INSTALLATION INSTRUCTIONS
& CONDITIONS FOR SAFE USE

II 3 G Ex ec II C Gc

Modular TERMINAL Blocks: A- Series

TÜV 16 ATEX 8063 U
IECEx TUR 17.0029 U

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

Modular Terminal Blocks: AAP22 10 LO-LO

		Order No
Version:	AAP22 10 LO-LO*	2428990000
	AAP22 10 FE-LO*	2429000000
in conjunction with:	AAP22 4 LI-FS*	2429010000
	AAP22 4 LI-FS 10-36V*	2459010000
	AAP22 4 LI-FS 30-70V*	2460140000
	AAP22 4 LI-FS 60-150V*	2460130000
	AAP22 4 LI-FS 100-250V*	2460120000

Accessories:	Type	Order No
end plate	AEP AP22*	2429040000
end bracket	AEB 35 SC/1*	1991920000
Terminal rail	TS 35/… acc.to DIN EN 60715	

Cross-connection	Plugable	Order No
	ZQV 4N/2*	1527930000
	ZQV 4N/3*	1527940000
	ZQV 4N/4*	1527970000
	ZQV 4N/5*	1527980000
	ZQV 4N/6*	1527990000
	ZQV 4N/7*	1528020000
	ZQV 4N/8*	1528030000
	ZQV 4N/9*	1528070000
	ZQV 4N/10*	1528090000

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 (increased safety "ec"):

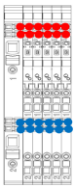
	AAP22 10 LO-LO	AAP22 10 FE-LO	AAP22 4 LI-FS
- Rated voltage	250 V / 250 V	- / 250 V	250 V / 250 V
- Rated current	31,5 A / 31,5 A / ΔT < 40 K	- / 31,5 A / ΔT < 40 K	6,3 A / ΔT < 40 K
- Contact resistance with rated conductor	0,3 mΩ / 0,3 mΩ	0,4 mΩ / 0,3 mΩ	0,3 mΩ / 4,5 mΩ (with dummy fuse link no. 2)
- Rated conductor cross section	0,5 - 10mm²	0,5 - 10mm²	4 mm²
- Conductor cross section solid	0,5 - 10mm²	0,5 - 10mm²	0,5 - 4mm²
- Conductor cross section stranded	0,5 - 10mm²	0,5 - 10mm²	0,5 - 4mm²
- Conductor cross section flexible	0,5 - 10mm²	0,5 - 10mm²	0,5 - 4mm²
- cross section, American Wire Gauge	AWG 20 - AWG 6	AWG 20 - AWG 6	26 - 12 AWG
- Stripping length	18 mm	18 mm	12 mm

IECEx / ATEX 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 "ec"):

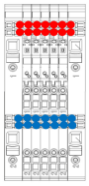
Application Case

A - Continuous supply with AAP22 10 LO-LO and distribution to AAP22 4 LI-FS



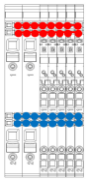
250 V

AAP22 10 LO-LO/ 5 x AAP22 4 LI-FS



250 V

AAP22 10 LO-LO/ 5 x AAP22 4 LI-FS/ AAP22 10 LO-LO



250 V

2 x AAP22 10 LO-LO/ 5 x AAP22 4 LI-FS

distribution terminals ≥ 5

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

Mounting instructions:
The Feed-through 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 Feed-through terminal blocks 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 these enclosures must satisfy the requirements according to 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 130 °C under any condition.

T6 (- 60°C ... +40 °C)
T5 (- 60°C … +55 °C)
T4 (- 60°C ... +90 °C)

WARNING – Do not remove or replace the test fuse disconnect switch (AAP22 4 LI-FS) 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.

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.

- 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 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.