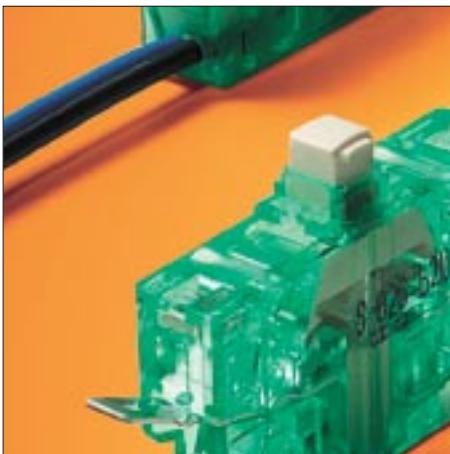
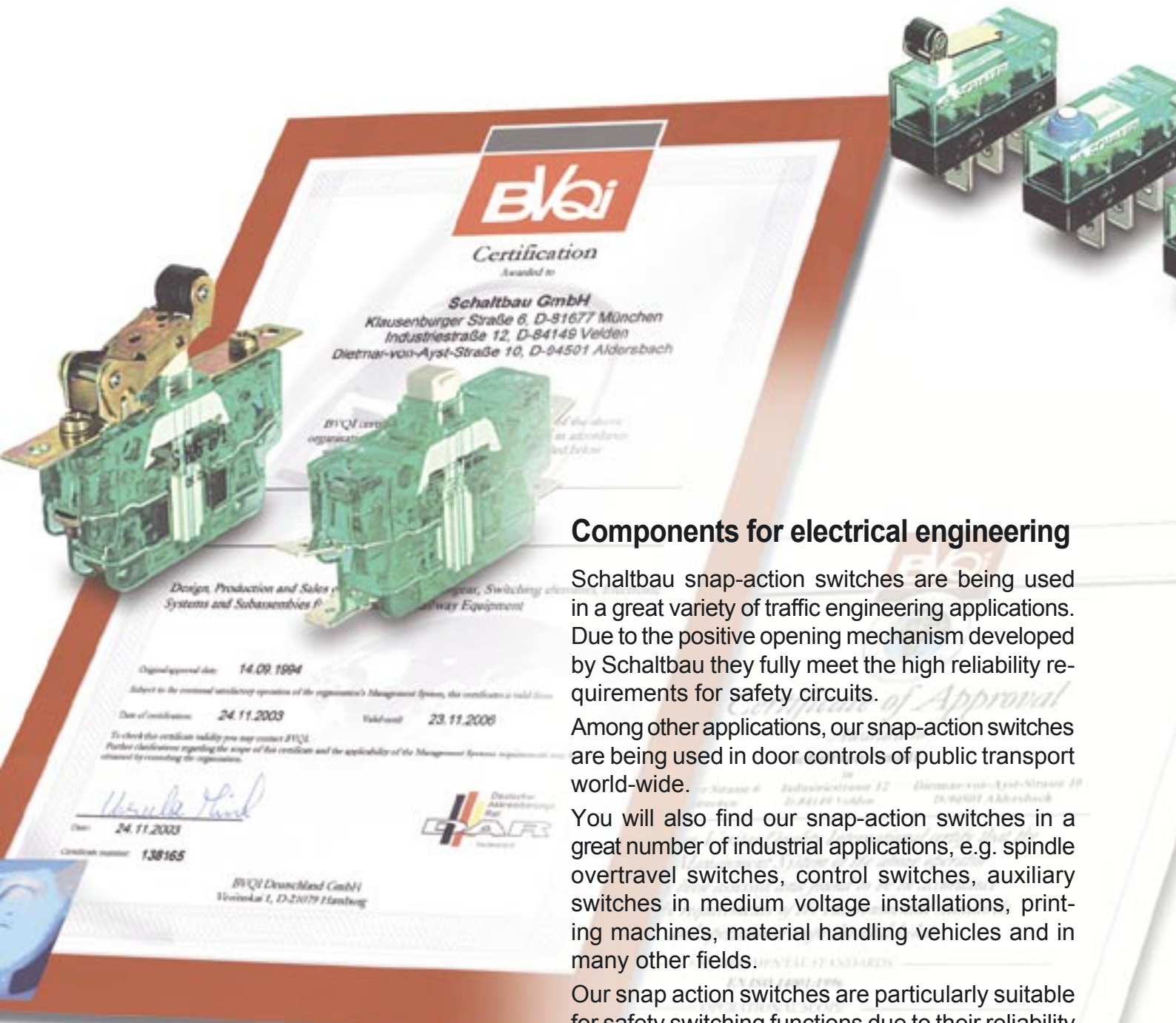


Snap-action Switches



Short Form
Catalogue



Components for electrical engineering

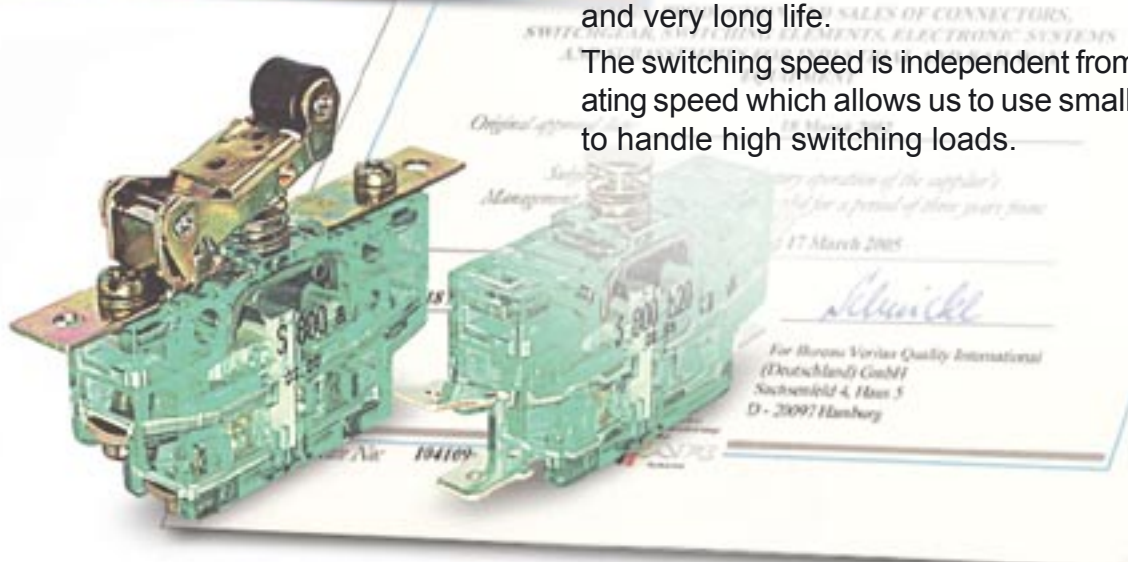
Schaltbau snap-action switches are being used in a great variety of traffic engineering applications. Due to the positive opening mechanism developed by Schaltbau they fully meet the high reliability requirements for safety circuits.

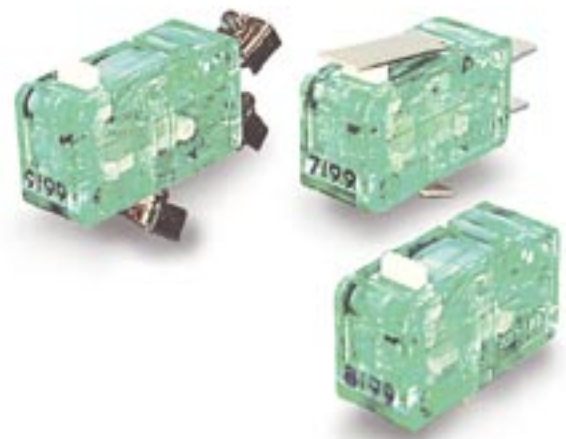
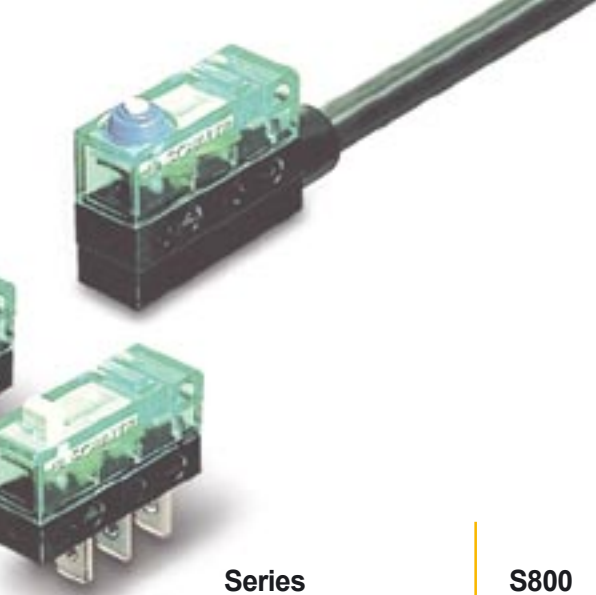
Among other applications, our snap-action switches are being used in door controls of public transport world-wide.

You will also find our snap-action switches in a great number of industrial applications, e.g. spindle overtravel switches, control switches, auxiliary switches in medium voltage installations, printing machines, material handling vehicles and in many other fields.

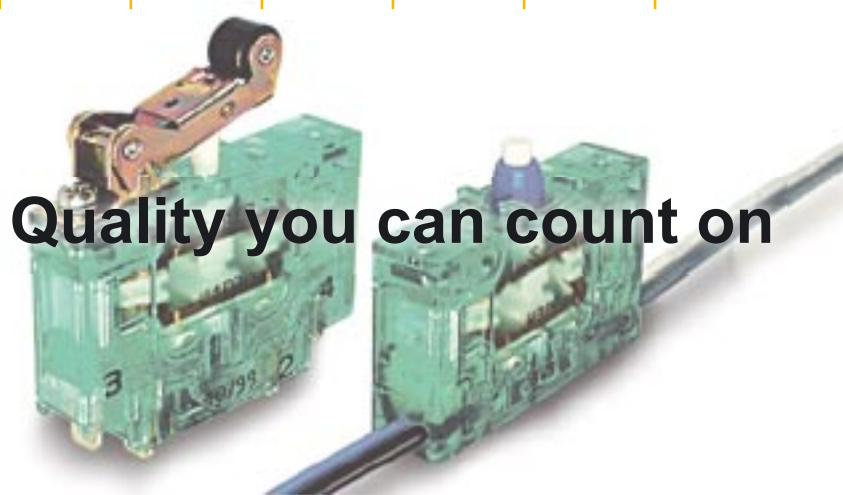
Our snap action switches are particularly suitable for safety switching functions due to their reliability and very long life.

The switching speed is independent from the actuating speed which allows us to use small switches to handle high switching loads.





Series		S800	S820	S826	S834	S840	S847	S860	S870
Conv. term. current I_{th}		10 A (16 A)	20 A	10 A	2,5 A	6 A (10 A)	10 A	10 A	10 A
Protection degree		IP40	IP40	IP40	IP50	IP40	IP40/60/67	IP65	IP40/60/67
Mechanical life (operations)		10 Mio.	1 Mio min..	10 Mio.	0.3 Mio.	10 Mio.	10 Mio. max.	5 Mio.	10 Mio max.
Contact systems	NC	•				•			•
	NO	•				•			•
	NC / NO	•	•	•		•	•	•	•
	DPDT		•	•	•		•		
Contacts	Contact material	Ag / Au	Ag	Ag / Au	Ag	Ag / Au	Ag / Au	Ag	Ag / Au
	Positive opening operation	•	•	•	•	•	•	•	•
	Self-cleaning			•	•	•	•	•	•
Terminals	Flat tabs	•		•		•	•	•	•
	Screws	•	•	•		•	•	•	•
	Leads						•		•
	Solder pins / lugs				•	•			•
Actuators	Plunger	•	•	•	•	•	•	•	•
	Roller lever	•	•	•		•	•	•	•
	Flat lever					•		•	•
	Cam lever					•		•	•
Blowout device		•	•	•			•		
Page		4	4	5	7	7	5	6	6



Quality you can count on

S800 ... S806 Series



S800 Series snap-action switches Catalogue D20e

S820 Series



S820 Series snap-action switches Catalogue in preparation

Features

- ▶ Performance in accordance with standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ Positive opening operation
- ▶ Type F, DIN 41636
- ▶ Protection degree IP40
- ▶ High electrical load capacity due to massive contact bridge
- ▶ Contact material: hard silver or gold alloy

Features

- ▶ Performance following standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ High vibration and shock resistance
- ▶ Positive opening operation
- ▶ Type F, DIN 41636
- ▶ Protection degree IP40
- ▶ High electrical load capacity due to massive contact bridge
- ▶ Contact material: hard silver or gold alloy

Technical Data

Series	S800	S802	S806
Conv. therm. current I_{th}	10 A (16 A max.)		
Utilization category	AC 15 230 V AC / 3.0 A DC 13 110 V DC / 1.0 A		
Impulse withst. voltage U_{imp} at pollution degree	4 kV 3	4 kV 3	4 kV 3
Protection degree	IP40	IP40	IP40
Actuator force	3 N	3 N	3 N
Actuator travel	3.2 mm	3.2 mm	3.2 mm
Contact type	NO + NC	NO	NC
Mechanical life	10 million operations		
Temperature range	-40°C ... +85°C		
Dimensions	50 x 28 x 12 mm		
Weight	20 ... 40 g		

Technical Data

Series	S820
Conv. therm. current I_{th}	20 A
Utilization category	AC 15 230 V AC / 3.0 A DC 13 110 V DC / 1.0 A
Impulse withst. voltage U_{imp} at pollution degree	4 kV 3
Protection degree	IP40
Actuator force	13 N max.
Actuator travel	4 mm (without roller lever)
Contact type	NO + NC
Mechanical life	1.0 million operations
Temperature range	-40°C ... +85°C
Dimensions	50 x 45 x 12 mm
Weight	40 ... 50 g

S826 Series



S826 Series snap-action switches Catalogue D26e

S847 Series



S847 Series snap-action switches Catalogue D47e

Features

- ▶ Performance in accordance with standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ Positive opening operation
- ▶ Type F, DIN 41636
- ▶ Protection degree IP40
- ▶ Self-cleaning contacts, double contact points
- ▶ Double Pole Double Throw (DPDT) contacts, galvanically isolated

Technical Data

Series	S826
Conv. therm. current I_{th}	10 A
Utilization category	AC 15 230 V AC / 1.0 A DC 13 110 V DC / 0.5 A
Impulse withst. voltage U_{imp} at pollution degree	4 kV 3
Protection degree	IP40
Actuator force	3 N
Actuator travel	3.2 mm
Contact type	NO + NC
Mechanical life	10 million operations
Temperature range	-40°C ... +85°C
Dimensions	50 x 28 x 12 mm
Weight	20 ... 40 g

Features

- ▶ Performance in accordance with standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ Positive opening operation
- ▶ Long overtravel after positive opening operation
- ▶ Type F, DIN 41636
- ▶ Protection degrees IP40, IP60, IP67
- ▶ Self-cleaning contacts, double contact points
- ▶ Double Pole Double Throw (DPDT) contacts, galvanically isolated

Technical Data

Series	S847		
Conv. therm. current I_{th}	10 A		
Utilization category	AC 15 230 V AC / 1.0 A DC 13 110 V DC / 0.5 A		
Impulse withst. voltage U_{imp} at pollution degree	4 kV 3	4 kV 3	4 kV 3
Protection degree	IP40	IP60	IP67
Actuator force	2.6 N	3 N	3 N
Actuator travel	4.9 mm	4.9 mm	4.9 mm
Contact type	NO + NC		
Mechanical life	10 million op.	5 million op.	5 million op.
Temperature range	-40°C ... +85°C	-40°C ... +85°C	-20°C ... +85°C
Dimensions	50 x 36 x 12 mm		
Weight	20 ... 40 g		

S860 Series



S860 Series snap-action switches

Catalogue in preparation

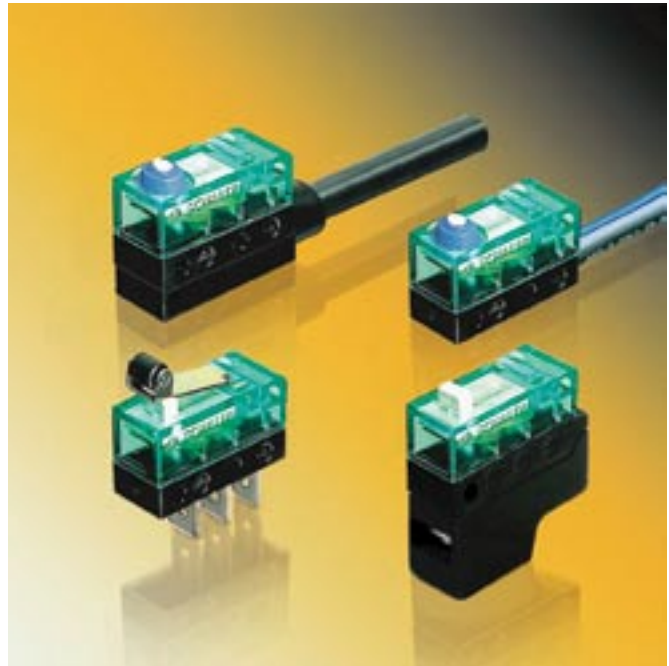
Features

- ▶ Performance in accordance with standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ Positive opening operation
- ▶ Type A, DIN 41636
- ▶ Protection degree IP65
- ▶ Self-cleaning contacts
- ▶ High vibration and shock resistance

Technical Data

Series	S860
Conv. therm. current I_{th}	10 A
Utilization category	AC 15 230 V AC / 1.5 A DC 13 60 V DC / 0.5 A
Impulse withst. voltage U_{imp} at pollution degree	4 kV 3
Protection degree	IP65
Actuator force	2.4 N
Actuator travel	3.0 mm
Contact type	NO + NC
Mechanical life	5 million operations
Temperature range	-40°C ... +85°C
Dimensions	35 x 19 x 11 mm
Weight	12 g

S870 Series



S870 Series snap-action switches

Catalogue D70e

Features

- ▶ Performance in accordance with standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ Positive opening operation
- ▶ Type A, DIN 41636
- ▶ Protection degrees IP40, IP60, **IP67**
- ▶ Self-cleaning contacts
- ▶ High vibration and shock resistance

Technical Data

Series	S870		
Conv. therm. current I_{th}	10 A		
Utilization category	AC 15 230 V AC / 1.5 A DC 13 60 V DC / 0.5 A		
Impulse withst. voltage U_{imp} at pollution degree	4 kV 3	4 kV 3	4 kV 3
Protection degree	IP40	IP60	IP67
Actuator force	2.4 N	3 N	3 N
Actuator travel	3.0 mm	3.0 mm	3.0 mm
Contact type	NO + NC		
Mechanical life	10 million op.	5 million op.	5 million op.
Temperature range	-40°C ... +85°C	-40°C ... +85°C	-20°C ... +85°C
Dimensions	30 x 16 x 10.5 mm		
Weight	10 g		

S834 Series



S834 Series, Enabling Switches Catalogue D34e

S840 ... S846 Series



S840 Series snap-action switches Catalogue D18

Features

- ▶ Performance in accordance with standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ Triple position switch OFF - ON - OFF
- ▶ Positive opening operation
- ▶ Long overtravel after positive opening operation
- ▶ Protection degree IP50
- ▶ Self-cleaning contacts
- ▶ Contact material hard silver

Technical Data

Series	S834
Conv. therm. current I_{th}	2.5 A
Utilization category	AC 12 48 V AC / 1.0 A DC 13 48 V DC / 0.3 A
Impulse withst. voltage U_{imp} at pollution degree	1.5 kV 1
Protection degree	IP50
Actuator force	3 ... 5 N
Actuator travel	6.0 mm
Contact type	NO
Mechanical life	300,000 operations
Temperature range	0°C ... +55°C
Dimensions	16.5 x 22.5 x 10.4 mm
Weight	5 g

Features

- ▶ Performance in accordance with standards VDE 0660 part 200 (EN 60947-5-1, IEC 947-5-1)
- ▶ Positive opening operation
- ▶ Type A, DIN 41636
- ▶ Protection degree IP40
- ▶ Self-cleaning contacts

Technical Data

Series	S840	S845	S846
Conv. therm. current I_{th}	6 A (10 A max.)		
Utilization category	AC 15 230 V AC / 1.5 A ---		
Impulse withst. voltage U_{imp} at pollution degree	2.5 kV 3	2.5 kV 3	2.5 kV 3
Protection degree	IP40	IP40	IP40
Actuator force	2.4 N	2.4 N	2.4 N
Actuator travel	2.5 mm	2.5 mm	2.5 mm
Contact type	NC	NO	NO + NC
Mechanical life	10 million operations		
Temperature range	-40°C ... +85°C		
Dimensions	30 x 16.5 x 10.3 mm		
Weight	9 ... 15 g		

Electrical Components and Systems for Railway Engineering and Industrial Applications

Connectors



- Connectors manufactured to industry standards
- Connectors to suit the special requirements of telecommunications engineering (MIL connectors)
- Charging connectors for battery-powered machines and systems
- Connectors for railway engineering, including UIC connectors
- Special connectors to suit customer requirements

Snap-action switches



- Snap-action switches with positive opening operation
- Snap-action switches with self-cleaning contacts
- Enabling switches
- Special switches to suit customer requirements

Contactors



- Single and multi-pole DC contactors
- High-voltage AC/DC contactors
- Contactors for battery powered vehicles and power supplies
- Contactors for railway applications
- Single terminal clamps and fuse holders
- DC emergency break switches
- Special contactors to suit customer requirements

Control devices



- Master controllers and reversers for railway applications
- Toggle switch devices
- Handles and foot switches for railway applications (dead-man equipment)
- Switching elements with high breaking capacity
- Emergency brake handles
- Signal devices

Transportation system components



- Power supplies for passenger coaches (electric equipment)
- Battery chargers for locomotives and passenger coaches
- High-voltage equipment for single and multi-phase operation
- Heating devices and heating controls
- Design and engineering services for high-voltage equipment
- Special equipment to suit customer requirements

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with compliments: