



INDICATOR

SPS-TYPE



Semaphore Indicator





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SPECIFICATIONS (RATINGS, PERFORMANCE)

Specification \ Type	SPSR-2□S, 3□S	SPSL-2□S, 3□S
Rated insulation voltage(Ui)	AC,DC250V	
Rated operational voltage (Ui)	DC24V, 30V, 48V, 100/110 V, 125 V, 200/220 V	
Voltage fluctuation range	±15% (24 V, 48 V, 200/220 V) -20 to 30% (100/110 V, 125V)	
Rated operational current (Ie)	11 mA max.	
Insulation resistance	1,000 MΩ over	
Power-frequency withstand voltage	2,000 V AC/min.	
Inpulse withstand voltage	±4,500 V, 3 times for each pole (1.2/50 μs)	
Shock resistance	490m/s ² 6 directions 3 times	
Durability	Over 10 thousand cycles	
Degree of protection	IP52	
Operating temperature	-20 to 60°C	
Storage temperature	-30 to 75°C	
Relative humidity	45 to 85%	
Altitude	Max 2,000 m	
Compatible copper conductors	AWG20 to 14	
Compatible terminal	M3.5×8 with square washer	
Mounting plate thickness	1 to 6 mm	
Weight	Approximately 30 g	

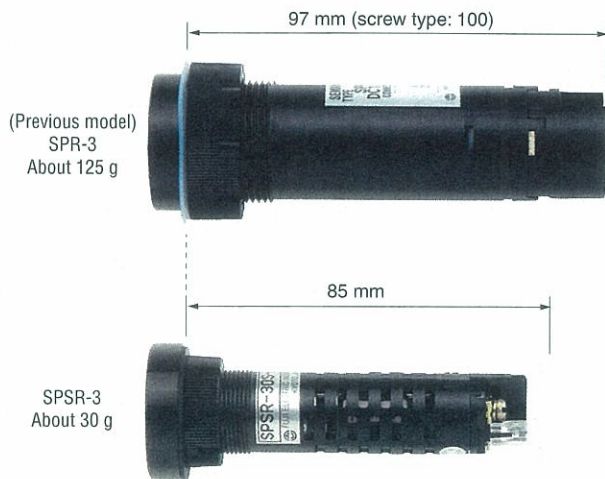
* Please refer to page 6 for the rating compliant with the international standard.

FEATURES

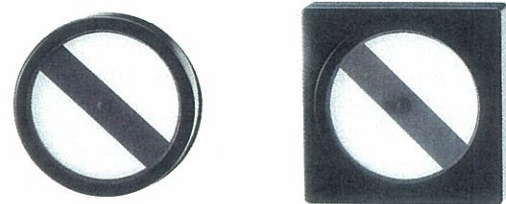
- 1** TÜV approved International Standard products conforming to EN60947-1 and EN60947-5-1.
(The TÜV and CE marks are affixed on the main body of the product.)

- 5** Standard terminal cover for the live parts ensures a higher level of safety.

- 2** Customer requirements for size and weight reductions are completely satisfied by the equipment's compact design.



- 6** Option for a round or square external shape is available. Distinct display of each optional shape completes the sophisticated panel design.



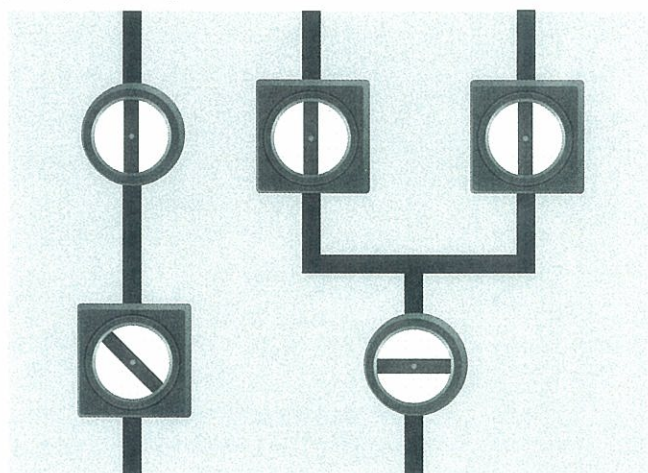
- 3** A superior energy-efficient design has achieved further reductions of power consumption to one fourth the previous model.

Note: Rated operationl current/24VDC
(Previous model) SPR/L model: Approx. 37 mA
(New model) SPSR/L model: Approx. 9 mA

- 4** Compatible with at maximum an AWG14 power cable (equivalent to 2.5 mm²).

- 7** Visual-apparent circuit display makes it possible to verify the circuit connection accurately and instantly.

(Conceptual drawing)





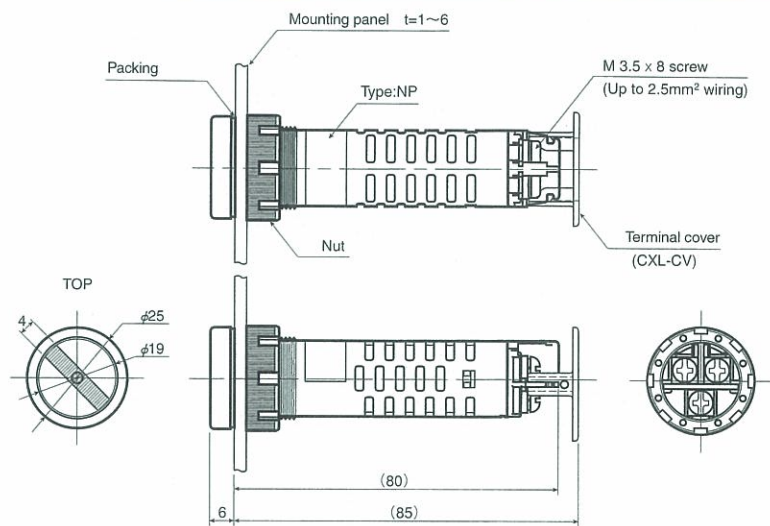
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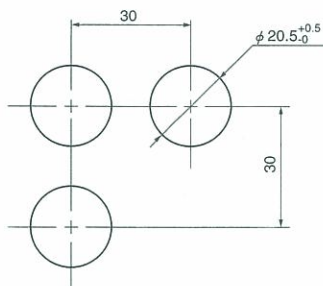


STANDARD PRODUCTS

SPSR-2 S



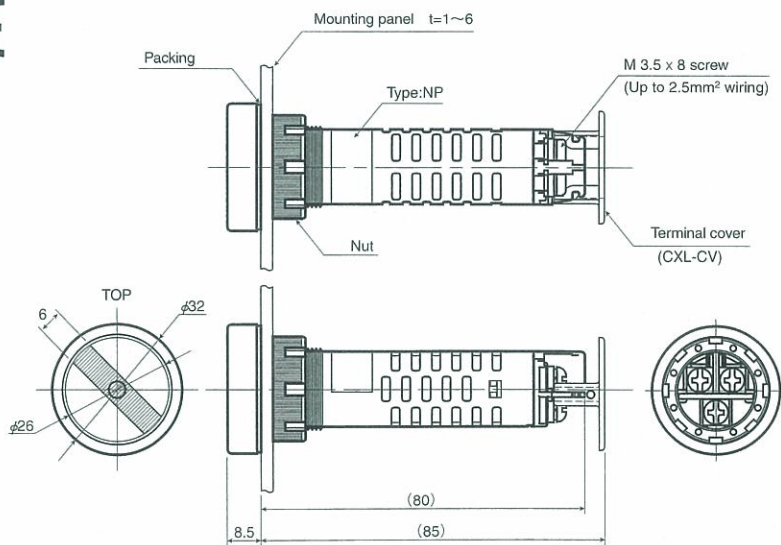
●Panel cut dimensions
(Minimum mounting pith)



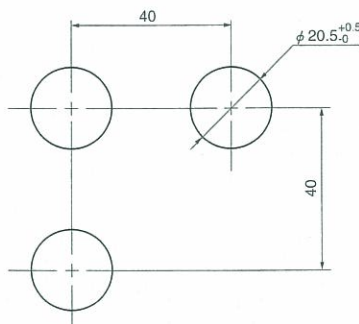
●Applicable accessories

Terminal cover	CXL-CV
Tightening tool	SPS-Q

SPSR-3 S



●Panel cut dimensions
(Minimum mounting pith)

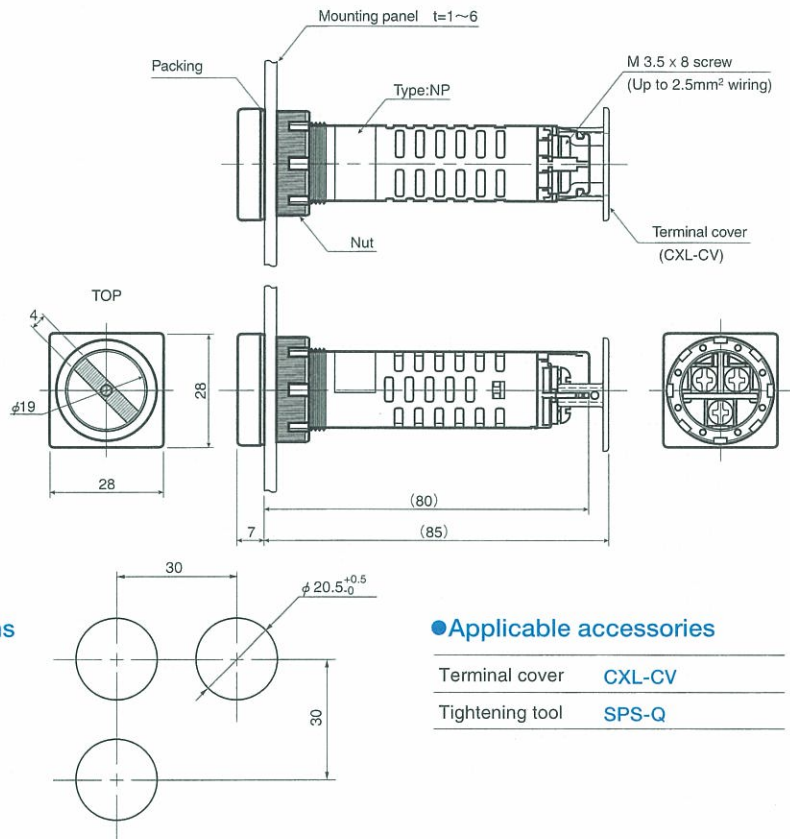


●Applicable accessories

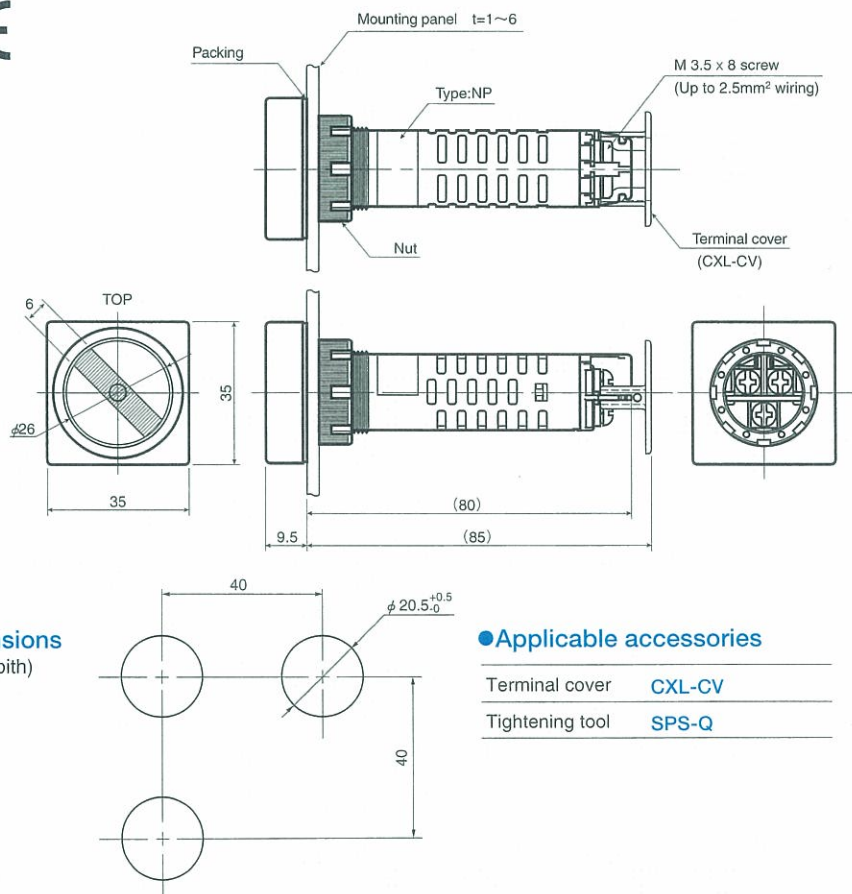
Terminal cover	CXL-CV
Tightening tool	SPS-Q

STANDARD PRODUCTS

SPSL-2□S



SPSL-3□S





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ORDERING METHOD

Refer to the following type code.

Product coding

SPSR-20S-DC110-BBA

Basic type

Surface dimensions

Code	Dimensions
R	Round type
L	Square type

Surface dimensions

Code	Face size	Indicating flag width
2	φ25mm	4mm
	□28mm	
3	φ32mm	6mm
	□35mm	

Terminal

Code	Type
S	Terminal screw

Power supply voltage

Code	Voltage
DC024	DC24V
DC030	DC30V
DC048	DC48V
DC110	DC100/110V
DC125	DC125V
DC220	DC200/220V

Mounting hole

Code	Mounting hole dimension
No Code	φ20.5mm
A	φ22.3mm

Frame color

Code	Color
B	Black (N1.5)

Flag color

Code	Color
B	Black (N1.5)

Indicating flag

Code	OFF	ON	No voltage
0	⊖	⊕	↘
1	⌒	⌒	⌒
2	⌒	⌒	⌒

ACCESSORIES

Terminal cover (Order unit : 10)

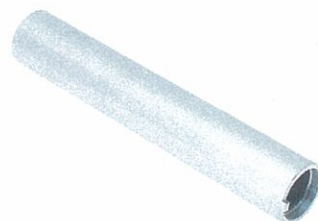
CXL-CV



Note:
The terminal cover is supplied with main unit.

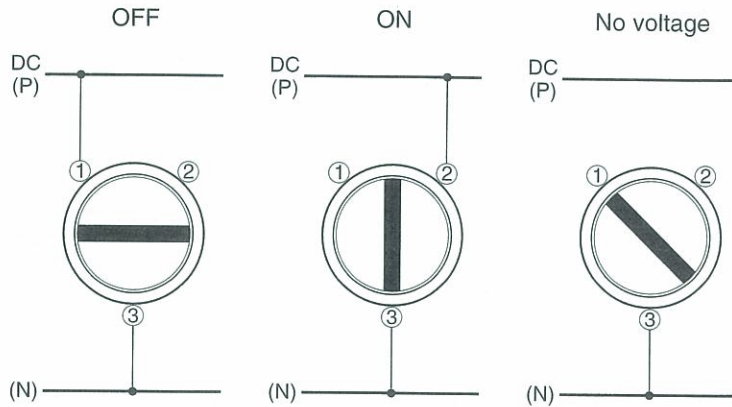
Tightening tool

SPS-Q

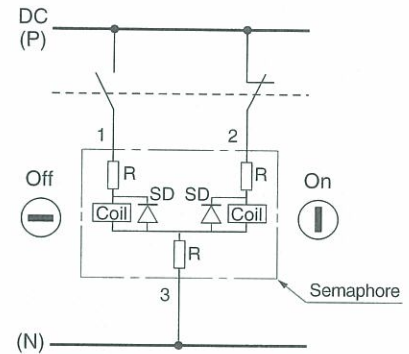


MOVEMENT AND CIRCUIT

● Indication diagram



● Circuit diagram



Rating compliant with the international standard (EN60947/IEC60947) as of June 2004

(1) Basic rated values and utilization

No.	Item	Basic rated values and utilization	IEC standard
1	Rated operational voltages	DC24V, 48V, 100/110V, 125V, 200/220V	IEC60947-5-1; 5.1-d
2	Rated operational currents	11mA max.	IEC60947-5-1; 5.1-e
3	Rated insulation voltage	250V	IEC60947-5-1; 5.1-f
4	IP code	IP 52	IEC60947-5-1; 5.1-l

(2) Normal service conditions

No.	Item	Normal service conditions	EC standard
1	Ambient air temperature	-5°C~+40°C	IEC60947-1; 6.1.1
2	Altitude	2,000m max.	IEC60947-1; 6.1.2
3	Atmospheric conditions	Humidity : max 90% at +20°C, 50% at +40°C Micro-environment : Pollution degree 3	IEC60947-1; 6.1.3
4	Conditions during transport and storage	Between -25°C and +55°C, for short periods not exceeding 24h, up to +70°C	IEC60947-1; 6.2
5	Mounting hole	see 3-4page	IEC60947-5-1; 6.3.1
6	Range of panel thickness	1~6mm	IEC60947-5-1; 6.3.1.2
7	Minimum mounting pitch	SPSR/L-2□ 30mm	IEC60947-5-1; 6.3.1.3
		SPSR/L-3□ 40mm	

(3) Basic rated values and utilization

No.	Item	Basic rated values and utilization	EC standard
1	Connecting capacity	Stranded wire : AWG20(max 2pair)	IEC60947-1; 7.1.7
		With ring lug : AWG14-20(max 2pair)	IEC60947-1; AnnexD
2	Dielectric properties	Power frequency withstand voltage : AC2000V/1 minute	IEC60947-5-1; 7.2.3
3	Durability	Mechanical durability : 100,000times	IEC60947-5-1; AnnexC

Note: The above items have been certified according to TÜV. Please contact us for more details.