

INSTALLATION INSTRUCTIONS & CONDITIONS FOR SAFE USE

Ex eb IIC Gb

Modular TERMINAL Blocks: A- Series

TÜV 16 ATEX 7909 U
IECEX TUR 16.0036 U
Notified Body No. of Ex - QA: 0344
Label print on package unit: 0344
TÜV21UKEX7001U
Approved Body No. of UK Ex - QA: xxxx
(see product marking)

Standards:

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

Modular Terminal Blocks: A2C 2.5

Order No

Version: A2C 2.5* 1521850000

Order No

in conjunction with: A2C 2.5 PE* 1521680000

Accessories: Type Order No

end plate AEP 2C 2.5* 1514400000 End bracket AEB 35 SC/1* 1991920000

Terminal rail TS 35/... acc.to DIN EN 60715

Cross-connection Plugable 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

Insulation material:

- Type Wemid - Tracking resistance (A) to IEC 60112 CTI \geq 600 - Flammability class to UL 94 V0

Operating temperature range
 Ambient temperature range
 Go°C...+40°C (for T6 applications)
 Ambient temperature range
 Go°C...+70°C (for T4 applications)

^{*} in all colours

Technical data according to IEC/EN 60079-7 (increased safety "eb"):

	A2C 2.5	A2C 2.5 PE
- Rated voltage	550 V	
- Rated current	$20 \text{ A} / \Delta \text{T} \leq 40 \text{ K}$	
- Rated current with ZQV	$19 \text{ A} / \Delta \text{T} \leq 40 \text{ K}$	
 Contact resistance with rated conductor, 2.5 mm² 	0,8 mΩ	
- Rated conductor cross section	2,5 mm ²	2,5 mm ²
- Conductor cross section solid	0,5 - 2,5 mm ²	0,5 - 2,5 mm ²
- Conductor cross section stranded	0,5 - 2,5 mm ²	0,5 - 2,5 mm ²
- Conductor cross section flexible	0,5- 2,5 mm ²	0,5 - 2,5 mm ²
- cross section, American Wire Gauge	28 - 12 AWG	28 - 12 AWG
- Stripping length	10 mm	10 mm

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

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

Application Case

A - Continuous no difference between one or two cross connections



440 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



352 V

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



550 V

H - Cross-connection with twin parallel



220 V

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

Note:

If smaller cross sections than the rated cross section are used, the belonging lower current has to be laid down in the IECEx/EC-Type Examination Certificate of the complete apparatus.



Mounting instructions:

The Feed-through terminals and PE 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.

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

Schedule of Limitations:

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

The enclosure shall be constructed to block all sun and UV light from affecting the terminal blocks. The terminal blocks shall be placed inside a suitable certified IP54 enclosure in type of protection "e" for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable certified enclosure (IEC/EN60079-31) in type of protection "t".

Under normal operating conditions the temperature rise of the terminal blocks is maximum 40 K, measured at the maximum permitted rated current. Due to the above mentioned, the terminal blocks may be used in apparatus of temperature classes T6..T1 as long as the terminal block ambient temperature range is not exceeded. No part of terminal block must exceed 110 °C under any condition.

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T6 (- 60°C ... +40 °C)
T5 (- 60°C ... +55 °C)
T4 (- 60°C ... +70 °C)
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When using the types A2C 2.5 and A2C 2.5 PE especially with other terminal blocks series or sizes or accessories the requirements for clearance and creepage distances according to IEC/EN60079-7 must be observed. Regarding the use of covers, cross-connectors and end brackets the instructions of the manufacturer must be followed.

For cross connection accessories current rating, resistance across the terminal please refer to the table under "Technical data" above.

If smaller conductor cross sections than the rated conductor cross sections are used, then the corresponding lower current shall be stated in the Certificate of the complete apparatus.

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.



- 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 II of ATEX / Schedule 1 of UKCA directive and Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016 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 / Schedule 1 of these Directives.