

# BETA Switching

## Switches and Light Indicators

### ON/OFF switches

#### Technical specifications

		5TE8 1	5TE8 2
<b>Standards</b>		IEC/EN 60947-3, (VDE 0660-107); IEC/EN 60669-1, (VDE 0632-1); GB14048.3-2002 CCC VDE and CCC	IEC/EN 60947-3, (VDE 0660-107); GB14048.3-2002 CCC
<b>Approved acc. to</b>			
<b>Rated operational current <math>I_e</math></b>	per conducting path	A	20
<b>Rated operational voltage <math>U_e</math></b>	1-pole multipole	V AC V AC	230 400
<b>Rated power dissipation <math>P_v</math></b>	per pole, max.	VA	0.7
<b>Thermal rated current <math>I_{th}</math></b>		A	20
<b>Rated breaking capacity</b>	at p.f. = 0.65	A	60
<b>Rated making capacity</b>	at p.f. = 0.65	A	60
<b>Short-circuit strength</b> in conjunction with fuse of the same rated operational current	EN 60269 gL/gG	kA	10
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>		kV	> 5
<b>Clearances</b>	open contacts between the poles	mm mm	2 x > 2 > 7
<b>Creepage distances</b>		mm	> 7
<b>Mechanical service life</b>		switching cycles	25000
<b>Electrical service life</b>		switching cycles	10000
<b>Minimum contact load</b>		V; mA	10; 300
<b>Rated short-time currents<sup>2)</sup></b> per conducting path at p.f. = 0.7	up to 0.2 s up to 0.5 s up to 1 s up to 3 s	A A A A	650 400 290 170
(The respective rated surge current can be calculated by multiplying by a factor of 1.5).			1000 630 450 250
<b>Terminals</b> Max. tightening torque	± screw (Pozidriv)	Nm	1 1.2
<b>Conductor cross-sections</b>	rigid flexible, with end sleeve	mm <sup>2</sup> mm <sup>2</sup>	1.5 ... 6 1 ... 6
<b>Permissible ambient temperature</b>		°C	-5 .... +40
<b>Resistance to climate</b> at 95 % relative humidity	according to DIN 50015	°C	45

			5TE8 3	5TE8 4	5TE8 5	5TE8 6	5TE8 7	5TE8 8
<b>Standards</b>			IEC/EN 60947-3 (VDE 0660-107); GB14048.3-2002 CCC	--	IEC/EN 60669-1 (VDE 0632-1)	--	VDE and CCC	--
<b>Approved acc. to</b>								
<b>Rated operational current <math>I_e</math></b>	per conducting path	A	32	40	63	80	100	125
<b>Rated operational voltage <math>U_e</math></b>	1-pole multipole	V AC V AC	230 400					
<b>Rated power dissipation <math>P_v</math></b>	per pole, max.	VA	0.7	0.9	2.2	3.5	5.5	8.6
<b>Thermal rated current <math>I_{th}</math></b>		A	32	40	63	80	100	125
<b>Rated breaking capacity</b>	at p.f. = 0.65	A	96	120	196	240	300	375
<b>Rated making capacity</b>	at p.f. = 0.65	A	96	120	196	240	300	375
<b>Short-circuit strength</b> in conjunction with fuse of the same rated operational current	EN 60269 gL/gG	kA	10					
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>		kV	> 5					
<b>Clearances</b>	open contacts between the poles	mm mm	> 7 > 7					
<b>Creepage distances</b>		mm	> 7					
<b>Mechanical service life</b>		switching cycles	20000					
<b>Electrical service life</b>		switching cycles	10000	5000	1000			
<b>Minimum contact load</b>	V; mA	24; 300						
<b>Rated power</b> Switching of resistive loads including moderate overload AC-21	1-pole 2-pole 3-/4-pole	kW kW kW	5 9 15	6.5 11 15	10 18 30	13 22 39	16 28 48	16 28 48
<b>Rated short-time currents<sup>2)</sup></b> per conducting path at p.f. = 0.7  (The respective rated surge current can be calculated by multiplying by a factor of 1.5).	up to 0.2 s up to 0.5 s up to 1 s up to 3 s	A A A A	760 500 400 280	950 630 500 350	1500 1000 800 560	2700 1650 1350 800	3400 2100 1700 1000	3400 2100 1700 1000
<b>Terminals</b> Max. tightening torque	± screw (Pozidriv)	Nm	2 3.5					
<b>Conductor cross-sections</b>	rigid flexible, with end sleeve	mm <sup>2</sup> mm <sup>2</sup>	1 ... 35 1 ... 35		2.5 ... 50 2.5 ... 50			
<b>Permissible ambient temperature</b>		°C	-5 ... +40					
<b>Resistance to climate</b> at 95 % relative humidity	according to DIN 50015	°C	45					