

EBU10-T – Electronic Breaker Unit for AC 230 V

Power safety for UPS operation



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The mechatronic circuit breaker type **EBU10-T** provides selective overcurrent protection in AC 230 V UPS systems. The unit consists of an MCB approved for short circuit interruptions up to 10 kA. The second element is an add-on electronic circuitry for measuring and evaluation tasks. The product is available with the typical MCB ratings 4 A, 6 A, 10 A and 16 A with B and C characteristics and is directly operated at the output of the corresponding UPS.

Uninterruptible power supplies only provide a limited current in the event

of a short circuit. The current provided by the UPS is not sufficient to trip a thermal-magnetic overcurrent circuit breaker. Thus - in the event of a failure - the entire UPS system will be disconnected.

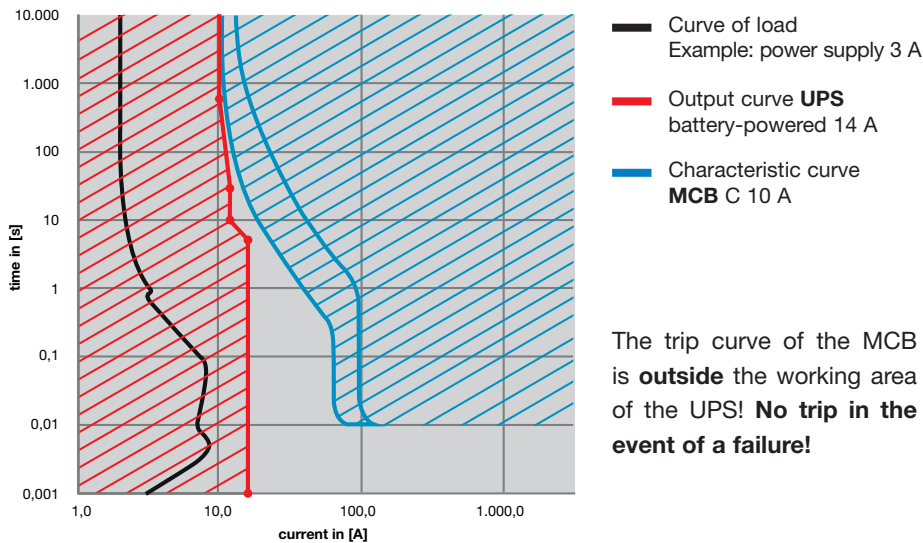
The **EBU10-T** type can be adjusted to the actual load conditions and the capability of the UPS unit in question by means of two selector switches. The device will reliably trip in the event of a failure. And only the load path concerned will be disconnected. All other paths remain unaffected. The EBU10-T unit tolerates switch-on operations and the corresponding high inrush currents.

Benefits:

- **Enhanced system availability** through effective protection
- **Reduction of overall costs** by a 1/3 more efficient rating
- **Easy planning** with a variable overcurrent protection

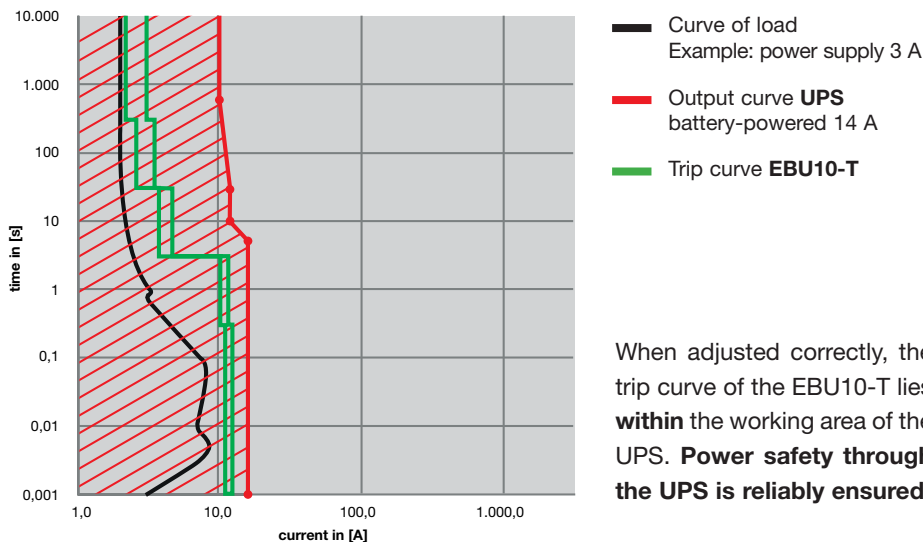
Enhanced system availability through effective protection

 working area UPS  trip range MCB



UPS systems only provide a limited current in the event of a short circuit (**red curve**). The current provided by the UPS is not sufficient to trip a thermal-magnetic overcurrent circuit breaker (**blue curve**).

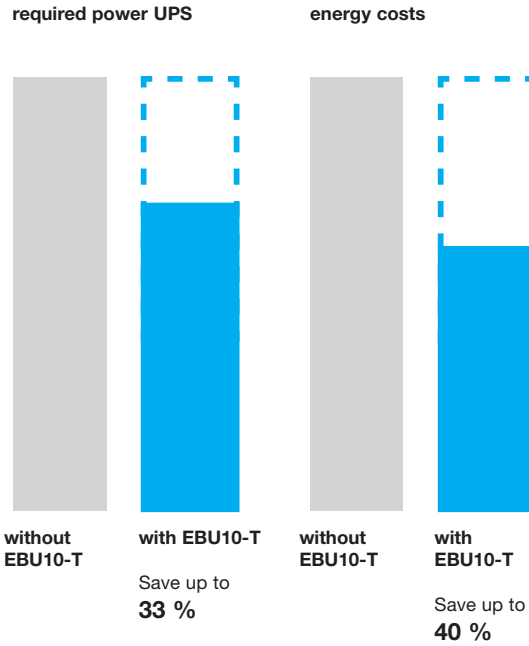
The trip curve of the MCB is **outside** the working area of the UPS! **No trip in the event of a failure!**



When adjusted correctly, the trip curve of the EBU10-T lies **within** the working area of the UPS. **Power safety through the UPS is reliably ensured.**

Reduction of overall costs by a 1/3 more efficient rating

Type **EBU10-T** allows UPS systems to be designed by 1/3 smaller. Annual energy costs are thus reduced by approx. 40 percent. In addition the smaller system also requires less space.



Easy planning with a variable overcurrent protection

It's so easy to plan:

1. step: selection of EBU10-T

Uninterruptible power supply / UPS
current rating = 14 A

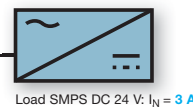
UPS
current rating = 14 A



Selection of trip characteristic and current rating:

Characteristic: curve C \Rightarrow inrush current SMPS
Current rating: 10 A \Rightarrow cable protection for cable cross section 1.5mm²

EBU10-T10-TA1-003-AC230V-C-10A



2. step: Adjustment of EBU10-T to UPS



EBU10-T $\Rightarrow I_N$ UPS:
adjustment to 14 A
 \Rightarrow rated current UPS = 14 A

3. step: Adjustment of EBU10-T to load



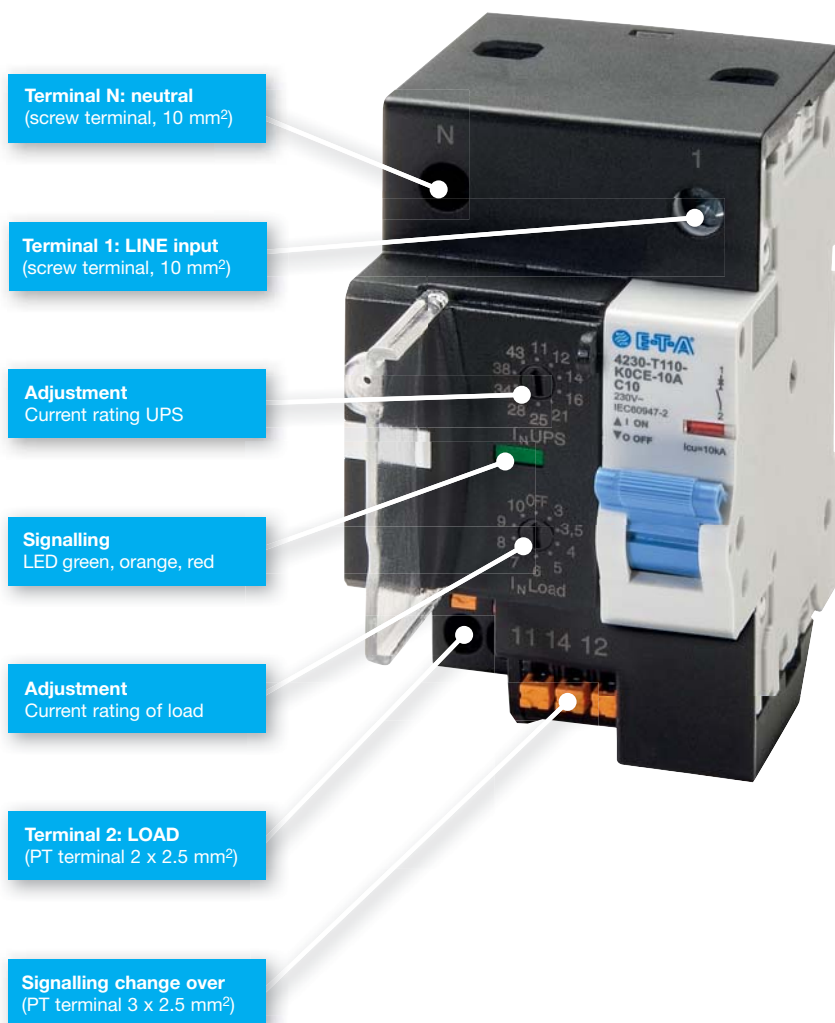
EBU10-T $\Rightarrow I_N$ UPS:
adjustment to 3 A
 \Rightarrow rated current load = 3 A

Technical Data

Voltage rating	AC 230 V (50 Hz)
Current ratings	4 A, 6 A, 10 A, 16 A (MCBs)
Trip characteristics	B (6 A...16 A) / C (4 A...16 A)
Trip mode	mechatronic
Number of poles	1-pole and 2-pole
Adjustment of electronic circuitry	rated current UPS (selector switch) rated current load (selector switch)
Signalling	aux. contact, change-over, LED on the unit
Connection technology	screw terminal (line entry) PT terminals (load output and signalling)
Dimensions (w x h x d)	54 x 95 x 72 (1-pole) 72 x 95 x 72 (2-pole)

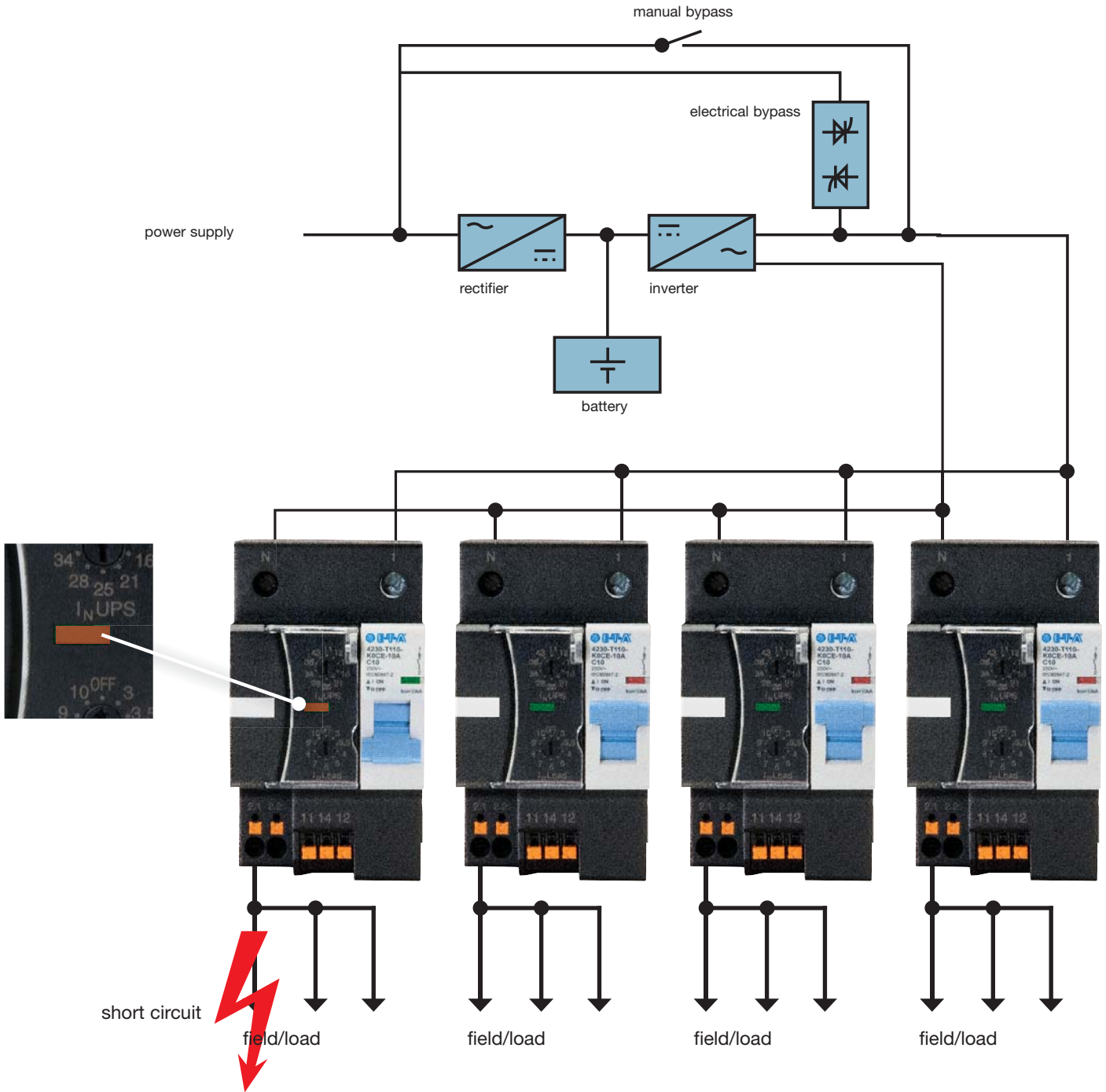


Connection and operation of EBU10-T



Do you need more information on the EBU10-T ?
Just scan the QR code!





First class selection for »power safety« in UPS systems:
EBU10-T - Electronic Breaker Unit made by E-T-A



E-T-A

A globe-spanning network



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- Bulgaria
- Denmark
- Germany
- Finland
- France
- Ireland
- Italy
- Croatia
- Luxemburg
- Macedonia
- Montenegro
- Netherlands
- Norway
- Austria
- Poland
- Portugal
- Russia
- Sweden
- Switzerland
- Serbia
- Slovakia
- Slovenia
- Spain
- Czech Republic
- Turkey
- Tunisia
- Hungary
- United Kingdom

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