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

Test - Disconnect Terminal Blocks: WTR 2.5

Version:	Type	Order No
	WTR 2.5 *	1855610000
	WTR 2.5 STB *	1855620000

Accessories:		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 2.5N/2	1693800000
	ZQV 2.5N/3	1693810000
	ZQV 2.5N/4	1693820000
	ZQV 2.5N/5	1693830000
	ZQV 2.5N/6	1693840000
	ZQV 2.5N/7	1693850000
	ZQV 2.5N/8	1693860000
	ZQV 2.5N/9	1693870000
	ZQV 2.5N/10	1693880000

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"):

	WTR 2.5 **WTR 2.5 STB**
- Rated voltage	500 V
- Rated current	24 A
- Rated current with ZQV	24 A
- Contact resistance with rated conductor, 2.5 mm² with max conductor, 4.0 mm²	 0,81 mΩ 0,74 mΩ
- Rated conductor cross section	2.5 mm²
- Conductor cross section solid	0,14 - 4,0 mm²
- Conductor cross section stranded	0,14 - 4,0 mm²
- Conductor cross section flexible	0,14 - 4,0 mm²
- Conductor cross section flexible with ferrule	0,14 - 1,5 mm²
- cross section, American Wire Gauge	26 - 12 AWG
- 2 conductors with same cross-section	0,5- 1,5 mm²
- Tightening torque range, terminal screw	0,4 - 0,8 Nm
- Stripping length	10 +/- 1 mm
Service life acc. To IEC 60947-7-1	
- max. no. Of actuations	100 cycles

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 2.5 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 disconnect 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.

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…T1 as long as the terminal block ambient temperature range is not exceeded as shown below. No part of terminal block must exceed 120 °C under any condition.

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

When using the types WTR 2.5 especially with other terminal blocks series or sizes or accessories the requirements for clearance and creepage distances according to table 1 of EN 60079-15 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 "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.

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 mam. value of the operating temperature range.

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.