

**INSTALLATION INSTRUCTIONS**  
**& CONDITIONS FOR SAFE USE**

 II 3 G Ex ec IIC Gc

**Modular TERMINAL Blocks: S- Series**

**TÜV 24 ATEX 9191 U**  
**IECEX TUR 24.0071 U**

Standards:

EN IEC 60079-0:2018 and EN 60079-7:2015, EN IEC 60079-7:2015/A1:2018  
IEC 60079-0: 7th Edition and IEC 60079-7: 5.1th Edition

**Test-disconnect terminal Blocks: SDT 2.5...**

Version:	Type	Order No
	SDT 2.5 3C*	3016680000
in conjunction with:	S4C 2.5 PE	2674580000
Accessories:		Order No
End Plate	SEP 4C 2.5*	2751100000
End bracket	AEB 35 SC/1*	1991920000
Terminal rail	TS 35/... acc.to DIN EN 60715	
Cross-connection	Pluggable	Order No
	ZQV 2.5N/2*	1527540000
	ZQV 2.5N/3*	1527570000
	ZQV 2.5N/4*	1527590000
	ZQV 2.5N/5*	1527620000
	ZQV 2.5N/6*	1527630000
	ZQV 2.5N/7*	1527640000
	ZQV 2.5N/8*	1527670000
	ZQV 2.5N/9*	1527680000
	ZQV 2.5N/10*	1527690000

\* in all colours

**Insulation material:**

- Type	Wemid
- Tracking resistance (A) to IEC 60112	CTI ≥ 600
- Flammability class to UL 94	V0
- Operating temperature range	-60°C...+130°C (insulating material limit)

\* in all colours

**Technical data according to IEC/EN 60079-7 / Ex ec:**

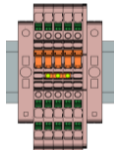
	<b>SDT 2.5 3C</b>	<b>S4C 2.5 PE</b>
- Rated voltage	550 V	
- Rated current	19 A / $\Delta T$ 40 K	
- Rated current with ZQV..	18,5 A / $\Delta T$ 40 K	
- Contact resistance with rated conductor, 2.5 mm <sup>2</sup>	1,4 m $\Omega$	1,1 m $\Omega$
- Rated conductor cross section	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
- Conductor cross section solid	0,5 - 2,5 mm <sup>2</sup>	0,5 - 2,5 mm <sup>2</sup>
- Conductor cross section flexible	0,5 - 2,5 mm <sup>2</sup>	0,5 - 2,5 mm <sup>2</sup>
- conductor cross section flexible with ferrule acc. to DIN 46228 part 1 + part 4	0,5 - 2,5 mm <sup>2</sup>	0,5 - 2,5 mm <sup>2</sup>
- cross section, American Wire Gauge	20 - 14 AWG	20 - 14 AWG
- Stripping length	10 mm	10 mm

**Service life acc. To IEC 60947-7-1**

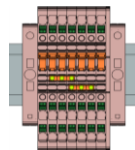
- max. no. Of actuations 50 cycles

**IECEx / ATEX - Terminal and Cross-Connection Arrangements:**

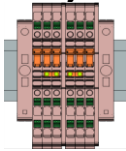
Max voltage data according to IEC/EN 60079-7 in conjunction with protective earth terminal blocks, (increased safety "ec"):

**Application Case****A - Continuous no difference between one or two cross connections**

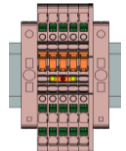
550 V



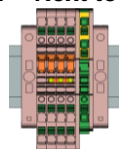
550 V

**C - Adjacent – separated by an end plate no difference between one or two cross-connections**

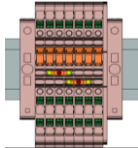
550 V

**D - Intermediate - bridging one or more unconnected terminals (e.g. every 3rd terminal) no difference between one or two cross connections**

550 V

**F - Next to a protective conductor terminal (earth) with end plate**

550 V

**H - Cross-connection with twin parallel**

550 V

Information for further cross-connector arrangements will be provided on request.

**Mounting instructions:**

The disconnect terminals of the A-series are suitable for application in enclosures in atmospheres with flammable gases or combustible dust. For use in flammable gases these enclosures must satisfy the requirements according to IEC/EN60079-0 and IEC/EN60079-7. For use in combustible dust these enclosures must satisfy the requirements according to IEC/EN60079-0 and IEC/EN60079-31.

In combination with other terminal block series and sizes and if other accessories are used, the applicable creepage and clearance distances shall be met.

Regarding the use of accessories the instructions of the manufacturer must be followed.

**Schedule of Limitations:**

The enclosure shall be constructed to block all sun and UV light from affecting the terminal blocks.

**WARNING** – Do not remove or replace the test disconnect switch when energized!

When using the types of disconnect terminals especially with other terminal blocks series or sizes or accessories the requirements for clearance and creepage distances of IEC/EN 60079-7 must be maintained. Regarding the use of covers, cross-connectors and end brackets the instructions of the manufacturer must be followed.

Please refer to the table under “Technical data” above.

When using ferrules for flexible conductors, it must be ensured that the test requirements of DIN 46228-1 and DIN 46228-4 are complied with. Therefore we recommend the use of the appropriate Weidmüller crimping tools. The length of the copper ferrule must correspond to the specified stripping length.

No other wire sizes or types than the ones specified in instructions must be used. The terminal blocks must either be mounted next to another block of the same type and size or with an end plate.

A thermal assessment for the classification into the temperature classes T6.....T1 shall be performed. No part of terminal block must exceed 130 °C under any condition.

The insulation material of the conductors shall meet the temperature requirements.



- Cross connections with blank ends shall not be used.
- Manually cut cross connections shall not be used.

**Essential Health and Safety Requirements:**

Concerning ESRs this Schedule verifies compliance with the Annex III of ATEX directive only. By placing the product on the market, the manufacturer declares compliance with other relevant Directives, and all other safety related requirements including those of Annex II of this Directive.