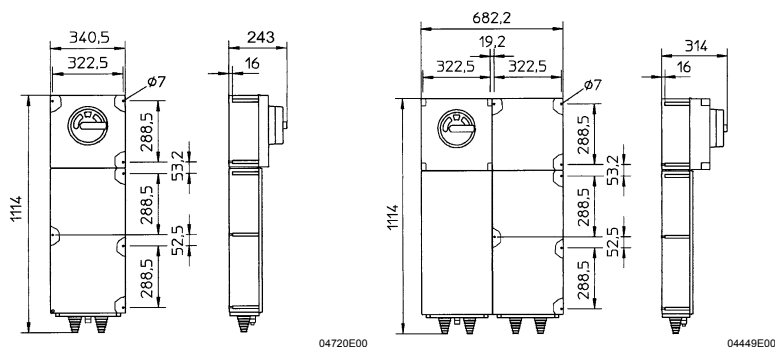
U <sub>e</sub>	AC 3		AC 23	
	I	P	I	P
230 V ~	125 A	37.0 kW	160 A	45.0 kW
400 V ~	125 A	55.0 kW	160 A	75.0 kW
500 V ~	100 A	75.0 kW	160 A	110.0 kW
690 V ~	80 A	90.0 kW	125 A	110.0 kW

Service life of electrical / mechanical parts > 10<sup>5</sup> operations  
Max. short-circuit protection 160 A, triggering characteristics: gG acc. to IEC/EN 60291-1  
Mounting / Installation  
Terminals 95 mm<sup>2</sup> finely stranded / solid wire  
120 mm<sup>2</sup> stranded

#### Auxiliary contacts

Electrical data  
Rated operating voltage 500AC  
Rated operational current 10 A  
Mechanical data  
Switch 3-pole: 1 NO (ON delayed - OFF advanced)  
6-pole: 2 NO (1 x ON delayed - OFF advanced / 1 x switching normally)  
Mounting / Installation  
Terminals 4 mm<sup>2</sup> finely stranded / solid wire

### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations




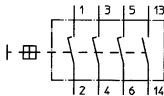
8537/2-709, 125 / 160 A, 3-pole

8537/2-809, 125 / 160 A, 6-pole

# Safety Switches 250 A

## Series 8537

### Selection Table

Version	Circuit diagram	Cable entries	Order number	Weight kg
250 A, 3-pole  <small>01683E00</small>	 <small>08787E00</small>	2 x 8161/5-M63 1 x 8161/5-M20	<b>8537/7-712-7000</b>	55.000

More versions (160, 315, 400, 500 A) on request.

### Explosion Protection

#### Marking

##### IECEX

Gas explosion protection Ex de ia IIC T6, T5  
 Dust explosion protection Ex tD A21 IP65 T80°C, T95°C

##### Europe (ATEX)

Gas explosion protection Ⓔ II 2 G Ex de IIC T6, T5  
 Dust explosion protection Ⓔ II 2 D IP66 T80°C, T95°C, T130°C

#### Certificates

##### IECEX

Gas explosion protection IECEX PTB 06.0073  
 Dust explosion protection IECEX PTB 06.0073

##### Europe (ATEX)

Gas explosion protection PTB 02 ATEX 1109 (certificate Series 8220/.50)  
 Dust explosion protection PTB 02 ATEX 1109 (certificate Series 8220/.50)

# Safety Switches 250 A

## Series 8537



### Technical Data

#### Ambient conditions

Ambient temperature - 20 ... + 40 °C

#### Mechanical data

Degree of protection IP54  
 Enclosure material Ex d housing: steel sheet, powder coated; cover: light metal  
 Ex e housing: galvanised steel sheet, powder coated  
 Enclosure cover In "ON" position removable, in "OFF" position interlocked  
 Handle In 0-position 3-times padlockable,  
 Colour: Handle black, protective collar black  
 Special version: Protective handle red, collar yellow

#### Main contacts

Electrical data

Rated operational voltage	690 V AC
Rated insulation voltage	750 V
Rated impulse withstand voltage	6 kV
Rated operational current	250 A
Switching capacity	according to IEC/EN 60947-3; DIN VDE 0660, part 107

AC 3		AC 23	
U <sub>e</sub>	P (3-pole)	U <sub>e</sub>	P (3-pole)
230 V ~	75.0 kW	230 V ~	75.0 kW
400 V ~	132.0 kW	400 V ~	132.0 kW
500 V ~	160.0 kW	500 V ~	160.0 kW
690 V ~	160.0 kW	690 V ~	200.0 kW

Service life of electrical / mechanical parts 3 x 10<sup>4</sup> / > 10<sup>5</sup>  
 max. operating cycles s / h 50

Max. short-circuit protection 315 A, triggering characteristics: gG acc. to IEC/EN 60291-1

Mounting / Installation

Terminals 120 mm<sup>2</sup> stranded

#### Auxiliary contacts

Electrical data

Rated operating voltage	500AC
Rated operational current	6 A

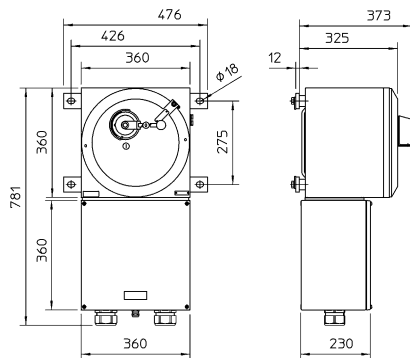
Mechanical data

Switch 1 NO (ON delayed - OFF advanced)

Mounting / Installation

Terminals 4 mm<sup>2</sup> finely stranded wire

### Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



04445E00

8537/7-712, 250 A, 3-pole

We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.