



Product Overview

# SWITCHES FROM 10A UP TO 315A

DISCONNECT SWITCHES / ROTARY CAM SWITCHES

## Safe **Switching** and **Disconnecting**

Disconnect Switches from Salzer are hand-operated switchgear for main circuits and are offered as ON-OFF Switches (3, 4, 6, and 8 pole) or as Changeover Switches with centre Off (3 and 4 pole).

### Design and Function

- 90° switching angle
- Forced open Contacts
- Terminal screws in open position
- Finger protected (degree of protection up to IP20)
- Short-circuit rating
- Fulfills the load break requirements up to 690V or up to 1000V

### Conformity

Our products are designed, manufactured and tested according to the following standards:

- IEC 60947
- EN 60947
- IEC 60204-1
- EN 60204-1
- UL 508
- CSA 22.2, No. 14

### Applications

Disconnect Switches offer ideal features for their use as:

- ON-OFF Switches
- Main Switches
- Emergency-Off Switches
- Maintenance Switches
- Safety Switches
- Distribution Switches
- Motor Switches

## Mounting Options

	<b>Front Mounting</b>
	<ul style="list-style-type: none"> <li>■ Four hole mounting</li> <li>■ Single hole mounting</li> </ul> <p>Available as Main/Emergency-Off Switch, Main Switch, ON-OFF Switch or as a Changeover Switch.</p>
	<b>Base Mounting</b>
	<ul style="list-style-type: none"> <li>■ DIN Rail mounting</li> <li>■ Four hole mounting</li> </ul> <p>Available as Main/Emergency-Off Switch, Main Switch, ON-OFF Switch or as a Changeover Switch.</p>
	<b>Enclosed Switches</b>
	<ul style="list-style-type: none"> <li>■ Insulated enclosure</li> <li>■ Mild steel enclosure</li> <li>■ Stainless steel enclosure</li> </ul> <p>Available as Main/Emergency-Off Switch, Main Switch, ON-OFF Switch or as a Changeover Switch.</p>

With a broad range of mounting and operator options, Salzer can provide economical, versatile and reliable solutions!

## Product lines

<b>Product line H200</b>	<u>IEC:</u>	<u>UL/CSA:</u>		
<ul style="list-style-type: none"> <li>■ Main/Emergency-Off Switch, Main Switch</li> </ul>	20A - 63A	15A - 60A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ ON-OFF Switch</li> </ul>	20A - 63A	15A - 60A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ Changeover Switch</li> </ul>	20A - 40A	20A - 40A	3 ... 4 pole	switching angle 90°
<b>Product line H400</b>	<u>IEC:</u>	<u>UL/CSA:</u>		
<ul style="list-style-type: none"> <li>■ Main/Emergency-Off Switch, Main Switch</li> </ul>	63A - 125A	63A - 100A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ ON-OFF Switch</li> </ul>	63A - 125A	63A - 100A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ Changeover Switch</li> </ul>	63A - 125A	63A - 100A	3 ... 4 pole	switching angle 90°
<b>Product line K600</b>	<u>IEC:</u>	<u>UL/CSA:</u>		
<ul style="list-style-type: none"> <li>■ Main/Emergency-Off Switch, Main Switch</li> </ul>	160A	175A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ ON-OFF Switch</li> </ul>	160A	175A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ Changeover Switch</li> </ul>	160A	175A	3 ... 4 pole	switching angle 90°
<b>Product line K800</b>	<u>IEC:</u>	<u>UL/CSA:</u>		
<ul style="list-style-type: none"> <li>■ Main/Emergency-Off Switch, Main Switch</li> </ul>	315A	240A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ ON-OFF Switch</li> </ul>	315A	240A	3 ... 8 pole	switching angle 90°
<ul style="list-style-type: none"> <li>■ Changeover Switch</li> </ul>	315A	240A	3 ... 4 pole	switching angle 90°

## Safe **Switching** and **Controlling**

Rotary Cam Switches from Salzer, are manually operated, independently programmable control switches for main and auxiliary circuits with up to 24 contacts and are offered with switching angles of 30°, 45°, 60° or 90°. A maximum of 12 switching positions can be provided.

### Design and Function

- 30°/ 45°/ 60° or 90° switching angle
- Forced open Contacts
- Terminal screws in open position
- Finger protected (degree of protection up to IP20)
- Short-circuit rating
- Fulfills the load break requirements up to 690V

### Conformity

Our products are designed, manufactured and tested according to the following standards:

- IEC 60947
- EN 60947
- IEC 60204-1
- EN 60204-1
- UL 508
- CSA 22.2, No. 14

### Applications

Rotary Cam Switches offer ideal features for their use as:

- ON-OFF Switches
- Changeover Switches
- Multi-step Switches
- Code Switches
- Gang Switches
- Instrument Switches
- Motor Switches



## Mounting Options

	<h3>Front Mounting</h3> <ul style="list-style-type: none"> <li>▪ Two hole mounting</li> <li>▪ Four hole mounting</li> <li>▪ Single hole mounting</li> <li>▪ Wall mounting with plaster depth box</li> </ul> <p>Available as Control Switch, ON-OFF Switch, Multi-step Switch, Changeover Switch, Motor Switch, Main/Emergency-Off Switch or as a Main Switch.</p>
	<h3>Base Mounting</h3> <ul style="list-style-type: none"> <li>▪ DIN Rail mounting</li> <li>▪ Four hole mounting</li> </ul> <p>Available as Control Switch, ON-OFF Switch, Multi-step Switch, Changeover Switch, Motor Switch, Main/Emergency-Off Switch or as a Main Switch.</p>
	<h3>Enclosed Switches</h3> <ul style="list-style-type: none"> <li>▪ Insulated enclosure</li> </ul> <p>Available as Control Switch, ON-OFF Switch, Multi-step Switch, Changeover Switch, Motor Switch, Main/Emergency-Off Switch or as a Main Switch.</p>

Our modular technology allows us to build custom switching solutions for up to 24 poles!

## Product lines

<b>Product line P100</b> <ul style="list-style-type: none"> <li>▪ connection in mounting direction</li> </ul>	<b>IEC:</b> 10A	<b>UL/ CSA:</b> 10A	1 ... 16 contacts	switching angle 30°/45°/60°/90°
<b>Product line P200</b> <ul style="list-style-type: none"> <li>▪ connection in mounting direction</li> </ul>	<b>IEC:</b> 20A - 25A	<b>UL/ CSA:</b> 20A - 25A	1 ... 24 contacts	switching angle 30°/45°/60°/90°
<b>Product line M200</b> <ul style="list-style-type: none"> <li>▪ lateral connection</li> </ul>	<b>IEC:</b> 20A - 25A	<b>UL/ CSA:</b> 20A - 25A	1 ... 24 contacts	switching angle 30°/45°/60°/90°
<b>Product line T200</b> <ul style="list-style-type: none"> <li>▪ lateral connection</li> </ul>	<b>IEC:</b> 32A	<b>UL/ CSA:</b> 35A	1 ... 24 contacts	switching angle 30°/45°/60°/90°
<b>Product line S400</b> <ul style="list-style-type: none"> <li>▪ lateral connection</li> </ul>	<b>IEC:</b> 50A - 63A	<b>UL/ CSA:</b> 55A - 70A	1 ... 24 contacts	switching angle 30°/45°/60°/90°
<b>Product line S600</b> <ul style="list-style-type: none"> <li>▪ lateral connection</li> </ul>	<b>IEC:</b> 80A - 160A	<b>UL/ CSA:</b> 95A - 175A	1 ... 24 contacts	switching angle 30°/45°/60°/90°
<b>Product line S800</b> <ul style="list-style-type: none"> <li>▪ lateral connection</li> </ul>	<b>IEC:</b> 315A	<b>UL/ CSA:</b> 240A	1 ... 24 contacts	switching angle 30°/45°/60°/90°

# Disconnect Switches

## Technical data

			H212	H216	H220	H226	H233	H263	H406	H408	H410	H412	K616	K830	
<b>General</b>															
Standards			IEC 60947, EN 60947, IEC 60204, EN 60204, UL 508, CSA 22.2, No. 14												
Mechanical lifespan Max. operating frequency/h			>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>5</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	
Climatic resistance			damp heat, constant, to DIN IEC 60068-2-3 damp heat, cyclic, to DIN IEC 60068-2-30												
Ambient temperature															
open	min/max	°C	-25/+50												
enclosed	min/max	°C	-25/+40												
Mechanical shock resistance (shock duration 20ms)			g	>10	>25	>25	>25	>25	>25	>25	>25	>25	>25	>10	>10
Rated frequency			Hz	50 to 60 (other frequencies on request)											
<b>Rated data</b>															
Operational voltage U <sub>e</sub>			V AC	690	690	690	690	690	690	690 <sup>1)</sup>	690 <sup>1)</sup>	690 <sup>1)</sup>	690 <sup>1)</sup>	690	690
Impulse withstand voltage U <sub>imp</sub>			kV	4	6	6	6	6	6	8	8	8	8	6	6
Uninterrupted current I <sub>u</sub> /I <sub>th</sub> /I <sub>the</sub>			A	20	20	25	32	40	63	63	80	100	125	160	315
Load carrying capacity in intermittent operation, class 12			AB	60%/40%/25% DF=1.3/1.6/2×I <sub>e</sub>											
Short-circuit rating Max. fuse			gL	20	20	25	35	40	63	63	80	100	125	160	315
Conditional short-circuit current			kA <sub>eff</sub>	15	15	15	15	15	15	25	25	25	25	25	25
Isolating characteristics acc. to EN 60947			up to... V AC	440	690	690	690	690	690	1000	1000	1000	1000	690	690
Switching angle				90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°	90°
Contacts (current paths)			max	4	8	8	8	8	4	8	8	8	8	8	8
Terminal capacity															
solid or stranded	min	mm <sup>2</sup>	1	1	1	1	1	4	4	4	4	4	95 <sup>2)</sup>	185 <sup>2)</sup>	
	max	mm <sup>2</sup>	2.5	10	10	10	10	16	50	50	50	50	95 <sup>2)</sup>	185 <sup>2)</sup>	
flexible or multiwire including ferrule	min	mm <sup>2</sup>	1	0.75	0.75	0.75	0.75	2.5	2.5	2.5	2.5	2.5	95 <sup>2)</sup>	185 <sup>2)</sup>	
	max	mm <sup>2</sup>	2.5	6	6	6	6	10	35	35	35	35	95 <sup>2)</sup>	185 <sup>2)</sup>	
American Wire Gauge			AWG	14	8	8	8	8	6	1/0	1/0	1/0	1/0	4/0	350MCM
Operational current I <sub>e</sub>															
AC-21A			A	20	20	25	32	40	63	63	80	100	125	160	315
AC-22A	220–500 V	A	20	20	25	32	40	63	63	80	100	100	125	160	315
	660–690 V	A	16	16	20	32	40	63	63	80	100	100	125	125	
UL/CSA General Use	300 V AC	A	15	20	25	30	40	60	63	80	100	100	175	240	
	600 V AC	A	15	20	25	30	40	60	63	80	100	100	175	240	
Operational power at 50–60 Hz, 3 pole															
AC-23A	220–240 V	kW	3	3	4	5.5	7.5	15	15	18.5	22	30	37	75	
	380–440 V	kW	5.5	5.5	7.5	11	15	22	22	30	37	45	75	132	
	500 V	kW	5.5	5.5	7.5	11	15	22	22	30	37	45	90	132	
	660–690 V	kW	5.5	5.5	7.5	11	15	22	22	30	37	37	55	55	
AC-3	220–240 V	kW	2.2	2.2	3	4	5.5	11	11	15	22	30	22	37	
	380–440 V	kW	3.7	3.7	5.5	7.5	11	18.5	18.5	22	30	37	45	55	
	500 V	kW	3.7	3.7	5.5	7.5	11	18.5	18.5	30	37	45	45	55	
	660–690 V	kW	3.7	3.7	5.5	7.5	11	18.5	18.5	22	30	37	45	55	
UL/CSA	110–120 V AC	HP	1	1	1.5	2	3	5	5	7.5	10	15	15	25	
	208 V AC	HP	2	2	3	5	7.5	10	10	10	15	15	15	30	
	220–240 V AC	HP	2	2	3	5	7.5	15	15	20	25	30	15	30	
	440–480 V AC	HP	3	3	5	10	15	30	30	30	30	40	40	50	
	550–600 V AC	HP	5	5	5	10	15	40	30	30	30	40	50	50	

<sup>1)</sup> 1000 V, AC-20, no load switching

<sup>2)</sup> with terminal extensions for cable lug connection

# Rotary Cam Switches

## Technical data

			P110	M220 P220	M221* P221*	P225	M225 P226*	T225	S432	S440	S606	S608	S612	S825		
<b>General</b>																
Standards			IEC 60947, EN 60947, IEC 60204, EN 60204, UL 508, CSA 22.2, No. 14													
Mechanical lifespan Max. operating frequency/h			>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	>10 <sup>6</sup> 50	
Climatic resistance			damp heat, constant, to DIN IEC 60068-2-3 damp heat, cyclic, to DIN IEC 60068-2-30													
Ambient temperature																
open	min/max	°C	-25/+50													
enclosed	min/max	°C	-25/+40													
Mechanical shock resistance (shock duration 20ms)			g	>10	>10	>10	>10	>10	>10	>10	>10	>10	>10	>10	>10	>10
Rated frequency			Hz	50 to 60 (other frequencies on request)												
<b>Rated data</b>																
Operational voltage U <sub>e</sub>			V AC	440	690	690	690	690	690	690	690	690	690	690	690	690
Impulse withstand voltage U <sub>imp</sub>			kV	4	6	6	6	6	6	6	6	6	6	6	6	6
Uninterrupted current I <sub>u</sub> /I <sub>th</sub> /I <sub>the</sub>			A	10	20	20	25	25	32	50	63	80	100	160	315	
Load carrying capacity in intermittent operation, class 12			AB	60%/40%/25% DF=1.3/1.6/2×I <sub>e</sub>												
Short-circuit rating Max. fuse			gL	10	20	20	25	25	32	50	63	80	100	160	315	
Conditional short- circuit current			kA <sub>eff</sub>	3	10	10	10	10	15	20	20	25	25	25	25	25
Isolating characteristics acc. to EN 60947			up to ... V AC	440	690	690	690	690	690	690	690	690	690	690	690	690
Switching angle Contacts (current paths)			max	30°/45°/60°/90°												
Terminal capacity																
solid or stranded	min	mm <sup>2</sup>	0.75	1	1	1.5	1.5	2.5	2.5	4	6	10	10	185 <sup>1)</sup>	185 <sup>1)</sup>	
	max	mm <sup>2</sup>	1.5	2.5	2.5	4.0	4.0	6.0	10	16	25	35	70	185 <sup>1)</sup>	185 <sup>1)</sup>	
flexible or multiwire including ferrule	min	mm <sup>2</sup>	0.75	1	1	1.5	1.5	1.5	2.5	2.5	6	10	10	185 <sup>1)</sup>	185 <sup>1)</sup>	
	max	mm <sup>2</sup>	1.5	2.5	2.5	2.5	2.5	4.0	6.0	10	16	25	50	185 <sup>1)</sup>	185 <sup>1)</sup>	
American Wire Gauge			AWG	16	12	12	10	10	10	6	4	4	1/0	2/0	350MCM	
Operational current I <sub>e</sub>																
AC-21A		A	10	20	20	25	25	32	50	63	80	100	160	315		
	220 – 500 V 660 – 690 V	A	10	20	20	25	25	32	50	63	80	100	160	315		
UL/CSA General Use	300V AC	A	10	20	20	25	25	35	55 <sup>1)</sup>	70 <sup>1)</sup>	95 <sup>1)</sup>	110 <sup>1)</sup>	175 <sup>1)</sup>	240		
	600V AC	A	—	—	20	—	25	35	55 <sup>1)</sup>	70 <sup>1)</sup>	95 <sup>1)</sup>	110 <sup>1)</sup>	175 <sup>1)</sup>	240		
Operational power at 50 – 60 Hz, 3 pole																
AC-23A	220 – 240 V	kW	1.8	4	4	5.5	5.5	7.5	11	15	30	30	37	75		
	380 – 440 V	kW	3	7.5	7.5	11	11	15	22	30	45	55	75	132		
	500 V	kW	—	7.5	7.5	11	11	15	30	45	55	55	90	132		
	660 – 690 V	kW	—	7.5	7.5	11	11	15	30	37	45	45	55	55		
AC-3	220 – 240 V	kW	1.5	3	3	4	4	5.5	11	15	15	22	22	37		
	380 – 440 V	kW	2.2	5.5	5.5	7.5	7.5	11	22	30	30	37	45	55		
	500 V	kW	—	5.5	5.5	7.5	7.5	11	22	30	30	37	45	55		
	660 – 690 V	kW	—	5.5	5.5	7.5	7.5	11	22	30	30	37	45	55		
UL/CSA	110 – 120 V AC	HP	0.5	1	1	1.5	1.5	3	5	7.5	10	10	15	25		
	208 V AC	HP	0.5	2	2	5	5	7.5	7.5	7.5	10	15	15	30		
	220 – 240 V AC	HP	0.5	2	2	5	5	7.5	10	15	15	15	15	30		
	440 – 480 V AC	HP	—	—	5	—	10	10	20	30	30	30	40	50		
	550 – 600 V AC	HP	—	—	5	—	10	10	25	40	50	50	50	50		

\* use this version for 600V AC (UL/CSA) applications

<sup>1)</sup> with terminal extensions for cable lug connection



### Switches from Salzer: Solutions for the future!

Our product range includes Disconnect Switches and Rotary Cam Switches from 10A up to 315A. These are available in a wide variety of voltage ratings and virtually an unlimited number of switching programs.

With an extensive selection of mounting forms, operators and accessories, we are able to offer practical solutions in a short time. No matter what switch you are looking for, all common components are systems specific and therefore easy to assemble.

No matter what the application, Salzer switches stand for safety and reliability!

Special requirements? Call us, we'll help you find an individual solution for your switching needs.

### Just in Time with SMD!

To ensure even greater flexibility and worldwide availability, Salzer has introduced the SMD system (Salzer Modular Design) which guarantees the product ready to ship within 24 hr.

SMD modules are individually prefabricated and tested components. Salzer's extensive inventory of components allows SMD Service to easily assemble standard and custom products for your application.

# salzer

**Salzer Electric GmbH**  
Matthiasstraße 16  
57482 Wenden  
www.saelzer-electric.de

Distribution Centre:  
Tel. +49 (0) 27 62/ 614-110  
Fax +49 (0) 27 62/ 614-100  
sales@salzer.de

Technical Support:  
Tel. +49 (0) 37 37/ 87-0  
Fax +49 (0) 37 37/ 87-226  
support@salzer.de

**Salzer UK Limited**  
Fax 0 12 96 39 22 29  
info@salzeruk.co.uk  
www.saelzer-electric.de

44 Edison Road  
Aylesbury  
Bucks.  
HP19 8TE

Telephone	0 12 96 39 99 92
External Sales Team	0 78 36 38 04 39
Internal Sales Team	0 12 96 39 22 62
Technical Support	0 12 96 39 25 95