

INSTALLATION INSTRUCTIONS
& CONDITIONS FOR SAFE USE

 II 3 G Ex nA IIC Gc

Modular TERMINAL Blocks: W- Series

DEMKO 14 ATEX 1389U
IECEX UL 14.0097U

Standards:
EN 60079-0:2012/A11:2013 and EN 60079-15: 2010
IEC 60079-0:2011 Rev. 6
IEC 60079-15:2010 Rev. 4

Fuse Terminal Blocks: WTR 4/SI

Version:	Type	Order No
	WTR 4 SI*	7910240000
	WTR 4/SI LD 36V*	7914370000
	WTR 4/SI LD 70V*	7914380000
	WTR 4/SI LD 150V*	7914390000
	WTR 4/SI LD 250V*	7914400000

Accessories:	Type	Order No
End Plate	WAP 2.5-10	1050000000
End bracket	WEW 35/2*	1061200000
Terminal rail	TS 35/... acc.to DIN EN 60715	

Cross-connection	Pluggable*	Order No
	ZQV 4N/2 GE	1758250000
	ZQV 4N/3 GE	1762630000
	ZQV 4N/4 GE	1762620000
	ZQV 4N/10 GE	1758260000

Insulation material:

- Type	Wemid
- Tracking resistance (A) to IEC 60112	CTI ≥ 600
- Flammability class to UL 94	V0
- Operating temperature range	-60°C...+120°C (insulating material limit)

* in all colours

Technical data according to IEC/EN 60079-15 (non sparking "nA"):

	Rated Voltage	
	Separate arrangement	Compound arrangement
WTR 4 SI*	250 V	250 V
WTR 4/SI LD 36V*		36 V
WTR 4/SI LD 70V*		70 V
WTR 4/SI LD 150V*		150 V
WTR 4/SI LD 250V*		250 V

- Rated current	6.3 A
- Rated power dissipation P _{vk}	
Separate arrangement	On request.
Compound arrangement	On request.
- Rated conductor cross section	4 mm ²
- Conductor cross section solid	0,5 - 6,0 mm ²
- Conductor cross section stranded	1,5 - 6,0 mm ²
- Conductor cross section flexible	0,5 - 4,0 mm ²
- Conductor cross section flexible with ferrule	0,5- 4,0 mm ²
- cross section, American Wire Gauge	26 - 10 AWG
- 2 conductors with same cross-section	0,5 - 1,5 mm ²
- Tightening torque range, terminal screw	0,5 - 0,6 Nm
- Stripping length	13 +/- 0,5 mm

Table 1**Catridge fuse-links (5 x 20 mm) ****

** only permissible for sandfilled fuse link

**EN 60127-2
Spec. Sheet****Rated current Breaking capacity**

1	50 mA ... 10 A	1,5 kA
2	32 mA ... 10 A	35 A resp. 10 x I _N
3	32 mA ... 10 A	35 A resp. 10 x I _N
5	100 mA ... 10 A	1,5 kA
6	32 mA ... 10 A	150 A

CONDITIONS FOR SAFE USE:

This document should be read carefully before starting installation. Respect the information stated on the certification label of the terminal, e.g. Type/s of protection, gas group and temperature class. The installation of these terminals should only be carried out by authorized and qualified personnel whose training has included instruction on the various types of protection and installation practices, the relevant rules and regulations, and on the general principles of area classification.

The fuse holder shall be fully closed all times. Do not remove or replace the fuse when energized.

The fuse link shall not be replaced in the presence of a hazardous area and the associated enclosure shall be marked "Switch off supply and discharge any stored energy safely before removing fuse(s)". The "stored energy" statement may be replaced by a statement declaring a de-energizing time before opening.

The fuse terminal is safe under the following conditions:

- Use only fuse links according to the Table 1.
- The temperature class must be verified in the final customers specific application.
- T4 based on 120 °C of the insulating material and 85 °C for the fuse carrier.

The informativ temperatures of Table 2 were determined with a nominal current of 100 % according to the

The fuse terminal blocks maybe used only for overload and short-circuit protection applications based on the operational self heating at nominal current in combination with the specified fuse links at ambient temperatures according to the following table:

Table 2:

WTR 4/SI:

		Temperature class:		
		T4 (120 °C)	T5 (100 °C)	T6 (85 °C)
Separate arrangement:	Cartridge fuse-link	max. ambient temperature (°C)		
	1,6 W/ 6,3 A	On request.		
Compound arrangement:	Cartridge fuse-link	max. ambient temperature (°C)		
	1,6 W/ 6,3 A	On request.		

Note:

The creepage and clearance distances were determined in the worst case.
(with closed or open clamping yoke)

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 WTR 4/SI terminal block is 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/EN60079-15. 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 fuse 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/EN 60079-0 and 60079-15. For combustible dust these enclosures must satisfy the requirements according to IEC/EN 60079-31.

The terminal blocks shall be placed inside a suitable IECEx/ATEX certified IP54 enclosure for gas atmosphere. For dust atmosphere the terminal blocks shall be mounted inside a suitable IECEx/ATEX certified "t" enclosure (IEC/EN60079-31).

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

WARNING – Do not remove or replace the fuse disconnect switch when energized!

When using the WSI 6 terminal blocks with other terminal blocks series or sizes or accessories, the requirements for clearance and creepages distances according to table 1 of IEC/EN 60079-15 has to 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 "types & electrical rating" above. Details on creepage and clearance values and the required torque values are in the respective "Notice to installers".

The terminal can be used with either one or two wires into either side of the terminal. When two wires are used they must be of the same type, and of equal sizes. 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 tightened.



Manually cut cross connections and cross connections with blank ends (ZQV's ≥ 20 poles) shall not be used.

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 of this manufacturer declares compliance with other relevant Directives, and all other safety related requirements including those of Annex II of this Directive.

Additional information:

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in the ATEX Directive 2014/34/EU.