1 **UNITED KINGDOM CONFORMITY ASSESSMENT**

UK TYPE EXAMINATION CERTIFICATE

2 **Product Intended for use in Potentially Explosive Atmospheres**
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

3 Type Examination Certificate Number: **ExVeritas 21UKEX0917U** Issue: **0**

4 Product: Modular Terminal Blocks models WPD 104 to WPD 109

5 Manufacturer: Weidmueller Interface GMBH & Co KG

6 Address: Klingenbergstraβe 26
Detmold D-32758
Germany

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 ExVeritas Limited Approved Body number 2585, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0: 2018 **EN IEC 60079-7:2015+A1:2018**

Except in respect of those requirements listed at section 16 of the schedule to this certificate.

10 If the sign “U” placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as the basis for certification of an equipment or protective system.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the equipment shall include the following:

Ex II 2 G Ex eb IIC Gb

UKAS PRODUCT CERTIFICATION
No. 8613

On behalf of ExVeritas

S Clarke CEng MSc FIET
Managing Director

Schedule

13 Description of Product

The modular terminal blocks models WPD 104 to WPD 109 are power distribution blocks, where one incoming current supply cable is distributed through one connection block over multiple outgoing cable connections. The insulating body is made of polyamide PA66 and the protective cover is made of polycarbonate.

Operating temperature range:

The operating temperature range is limited to -60 °C … +100 °C
The ambient temperature range is limited to -60 °C … +40 °C (for T6 applications)
The ambient temperature range is limited to -60 °C … +55 °C (for T5 applications)
The ambient temperature range is limited to -60 °C … +60 °C (for T4 applications)

Electrical Data:

Max. rated voltage [V]:

Model:	WPD 104	WPD 105	WPD 106	WPD 107	WPD 108	WPD 109
Screw mounting	550	690	550	880	880	880
TS35 mounting	550	690	880	440	1100	1100
For busbar (Flexibar) with Screw Mounting	NA	NA	550	NA	880	880
For busbar (Flexibar) with TS35 Mounting	NA	NA	690	NA	1100	1100

Rated incoming currents:

Model:	WPD 104	WPD 105	WPD 106	WPD 107	WPD 108	WPD 109
Current [A]:	101	125	160	232	250	353

Rated conductor cross sections:

Model	Wire type	Incoming connection size [mm^2]			Outgoing connection size [mm^2]		
		left	centre	right	Top level	Middle level	Bottom level
WPD 104	Solid	1 x 2.5…25	-	1x 1.5…16	3x 1.5…10	-	2x 1.5…16
WPD 104	Stranded	1 x 2.5…25	-	1x 1.5…16	3x 1.5…10	-	2x 1.5…16
WPD 104	Flexible with Ferrule	1x 1.5…16	-	1x 1.5…10	3x 1.5…6	-	2x 1.5…16
WPD 105	Solid	1x 4…35	-	1x 1.5…16	3x 1.5…16	-	2x 2.5…25
WPD 105	Stranded	1x 4…35	-	1x 1.5…16	3x 1.5…16	-	2x 2.5…25
WPD 105	Flexible with Ferrule	1x 2.5…25	-	1x 1.5…10	3x 1.5…16	-	2x 1.5…16
WPD 106	Solid	-	1x 10…70	-	3x 1.5…16	-	2x 2.5…25
WPD 106	Stranded	-	1x 10…70	-	3x 1.5…16	-	2x 2.5…25
WPD 106	Flexible with Ferrule	-	1x 6…50	-	3x 1.5…16	-	2x 1.5…16
WPD 106	Flexible busbar	-	15.5 x 5 mm^2	-	3x 1.5…16	-	2x 2.5…25

Schedule

Model	Wire type	Incoming connection size [mm²]			Outgoing connection size [mm²]		
		left	centre	right	Top level	Middle level	Bottom level
WPD 107	Solid	1x 4…35	1x 16…95	1x 4…35	4x 2.5…25	-	4x 2.5…25
WPD 107	Stranded	1x 4…35	1x 16…95	1x 4…35	4x 2.5…25	-	4x 2.5…25
WPD 107	Flexible with Ferrule	1x 2.5…25	1x 10…70	1x 2.5…25	4x 1.5…16		4x 1.5…16
WPD 108	Solid	-	1x 35…120	-	3x 2.5…25	4x 2.5…25	2x 4…35
WPD 108	Stranded	-	1x 35…120	-	3x 2.5…25	4x 2.5…25	2x 4…35
WPD 108	Flexible with Ferrule	-	1x 25…95	-	3x 1.5…16	4x 1.5…16	2x 2.5…25
WPD 108	Flexible busbar	-	24 x 10 mm²	-	-	-	-
WPD 109	Solid	-	95…185	-	3x 2.5…25	4x 2.5…25	2x 4…35
WPD 109	Stranded	-	95…185	-	3x 2.5…25	4x 2.5…25	2x 4…35
WPD 109	Flexible with Ferrule	-	70…150	-	3x 1.5…16	4x 1.5…16	2x 2.5…25
WPD 109	Flexible busbar	-	24 x 10 mm²	-	-	-	-

Schedule

14 Descriptive Documents

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R3385/A/1	2021-11-30	0	Initial issue of the Prime Certificate

14.2 Compliance Drawings:

Title:	Drawing No.:	Rev. Level:	Date:
Approval drawing WPD 104	WPD 104	-	21-02-2017
Approval drawing WPD 105	WPD 105	-	21-02-2017
Approval drawing WPD 106	WPD 106	-	21-02-2017
Approval drawing WPD 107	WPD 107	-	21-02-2017
Approval Drawing	WPD 108	-	2016-06-17
Notice To Installers (NTI) WPD 104	WPD 104 11945810	01	04-2021
Notice To Installers (NTI) WPD 105	WPD 105 11945811	01	04-2021
Notice To Installers (NTI) WPD 106	WPD 106 11945812	01	04-2021
Notice To Installers (NTI) WPD 107	WPD 107 11945813	01	04-2021
Deckel PDB 400 / PDB 490	513569	a	2017-03-03
Messing Block PDB 400	H54_D3 (2 sheets)	a	2016-05-31
Sockel PDB 400 / PDB 490	514459	a	2017-07-12
Leistungsverteilerblock WPD 108	W82080	a	2017-03-13
Approval Drawing	WPD 109	-	2016-06-17
Messing Block PDB 490	F54_D4	b	2016-05-31
Leistungsverteilerblock WPD 109	W82090	a	2017-03-14
NTI	WPD_108_NTI_201709	01	2017-09
NTI	WPD_109_NTI_201709	01	2017-09
UKCA – Product Marking (8 sheets)	D1499507	1	18.08.2021

Schedule

15 Schedule of Limitations

- The modular terminal blocks models WPD 104 to WPD 109 shall always be installed inside suitable certified enclosures. For use in flammable gases these enclosures must satisfy the requirements according to EN/IEC 60079-0 and EN/IEC 60079-7. For use in combustible dust these enclosures must satisfy the requirements according to EN/IEC 60079-0 and EN/IEC 60079-31.
- When installed, all connections, even if unused, shall be tightened with the torques specified in the manufacturer's instructions.
- The transparent covers are always to be applied on the terminal blocks.
- For each modular terminal block, there shall always be only one cable installed in the incoming connection side of the terminal block.
- Multiple wires installed into one connection are not allowed.
- When combined with other terminal block series and accessories, the applicable creepage and clearance distances shall be observed.
- The insulation material has a limiting temperature of +100 °C.
- The temperature rise in the terminals does not exceed 40 K at 110 % of the rated current.
- 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 IP6X enclosure (EN/IEC 60079-31) in type of protection 'tb'.
- 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 100 °C under any condition.
- 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.
- The resistance across the terminals, at rated conductor cross-section, are given as follows:

Model:	WPD 104	WPD 105	WPD 106	WPD 107	WPD 108	WPD 109
contact resistance [mOhm]	< 0.32	<0.26	< 0.2	< 0.14	< 0.13	< 0.1

Routine tests:

- Routine dielectric strength tests according to EN IEC 60079-7 cl. 7.1 are applicable.

16 Essential Health and Safety Requirements (Regulations Schedule 1)

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

The manufacturer shall inform ExVeritas of any modifications to the design of the product described by this schedule.