

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx UL 24.0002X** Page 1 of 5

Issue 1 (2024-06-14) Issue No: 2 Status: Current Issue 0 (2024-03-06)

**Lucy Frieders** 

2025-04-28 Date of Issue:

Weidmüller Interface GmbH & Co. KG Applicant:

Klingenbergstrasse 26 Detmold 32758 Germany

Equipment: Industrial Ethernet Switch, Model Series IE-SW-BLB

Optional accessory:

Type of Protection: Increased Safety "ec", Sealed Device "nC"

Marking: Ex ec nC IIC T4 Gc for Models:

IE-SW-BLB-16-16TX

IE-SW-BLB-18-16TX-2GESFP

IE-SW-BLB-24-24TX IE-SW-BLB-16-16GT IE-SW-BLB-16-16GT-C

IE-SW-BLB-16-14GT-2GESFP

Ex ec IIC T4 Gc for Models:

IE-SW-BLB-10-8GT-2GESFP

IE-SW-BLB-05-5GT IE-SW-BLB-05-5GT-C IE-SW-BLB-05-5TX

IE-SW-BLB-05-4TX-1FESFP

Certification Body:

Approved for issue on behalf of the IECEx

Staff Engineer Position:

Signature:

(for printed version)

2025-04-28

(for printed version)

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Certificate history:

Certificate issued by:

**UL Solutions (US)** 333 Pfingsten Road Northbrook IL 60062-2096 **United States of America** 





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IE-SW-BLB-08-6TX-2FESFP

IE-SW-BLB-08-7TX-1FESFP

IE-SW-BLB-08-8TX

IE-SW-BLB-05-4GT-1GESFP

IE-SW-BLB-08-8GT

IE-SW-BLB-08-8GT-C

-40°C to +75°C



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Manufacturer: Weidmüller Interface GmbH & Co. KG

Klingenbergstrasse 26 Detmold 32758 **Germany** 

Manufacturing Weidmüller Interface GmbH & Co.

locations: K

Klingenbergstrasse 26 Detmold 32758 **Germany** 

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### **STANDARDS**:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n" Edition:5.0

EC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

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This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

US/UL/ExTR24.0002/00 US/UL/ExTR24.0002/01 US/UL/ExTR24.0002/02

**Quality Assessment Report:** 

NL/DEK/QAR12.0052/10



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

Industrial Ethernet Switch Model IE-SW-BLB Series have LAN ports and SFP slots with different amount and combination. These devices are evaluated as open-type devices, microcomputer based and communicate via interfaces through wire. They are intended for installation into a tool-accessible only ultimate enclosure and can be installed by DIN-Rail vertical mounting.

Models covered:

IE-SW-BLB-10-8GT-2GESFP;

IE-SW-BLB-05-5GT and IE-SW-BLB-05-5GT-C;

IE-SW-BLB-05-5TX and IE-SW-BLB-05-4TX-1FESFP;

IE-SW-BLB-05-4GT-1GESFP;

IE-SW-BLB-08-6TX-2FESFP, IE-SW-BLB-08-7TX-1FESFP and IE-SW-BLB-08-8TX;

IE-SW-BLB-08-8GT and IE-SW-BLB-08-8GT-C;

IE-SW-BLB-16-16TX, IE-SW-BLB-18-16TX-2GESFP and IE-SW-BLB-24-24TX;

IE-SW-BLB-16-16GT, IE-SW-BLB-16-16GT-C and IE-SW-BLB-16-14GT-2GESFP.

Please see Annex for additional information.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- The equipment shall be mounted on Din-rail in vertical position and installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0 and only accessible by use of a tool, see installation instructions before use.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.
- The equipment shall keep minimum installation clearances as following to prevent from overheating:

Top and bottom: 51 mm (2.0 inch)

Side: 51 mm (2.0 inch)

Front: 64 mm (2.5 inch).

The input terminal block shall be used with conductors of 12 – 24 AWG wire size (ISO Metric size 4 - 0.2 mm<sup>2</sup>).



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#### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Issue 1: Add new Models IE-SW-BLB-05-5GT, IE-SW-BLB-05-5GT-C; IE-SW-BLB-05-5TX, IE-SW-BLB-05-4TX-1FESFP; IE-SW-BLB-08-6TX-2FESFP, IE-SW-BLB-08-7TX-1FESFP, IE-SW-BLB-08-8TX; IE-SW-BLB-16-16TX, IE-SW-BLB-18-16TX-2GESFP and IE-SW-BLB-24-24TX.

Issue 2: Addition of new Models IE-SW-BLB-16-16GT, IE-SW-BLB-16-16GT-C, IE-SW-BLB-16-14GT-2GESFP, IE-SW-BLB-05-4GT-1GESFP, IE-SW-BLB-08-8GT-C, IE-SW-BLB-08-8GT.

Annex:

Annex to IECEx UL 24.0002X Issue 2.pdf



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#### TYPE DESIGNATION

#### Nomenclature:

IE-SW-BLB	-	05	•	4TX	-	1FESFP	•	C
I		II		III		IV		V

I- Basic type designation:

IE-SW-BLB: Type designation

II- Total IO port number:

May be 05, 08, 10, 16, 18 or 24.

III- LAN port number and type:

GT: 10/100/1000Base-T(X) LAN port.

TX: 10/100Base-T(X) LAN port.

IV- SFP connector number and type:

Blank: No SFP connector provided.

GESFP: 100/1000Base-X SFP Connector (For Model IE-SW-BLB-18-16TX-2GESFP, BLB-10-8GT-

2GESFP, IE-SW-BLB-16-14GT-2GESFP, IE-SW-BLB-05-4GT-1GESFP only)

FESFP: 100Base-X SFP Connector (For Models IE-SW-BLB-05-4TX-1FESFP, IE-SW-BLB-08-6TX-

2FESFP and IE-SW-BLB-08-7TX-1FESFP only)

V- Conformal coating (For IE-SW-BLB-05-5GT, IE-SW-BLB-08-8GT, IE-SW-BLB-16-16GT Series only):

C: Conformal Coating provided.

Blank: No conformal coating provided

#### Model Difference:

Models IE-SW-BLB-05-5GT and IE-SW-BLB-05-5GT-C are identical except conformal coating is provided on the PWB of Model IE-SW-BLB-05-5GT-C.

Models IE-SW-BLB-05-5TX and IE-SW-BLB-05-4TX-1FESFP are identical except for the amount of LAN ports and SFP slot does not provide on Model IE-SW-BLB-05-5TX, and the enclosure openings for output ports.

Models IE-SW-BLB-08-6TX-2FESFP, IE-SW-BLB-08-7TX-1FESFP and IE-SW-BLB-08-8TX are identical except for the amount of LAN ports and SFP slots, and the enclosure openings for output ports.

Model IE-SW-BLB-16-16TX and IE-SW-BLB-24-24TX utilized identical Main Board, but no I/O Board provided on Model IE-SW-BLB-16-16TX, also with smaller enclosure size.

Model IE-SW-BLB-18-16TX-2GESFP and IE-SW-BLB-24-24TX are identical except for the amount of LAN ports and SFP slots, and the enclosure openings for output ports.

Models IE-SW-BLB-08-8GT and IE-SW-BLB-08-8GT-C are identical except conformal coating is provided on the PWB of Model IE-SW-BLB-08-8GT-C.



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Models IE-SW-BLB-16-16GT and IE-SW-BLB-16-16GT-C are identical except conformal coating is provided on the PWB of Model IE-SW-BLB-16-16GT-C.

Models IE-SW-BLB-16-16GT and IE-SW-BLB-16-14GT-2GESFP utilized identical Main Board except for the amount of LAN ports. Additional SFP Board provided on Model IE-SW-BLB-16-14GT-2GESFP, which has bigger enclosure size due to SFP ports.

#### PARAMETERS RELATING TO THE SAFETY

Model Series	Electrical Rating	Relay Output		
IE-SW-BLB-10-8GT-2GESFP	Dual 12-48 Vdc or 24 Vac, Max. 7.06 W			
IE-SW-BLB-05-5GT	Dual 12-48 Vdc or 24 Vac, Max. 2.5 W			
IE-SW-BLB-05-5GT-C	Dual 12-46 vuc of 24 vac, Max. 2.5 W			
IE-SW-BLB-05-5TX	Dual 12-48 Vdc or 24 Vac, Max. 1.1 W	N/A		
IE-SW-BLB-05-4TX-1FESFP	Dual 12-48 Vdc or 24 Vac, Max. 1.8 W			
IE-SW-BLB-08-6TX-2FESFP	Dual 12-48 Vdc or 24 Vac, Max. 3.1 W			
IE-SW-BLB-08-7TX-1FESFP	SFP Dual 12-48 Vdc or 24 Vac, Max. 2.4 W			
IE-SW-BLB-08-8TX	Dual 12-48 Vdc or 24 Vac, Max. 1.8 W			
IE-SW-BLB-08-8GT	Dual 12-48 Vdc, 24 Vac, Max. 4 W			
IE-SW-BLB-08-8GT-C	Duai 12 40 vuo, 24 vuo, iviax. 4 vv			
IE-SW-BLB-05-4GT-1GESFP	Dual 12-48 Vdc or 24 Vac, Max. 3 W			
IE-SW-BLB-16-16TX	Dual 12-48 Vdc or 24 Vac, Max. 4.5 W			
IE-SW-BLB-18-16TX-2GESFP	Dual 12-48 Vdc or 24 Vac, Max. 8.4 W	24VDC, 1A,		
IE-SW-BLB-24-24TX	Dual 12-48 Vdc or 24 Vac, Max. 6 W			
IE-SW-BLB-16-16GT	Dual 12-48 Vdc, 24 Vac, Max. 13W	Resistive		
IE-SW-BLB-16-16GT-C,	Duai 12-40 vuc, 24 vac, iviax. 13vv			
IE-SW-BLB-16-14GT-2GESFP	Dual 12-48 Vdc, 24 Vac, Max. 11.5W			



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#### **MARKING**

Marking has to be readable and indelible; it has to include the following indications:





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IE-SW-BLB-05-5TX

IE-SW-BLB-05-4TX-1FESFP

IE-SW-BLB-08-6TX-2FESFP

### Weidmüller 🏖

Type: Ethernet Switch 經路交換機 Name 型號: IE-SW-BLB-05-5TX Article No. 編號: 2908030000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 1.1 W

HW Rev.: 1.0

Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26, 32758 Detmold-Germany Made in Talwan

### Weidmüller 🏖

Type: Ethernet Switch 網路交換機 Name 型號: IE-SW-BLB-05-4TX-1FESFP Article No. 編號: 2908140000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 1.8 W

HW Rev.: 1.0

Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26, 32758 Detmold-Germany Made in Taiwan

### Weidmüller 🕏

Type: Ethernet Switch 網絡交換機 Name 型號: IE-SW-BLB-08-6TX-2FESFP Article No. 編號: 2908160000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz

Max. 3.1 W HW Rev.: 1.0

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IE-SW-BLB-08-7TX-1FESFP

IE-SW-BLB-08-8TX

IE-SW-BLB-16-16TX

### Weidmüller 🏖

Type: Ethernet Switch 網絡交換機 Name 型號: IE-SW-BLB-08-7TX-1FESFP Article No. 編號: 2908150000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz

Max. 2.4 W HW Rev.: 1.0

CE EX 3G Bx ec IIC T4 Gc

II 3G IIC T4 Gc UL 24.0002X ATEX 3149X MEX2973X

Weidmüller Interface GmbH & Co. KG Kingenbergstraße 26, 32758 Detmold-Germany Made in Taiwa

### Weidmüller 🏖

Type: Ethernet Switch 網路交換機 Name 型號: IE-SW-BLB-08-8TX Article No. 編號: 2908040000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz

Max. 1.8 W HW Rev.: 1.0

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II 3G Ex ec IIC T4 Gc IECEX UL 24.0002X UL 24 ATEX 3149X UL 24 UKEX 2973X ADTC - Ta < + 75°C

Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26, 32758 Detmold-Germany Made in Taiwan



Type: Ethernet Switch 網絡交換機 Name 型號: IE-SW-BLB-16-16TX Article No. 編號: 2908050000

Serial No.: AX8I18PN4800001

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 4.5 W Relay Output 24 VDC, 1A, resistive HW Rev.: 1.0







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IE-SW-BLB-08-8GT

IE-SW-BLB-08-8GT-C

IE-SW-BLB-05-4GT-1GESFP

### Weidmüller 🏖

Type: Ethernet Switch 網路交換機 Name 型號: IE-SW-BLB-08-8GT Article No. 編號: 2908080000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 4 W



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### Weidmüller 🏖

Type: Ethernet Switch 網路交換機 Name 型號: IE-SW-BLB-08-8GT-C Article No. 編號: 2908110000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 4 W

HW Rev.: 1.0





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### Weidmüller 🏖

Type: Ethernet Switch 網路交換機 Name 型號: IE-SW-BLB-05-4GT-1GESFP

Article No. 編號: 2908180000

Serial No.:

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 3 W

HW Rev.: 1.0







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IE-SW-BLB-16-16GT

IE-SW-BLB-16-16GT-C,

IE-SW-BLB-16-14GT-2GESFP

#### Weidmüller 🏖

Type: Ethernet Switch 網路交換機 Name 型號: IE-SW-BLB-16-16GT Article No. 編號: 2908090000

Serial No.:

AX8I18 PN//800001

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 11.5 W

Relay Output: 24 VDC, 1A, resistive HW Rev.: 1.0

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ec n C IIC T4 Gc CE x UL 2 4.000 2 X 2.24 ATEX 31 49 X 2.4 UKE X29 73 X Weidmüller 😤

Type: Ethernet Switch 網路交換機 Name 型號: IE-SW-BLB-16-16GT-C Article No. 編號: 2908120000

Serial No.:

AX8I18PN4800001

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 11.5 W Relay Output: 24 VDC, 1A, resistive

CE

HW Rev.: 1.0



EX ec n C IIC T4 Gc IECE x UL 2 4.000 2X UL 24 ATEX 31 49X UL2 4UKE X29 73X -40°C 5 Ta 5 +75°C Weidmüller 🏖

Type: Ethernet Switch 經路交換機 Name 型號: IE-SW-BLB-16-14GT-2GESFP Article No. 編號: 2908130000

Serial No.:

AX8I18PN4800001

Power Input 輸入: 12-48 VDC / 24 VAC, 50/60Hz Max. 13 W Relay Output: 24 VDC, 1A, resistive

HW Rev.: 1.0

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