



## INSTALLATION INSTRUCTIONS

### BLITZDUCTOR® XT

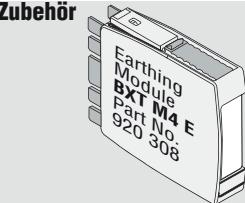
Publication No. 1537 / UPDATE 05.11 Id. No. 051318



#### Accessories / Zubehör

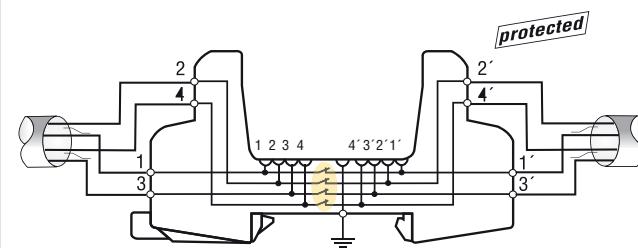
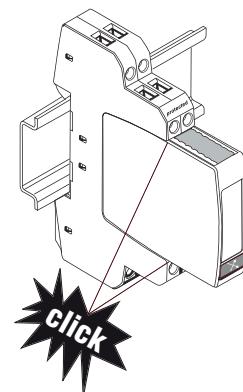
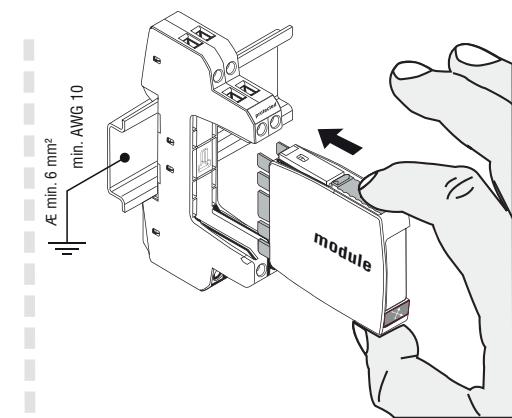
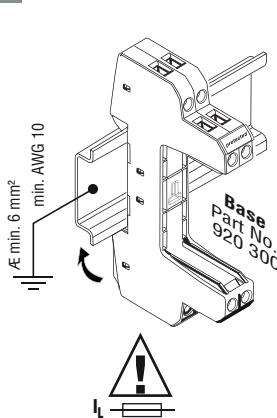
#### Installation / Montage

#### Basic circuit diagram / Prinzipschaltbild



**Labelling System  
BS 1 50 BXT**  
Part No. 920 399

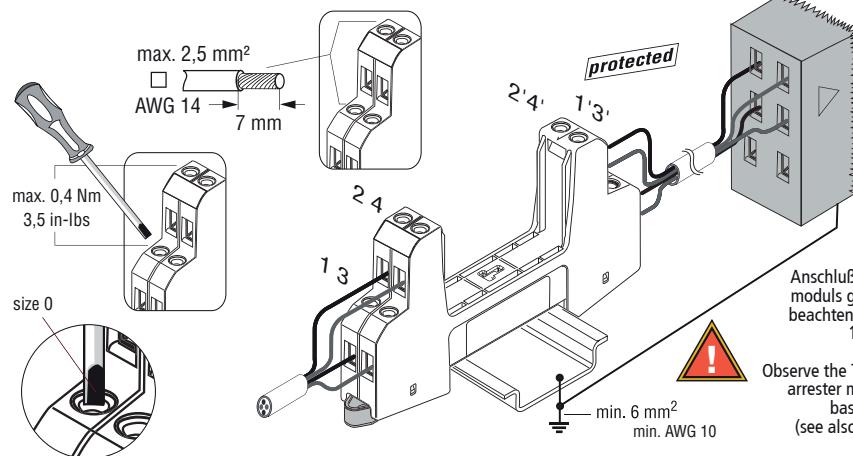
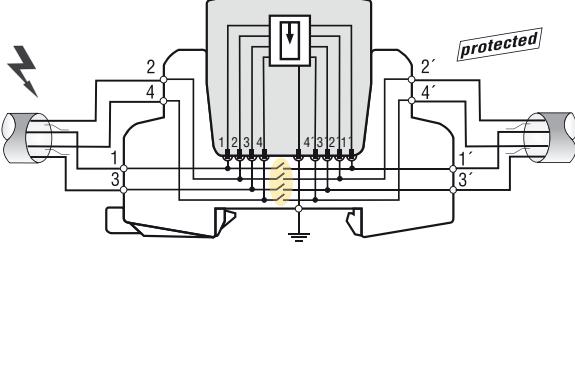
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31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
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41	42	43	44	45	46	47	48	49	50



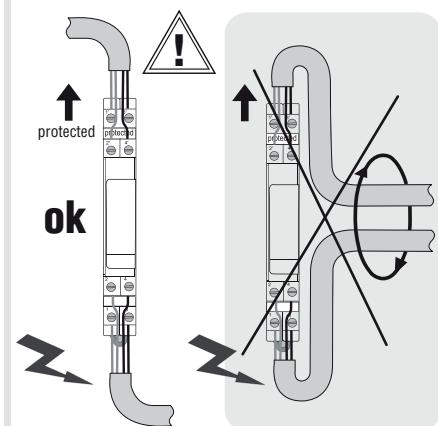
#### Basic circuit diagram / Prinzipschaltbild

#### Connection / Anschluss

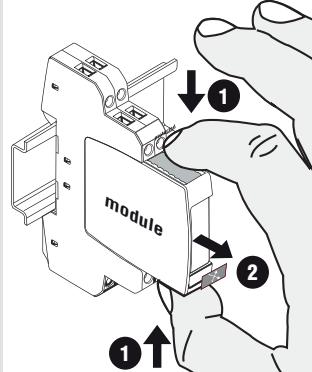
#### Cable routing / Leitungsführung



Hinweis:  
Anschlußbelegung des Ableitermoduls gemäß Prinzipschaltbild beachten (siehe auch Publication 1568 und 1764)  
Note:  
Observe the Terminal assignment of the arrester module according to the basic circuit diagram (see also Publication 1568 and 1764)



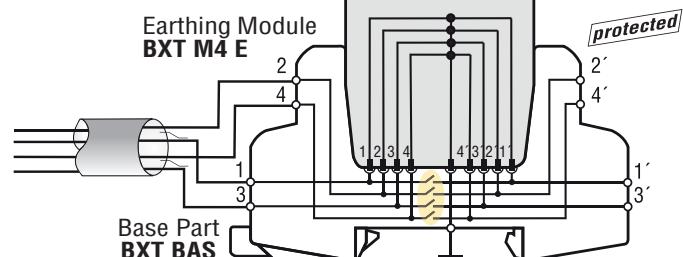
#### Removing the module / Entfernen des Moduls



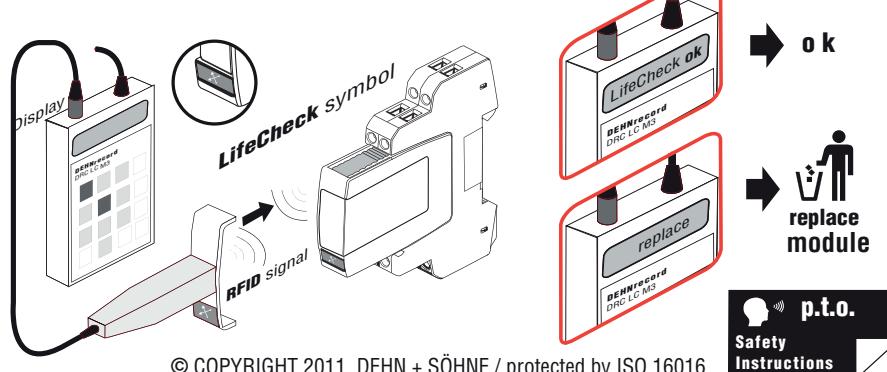
#### Earthing module / Erdungsmodul

Der Einsatz des Erdungsmoduls (Erden von nicht benutzten Adern) darf nur im spannungsfreien Zustand des Basisteils BXT BAS erfolgen.

The earthing module (earthing of unused lines) may only be inserted into an isolated BXT BAS base part.



#### LifeCheck



**Instruções de segurança****PT**

A ligação e a montagem do aparelho apenas devem ser efectuadas por electricistas. Cumprir as normas nacionais e as disposições de segurança. Antes da montagem, controlar se o aparelho apresenta danos exteriores. Não se pode proceder à montagem do aparelho, se for detectado um dano ou qualquer outro defeito. A utilização do aparelho só é permitida no âmbito das condições referidas e indicadas no presente manual de montagem. No caso de cargas superiores aos valores indicados, podem ser causados danos no aparelho, assim como nos meios de produção eléctricos ligados a este. As intervenções e as alterações no aparelho causam a perda do direito à garantia.

**Informazioni di sicurezza****IT**

L'allacciamento ed il montaggio dell'apparecchiatura possono essere effettuati solo da personale qualificato. Sono da osservare le prescrizioni e le disposizioni di sicurezza nazionali. Prima del montaggio, controllare che l'apparecchiatura non presenti danneggiamenti all'esterno. Nel caso in cui dovesse essere constatato un danneggiamento o un altro difetto, non montare l'apparecchiatura. L'impiego dell'apparecchiatura è consentito esclusivamente in presenza delle condizioni menzionate ed indicate in queste istruzioni sul montaggio. In caso di carico superiore ai valori dimostrati, l'apparecchiatura e l'impianto elettrico collegativo possono subire gravi danneggiamenti. Interventi o modifiche all'apparecchiatura comportano la perdita del diritto di garanzia.

**Indicaciones de seguridad****ES**

La conexión y el montaje del aparato sólo deben ser realizados por un electricista especializado. Deben observarse las normativas y disposiciones de seguridad nacionales. Antes de iniciar el montaje, debe comprobarse que el aparato no presente daños externos. En caso de observar daños u otros defectos, no debe efectuarse el montaje del aparato. El empleo del aparato está limitado a las condiciones indicadas y mostradas en estas instrucciones de montaje. Si las cargas superan los valores indicados, puede dañar tanto el aparato como los medios de producción eléctricos conectados al mismo. La manipulación interior o la modificación del aparato invalidan el derecho de garantía.

**DEHN + SÖHNE GMBH + CO. KG.**

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Germany  
Tel: +49 91 81 906-0  
Fax: +49 91 81 906-333

**Veiligheidsvoorschriften****NL**

Aansluiting en montage van het apparaat mogen enkel door een erkend elektricien uitgevoerd worden. De nationale voorschriften en veiligheidsbepalingen dienen opgevolgd te worden. Voor de montage dient het apparaat op uitwendige schade naagekeken te worden. Indien schade of een andere fout vastgesteld wordt, mag het apparaat niet gemonteerd worden. Het gebruik van het apparaat is alleen toegelaten binnen het kader van de in deze montagehandleiding opgenoemde en getoonde omstandigheden. Bij belastingen die hoger liggen dan de getoonde waarden, kunnen zowel het apparaat als de aangesloten elektrische werktuigen beschadigd worden. Verkeerd gebruik en veranderingen aan het apparaat leiden tot het verlies van het recht op waarborg.

**Sikkerhedshenvisninger****DK**

Tilslutning og montering af aflederen må kun udføres af en fagkyndig. Forskrifter og sikkerhedsbestemmelser skal overholdes. For monteringen kontrolleres aflederen for udvendige skader. Hvis der konstateres skader eller andre mangler, må aflederen ikke monteres. Aflederen må kun monteres og anvendes i overensstemmelse med denne montage-vejledning. Ved belastninger der overskridt de anførte værdier, kan aflederen såvel som de tilsluttede installationer og apparater beskadiges. Åbning og indgreb i aflederen medfører bortfald af enhver garanti.

**Säkerhetsföreskrifter****SE**

Apparaten får endast anslutas och monteras av behörig elektriker. Nationella föreskrifter och säkerhetsbestämmelser måste beaktas. Kontrollera apparaten på yttra skador innan den monteras. Om skador eller andra brister föreligger, får apparaten inte monteras. Apparaten får endast användas under de villkor som nämnts och åskådliggörs i denna monteringsanvisning. Vid belastningar som sträcker sig utöver nämnda värden, kan apparaten samt anslutna elektriska driftenheter förstöras. Ingrep i och förändringar av apparaten leder till att alla garantianspråk bortfaller.

**Consignes de sécurité****FR**

Montage et branchement de l'appareil à faire effectuer exclusivement par un électricien qualifié. Respecter les normes et les prescriptions de sécurité en vigueur localement. Avant montage, procéder à un contrôle visuel extérieur de l'appareil. Ne pas monter celui-ci en cas de dommage manifeste ou si tout autre défaut est présent. La mise en oeuvre de l'appareil n'est autorisée que pour la destination et aux conditions présentées et explicitées dans les présentes instructions de service. Des charges non comprises dans les plages de valeurs indiquées pourront abîmer l'appareil ainsi que les matériels électriques qui lui sont raccordés. Toute revendication en garantie sera exclue dans le cas d'une intervention sur l'appareil ou d'une transformation de celui-ci.

The device may only be connected and installed by an electrically skilled person. National standards and safety regulations must be observed. The device must be checked for external damage prior to installation. If any damage or other faults are detected in this check, the device must not be installed.

Its use is only permitted within the limits shown and stated in these installation instructions. The device and the equipment connected to it can be destroyed by loads exceeding the values stated.

Opening or otherwise tampering with the device invalidates the warranty. The earthing module (earthing of unused lines) may only be inserted into an isolated BXT BAS base part.

Der Anschluss und die Montage des Gerätes darf nur durch eine Elektrofachkraft erfolgen. Die nationalen Vorschriften und Sicherheitsbestimmungen sind zu beachten.

Vor der Montage ist das Gerät auf äußere Beschädigung zu kontrollieren. Sollte eine Beschädigung oder ein sonstiger Mangel festgestellt werden, darf das Gerät nicht montiert werden.

Der Einsatz des Gerätes ist nur im Rahmen der in dieser Einbaurichtung genannten und gezeigten Bedingungen zulässig. Bei Belastungen, die über den ausgewiesenen Werten liegen, können das Gerät sowie die daran angeschlossenen elektrischen Betriebsmittel zerstört werden. Eingriffe und Veränderungen am Gerät führen zum Erlöschen des Gewährleistungsanspruches.

Der Einsatz des Erdungsmoduls (Erden von nicht benutzten Adern) darf nur im spannungs-freien Zustand des Basisteils BXT BAS erfolgen.

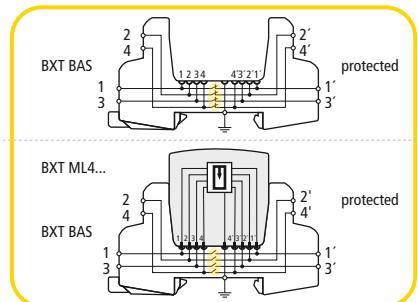
**Υποδείξεις ασφαλείας****GR**

συναρμολόγηση της συσκευής επιτρέπεται να διερχοτούν μόνο από κάποιον/κάποια ηλεκτρολόγο. Πρέπει να προηνύμεται οι εθνικές διατάξεις και οδηγίες ασφαλείας. Πριν τη συναρμολόγηση της συσκευής πρέπει να ελεχτεί για τυχόν εξωτερικές βλάβες. Δεν επιτρέπεται η συναρμολόγηση της συσκευής σε περίπτωση που εξακριβώθετε κάποια ζημιά ή άλλο ελάττωμα. Η χρήση της συσκευής επιτρέπεται μόνο στο πλαίσιο των όρων που αναφέρονται σ' αυτές τις οδηγίες συναρμολόγησης. Σε περίπτωση επιθαρύνσεων που υπερβαίνουν τις προδιαγραμμένες τιμές μπορεί να καταστραφούν η συσκευή και οι συνδεδεμένοι μ' αυτήν πόροι. Επεμβάσεις και μετατροπές στη συσκευή οδηγούν στην απώλεια των αξιώσεων που απορρέουν από την εγγύηση.

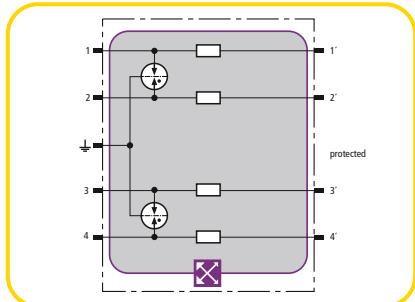
**Wzkażówki bezpieczeństwa****PL**

Do połączenia i montażu upoważnieni są wyłącznie fachowcy elektrycy. Obowiązkiem jest przestrzeganie przepisów krajowych i bezpieczeństwa pracy. Przed przystąpieniem do montażu należy urządzić skontrolowanie pod względem ewentualnych uszkodzeń zewnętrznych lub innych usterek. Eksplatacja urządzenia dozwolona jest wyłącznie z uwzględnieniem podanych w opisanych warunków zawartych w instrukcji montażu. Obciążenia przekraczające wartości podane w instrukcji mogą spowodować uszkodzenie samego urządzenia jak i podłączone układy elektryczne. Manipulacja i zmiany przeprowadzane na urządzeniu grożą wygaszeniem prawa gwarancji..

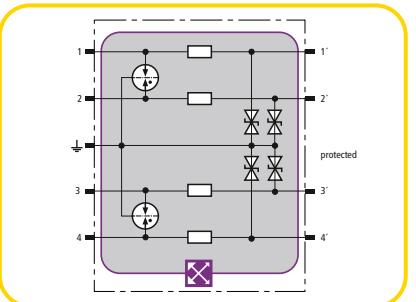
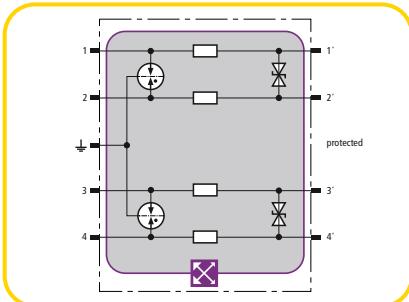
BXT BAS Part No. 920 300



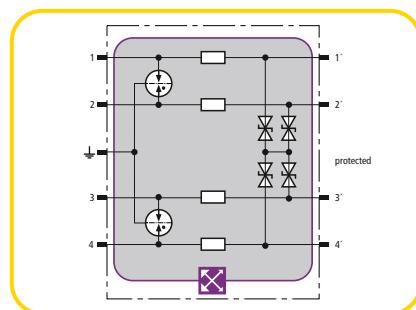
BXT ML4 B XXX Part No. 920 3XX



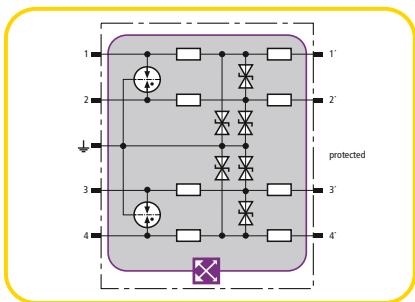
BXT ML4 BE XXX Part No. 920 3XX

BXT ML4 BD XXX  
Part No. 920 3XX

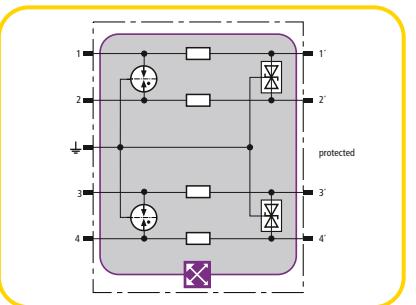
BXT ML4 BC XXX Part No. 920 3XX



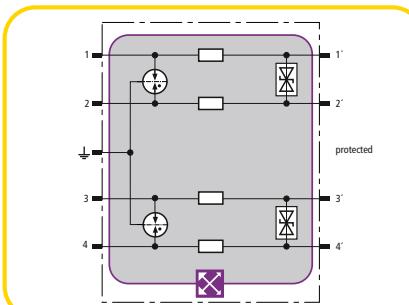
BXT ML4 BE C XXX Part No. 920 3XX



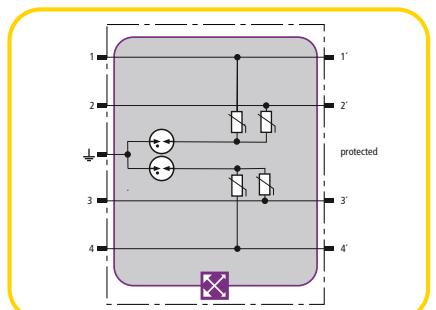
BXT ML4 BE HF XX Part No. 920 37X



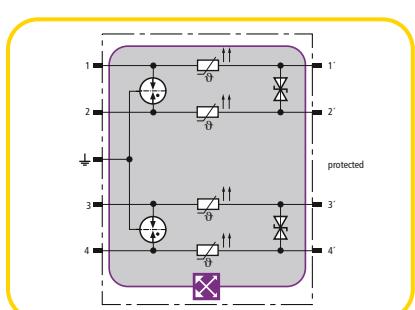
BXT ML4 BD HF XX Part No. 920 37X



BXT ML4 MY XXX Part No. 920 3XX



BXT ML4 BPD XXX Part No. 920 3XX





## UL requirements

- These modules are intended for ordinary indoor use on communication loop circuits that are isolated from the Public Switched Telephone Network.
- The protector module shall be secured to the compatible protector base before applying power to the communication loop.
- The protector base shall be secured to a compatible DIN Rail ground bar using the methods described in this instruction.
- Proper grounding continuity shall be determined.
- If a replacement module is needed, deactivate power to the communication loop and only use a Listed protector module having the same rated voltage breakdown range.
- Please install the protector modules in accordance with the applicable requirements of the National Electrical Code, Article 800 or other applicable local codes.
- Performance testing has not been conducted on the LifeCheck function by Underwriters Laboratories.
- Screw Terminal Ratings with the applicable wire gauge sizes shall be noted.
- The maximum circuit current for UL 497 B application is limited to 100 mA.

BXT Series ML4		Strike voltage 100 Volts / sec				Surge voltage 100 Volts / $\mu$ sec			
Type	Part No.	Line to Ground		Line to Line		Line to Ground		Line to Line	
BXT ML4 BE 5	920 320	min. 6,7V	max. 8,5V	min. 13,4V	max. 17V	min. 6,7V	max. 9V	min. 13,4V	max. 18V
BXT ML4 BE 12	920 322	16,5V	18,7V	33V	37,5V	16V	19V	33V	38V
BXT ML4 BE 24	920 324	35V	42V	70V	83V	35V	45V	70V	90V
BXT ML4 BE 36	920 336	50V	56V	72V	112V	50V	56V	100V	112V
BXT ML4 BE 48	920 325	59V	67V	72V	133V	59V	70V	118V	140V
BXT ML4 BE 60	920 326	72V	97V	72V	173V	72V	90V	144V	180V
BXT ML4 BE 180	920 327	182V	224V	182V	446V	182V	220V	182V	500V
BXT ML4 BD 5	920 340	70V	110V	6,7V	8,5V	70V	550V	6,7V	9V
BXT ML4 BD 12	920 342	70V	110V	16,5V	18,7V	70V	550V	16V	19V
BXT ML4 BD 24	920 344	70V	110V	35V	42V	70V	550V	35V	45V
BXT ML4 BD 48	920 345	70V	110V	59V	67V	70V	550V	59V	70V
BXT ML4 BD 60	920 346	70V	110V	72V	87V	70V	550V	72V	90V
BXT ML4 BD 180	920 347	182V	278V	182V	224V	182V	550V	182V	250V
BXT ML4 BE HF 5	920 370	7,5V	10V	7,5V	10V	7,5V	11V	7,5V	11V
BXT ML4 BD HF 5	920 371	70V	110V	7,5V	11V	70V	550V	7,5V	11V
BXT ML4 BD HF 24	920 375	70V	110V	36V	43V	70V	550V	36V	47V

## Instruction for use as surge protective device in explosive atmospheres zone 2

- when installed in potentially explosive atmospheres, the BLITZDUCTOR BXT-series shall be installed into an enclosure which meets the requirements of a recognized type of protection, in accordance with EN 60079-0
- The BLITZDUCTOR BXT-series as transient suppressor. This approval applies to the following equipment types:

Ambient temperature and temperature class:  
-40°C ....+80°C, T4

DEKRA  
11ATEX0089 X

II 3 G Ex nA IIC T4 Gc  
IECEx DEK 11.0032 X  
Ex nA IIC T4 Gc

- List of used standards:

● for ATEX: EN 60079-0: 2009,  
EN 60079-15: 2005

● for IECEx: IEC 60079-0: 2007,  
IEC 60079-15: 2005

Certificate CSA 2516389  
C US

- Class I, Division 2, Groups A,B,C,D T4
- Class I, Zone 2, AEx nA IIC T4
- Ex nA IIC T4

Base Part:  
BXT BAS

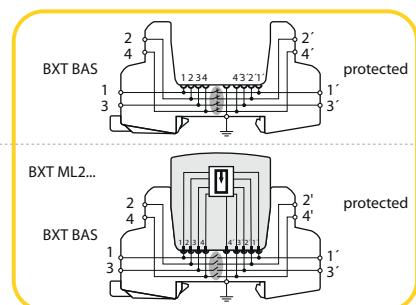
Modules:

BXT ML4 B 180  
BXT ML4 BE 5  
BXT ML4 BE 12  
BXT ML4 BE 24  
BXT ML4 BE 48  
BXT ML4 BE 60  
BXT ML4 BE 180  
BXT ML4 BE 24  
BXT ML4 BC 5  
BXT ML4 BC 24  
BXT ML4 BE C 12  
BXT ML4 BE C 24  
BXT ML4 BE HF 5

Modules:  
BXT ML4 BD 5  
BXT ML4 BD 12  
BXT ML4 BD 24  
BXT ML4 BD 48  
BXT ML4 BD 60  
BXT ML4 BD 180  
BXT ML4 BD HF 5  
BXT ML4 BD HF 24

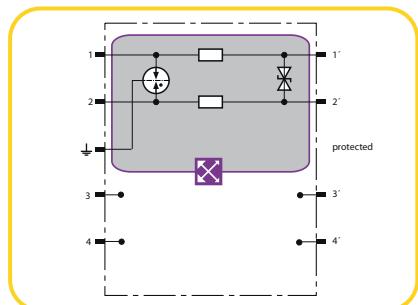
# CE INSTALLATION INSTRUCTIONS

BXT BAS Part No. 920 300



BLITZDUCTOR® XT

BXT ML2 BD XXX Part No. 920 247

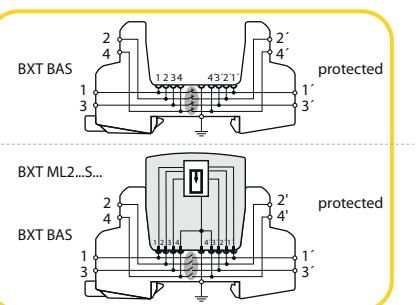


Basic circuit diagrams / Prinzipschaltbilder

Publication No. 1764 / UPDATE 08.12 064474

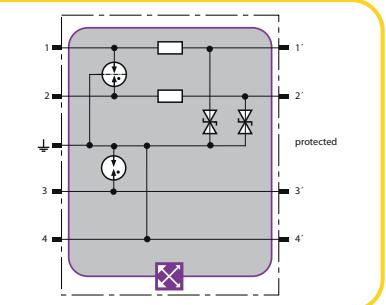
DEHN

BXT BAS Part No. 920 300



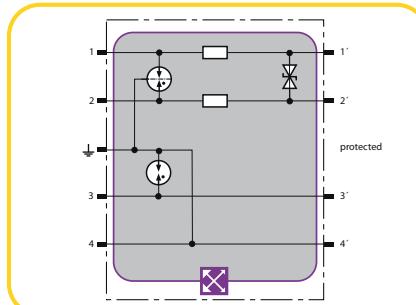
BXT ML2 BE S XX

Part No. 920 2XX



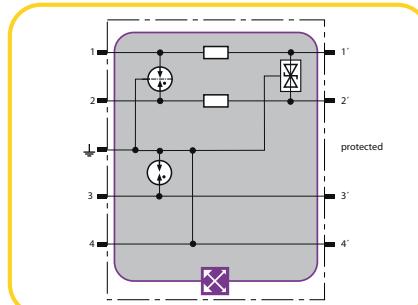
BXT ML2 BD S XX Part No. 920 2XX

BXT ML2 BD DL S 15 Part No. 920 243

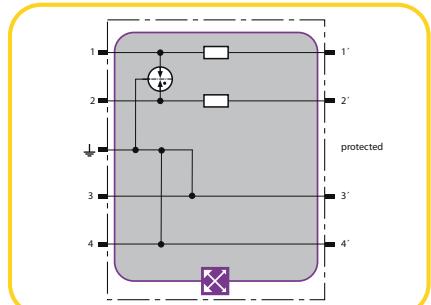


BXT ML2 BE HFS XXX Part No. 920 27X

BXT ML2 BD HFS XXX Part No. 920 27X

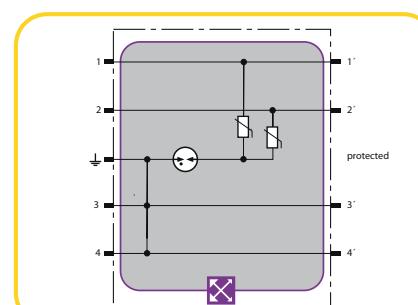
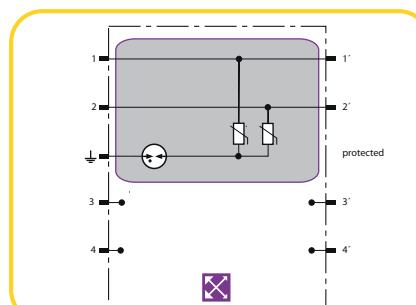


BXT ML2 B XXX Part No. 920 2XX



BXT ML2 MY 250 Part No. 920 289

BXT ML2 MY E 110 Part No. 920 28X



## UL requirements

- These modules are intended for ordinary indoor use on communication loop circuits that are isolated from the Public Switched Telephone Network.
- The protector module shall be secured to the compatible protector base before applying power to the communication loop.
- The protector base shall be secured to a compatible DIN Rail ground bar using the methods described in this instruction.
- Proper grounding continuity shall be determined.
- If a replacement module is needed, deactivate power to the communication loop and only use a Listed protector module having the same rated voltage breakdown range.
- Please install the protector modules in accordance with the applicable requirements of the National Electrical Code, Article 800 or other applicable local codes.
- Performance testing has not been conducted on the LifeCheck function by Underwriters Laboratories.
- Screw Terminal Ratings with the applicable wire gauge sizes shall be noted.
- The maximum circuit current for UL 497 B application is limited to 100 mA.

Tabulation Strike voltage in accordance with UL 497 B (Protectors for Data Communication and Fire Alarm Circuits)									
BXT Series ML2 Signal lines 1/1' and 2/2'		Strike voltage 100 Volts / sec				Surge voltage 100 Volts / $\mu$ sec			
Type	Part No.	Line to Ground		Line to Line		Line to Ground		Line to Line	
BXT ML2 BE S 36	920 226	min. 50 V	max. 56 V	min. 72 V	max. 112 V	min. 50 V	max. 56 V	min. 100 V	max. 112 V
BXT ML2 BE S 48	920 225	59 V	67 V	72 V	133 V	59 V	70 V	118 V	140 V
BXT ML2 BE HFS 5	952 270	7,5 V	10 V	7,5 V	10 V	7,5 V	11 V	7,5 V	11 V
BXT ML2 BD HFS 5	920 271	70 V	110 V	7 V	10 V	70 V	550 V	7 V	11 V
BXT Series ML2 Shielding lines 3/3'		Strike voltage 100 Volts / sec				Surge voltage 100 Volts / $\mu$ sec			
Type	Part No.	Line to Ground		Line to Ground		Line to Ground		Line to Ground	
BXT ML2 BE S 36	920 226	min. 70 V		max. 110 V		max. 70 V		max. 550 V	
BXT ML2 BE S 48	920 225	70 V		110 V		70 V		550 V	
BXT ML2 BE HFS 5	920 270	70 V		110 V		70 V		550 V	
BXT ML2 BD HFS 5	920 271	70 V		110 V		70 V		550 V	

## Instruction for use as surge protective device in explosiv atmospheres zone 2

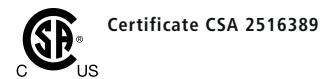
- when installed in potentially explosive atmospheres, the BLITZDUCTOR BXT-series shall be installed into an enclosure which meets the requirements of a recognized type of protection, in accordance with EN 60079-0
- The BLITZDUCTOR BXT-series as transient suppressor.  
This approval applies to the following equipment types:

Ambient temperature and temperature class:  
-40°C ....+80°C, T4

 DEKRA  
11ATEX0089 X  
II 3 G Ex nA IIC T4 Gc  
IECEx DEK 11.0032 X  
Ex nA IIC T4 Gc

### - List of used standards:

- for ATEX: EN 60079-0: 2009,  
EN 60079-15: 2005
- for IECEx: IEC 60079-0: 2007,  
IEC 60079-15: 2005



Base Part:  
BXT BAS

### Modules:

BXT ML2 B180  
BXT ML2 BD 180  
BXT ML2 BD S 5  
BXT ML2 BD S 12  
BXT ML2 BD S 24  
BXT ML2 BD S 48  
BXT ML2 BE S 5  
BXT ML2 BE S 12  
BXT ML2 BE S 24  
BXT ML2 BE S 48  
BXT ML2 BE HFS 5  
BXT ML2 BD HFS 5  
BXT ML2 BD DL S 15

- Class I, Division 2, Groups A,B,C,D T4
- Class I, Zone 2, AEx nA IIC T4
- Ex nA IIC T4