Ripple Control Transmitter

Enermet SFU-K 001/101

Short Description

Reliable near real-time signal broadcasting thanks to proven design
Field tested robust operation
Feeds up to 30 neutral-ground coupling cells
Integrated diagnostic system and emergency operation options
Compact and modular design using 19" technology
Easy integration of additional components in a single cabinet
Ripple Control Transmitter Enermet SFU-K 001/101

Short Description

Compact Design
The Ripple Control Transmitter Enermet SFU-K is based on state-of-the-art power electronics technology. The components enable robust operation with short-circuit protection. The transmitter consists of the power converter module and the power supply. The terminal unit is included in the power supply and is equipped with a radio interference filter and an isolating transformer for the galvanic separation of the converter and the control cables.

Versatile
The use of 19” technology allows easy integration of further components in the Enermet SFU-K cabinet, such as a controller, a line filter, check-back receivers or ammeters. A glass door allows easy visual supervision and monitoring of the transmitter and additional equipment. The door can be locked to prevent unauthorized access.

Application
The Transmitter Enermet SFU-K 001/101 is especially designed for feeding the ripple control signal into the low voltage network. The single phase output of the transmitter is connected in series with the neutral point of the low voltage distribution transformer through a tuned injection transformer. The application is commonly called “neutral injection”.

Configuration and Diagnostics
The Transmitter Enermet SFU-K 001/101 features an operating panel for parameterization and diagnostics. A display provides a user-friendly interface with plain text information. Events are recorded in the diagnostic system together with the relevant operating values. Occurring problems can be easily tracked down and precisely evaluated during operation. Communication with the transmitter is also possible via a serial interface. The parameterization, diagnostic and remote control software Enermet SFP allows easy programming and diagnostics either on site or remotely. All transmissions and their operating values can be logged continually on a PC.

Emergency Operation
Emergency operation of the transmitter is essential in case of failure of the central or local controller. The transmitter Enermet SFU-K 001/101 provides two solutions for this eventuality:

• An emergency control plug is available for the connection of a portable emergency controller
• Individual DECABIT commands can be sent via the operating panel without additional device

Options
• Built-in Ripple Controller Enermet MxC
• Forwarding of alarm messages to cell phone
• Emergency Controller
• Parameterization, diagnostic and remote control Software Enermet SPF

Experience and Expertise
The brand Enermet stands for many years of experience in the design and construction of ripple control transmitters. The Enermet SFU-K is the fourth generation of static frequency converters. The current successful transmitter family is compatible to the older Enermet transmitters and Enermet injection equipment. Thanks to its wide power range, the Enermet SFU-K transmitters can be used in all ripple control system applications.
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Technical Data

Electrical Data
- Input/Mains Voltage: 3x400 VAC ± 15%
- Input/Mains Frequency: 50/60 Hz
- Coupling cells: up to 30
- Output Voltage: 1 x 150 ... 400 VAC, adjustable
- Output Frequency: 230, 492, 595 Hz, adjustable
- Nominal Power:
  - Enermet SFU-K 001: 4 kVA
  - Enermet SFU-K 101: 8 kVA
  - higher power class upon request

Cabinet Dimensions (W x H x D)
- Enermet SFU-K 001: 620 x 1120 x 605 mm
- Enermet SFU-K 101: 650 x 1915 x 605 mm

Weight
- Enermet SFU-K 001: 100 kg (for H = 1120 mm)
- Enermet SFU-K 101: 210 kg (for H = 1915 mm)

Environment
- Operating Temperature: -10 °C to 55 °C
- Protection Class: IP 20 (DIN 40050)
- Humidity Class: F

Block Diagram

![Block Diagram of Enermet SFU-K 001/101](image-url)