

UL Type Examination Certificate

ATEX Directive 2014/34/EU



Certificate

UL 24 ATEX 3149X
Rev. 3

Issue date
2024-03-06

Re-issued
2026-02-12

This is to acknowledge that

Weidmüller Interface GmbH & Co. KG
Klingenbergstrasse 26, 32758 Detmold Germany

has had

Industrial Ethernet Switch

Model Series IE-SW-BLB

evaluated and meets the requirements of the standards

EN IEC 60079-0:2018
EN IEC 60079-0:2018/A11:2024
EN 60079-7:2015
EN IEC 60079-7:2015/A1:2018
EN 60079-7:2015/A11:2024
EN IEC 60079-15:2019

Test Report No. **US/UL/ExTR24.0002/03**

Certification Manager
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This is to certify that the sample(s) of the product described herein ("Certified Product") has been investigated and found in compliance with the above mentioned harmonized Standard(s) per Article 12 of Directive 2014/34/EU of the European Parliament and of the Council relating to equipment and protective systems for use in potentially explosive atmospheres indicated on this Certificate, in accordance with the UL Type Examination Certificate Scheme Requirements.

The responsibilities of manufacturers, their authorized representatives are provided in Articles 6 and 7 of the Directive 2014/34/EU. This remains the responsibility of the manufacturer and authorized representative and is not covered as part of this certificate.

This certificate and test results obtained apply only to the product sample(s) submitted by the Applicant. UL International Demko A/S (UL) did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established follow-up service for inspection or other surveillance of the product. The Certificate Holder is solely and fully responsible for conformity of all products to all applicable Standards, specifications, requirements or Directives/Regulations. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

UL TYPE EXAMINATION CERTIFICATE No. UL 24 ATEX 3149X Rev. 3
Technical Details / Schedule

Description of product

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, 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;
- IE-SW-BLB-05-1TX-4POE;
- IE-SW-BLB-05-1GT-4GTPOE;
- IE-SW-BLB-08-8POE;
- IE-SW-BLB-08-8GTPOE.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exceptions 1) and 3) to the scope of EN 60079-28:2015.

Nomenclature

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

I- Basic type designation:

IE-SW-BLB: Type designation

II- Total IO port number:

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

III- Number of LAN port.

IV. LAN port type:

Blank: No LAN port provided.

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

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

V- Number of SFP and PoE ports.

VI- SFP and PoE connector type:

Blank: No SFP and PoE connector provided.

GESFP: 100/1000Base-X SFP Connector (For Models IE-SW-BLB-18-16TX-2GESFP, IE-SW-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)

POE:10/100Base-T(X) PoE port (For Models IE-SW-BLB-05-1TX-4POE and IE-SW-BLB-08-8POE only)

GTPOE:10/100/1000Base-T(X) PoE port (For Models IE-SW-BLB-05-1GT-4GTPOE and IE-SW-BLB-08-8GTPOE only)

VII- 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.

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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.
 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.

Ex marking


 II 3 G **Ex ec IIC T4 Gc**
 II 3 G **Ex ec nC IIC T4 Gc**

Temperature range



The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature class
40°C to +75°C	T4

Trademark

The trademark  will be used as the company identifier on the marking label

Ratings

Model	Input Rating	Relay Output	Marking		
IE-SW-BLB-10-8GT-2GESFP	Dual 12-48 Vdc or 24 Vac, Max. 7.06 W	N/A	 II 3 G Ex ec IIC T4 Gc		
IE-SW-BLB-05-5GT IE-SW-BLB-05-5GT-C	Dual 12-48 Vdc or 24 Vac, Max. 2.5 W				
IE-SW-BLB-05-5TX	Dual 12-48 Vdc or 24 Vac, Max. 1.1 W				
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	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 IE-SW-BLB-08-8GT-C	Dual 12-48 Vdc, 24 Vac, Max. 4 W				
IE-SW-BLB-05-4GT-1GESFP	Dual 12-48 Vdc or 24 Vac, Max. 3 W				
IE-SW-BLB-05-1TX-4POE	Dual 12-57 Vdc, Max. 150 W				
IE-SW-BLB-05-1GT-4GTPOE	Dual 12-57 Vdc, Max. 150 W				
IE-SW-BLB-16-16TX	Dual 12-48 Vdc or 24 Vac, Max. 4.5 W			24VDC, 1A, Resistive	 II 3 G Ex ec nC IIC T4 Gc
IE-SW-BLB-18-16TX-2GESFP	Dual 12-48 Vdc or 24 Vac, Max. 8.4 W				
IE-SW-BLB-24-24TX	Dual 12-48 Vdc or 24 Vac, Max. 6 W				
IE-SW-BLB-16-16GT IE-SW-BLB-16-16GT-C,	Dual 12-48 Vdc, 24 Vac, Max. 13W				
IE-SW-BLB-16-14GT-2GESFP	Dual 12-48 Vdc, 24 Vac, Max. 11.5W				
IE-SW-BLB-08-8POE	Dual 12-57 Vdc, Max. 150 W				
IE-SW-BLB-08-8GTPOE	Dual 12-57 Vdc, Max. 152 W				

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Routine tests
N/A
Descriptive documents
The scheduled drawings are listed in the report no. provided under item "Test Report No." on page 1 of this UL Type Examination Certificate.
Specific Conditions of Use
<ul style="list-style-type: none">• The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 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 EN 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:<ul style="list-style-type: none">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 mm²). (Except for Models IE-SW-BLB-05-1TX-4POE, IE-SW-BLB-05-1GT-4GTPOE, IE-SW-BLB-08-8POE and IE-SW-BLB-08-8GTPOE)• The input terminal block shall be used with conductors of 12-20AWG wire size (ISO Metric size 4-0.5 mm²). (For Models IE-SW-BLB-05-1TX-4POE, IE-SW-BLB-05-1GT-4GTPOE, IE-SW-BLB-08-8POE and IE-SW-BLB-08-8GTPOE only)
Essential Health and Safety Requirements
The Essential Health and Safety Requirements (EHSRs) covered by the standards listed on page 1.
Additional Information
N/A