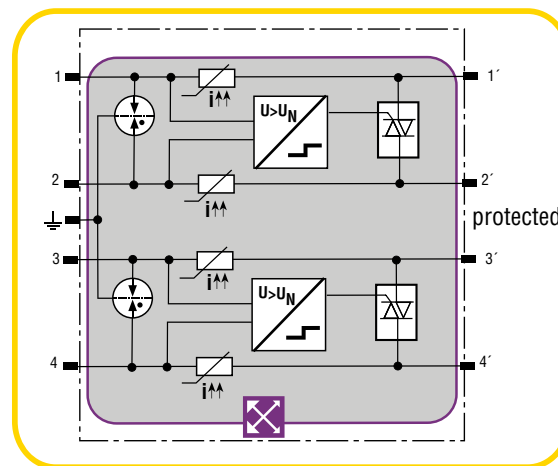
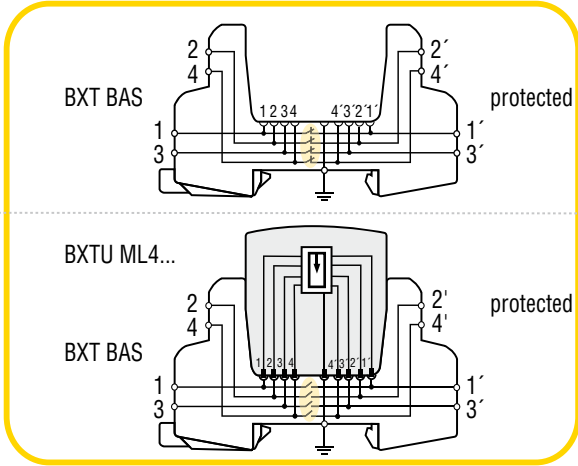




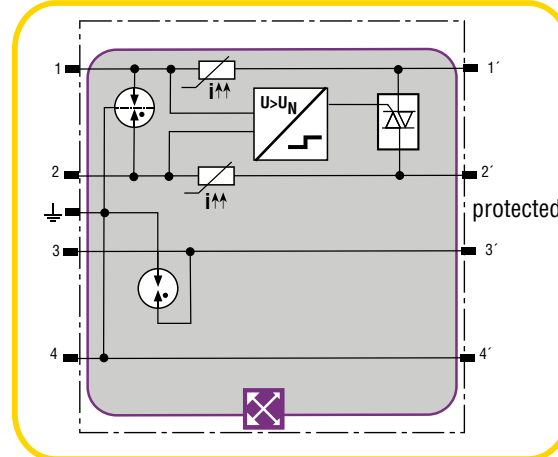
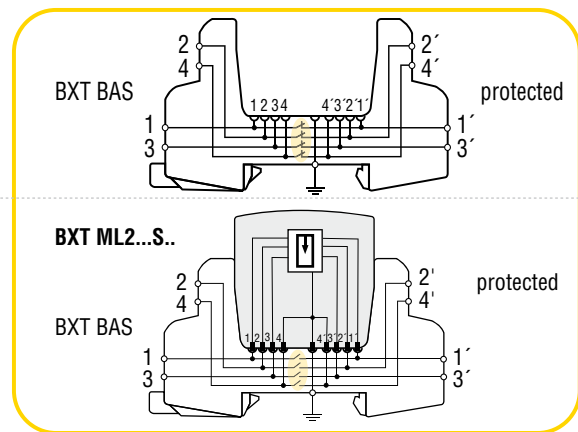
BXT BAS Art.-Nr. 920 300
Prinzipschaltbild BXT BAS

BXTU ML4 BD 0-180 Art.-Nr. 920 349
Prinzipschaltbild BXTU ML4 BD 0-180



BXT BAS Art.-Nr. 920 300
Prinzipschaltbild BXT BAS

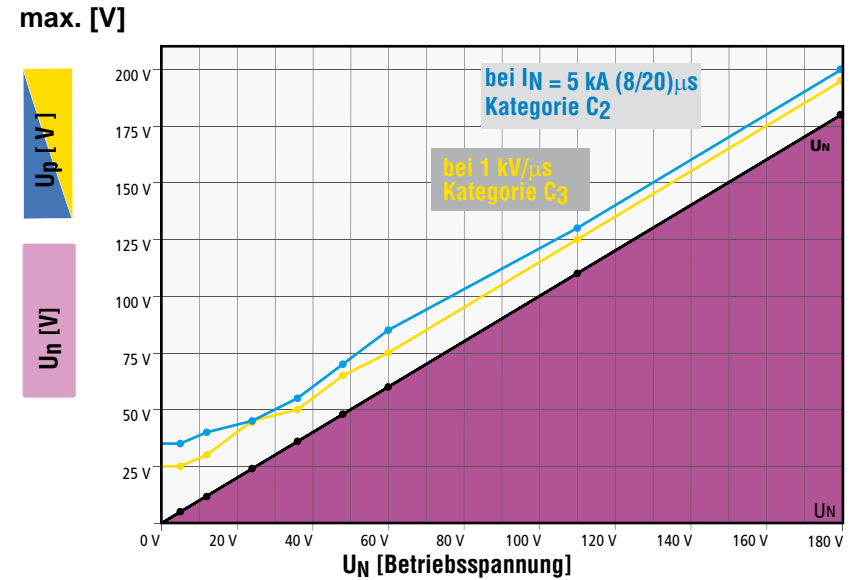
BXTU ML2 BD S 0-180 Art.-Nr. 920 249
Prinzipschaltbild BXTU ML2 BD S 0-180



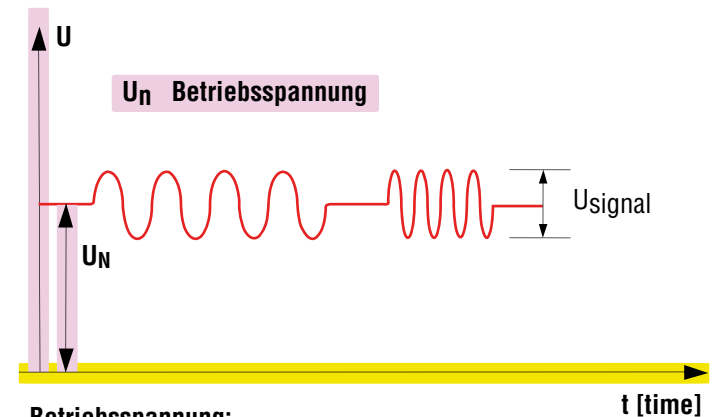
Anwendung und Funktion

Das spannungsgesteuerte **Schutzmodul** BXTU ML2... / BXTU ML4... wird zusammen mit dem Standard-Basisteil **BXT BAS**, Art.-Nr. 920 300 eingesetzt (siehe Prinzipschaltbild, BXT BAS). Im eingesteckten Zustand paßt sich das **Schutzmodul** BXTU ML2... / BXTU ML4... selbsttätig an die eingespeiste Betriebsspannung (im Bereich: 0 ... 180 V) des zu schützenden Gerätes an. Im Beeinflussungsfall einer Überspannung stellt sich in Abhängigkeit der eingespeisten Betriebsspannung an den Ausgangsklemmen des Basisteils ein resultierender Schutzpegel ein (siehe Diagramm 1 und Oszillogramm 1).

Diagramm 1 Schutzpegel U_p [V] (Ader/Ader)



Oszillogramm 1



Betriebsspannung:

$U_N = [0 \dots 180 \text{ V}]$

$f_{UN} \leq 400 \text{ Hz}$

$I_L \leq 100 \text{ mA}$

Signalspannung:

$U_{\text{Signal}} \leq \pm 5 \text{ V}$

$f_g \text{ Signal} = 25 \text{ MHz}$

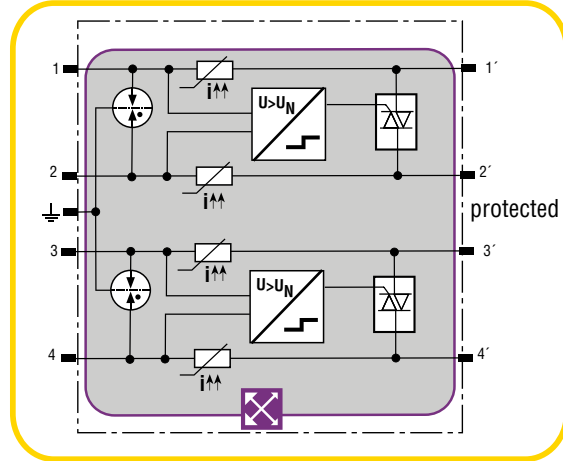
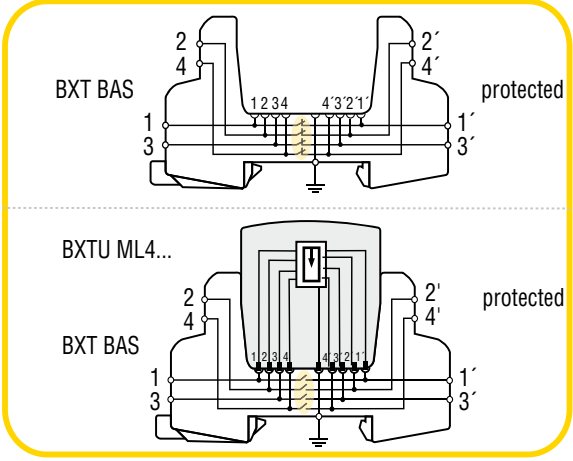


Kurzschlussströme im Anlagenkreis auf 100 mA begrenzen!



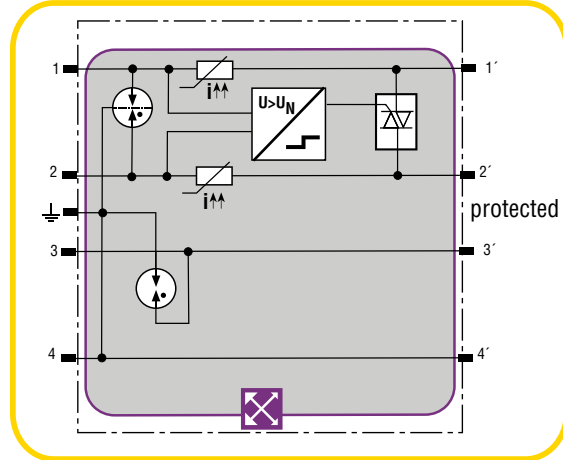
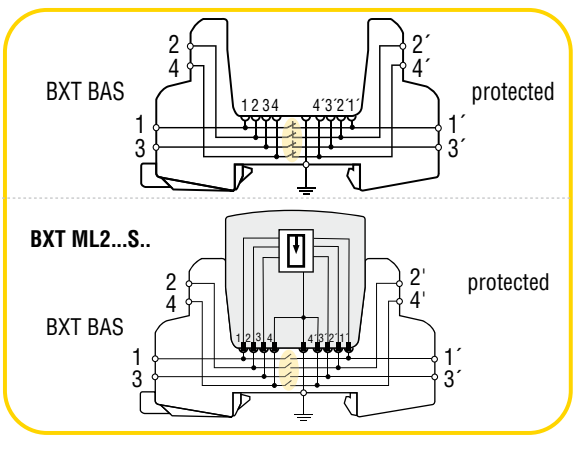
BXT BAS Part No. 920 300
Basic circuit diagram BXT BAS

BXTU ML4 BD 0-180 Part No. 920 349
Basic circuit diagram BXTU ML4 BD 0-180



BXT BAS Part No. 920 300
Basic circuit diagram BXT BAS

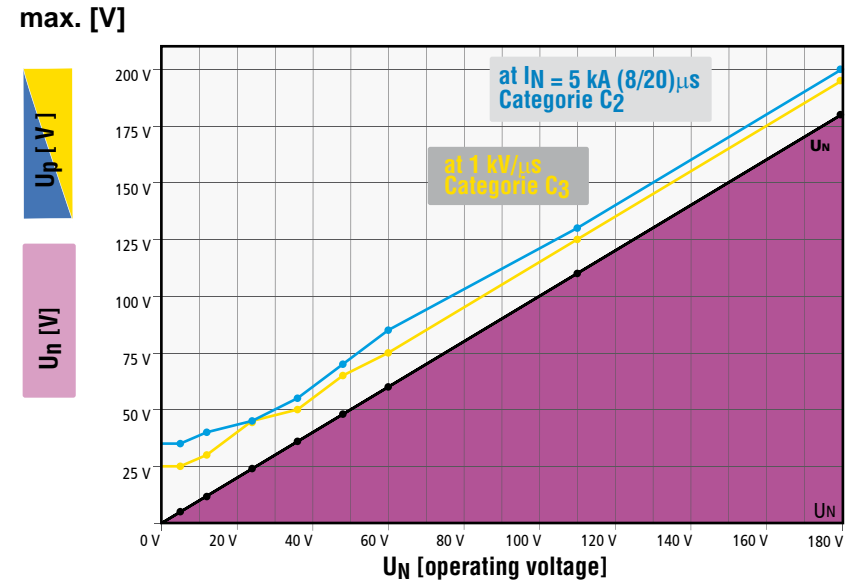
BXTU ML2 BD S 0-180 Part No. 920 249
Basic circuit diagram BXTU ML2 BD S 0-180



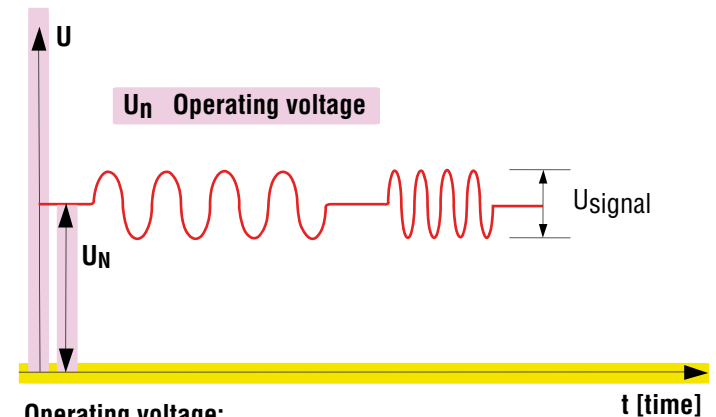
Application and mode of operation

The voltage-controlled **protection module** BXTU ML2... / BXTU ML4... is used in combination with the standard **BXT BAS** base part, Part No. 920 300 (see basic circuit diagram BXT BAS).
If plugged in, the BXTU ML2... / BXTU ML4... **protection module** automatically adjusts itself to the operating voltage supplied (in the range from 0 to 180 V) of the device to be protected.
In case of overvoltage, the voltage protection level adjusts itself depending on the operating voltage at the output terminals of the base part (see diagram 1 and oscillogram 1).

Diagram 1 Voltage protection level U_p [V] (line/line)



Oscillogram 1



Operating voltage:
 $U_N = [0 \dots 180 \text{ V}]$
 $f_{UN} \leq 400 \text{ Hz}$
 $I_L \leq 100 \text{ mA}$
Signal voltage:
 $U_{\text{Signal}} \leq \pm 5 \text{ V}$
 $f_g \text{ Signal} = 25 \text{ MHz}$

Limit short-circuit currents to 100 mA in the vicinity of the installation.



**UL requirements**

1. These modules are intended for ordinary indoor use on communication loop circuits that are isolated from the Public Switched Telephone Network.
2. The protector module shall be secured to the compatible protector base before applying power to the communication loop.
3. The protector base shall be secured to a compatible DIN Rail ground bar using the methods described in this instruction.
4. Proper grounding continuity shall be determined.
5. 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.
6. Please install the protector modules in accordance with the applicable requirements of the National Electrical Code, Article 800 or other applicable local codes.
7. Performance testing has not been conducted on the LifeCheck function by Underwriters Laboratories.
8. Screw Terminal Ratings with the applicable wire gauge sizes shall be noted.
9. 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)									
Blitzductor BXT U ML4		Strike voltage 100 Volts / sec				Surge voltage 100 Volts / μ sec			
Type	Part No.	Line to Ground		Line to Line Line 1/1' to Line 2/2' Line 3/3' to Line 3/3'		Line to Ground		Line to Line Line 1/1' to Line 2/2' Line 3/3' to Line 3/3'	
		min.	max.	min.	max.	min.	max.	min.	max.
BXTU ML4 BD 0-180	920 349	182 V	278 V	182 V	240 V	182 V	550 V	6 V	25 V

Tabulation Strike voltage in accordance with UL 497 B (Protectors for Data Communication and Fire Alarm Circuits)									
Blitzductor BXT U ML2 Signal Lines 1/1' and 2/2'		Strike voltage 100 Volts / sec				Surge voltage 100 Volts / μ sec			
Type	Part No.	Line to Ground		Line to Line		Line to Ground		Line to Line	
		min.	max.	min.	max.	min.	max.	min.	max.
BXTU ML2 BD S 0-180	920 249	182 V	278 V	182 V	240 V	182 V	550 V	6 V	25 V
Blitzductor BXT U ML2 Shielding Lines 3/3'		Strike voltage 100 Volts / sec				Surge voltage 100 Volts / μ sec			
Type	Part No.	Line to Ground		Line to Ground					
		min.	max.	min.	max.				
BXTU ML2 BD S 0-180	920 249	70 V	110 V	70 V	150 V				