

de Sicherheitshinweise	
GEFAHR	
	Zur sicheren Installation und zum sicheren Betrieb des Gerätes ist Folgendes zu beachten: ► Das Gerät darf nur von qualifiziertem Fachpersonal montiert werden, das mit nationalen und internationalen Gesetzen, Direktiven und Standards für Ex-Bereiche vertraut ist. ► Um eine Zündung in einer potenziell explosionsgefährdeten Atmosphäre zu vermeiden, muss vor Installation und Wartungsarbeiten die Spannung abgeschaltet werden. Es dürfen keine unter Spannung stehenden Leitungen, Verbindungen oder Stecker getrennt oder angeschlossen werden, wenn eine explosionsfähige Atmosphäre vorhanden ist. ► Zur Installation in Zone 2 oder Class I Division 2 sind grundsätzlich die Bedingungen und Vorschriften für den Ex-Bereich einzuhalten. ► Vor dem Abschluss des festen Einbaus darf am Gerät keine gefährliche Spannung angelegt werden. ► Das Gerät darf nur in einer Umgebung betrieben werden, die nicht mehr als Verschmutzungsgrad 2 gemäß IEC/EN 60664-1 aufweist. ► Gemäß IEC/EN IEC 60079-0 muss das Gerät in einem ATEX/IECEx-zertifizierten IP54-Gehäuse montiert werden, das nur mit einem Werkzeug zu öffnen ist. ► Das Geräte muss in vertikaler Ausrichtung auf einer DIN-Tragschiene montiert werden. ► Bei Installationen in Zone 2 Umgebungen muss sichergestellt sein, dass die Versorgungsanschlüsse gegen transiente Störungen über 140 % der Nennspannung geschützt sind. ► Wenn optische SFP-Kommunikationsmodule verwendet werden, müssen diese auf die Laserklasse 1 beschränkt sein. ► Bei Anwendungen, in denen gefährliche Spannungen an den Ein-/Ausgängen des Gerätes angeschlossen sind, ist auf genügend Abstand bzw. Isolation von Leitungen, Anschlussklemmen und Gehäusen zur Umgebung (inkl. Nebengeräten) zu achten, um den Schutz vor elektrischem Schlag zu gewährleisten. ► Das Gerät muss von einer SELV-/PELV-Quelle versorgt werden, gemäß EN/IEC 60950-1, EN/IEC 61010-2-201 oder EN/IEC 62368-1 (ES1).
VORSICHT	
	► Das Gerät erwärmt sich während des Betriebs. Lassen Sie das Gerät abkühlen oder tragen Sie Schutzhandschuhe, wenn Sie Arbeiten durchführen.

en Safety notices	
DANGER	
	For safe installation and safe operation the following must be observed: ► The equipment may be installed only by qualified experts who are familiar with national and international laws, directives and standards for EX zones. ► To prevent ignition of explosive atmospheres, disconnect power before installation and service. No live cables, connections or plugs must be disconnected or connected if there is a potentially explosive atmosphere. ► For installation in Zone 2 or Class I Division 2, the conditions and regulations for the hazardous area must always be adhered to. ► Until the device is installed, do not connect hazardous voltages to the device. ► The device may only be operated in an environment with pollution degree 2 or lower acc. to IEC/EN 60664-1. ► In accordance with IEC/EN IEC 60079-0, the equipment must be installed in an ATEX/IECEx certified IP54 housing, accessible only by use of a tool. ► The equipment shall be mounted on DIN rail in vertical position. ► In Zone 2 installations ensure the protection of supply terminals against transient voltages exceeding 140 % of the rated supply voltage. ► When using optical SFP communications modules, these must be limited to Laser Class 1 only. ► In applications where hazardous voltage is connected to in-/outputs of the device, sufficient spacing or isolation from wires, terminals and enclosure to surroundings (incl. neighbouring devices), must be ensured to maintain protection against electric shock. ► Power to this equipment must be supplied from a source compliant with the following: SELV/PELV source approved to EN/IEC60950-1, EN/IEC61010-2-201 or EN/IEC62368-1 (ES1)
CAUTION	
	► The device heats up during operation. Allow the unit to cool down or use protection gloves when carrying out any work.

fr Consignes de sécurité	
DANGER	
	Afin que l'installation et le fonctionnement de l'appareil soient sécurisés, tenir compte de ce qui suit : ► L'appareil doit être monté exclusivement par un personnel qualifié connaissant la législation, les directives et les normes nationales et internationales en vigueur pour les zones Ex. ► Afin d'éviter tout allumage dans une atmosphère potentiellement explosive, la tension doit être couplée avant installation et travaux d'entretien. Il est interdit de séparer ou de raccorder des lignes, connexions ou connecteur sous tension lorsque l'on est en présence d'une atmosphère explosive. ► Pour toute installation en zone 2 ou Classe I Division 2, les conditions et prescriptions applicables en zone Ex doivent impérativement être respectées. ► Avant de terminer le montage fixe, n'appliquer aucune tension dangereuse sur l'appareil. ► L'appareil ne doit fonctionner que dans un environnement présentant un degré de pollution de niveau 2 au maximum selon IEC/EN 60664-1. ► Selon IEC/EN IEC 60079-0, l'appareil doit être monté dans un boîtier certifié ATEX/IECEx IP54, ouvrable uniquement avec un outil. ► L'appareil doit être monté en position verticale sur un rail support DIN. ► Dans les installations en environnement de zone 2, il faut s'assurer que les connexions d'alimentation sont protégées contre les perturbations transitoires de plus de 140 % de la tension d'alimentation nominale. ► Si des modules de communication SFP optiques sont utilisés, ils doivent être limités à la catégorie laser 1. ► Dans les applications pour lesquelles des tensions dangereuses sont appliquées aux entrées/sorties de l'appareil, il faut veiller à garder une distance ou une isolation suffisante entre les câbles, bornes de connexion et boîtier par rapport à l'environnement (appareils voisins compris) afin de garantir la protection contre les chocs électriques. ► L'appareil doit être alimenté par une source SELV/PELV, selon EN/IEC 60950-1, EN/IEC 61010-2-201 ou EN/IEC 62368-1 (ES1).
ATTENTION	
	► L'appareil chauffe pendant le fonctionnement. Laissez l'appareil refroidir ou portez des gants de protection lorsque vous réalisez des travaux.

it Indicazioni di sicurezza	
PERICOLO	
	Per un'installazione e un esercizio sicuri dell'apparecchio occorre attenersi a quanto segue: ► Il dispositivo può essere montato solo da personale tecnico qualificato a conoscenza delle leggi, delle direttive e degli standard nazionali e internazionali per le zone Ex. ► Per evitare l'accensione in atmosfere potenzialmente pericolose, è necessario togliere la tensione prima dell'installazione e dei lavori di manutenzione. Non scollegare o allacciare cavi, collegamenti o connettori sotto tensione in presenza di un'atmosfera potenzialmente esplosiva. ► Per l'installazione in Zona 2 o Class I Division 2 occorre sempre rispettare le condizioni e le normative per gli ambienti a rischio di esplosione. ► Non dare tensione elettrica pericolosa all'apparecchio prima della conclusione dell'installazione fissa. ► Il dispositivo può essere utilizzato solo in un ambiente che non supera una gravità di inquinamento 2 secondo la norma IEC/EN 60664-1. ► Secondo la norma IEC/EN IEC 60079-0 il dispositivo deve essere montato in un alloggiamento IP54 certificato secondo ATEX/IECEx che può essere aperto solo con un utensile. ► Il dispositivo deve essere montato in posizione verticale su una guida di montaggio DIN. ► Per le installazioni in Zona 2 ambienti occorre assicurarsi che gli attacchi per l'alimentazione siano protetti da disturbi transienti oltre il 140 % della tensione di alimentazione nominale. ► Se vengono utilizzati moduli di comunicazione ottici SFP, questi devono essere limitati alla classe laser 1. ► Per le applicazioni in cui vengono collegate tensioni pericolose agli ingressi/alle uscite dell'apparecchio, occorre mantenere una distanza di assicurare un isolamento sufficienti in relazione ai cavi, ai morsetti di collegamento e alle custodie rispetto all'ambiente circostante (compresi gli apparecchi accessori), al fine di garantire la protezione dalle scosse elettriche. ► Il dispositivo deve essere alimentato da una sorgente SELV/PELV, secondo EN/IEC 60950-1, EN/IEC 61010-2-201 o EN/IEC 62368-1 (ES1).
ATTENZIONE	
	► Il dispositivo si surriscalda durante il funzionamento. Lasciare raffreddare il dispositivo oppure indossare guanti protettivi durante l'esecuzione dei lavori.

es Indicaciones de seguridad	
PELIGRO	
	Para una instalación y funcionamiento seguros del equipo debe tener presente lo siguiente: ► El dispositivo debe ser instalado exclusivamente por personal cualificado, familiarizado con las leyes, directivas y normas nacionales e internacionales para zonas con peligro de explosión. ► Para evitar la ignición en atmósferas potencialmente explosivas debe cortarse la alimentación antes de llevar a cabo la instalación o el mantenimiento. No deben desconectarse ni conectarse cables, conexiones o conectores eléctricos si existe una atmósfera explosiva. ► Para la instalación en zona 2 o Clase I División 2 deben cumplirse como norma general las condiciones y normativa para atmósferas explosivas. ► Antes de finalizar el montaje fijo, el aparato no debe exponerse a tensiones peligrosas. ► El dispositivo debe utilizarse únicamente en un ambiente que no supere el grado de polución 2 según la norma IEC/EN 60664-1. ► De acuerdo con la norma IEC/EN IEC 60079-0, el dispositivo debe instalarse en una caja IP54 con certificación ATEX/IECEx que sólo pueda abrirse con una herramienta. ► El dispositivo debe montarse en posición vertical sobre un carril DIN. ► En instalaciones en zona 2 debe asegurarse de que las conexiones de alimentación estén protegidas frente a perturbaciones transitorias de más del 140 % de la tensión de alimentación nominal. ► Si se utilizan módulos ópticos de comunicación SFP, deben limitarse a la clase láser 1. ► En aplicaciones en las que hay tensiones peligrosas conectadas a las entradas/salidas del aparato, debe procurar una distancia o aislamiento suficiente entre cables, bornes de conexión y carcاسas y el entorno (incluidos aparatos secundarios) para asegurar la protección frente a posibles electrocuciones. ► El dispositivo debe alimentarse a través de una fuente SELV/PELV conforme a las normas EN/IEC 60950-1, EN/IEC 61010-2-201 o EN/IEC 62368-1 (ES1).
ATENCIÓN	
	► El dispositivo se calienta durante su funcionamiento. Deje que el dispositivo se enfríe o utilice guantes protectores cuando realice trabajos.

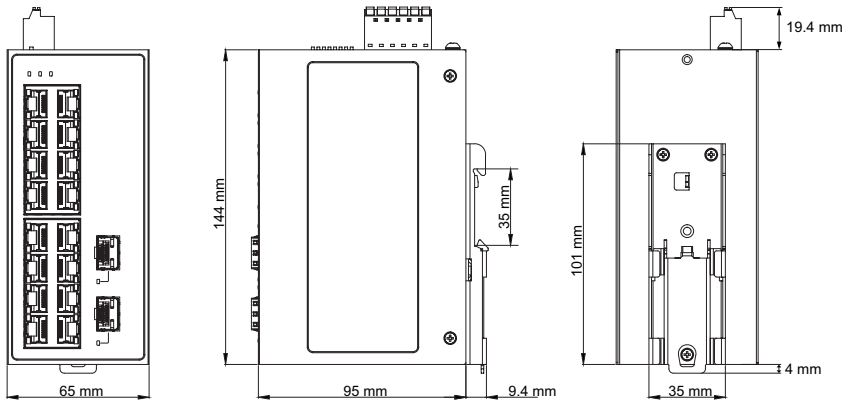
zh 安全规程	
危险	
	为保证安装和操作安全, 请务必遵守下列规程: ► 只允许有资质的专业人员安装设备, 该专业人员熟悉防爆区域国家和国际法律、指令和标准。 ► 为防止在有爆炸危险的环境中引燃, 在进行安装和维护操作前必须断开电源。如果存在潜在爆炸性环境, 则不得断开或连接带电的电缆、接线点或插头。 ► 在 2 区 或 I 类 2 区安装时, 必须遵守工业危险区分类的条件和规定。 ► 在装置安装妥当前, 切勿将危险电压接通至装置。 ► 只允许在依据 IEC/EN 60664-1 有不超过 2 级污染等级的环境中运行设备。 ► 依据 IEC/EN IEC 60079-0, 设备必须安装在经过 ATEX/IECEx 认证的 IP54 外壳中, 只能使用工具打开外壳。 ► 必须在垂直方向中将设备安装到 DIN 支承轨上。 ► 在区域 2 类安装中, 安装人员必须确保对电源端子进行保护, 以防瞬态电压超过额定供电电压的 140 %。 ► 如果使用光学 SFP 通信模块, 必须将其限定为 1 级激光。 ► 在应用中, 装置的输入/输出如果要接入危险电压, 必须保证导线、端子和外壳与四周 (包括相邻的装置) 之间有充分的空间间隔或隔离, 以确保防触电保护有效。 ► 必须由 SELV/PELV 电源为设备供电, 依据 EN/IEC 60950-1、EN/IEC 61010-2-201 或 EN/IEC 62368-1 (ES1)。
注意	
	► 设备在运行期间会升温, 使设备冷却, 或者在执行作业时佩戴防护手套。 ► [甲類警語] 警告: 為避免電磁干擾, 本產品不應安裝或使用於住宅環境。

Weidmüller 	
Weidmüller Interface GmbH & Co. KG Klingenbergstraße 26 32758 Detmold, Germany T +49 5231 14-0 F +49 5231 14-292083 www.weidmueller.com	
2978420000/01/06.2024	
	
IE-SW-BLB-16-16TX	2908050000
IE-SW-BLB-24-24TX	2908060000
IE-SW-BLB-18-16TX-2GESFP	2908170000
Zulassungen / Approvals / Agréments / Omologazioni / Homologaciones / 认证	
ATEX UKEX	Kennzeichnung / Markings / Marquage / Marcatura / Identificación / 标记 Ⓢ II 3G Ex ec nC IIC T4 Gc Normen / Standards / Normes / Norme / Normas / 适用标准 EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN IEC 60079-15:2019 Zertifikat / Certificate / Certificat / Certificato / Certificado / 认证 UL 24 ATEX 3149 X UL24UKEX2873X
IECEx	Kennzeichnung / Markings / Marquage / Marcatura / Identificación / 标记 Ex ec nC IIC T4 Gc Normen / Standards / Normes / Norme / Normas / 适用标准 IEC 60079-0, Edition 7.0 IEC 60079-7, Edition 5.1 IEC 60079-15:2019, Edition 5.0 Zertifikat / Certificate / Certificat / Certificato / Certificado / 认证 IECEx UL 24.0002X
c UL us	Normen / Standards / Normes / Norme / Normas / 适用标准 UL 61010-1 UL 61010-2-201 (NRAQ) CSA C22.2 NO. 61010-2-201 (NRAQ7) UL 12.12.01 (NRAQ) CSA C22.2 No. 213-M1987 (NRAQ7) Datei / File / Fichier / File / Archivo / 文件: E141197 (Ord Loc.) E223527 (Haz. Loc.)
CCC	Kennzeichnung / Markings / Marquage / Marcatura / Identificación / 标记: Ex ec nC IIC T4 Gc Standards / Normen / Normes / Norme / Normas / 适用标准: GB/T 3836.1-2021, GB/T 3836.3-2021, GB/T 3836.8-2021

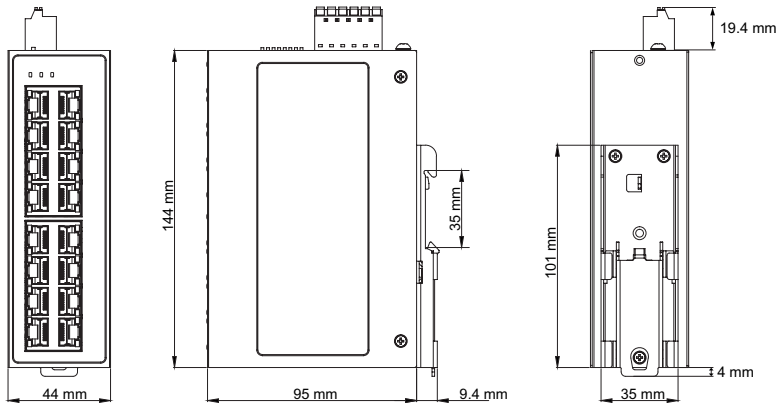
Technische Daten / Technical data

de	en	fr	it	es	zh	IE-SW-BLB-16-16TX 2908050000	IE-SW-BLB-24-24TX 2908060000	IE-SW-BLB-18-16TX-2GESFP 2908170000
Elektrische Daten	Electrical data	Caractéristiques électriques	Dati elettrici	Datos eléctricos	电气数据			
Eingangsspannung (redundante Doppelgänge)	Input voltage (redundant dual inputs)	Tension d'entrée (entrées doubles redondantes)	Tensione di ingresso (doppi ingressi ridondanti)	Tensión de entrada (entradas dobles redundantes)	输入电压 (冗余双输入端)	12 ~ 48 V DC, 24 V AC		
Betriebsspannung	Operating voltage	Tension de fonctionnement	Tensione d'esercizio	Tensión de servicio	工作电压	9 ... 60 V DC, 18 ... 30 V AC		
Max. Leistungsaufnahme	Max. power consumption	Consommation de puissance max.	Potenza assorbita massima	Consumo de potencia máx.	最大功率消耗	0.16 A @ 24 V DC = 4.5 W	0.21 A @ 24 V DC = 6 W	0.23 A @ 24 V DC = 8.4 W
Überlastschutz vorhanden	Overload current protection present	Protection contre les surcharges disponible	Protezione contro il sovraccarico presente	Protección contra sobrecarga disponible	有过载保护	✓		
Verpolungsschutz vorhanden	Reverse polarity protection present	Protection contre les inversions de polarité disponible	Protezione contro l'inversione di polarità presente	Protección contra polarización inversa disponible	有反极性保护	✓		
Max. Relaisausgangsleistung	Max. relay output power rating	Puissance max. de sortie du relais	Potenza massima di uscita del relé	Potencia máx. de salida de relé	最大继电器输出额定值	24 V DC, 1 A, resistive		
Umgebungsbedingungen	Environmental conditions	Conditions ambiantes	Condizioni ambientali	Condiciones del entorno	环境条件			
Betriebstemperatur	Operating temperature	Température de fonctionnement	Temperatura d'esercizio	Temperatura de servicio	工作温度	-40 °C ... 75 °C		
Lagertemperatur	Storage temperature	Température de stockage	Temperatura di magazzino	Temperatura de almacenamiento	存储温度	-40 °C ... 85 °C		
Feuchtigkeit	Humidity	Humidité	Umidità	Humedad	湿度	5% ... 95%, no condensation		
Max. Einsatzhöhe ohne Derating	Max. altitude without derating	Hauteur d'utilisation max. sans déclassement	Altezza di impiego massima senza derating	Altura máx. de funcionamiento sin derating	无降额的最大使用高度	2000 m		
Allgemeine Daten	General data	Données générales	Dati generali	Datos generales	常规数据			
Höhe x Breite x Tiefe	Height x Width x Depth	Hauteur x largeur x profondeur	Altezza x Larghezza x Profondità	Altura x anchura x profundidad	高度 x 宽度 x 深度	144 x 44 x 95 mm	144 x 65 x 95 mm	
Gewicht	Weight	Poids	Peso	Peso	重量	524 g	687 g	634 g
Verschmutzungsgrad	Pollution degree	Degré de pollution	Livello di inquinamento	Grado de polución	污染等级	2		
Schutzart	Protection class	Degré de protection	Classe di protezione	Tipo de protección	防护等级	IP30		
Anschlussdaten	Connection data	Données de connexion	Dati di collegamento	Datos de conexión	联接数据			
Anzahl Anschlussstecker	Number of terminal blocks	Nombre de prises de raccordement	Numero di spine di collegamento	Número de clavijas de conexión	连接插头数量	1		
Leiterquerschnitt	Wire cross-section	Diamètre du câble	Sezione del conduttore	Sección del conductor	导体横截面	0.2 ... 2.5 mm² (AWG 12 ... AWG 24)		
Abisolierlänge	Insulation stripping length	Longueur de dénudage	Lunghezza di spellatura	Longitud de desaislado	剥皮长度	10 mm		
Schnittstellen	Interfaces	Interfaces	Interfacce	Interfaces	接口	16 x RJ45 ports (10/100TX, Auto MDI/MDIX)	24 x RJ45 ports (10/100TX, Auto MDI/MDIX)	16 x RJ45 ports (10/100TX, Auto MDI/MDIX) 2 x SFP ports (100/1000Base-X, SFP sockets)
Technologie	Technology	Technologie	Tecnologia	Tecnologia	技术			
Ethernet Standard	Ethernet standards	Ethernet standard	Standard Ethernet	Estándar Ethernet	标准以太网	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3X for flow control IEEE 802.3az for energy efficient ethernet IEEE 802.1p/q for quality of service		IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3u for 100BaseFX IEEE 802.3z for 1000BaseX IEEE 802.3X for flow control IEEE 802.3az for energy efficient ethernet IEEE 802.1p/q for quality of service
MAC-Tabelle	MAC table	Tableau MAC	Tabella MAC	Tabla MAC	MAC 表	8 K		
Prioritätswarteschlangen	Priority queues	Files d'attente prioritaires	Coda di priorità	Colas de espera prioritarias	优先级队列	8		
Größe des Paketpuffers	Packet buffer size	Taille du tampon du paquet	Dimensione del buffer di pacchetto	Tamaño del búfer de paquetes	程序包缓存大小	4 MBit		
Verarbeitung	Processing	Traitement	Lavorazione	Procesamiento	处理	Store-and-Forward		
Jumbo frame	Jumbo frame	Jumbo frame	Jumbo frame	Bastidor Jumbo	巨型帧	9 KB		
Normen	Standards	Normes	Norme	Normas	标准			
EMV	EMC	CEM	EMC	EMC	电磁兼容性	Contact 6 kV, Air 8 kV acc. to EN 61000-4-2 (ESD)		
						10 V/m with 1 kHz sine-wave 80 % AM from 80 ... 1000 MHz acc. to EN 61000-4-3 (RS)		
						Power: ±4 kV at 5 kHz Signal: ±2 kV at 5 kHz acc. to EN 61000-4-4 (EFT)		
						AC/DC power lines Line/Earth: 2 kV 1.2/50 µs, Line/Line: 1 kV 1.2/50 µs Data communication Line/Earth: 2 kV 1.2/50 µs acc. to EN 61000-4-5 (Surge)		
						10 V rms with 1 kHz sine-wave 80 % AM from 150 kHz ... 80 MHz acc. to EN 61000-4-6 (CS)		
						EN 61000-4-8 (PFMF)		
Vibrationsfestigkeit	Vibration resistance	Tenue aux vibrations	Resistenza alle vibrazioni	Resistencia a las vibraciones	抗震动性	1 g acc. to IEC 60068-2-6		
Schockfestigkeit	Shock resistance	Résistance aux chocs	Resistenza agli urti	Resistencia a choques	抗冲击性	15 g acc. to IEC 60068-2-27		
Freier Fall	Free fall	Chute libre	Caduta libera	Caída libre	自由落体	IEC 60068-2-31		
MTBF	MTBF	MTBF	MTBF	MTBF	MTBF (平均故障间隔时间)			
Zeit	Time	Durée	Tempo	Tiempo	时间	841302 hrs	581976 hrs	759792 hrs
Datenbank	Database	Base de données	Banca dati	Base de datos	数据库	Telcordia SR332		

Abmessungen / Dimensions



IE-SW-BLB-18-16TX-2GESFP
IE-SW-BLB-24-24TX



IE-SW-BLB-16-16TX

A Montage und Demontage / Mounting and demounting

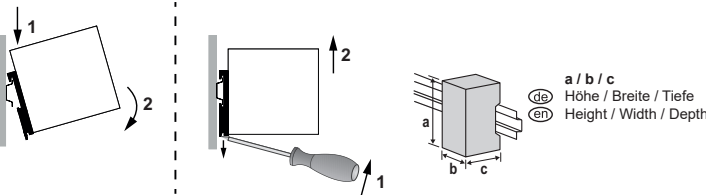
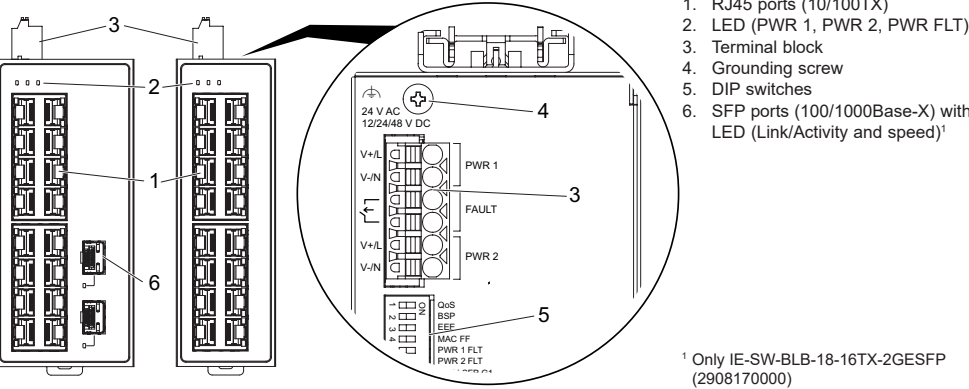


Abb. / Fig. A1

Abb. / Fig. A2

B Anschlüsse / Connections



1. RJ45 ports (10/100TX)
2. LED (PWR 1, PWR 2, PWR FLT)
3. Terminal block
4. Grounding screw
5. DIP switches
6. SFP ports (100/1000Base-X) with LED (Link/Activity and speed)¹

¹ Only IE-SW-BLB-18-16TX-2GESFP (2908170000)

C DIP-Schalter / DIP switches

1

2

3

4

5

6

7

8

NO

QoS

BSP

EEE

MAC FF

PWR 1 FLT

PWR 2 FLT

100M SFP G1

100M SFP G2

OFF

ON

No.	Function	Default	Setting																									
1	Quality of service (QoS)	on	on: Enables QoS																									
			<table> <tr> <td>DSCP/TOS</td> <td>27, 31, others</td> <td>43, 47</td> <td>55</td> <td>59</td> </tr> <tr> <td>COS (802.1P)</td> <td>0.1.2.3.4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>Priority</td> <td>lowest</td> <td>third highest</td> <td>second highest</td> <td>highest</td> </tr> <tr> <td>WRR</td> <td>1</td> <td>2</td> <td>4</td> <td>8</td> </tr> <tr> <td>Queues</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> </tr> </table>	DSCP/TOS	27, 31, others	43, 47	55	59	COS (802.1P)	0.1.2.3.4	5	6	7	Priority	lowest	third highest	second highest	highest	WRR	1	2	4	8	Queues	0	1	2	3
			DSCP/TOS	27, 31, others	43, 47	55	59																					
			COS (802.1P)	0.1.2.3.4	5	6	7																					
			Priority	lowest	third highest	second highest	highest																					
			WRR	1	2	4	8																					
Queues	0	1	2	3																								
off: Disables QoS																												
2	Broadcast storm protection (BSP)	off	on: Enables BSP for each Ethernet port. Only a maximum of 2000 broadcast packets per second is allowed.																									
			off: Disables BSP for each Ethernet port																									
3	Energy-Efficient Ethernet (EEE)	off	on: Enables EEE off: Disables EEE																									
4	MAC frame filtering (MAC FF)	off	on: Enables MAC FF to drop range of 01-80-C2-00-00-02 to 01-80-C2-00-00-0F off: Disables MAC FF																									
5	PWR 1 Fault	off	on: Enables LED and relay indication for missing voltage supply for PWR 1 off: Disables LED and relay indication for missing voltage supply for PWR 1																									
6	PWR 2 Fault	off	on: Enables LED and relay indication for missing voltage supply for PWR 2 off: Disables LED and relay indication for missing voltage supply for PWR 2																									
7	SFP G1 Speed ²	off	on: Force SFP port G1 speed at 100 Mbps off: Force SFP port G1 speed at 1000 Mbps A change of this setting will only get active after rebooting the device.																									
8	SFP G2 Speed ²	off	on: Force SFP port G2 speed at 100 Mbps off: Force SFP port G2 speed at 1000 Mbps A change of this setting will only get active after rebooting the device.																									
² Only IE-SW-BLB-18-16TX-2GESFP (2908170000)																												

D LED Anzeige / LED indicator

PWR 1	green	PWR 1 supply voltage OK
PWR 2	green	PWR 2 supply voltage OK
PWR FLT	amber	Supply voltage not OK
10/100TX Port	Upper LED	
	green	10/100 Mbps link active
	off	10/100 Mbps link inactive
	Lower LED	
	yellow	Data transmission at 100 Mbps
100/1000Base-X SFP Port ³	off	Data transmission at 10 Mbps
	Dual color LED	
	green	Data transmission at 1000 Mbps
	yellow	Data transmission at 100 Mbps
	blinking	100/1000 Mbps link active
	off	100/1000 Mbps link inactive

³ Only IE-SW-BLB-18-16TX-2GESFP (2908170000)

E Relaisverhalten / Relay behaviour

Relay contacts	Power source		DIP switches		LED status
	Power 1	Power 2	PWR1 FLT	PWR2 FLT	Fault LED
open	off	off	–	–	off
	off	on	on	–	on
	on	off	–	on	on
closed	on	on	–	–	off
	on	off	–	off	
	off	on	off	–	

–: Setting is irrelevant.

Relay contact is normally closed (N.C.).

F Pinbelegung / Pinouts

10/100Base TX RJ45 Pinouts

MDI Port Pinouts		MDI-X Port Pinouts		8-pin RJ45
Pin	Signal	Pin	Signal	
1	Tx+	1	Rx+	
2	Tx-	2	Rx-	
3	Rx+	3	Tx+	
6	Rx-	6	Tx-	

en

Intended use

The devices are intended for setting up communication networks within an industrial environment, they are intended to be used in a restricted access location. The devices may only be used within the scope of the specified technical data. Observing the documentation is part of the intended use.

The devices are equipped with RJ45 Fast Ethernet ports (10/100TX). The model IE-SW-BLB-18-16TX-2GESFP (2908170000) is additionally equipped with 2 Gigabit Ethernet SFP ports (100/1000Base-X). The DIP switches can be used to configure the following features: Quality of service (QoS), Broadcast storm protection (BSP), Energy-Efficient Ethernet (EEE), MAC frame filtering (MACFF), power fault and SFP speed (only with model IE-SW-BLB-18-16TX-2GESFP).

For maritime applications applies: The switch is a device with IP30 protection. Depending on the installation site, additional protection against salt spray must be ensured through installation in a suitable enclosure (e.g. control cabinet, control box, console or similar). The device may only operate on DC grids.



Assembly and installation may only be carried out by an electrician.

Scope of delivery

- Ethernet switch
- Installation instructions
- Terminal block (1013470000)
- Protective caps for unused SFP ports

Mounting the device

WARNING



Dangerous contact voltage!

- Carry out mounting and wiring work only when the power supply is disconnected.
- Make sure that the place of installation (switch cabinet etc.) has been disconnected from the power supply.

NOTICE

Material damage!

- To prevent the switch from overheating, observe the following minimum clearances:
 - Top and bottom: 51 mm (2.0 ")
 - Sides: 51 mm (2.0 ")
 - Front: 64 mm (2.50 ")

- Clip the device on to a 35 mm DIN mounting rail, e.g. Weidmüller TS 35x7.5 (see Fig. A1).

- Alternatively, you can screw the device directly to a wall or mounting plate. To do this, you will need the wall mount kit, see accessories in the online catalogue.

Installing the device

NOTICE

Material damage!

- The supply voltage may not be greater than the voltage indicated on the product label.
- Check the voltage of your power source to make sure you are using the correct voltage.

Wiring the device

When wiring the device observe the following aspects:

- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross, make sure the wires are perpendicular at the intersection point.
- Do not run signal or communications wiring and power wiring in the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.
- You can use the type of signal transmitted through a wire to determine which wires should be kept separate. Wiring with similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separated.



It is strongly advised to label the wiring for all devices in the system.

Grounding the device

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.



This product must be mounted to a well-grounded mounting surface, such as a metal panel. Use at least cable type 1 mm² (AWG 18) for grounding the product.

Wiring the redundant power inputs

The two power inputs can be connected to different power sources. If one power source fails, the second one acts as a back up and enables the continuous supply of the device. The terminal block connector on top of the device is used for the two inputs, see Fig. B.

NOTICE

Material damage!

Before connecting the Ethernet Switch to the power inputs, make sure the power source voltage is stable.

- Use a copper conductor with the cable type 0.2 to 2.5 mm² (AWG 12 to 24) and the corresponding pin type cable terminals.

The wire must be able to withstand at least 105 °C (221 °F). There should only be one individual conductor in a clamping point.

Additional IECEx installation instructions

- The stripped conductor length of the power cable shall be 3 – 5 mm.
- The input terminal block should be used with conductors of 0.2 – 4 mm² (12 – 24 AWG) wire size.

- Insert the negative/positive AC/DC wires into the V-/V+ terminals.

- Insert the plastic terminal block connector prongs into the terminal block receptor, which is located on top of the device.

DIP switches

For the DIP switch settings, see Fig. C.

LED indicators

LEDs indicating the status of power supply and the Ethernet connection are placed on the front of the device, see Fig. B. The LED behaviour is described in Fig. D. The power fault indication depends on the DIP switch settings.

Relay behaviour

The state of the power fault relay is indicated by a power fault LED. The relay behaviour is described in Fig. E.

Pinouts

For pinouts for MDI (NIC-type) ports and MDIX (HUB/Switch-type) ports, see Fig. F.

Disassembly

- Remove all cables and lines.
- Remove the device from the DIN rail, see Fig. A2.

Disposal



Observe the notes for proper disposal of the product. You can find the notes here: www.weidmueller.com/disposal.

