Emergency-stop switch compact, foolproof EN IEC 60947-5-5, IP67, IP69K

Equipment consisting of (schematic overview)

Actuator

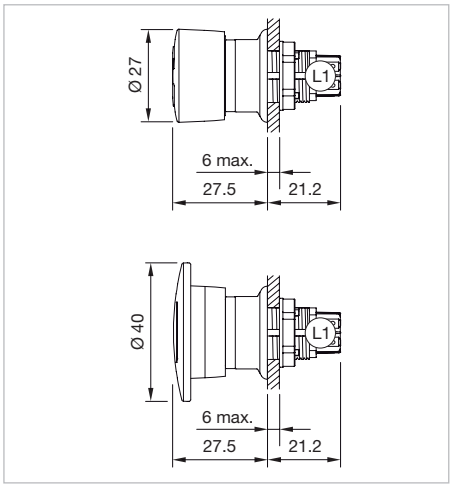
Seal

Anti-twist ring

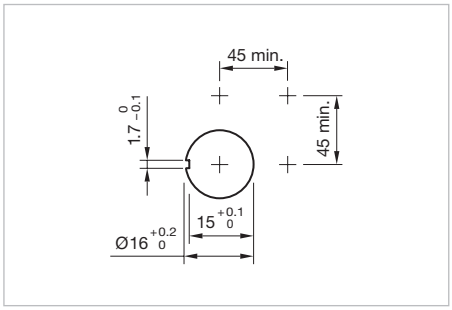
Fixing nut

Each Part Number listed below includes all the black components shown in the 3D-drawing.

To obtain a complete unit, please select the red components from the pages shown.



Dimensions [mm]
L1 = Solder/Plug-in terminal 2.8 x 0.5 mm



Mounting cut-outs [mm]

Product can differ from the current configuration.

Additional Information

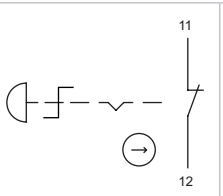
- Application as per DIN EN ISO 13850 and EN 60204-1
- Seal Part No. 61-9900
- Anti-twist ring No. 51-910
- Fixing nut No. 51-991
- Other accessories and spare parts see chapter «Accessories»

Product attribute	Marking	Contacts	Switching action	Terminal	Part No.	Component layout	Wiring diagram	Weight
 **Emergency-stop switch compact, foolproof EN IEC 60947-5-5, Front dimension Ø 27 mm**								
Twist to unlock clockwise, position indication ring green	Arrows	1 NC	C	Solder 2.8 x 0.5 mm	61-6441.4047	41	1	0.018 kg
	Arrows	2 NC	C	Solder 2.8 x 0.5 mm	61-6441.4057	42	2	0.018 kg
	Arrows	3 NC	C	Solder 2.8 x 0.5 mm	61-6441.4067	43	3	0.018 kg
	Arrows	1 NC + 1 NO	C	Solder 2.8 x 0.5 mm	61-6441.4077	44	4	0.018 kg
	Arrows	2 NC + 1 NO	C	Solder 2.8 x 0.5 mm	61-6441.4087	45	5	0.018 kg
	Arrows	1 NC + 2 NO	C	Solder 2.8 x 0.5 mm	61-6441.4097	46	6	0.018 kg
 **Emergency-stop switch compact, foolproof EN IEC 60947-5-5, Front dimension Ø 27 mm**								
Twist to unlock clockwise, position indication ring green	Arrows	1 NC	C	Solder 2.8 x 0.5 mm	61-6451.4247	47	7	0.018 kg
	Arrows	2 NC	C	Solder 2.8 x 0.5 mm	61-6451.4257	48	8	0.018 kg
	Arrows	1 NC + 1 NO	C	Solder 2.8 x 0.5 mm	61-6451.4277	49	9	0.018 kg

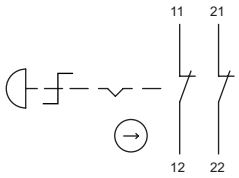
61 Raised design

Product attribute	Marking	Contacts	Switching action	Terminal	Part No.	Compo-nent layout	Wiring diagram	Weight
 **Emergency-stop switch compact, foolproof EN IEC 60947-5-5, Front dimension Ø 40 mm**								
Twist to unlock clockwise, position indication ring green	Arrows	1 NC	C	Solder 2.8 x 0.5 mm	61-6461.4047	41	1	0.018 kg
	Arrows	2 NC	C	Solder 2.8 x 0.5 mm	61-6461.4057	42	2	0.018 kg
	Arrows	3 NC	C	Solder 2.8 x 0.5 mm	61-6461.4067	43	3	0.018 kg
	Arrows	1 NC + 1 NO	C	Solder 2.8 x 0.5 mm	61-6461.4077	44	4	0.018 kg
	Arrows	2 NC + 1 NO	C	Solder 2.8 x 0.5 mm	61-6461.4087	45	5	0.018 kg
	Arrows	1 NC + 2 NO	C	Solder 2.8 x 0.5 mm	61-6461.4097	46	6	0.018 kg

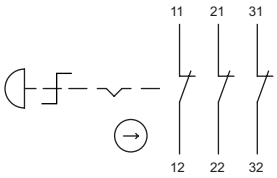
Switching action: C = Maintained
The component layouts you will find from page 90



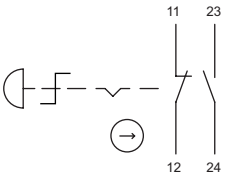
Wiring diagram 1



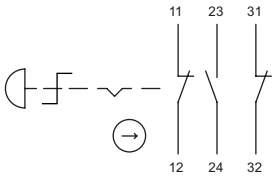
Wiring diagram 2



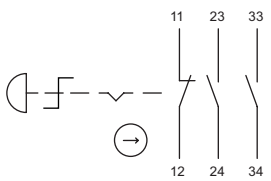
Wiring diagram 3



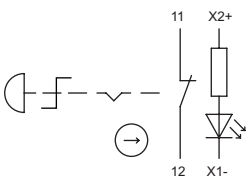
Wiring diagram 4



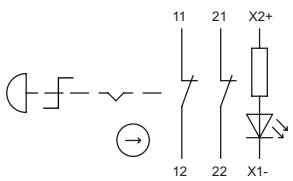
Wiring diagram 5



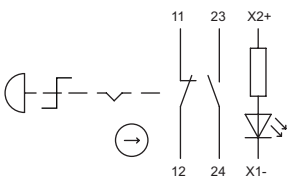
Wiring diagram 6



Wiring diagram 7

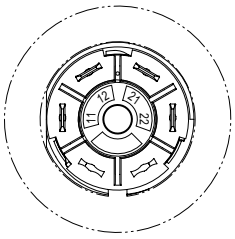


Wiring diagram 8

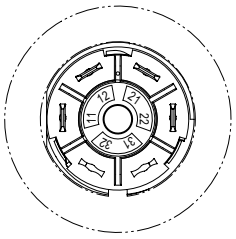


Wiring diagram 9

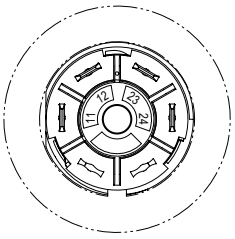
61 Drawings



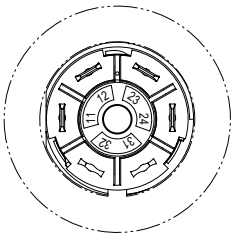
Component layout 41



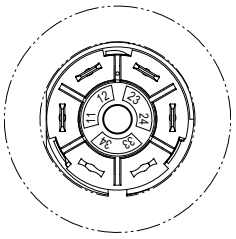
Component layout 42



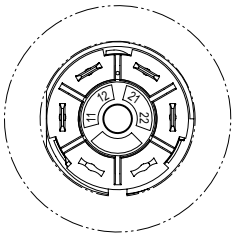
Component layout 43



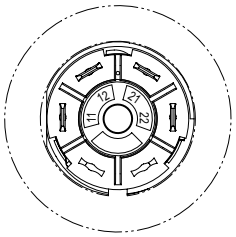
Component layout 44



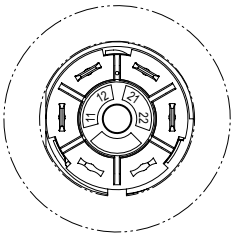
Component layout 45



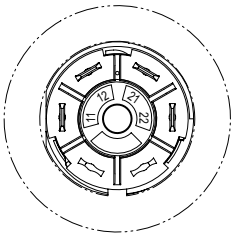
Component layout 46



Component layout 47



Component layout 48



Component layout 49

Emergency-stop switch compact, foolproof EN IEC 60947-5-5

Materials

Mushroom head lens
Plastic

Actuator housing material
Plastic

Contact material
Metal (Silver palladium)

Mechanical characteristics

Front plate thickness
1 ... < 4 mm with an anti-rotation ring
Maximum 6 mm without an anti-rotation ring

Terminals
Plug-in terminals 2.8 mm x 0.5 mm
(solderable, without UL certification)

Mounting cut-out
Ø 16.2 mm

Tightening torque
Max. 0.8 Nm

Actuation force
30 N ± 4 N

Actuating distance
4.2 mm

Mechanical life time
≥ 20000 switching cycles

Electrical characteristics

Standards
EN 60947-5-1, EN 60947-5-5,
DIN EN ISO 13850, EN IEC 60204

Illumination
LED red with reverse polarity protection, constant current source
Operating voltage 6 VDC ... 32 VDC
Current consumption 10 mA ... 12 mA

Rated operating voltage U_e
50 VAC/DC (EN IEC 60947-1)

Rated insulation voltage U^i
250 V (EN IEC 60947-1)

Rated impulse withstand voltage U_{imp}
0.5 kV (EN IEC 60947-1)

Contact resistance test
At 20 mV, 100 mA (IEC 60512-2-1)

61 Technical data

Insulation resistance
2 MΩ between the open contacts,
7 MΩ towards the panel (DIN IEC 60512-3-1)

Conventional therm. Current in free air I_{th}
0.5 A (EN IEC 60947-5-1 / maximum current in continuous operation at maximum +55 degrees C)

Rated short-circuit current caused
1 000 A, type of short-circuit device 2 A gG
(EN 60947-5-1)

Breaking capacities
Alternating current usage category AC-15
(EN IEC 60947-5-1)
50 VAC
0.2 A
DC usage category DC-13 (EN IEC 60947-5-1)
50 VDC
0.2 A

Minimum operating data

Voltage	1 VAC / DC
Current	1 mA

Dielectric strength
500 VAC, 50 Hz, 1 min, (DIN IEC 60512-2)

Protective class
Class II (EN IEC 60947-5)

Overvoltage category
II (EN IEC 60947-1)

Degree of pollution
3 (EN IEC 60947-1)

Electrical life time
≥ 20 000 switching cycles

Ambient conditions

Storage temperature
–40 °C … +85 °C

Operating temperature
–25 °C … +55 °C

Front protection
IP67, in accordance with EN IEC 60529/A1:2010-04
IP69K, in accordance with EN IEC 60529/A1:2010-04
Panel surface roughness Ra1.6
IK07 (Cover D27)
IK06 (Cover D40)

Resistance to shock
Max. 150 m/s², pulse width 11 ms, 3-axis
(half sinusoidal EN IEC 60068-2-27)

Vibration resistance
Max. 100 m/s² from 10 Hz ... 500 Hz, 20 cycles, 3-axis
(sinusoidal EN IEC 60068-2-6)

Environmental resistance
Humid heat, constant, 56 days, +40 °C / 93 % relative humidity (EN IEC 60068-2-78)
Dry heat, 96 hours, +55 °C (EN IEC 60068-2-2)
Cold, 96 hours, –25 °C (EN IEC 60068-2-1)
UV test, 56 days (EN 60068-2-5:1999)

Certificates

Approvals
UL NISD (cULus, UL EU) LISTED E-File no.: E341760
CB (EN 60947)

Declaration of Conformity
CE

EAO reserves the right to alter specifications without further notice.