

## IPS-Series 710

Complete Isolated Power Solution for Operating Rooms and Critical Care Areas

# IPS-Series 710

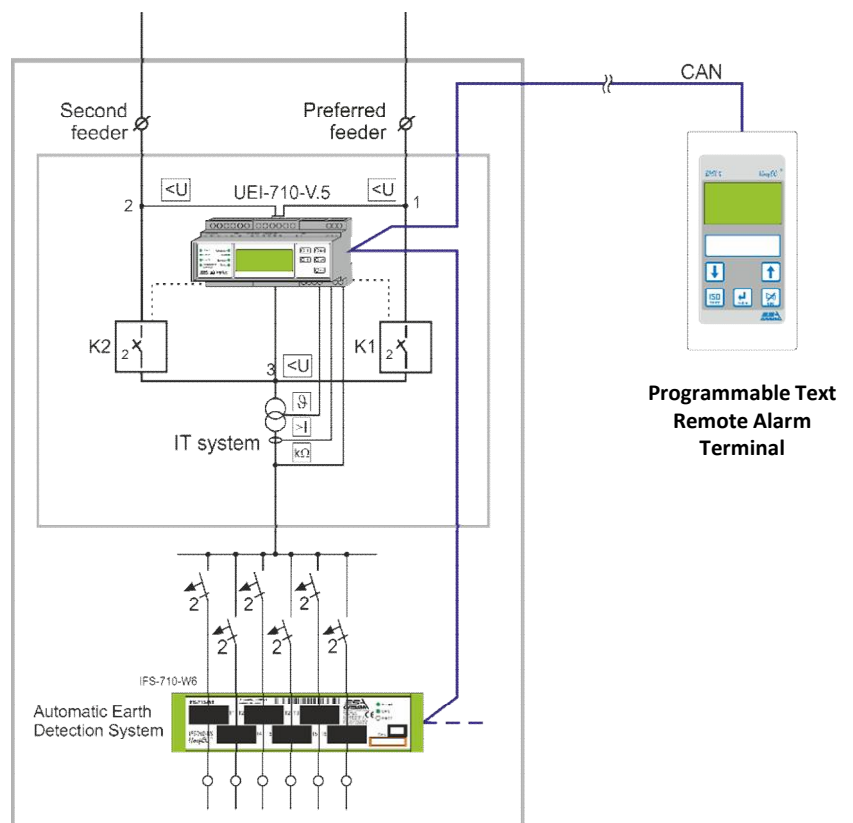
- ◆ The IPS-Series 710 is a compact, floor-standing cabinet with insulation, temperature and overload monitors, integrated transformers (4kVA-10kVA) and outgoing distribution
- ◆ Single or multiple channel cabinets available
- ◆ Optional earth detection and automatic transfer systems available with monitoring devices where required
- ◆ Multiple beds with the same use may be fed from a single transformer ensuring each bed space has at least 2 separate socket outlet circuits
- ◆ The interleaving of final sub-circuits from multiple transformers is seen as a recognised and recommended way to enhance resilience



IFS-710-W6



- ◆ Isolated Power Supply (IT) distribution systems are a recognised requirement as a means of protection for all electrical power outlets in group 2 (category 4/5) areas, including ORs, Recovery, ICU, A & E and Imaging Rooms
- ◆ In many countries in accordance with national and international standards this requirement may be mandatory.
- ◆ IPS systems provide protection from electric shocks and continuity of supply in the event of a first earth fault



- ◆ Fully programmable 5-line remote alarm text display for displaying operational and fault messages of monitored power supply systems
- ◆ Wall-mounted distribution and separate free standing transformer enclosures available
- ◆ Unique distribution cabinet ready for connection with extensive and easy to use functionality
- ◆ Network TCP/IP Gateway with CAN bus protocol



## Features

- ◆ Modular design with separate load switching and control
- ◆ Partial replacement of individual components
- ◆ Multifunctional changeover and monitoring device
- ◆ Bypass functionality enables uninterrupted recurrent testing
- ◆ Reliable separation of feed-in systems by using motor driven load-break switches
- ◆ Connection of signalling, operating systems and I/O components via CAN bus
- ◆ Earth detection system (IFS) for up to 30 feeders
- ◆ IT transformers (3.15kVA – 10kVA) according to DIN EN 61558-2-15
- ◆ Short delivery time due to standard distributor
- ◆ Employment of latest push-in terminal and latest automated ultrasonic welding technology with consistent single wire labelling

## Advantages

- ◆ Compact design ensures smaller cabinet dimensions with large connection space
- ◆ Complete documentation of faults with date and time in a history memory
- ◆ Automatic test monitoring by triggering “silent alarms” when test intervals are exceeded. Can be forwarded to the BMS
- ◆ Plug-in terminals allows changeover and monitoring devices to be replaced whilst system is operational
- ◆ Secure and quick isolation monitoring by means of patented measuring method
- ◆ Self-monitoring of all internal and external functions of the IT system
- ◆ Quick troubleshooting with the optional earth detection system
- ◆ A separately locked transformer compartment allows for optimum running temperatures

## Technical Data (excerpt)

Product designation	IPS-ICU Series 710
Operating voltage	230 V AC, 50...60 Hz
Control voltage	230 V AC, 50...60 Hz
Rated power, IT power transformers	4 / 6.3 / 8 / 10kVA
Dimensions, H x W x D	2000 x 350 x 400 mm H = 2300 mm with 24 or 30 feeders (LSA), 2-pole
Possible number of feeders (LSA), 2-pole	6 / 12 / 18 / 24 / 30

### Multifunctional changeover and monitoring device UEI-710-V.5

Adjustment range, undervoltage	150...230 V (0.65... 1.0 x Un)
Adjustment range, overvoltage	230...260 V (1.0 1.13 x Un)
Switch-on delay tvh (switch-on time)	0...20 s (increments of 0.2 s)
Switch-off delay tvr (switch-off time)	0...20 s (increments of 0.2 s)

Isolation monitoring, 230 V	AC 50.60 Hz / 120.265 V
Response value / hysteresis	programmable 50...250 kOhm / fixed +25%
Load current monitoring, response value / hysteresis	programmable 5...50 A / fixed 4%
Temperature monitoring	120°C (using break contacts or PTC thermistors)
Communications interface / protocol	CAN / CAN (2.0) ISO 11898, additional coupling possible: via gateways; binary, Modbus
Connection of peripheral devices (via CAN bus)	e.g. operating and signaling terminal BMTI 5, signaling and operating panels Series FolioTec
Parameter setting	on the device or via connected peripherals
Displays	operation and fault messages via plain text display and LED

- Complete documentation of faults in the non-volatile memory (buffered RTC integrated)

- Monitoring of "recurrent testing", triggering of "silent alarms", ' when test intervals are exceeded

### Isolation fault detection (IFS) when using the isolation fault detection devices IFS-710-W6

- Output circuit fault detection

- Integrated instrument transformers

- Triggering threshold, test signal: 0.5 mA

- Up to 30 feeders can be monitored