

## Technical Data and Specifications

### Pushbuttons, Indicating Lights, Selector Switches and Emergency-Stop Operators

Description		Momentary Pushbuttons	Maintained Pushbuttons	Indicating Lights, Buzzers and Potentiometers	Emergency-Stop Operators	Selector Switches	Key-Operated Operators	Double Pushbuttons
<b>General</b>								
Standards		IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #340491	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184	IEC/EN 60947 VDE 0660 UL #E29184
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	>5	>1	—	>0.1	>0.1	>0.1
Operating frequency	Operations/h		≥3600	≥1800	—	≥600	≥2000	≥100
Actuating force	n		≥5	≥5	—	—	—	≥5
Operating torque (screw terminals)	Nm		—	—	—	≥0.3	≥0.5	—
<b>Protection Type</b>								
IP		IP67, IP69K	IP67, IP69K	Indicating lights: IP67, 69K Buzzers: IP40 Potentiometers: IP66	IP67, IP69K	IP66	IP66	IP66
UL type		4X, 13	4X, 13	Indicating lights: 4X/13 Buzzers: 12 Potentiometers: 4X/13	4X, 13	4X, 13	4X, 13	4X, 13
Climatic proofing		Damp heat, constant, according to IEC 60068-2-78 Damp heat, cyclical to IEC 60068-2-30						
Ambient temperature, operating		°F (°C)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)	–13 to 158 (–25 to 70)
Mounting position			As required	As required	As required	As required	As required	As required
Mechanical shock resistance to IEC 60068-2-27 shock duration 11 ms, half-sinusoidal		g	>30	>30	>30	>50	>30	>30
<b>Terminal Capacities</b>								
Solid		AWG	—	—	20-16	—	—	—
		mm <sup>2</sup>	—	—	0.5–1.5	—	—	—
Stranded		AWG	—	—	20-16	—	—	—
		mm <sup>2</sup>	—	—	0.5–1.5	—	—	—
<b>Contacts</b>								
Rated impulse withstand voltage		U <sub>imp</sub>	Vac	—	—	—	—	—
Rated insulation voltage		U <sub>i</sub>	V	—	—	—	—	—
Overvoltage category/pollution degree			—	—	III/3	—	—	—