INSTALLATION INSTRUCTIONS & CONDITIONS FOR SAFE USE

II 3 G Ex ec IIC Gc

Modular TERMINAL Blocks: W- Series

TÜV 20 ATEX 8502 U
IECEx TUR 20.0014 U
TÜV 22 UKEX 7091 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

Test - Disconnect Terminal Blocks: W2C 4 DT…

Version:	Type *	Order No
	W2C 4 DT	2892740000
	W2C 4 DT STB	2892770000
	W2C 4 DT-PE	2892810000
	W2C 4 DT-PE STB	2892820000

Accessories:*		Order No
End Plate	WEP 2C 4	2894210000
End bracked	WEW 35/2 SW	1061210000

Terminal rail	TS 35/… acc.to DIN EN 60715
Cross-connection	Pluggable* ZQV 4N/2 ZQV 4N/3 ZQV 4N/4 ZQV 4N/5 ZQV 4N/6 ZQV 4N/7 ZQV 4N/8 ZQV 4N/9 ZQV 4N/10

Insulation material:

- Type	Wemid
- Tracking resistance (A) to IEC 60112	CTI ≥ 600
- Flamability 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 (incresaed safety "ec"):

	W2C 4 DT W2C 4 DT STB	W2C 4 DT-PE W2C 4 DT-PE STB
- Rated voltage	550 V	550 V
- Rated current	26 A	26 A
- Rated current with ZQV	23,5 A	23,5 A
- Rated conductor cross section	4 mm²	4 mm²
- Conductor cross section solid	0,5 - 4,0 mm²	0,5 - 4,0 mm²
- Conductor cross section flexible	0,5 - 4,0 mm²	0,5 - 4,0 mm²
- Conductor cross section flexible with	0,5 - 4,0 mm²	0,5 - 4,0 mm²
- Cross section, American Wire Gauge	24 - 12 AWG	24 - 12 AWG
- Tightening torque range, terminal screw	0,5 - 0,8 Nm	0,5 - 0,8 Nm
- Tightening torque range, STB - version	0,5 - 0,7 Nm	0,5 - 0,7 Nm
- Stripping length	8 mm	8 mm

Service life acc. To IEC 60947-7-1

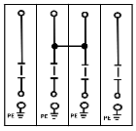
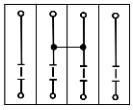
- max. no. Of actuations	50 cycles

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

Max voltage data according to IEC/EN 60079-7; (increased safety "ec"):

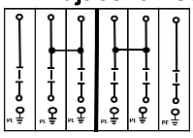
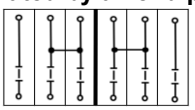
Application Case

A - Continuous no difference between one or two cross connections

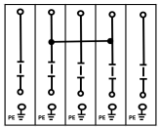
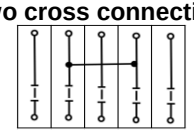
550 V 550 V

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

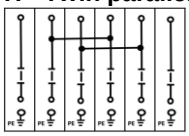
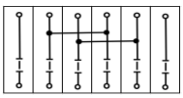
550 V 550 V

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

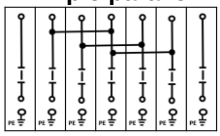
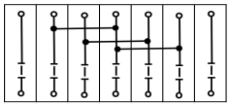
550 V 550 V

H - Twin parallel

550 V 550 V

I - Triple parallel

550 V 550 V

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

Note:
The creepage and clearance distances were determined in the worst case.
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 W2C 4 DT... terminal block is suitable for application in enclosures in atmospheres with flammable gases and 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.

The terminal blocks shall be placed inside a suitable IECEx/ATEX/UKCA certified IP54 enclosure for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable IECEx/ATEX/UKCA certified 't' enclosure (IEC/EN60079-31).

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

Under normal operating conditions the temperature rise of the terminal blocks is max 40 K, measured with the max permitted rated current. Due to the above mentioned the terminal blocks may be used in apparatus of temperature classes T6…T1as long as the terminal block ambient temperature range is not exceeded as shown below. No part of terminal block must exceed 130°C under any condition.

WARNING – Do not remove or replace the fuse/test disconnect lever when energized!

When using the types W2C 4 DT... with other terminal blocks series or sizes or accessories, the requirements for clearance and creepages 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 terminal jumper accessories current ratings and the resistances across the terminals please refer to the table under "technical data".

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 terminal blocks may be used, based on the self-heating when used at the nominal current and at ambient temperatures of - 60 °C to + 40 °C at the mounting position in electrical apparatus, e.g. junction and connection boxes, for temperature class T6. When the terminal blocks are used in electrical apparatus of temperature classes T1 up to T5, the highest temperature of the insulating material shall not exeed the max. value of the operating temperature range.

- 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.