INSTALLATION INSTRUCTIONS & CONDITIONS FOR SAFE USE

II 2 GD

Ex eb IIC Gb

Modular TERMINAL Blocks: SAKK- Series

TÜV 18 ATEX 8208 U
IECEx TUR 18.0018 U
Notified Body No. of Ex - QA: 0344
Label print on package unit: 0344

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: SAKK 4

			Order No
Version:		SAKK 4	9502600000
		SAKK 4 KER/WS	1598080000
Accessories:		Type	
end plate		AP SAKK4/10 KER/WS	9502630000
end bracket		MEW 1/32	0445600000
Terminal rail		TS 32/… acc.to IEC 60715	
Cross-connection	Cross-connection link	QL 2 SAKK4	9502540000
		QL 3 SAKK4	9502550000
		QL 4 SAKK4	9502560000
		QL 10 SAKK4	9502570000
	Connecting sleeve	VH 13.5 SAKK 4	9502580000
	Fixing screw	KISC M3X20.5/10 EK4	0303000000

Insulation material:

- Type	Ceramic
- Tracking resistance (A) to IEC 60112	CTI ≥ 600
- Flammability class to UL 94	V0
- Operating temperature range	-60°C to +210°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…+95°C (for T4 applications)
- Ambient temperature range	-60°C…+155°C (for T3 applications)
- Ambient temperature range	-60°C…+170°C (for T2 applications)

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

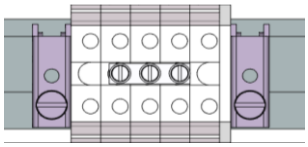
	SAKK 4
- Rated voltage	440 V
- Rated current	32 A
- Temperature rise with rated current	≤ 40 K / 32 A
- Rated current with cross connection	32 A
- Contact resistance with rated conductor SAKK 4 KER/WS (TIN)	0,2 mΩ
- Contact resistance with rated conductor SAKK 4 (Nickel)	0,4 mΩ
- Conductor cross section solid	0,5 - 6 mm²
- Conductor cross section stranded	0,5 - 6 mm²
- Conductor cross section flexible	0,5 - 4 mm²
- cross section, American Wire Gauge	22 - 10 AWG
- conductor cross section flexible with ferrule acc. to DIN 46228 part 1 + 4	0,5 - 4 mm²
- Tightening torque range, terminal screw	0,5 - 1,0 Nm
- Tightening torque range for cross connection	0,5 - 1,0 Nm
- Stripping length	10 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 SAKK-Series, (increased safety "eb"):

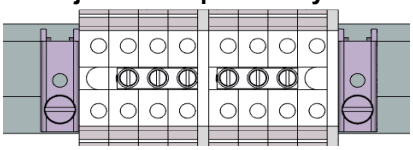
Application Case

A - Continuous



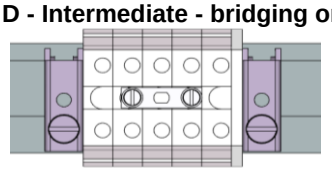
440 V

C - Adjacent – separated by an end plate



440 V

D - Intermediate - bridging one or more unconnected terminals



352 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:
Regarding the use of accessories the instructions of the manufacturer must be followed.

Schedule of Limitations:
The SAKK-series products 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 EN 60079-0 and EN 60079-7. For combustible dust the enclosure must satisfy the requirements according to EN 60079-0 and EN 60079-31.

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 “eb” for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable certified enclosure (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 210°C under any condition.

Ambient temperature
T6 (- 60°C ... +40 °C)
T5 (- 60°C … +55 °C)
T4 (- 60°C ... +95 °C)
T3 (- 60°C ... +155 °C)
T2 (- 60°C ... +170 °C)

When using the SAKK-series products especially with other terminal blocks series or sizes or accessories the requirements for clearance and creepage distances according to table 2 of 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.

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.

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.

Unused terminals shall be tighted.

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.