

XCDBox External AC mains filter discharge unit

TopCon power supplies are frequently used in a mobile rack system for the flexible use at different test areas. The systems can be equipped with a pluggable AC mains supply cable for easy handling. For this intended use, the AC mains filter stage of the power supplies must be discharged within a specified time in accordance with the EN 62477-1 standard. For this purpose, the external device XCDBox is used to safely discharge the remaining electrical charges after disconnecting the AC plug.

Functionality

The XCDBox is designed to discharge the AC mains filter capacitors of the TopCon power supplies within 1 s to below 60 V once the mains supply has been disconnected.

While connected to the mains, the discharge circuit is disabled and will not cause any power loss. Once the plug has been disconnected from the AC mains, the discharge circuit is switched on immediately and a safe discharge of the filter capacitors starts. This ensures a safe low voltage at the pins of the plug according to EN 62477-1.

Installation

The XCDBox is connected between the AC mains plug and the AC mains clamps of the TopCon power supply or system.

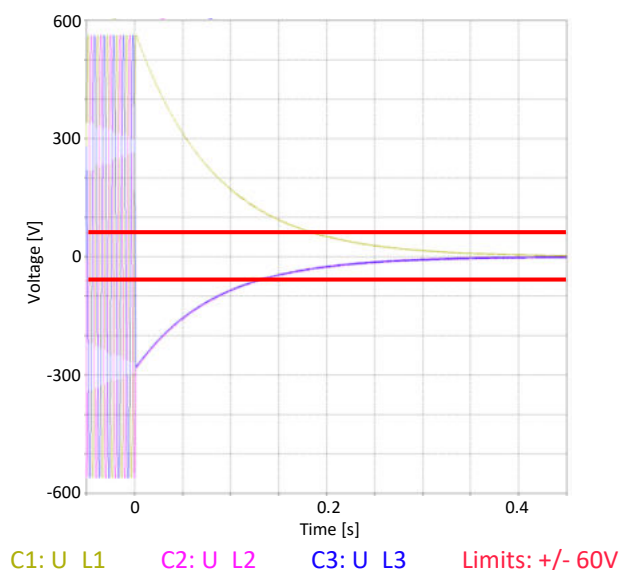


Figure 1: The live voltage on the TC.P AC-plug is decreasing below 60 V within <1 s

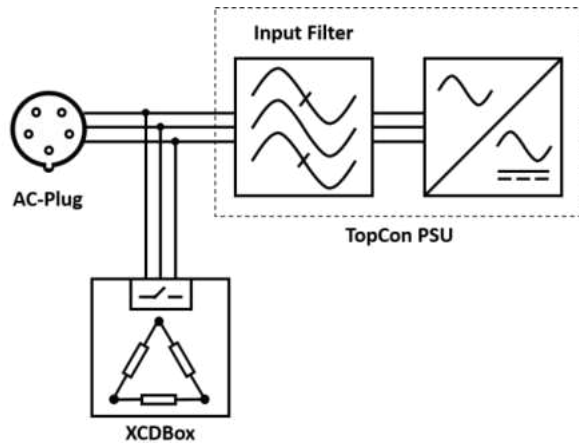


Figure 2: Connection diagram of the XCDBox

For easy installation in a mobile cabinet, the XCDBox is designed to be mounted on a top-hat (DIN) rail.

Operation Range

Not only for single devices, but also in multi-device systems, the XCDBox may be used the same way to allow a mobile application with an AC mains plug. Depending on the device type, a different number of devices may be connected to one single XCDBox to remain within <1 s discharge time to <60 V.

TopCon Series	Max # of devices
TC.P 10/16 kW	3
TC.P 20/32 kW	2
TC.GSS	2
TC.ACS	2

For a greater number of TopCon devices the paralleling of two XCDBox devices is possible.

Mechanical Dimensions

H × W × D:	80 × 31 × 80 mm 3 5/32" × 1 1/4" × 3 5/32"
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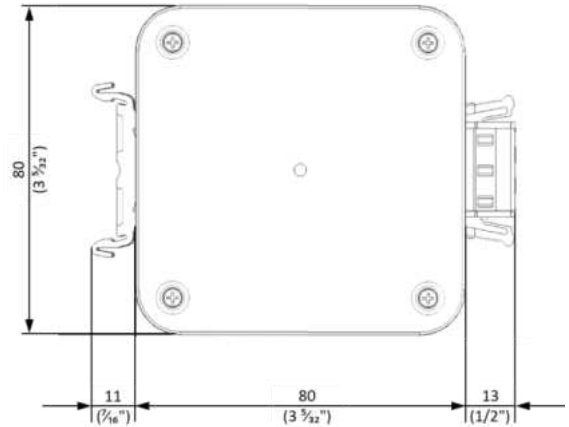


Figure 3: Dimensions

Order Code

The described discharge box is available under the order code "XCDBox".

This product is developed, produced and tested according to ISO 9001 by REGATRON.

For detailed technical information, contact your local sales partner or REGATRON.

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All product specifications and information herein are subject to change without notice.

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Class: public