INSTALLATION INSTRUCTIONS
& CONDITIONS FOR SAFE USE

II 2 GD

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 50/70

		Order No
Version:	A2C 50/70*	2663250000
	A2C 50/70-DM *	2663330000

		Order No
In conjunction with:	A2C 50/70 PE *	2663280000

Block types:		Order No
	A2C 50/70 3FT-N-PE	2663290000
	A2C 50/70 3FT-N	2663300000
	A2C 50/70 3FT-PE	2663310000
	A2C 50/70 3FT	2663320000
	A2C 50/70 3FT-N-FE-DM	2663360000
	A2C 50/70 3FT-N-DM	2663370000
	A2C 50/70 3FT-FE-DM	2663380000
	A2C 50/70 3FT-DM	2663390000

Accessories:	Type	Order No
end bracket	AEB 35 SC/1*	1991920000

Terminal rail	TS 35/… acc.to IEC 60715

Cross-connection	Plugable	Order No
	ZQV 50/70N/2*	2663400000

Insulation material:

- Type	Wemid
- Tracking resistance (A) to IEC 60112	CTI ≥ 600
- Flammability class to UL 94	V0
- Operating temperature range	-60°C…+110°C (insulating material limit)
- Ambient temperature range	-60°C…+40°C (for T6 applications)
- Ambient temperature range	-60°C…+55°C (for T5 applications)
- Ambient temperature range	-60°C…+70°C (for T4 applications)

* in all colours

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

	A2C 50/70	A2C 50/70 PE	A2C 50/70 DM
- Rated voltage	1.100 V		1.1000 V
- Rated current	128 A / ΔT ≤ 40 K		128 A / ΔT ≤ 40 K
- Rated current with ZQV The ZQV 50/70N/2 cross-connection shall only be used in combination with conductors size up to 50 mm².	128 A / ΔT ≤ 40 K		128 A / ΔT ≤ 40 K
- Contact resistance with rated conductor	0,2 mΩ	0,2 mΩ	0,2 mΩ
- Rated conductor cross section	50 mm²	50 mm²	50 mm²
- Conductor cross section solid	10 - 16 mm²	10 - 16 mm²	10 - 16 mm²
- Conductor cross section stranded	10 - 70 mm²	10 - 70 mm²	10 - 70 mm²
- Conductor cross section flexible	10 - 70 mm²	10 - 70 mm²	10 - 70 mm²
- cross section, American Wire Gauge	AWG 2/0…8	AWG 2/0…8	AWG 2/0…8
- Stripping length	30 mm	30 mm	30 mm

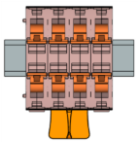
IECEx / ATEX / UKCA Terminal and Cross-Connection Arrangements:

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

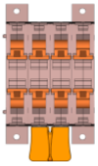
Application Case

A - Continuous no difference between one or two cross connections

DIN Rail - Version *Direct Assembly - Version*



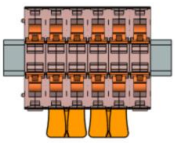
1.100 V



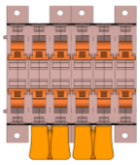
690 V

B - Continuous with 2 cross-connections

DIN Rail - Version *Direct Assembly - Version*

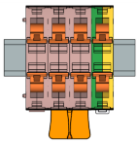


690 V



690 V

E - Next to a protective conductor terminal (earth)



690 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 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.

T6 (- 60°C ... +40 °C)
T5 (- 60°C … +55 °C)
T4 (- 60°C ... +70 °C)

When using the types A2C 50/75 and A2C 50/75 PE especially with other terminal blocks series or sizes or accessories the requirements for clearance and creepage distances according to IEC/EN 60079-7 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.

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.

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.

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.