iSAFT Mains Power Distribution Unit (MPDU) - Rack Cabinet

iSAFT-MPDU-43xx (with Isolation Transformer)

The iSAFT-MPDU-43xx is a Mains Power Distribution Unit, which provides full isolation between the input power source and the output. This unit is used for mains power distribution to the various SCOE racks by providing galvanic isolation and protecting both the facility supply and the SCOE racks or the Unit Under Test (UUT) from noise or other unwanted signals or parasites.

It consists of the Mains Isolation Transformer and Distribution unit, which is integrated in a 34U Rack Cabinet. Measurements for Main input and output power are provided on digital displays on the unit's front panel.

The iSAFT-MPDU transformer is designed to be powered on with low inrush current without the use of a current limiter, preventing Start-Up Issues without the possibility of power cut off from an input fuse or hardware failure on a current limiter device.

It integrates an Insulation Monitoring Device, which is activated in case of a single failure. Specifically, if any of the power lines gets in contact with the chassis of the equipment, the differential protection of the unit will cut-off the power supply for safety purposes.

Main Features

- Class II Isolation Transformer.
- Input & output power measurement displays.
- Input Overvoltage Suppressor.
- Power supply cable (10m) with CEE input plug connector.
- Option A: Customised output sockets connectors.
- Option B: Additional separate power measurement displays for each output group.
- Option C: Customised input plug connector and power supply cable length.
- Option D: Customised output harness.

Competitive advantages

- Start-Up low inrush current.
- Continuous insulation monitoring on the output.
- Separate ground points for input and output.
- Selectable ground schema.

Key Benefits

- Proven industrial solution in various EU customers.
- Supplied in various EGSE / AIT testbeds for the aerospace sector.
- Customization from 10 to 50 KVA Output Power, according to power requirements.

Standards

- EN 61558-1:2005/A1:2009
- EN 61558-2-4:2009
- EN 61011-1:2010

Insulation Monitoring

The iSAFT-MPDU isolation PDU device is equipped with an Isolation Monitoring Device (IMD). In case of an insulation fault, the IMD switches off completely the isolation PDU after 7 secs through the auxiliary contact, and at the same time the red LED indicating ''insulation fault'' lights on. The operation of the isolation PDU will be restored only when the insulation is repaired.

Technical Data

iSAFT-MPDU-	43xx
INPUT	
Phase	Three
Voltage	400VAC
Frequency	50-60 Hz
Current	22,7 / 68,4 A
OUTPUT	
Power rating	15 to 45 KVA
Voltage	400VAC
Frequency	50-60Hz
Current	21,6 / 65A
Output Sockets *	Industrial sockets 400V 63A / 32A / 16A Industrial sockets 230V 32A / 16A Domestic sockets 230V 16A / 10A * Number and type of sockets depend on model
ENVIRONMENTAL	
Ambient Temperature	0°C to 30°C
Operating Humidity	< 95 %
Altitude	<1000m
Storage Temperature	10°C to +50°C
Efficiency at full load	>95%
Form Factor	34U Standalone Rack Cabinet

Order Information

- iSAFT-MPDU-43xx (xx indicates the Isolation Transformer KVA power rating: 15, 25, 32, 45)

iSAFT Mains Power Distribution Unit (MPDU) - Rack Cabinet

iSAFT-MPDU-3263 (without Isolation Transformer)

The iSAFT-MPDU-3263 is a Mains Power Distribution Unit, which *is used for mains power distribution to the various SCOE racks by providing safety protection for the personnel, protection and filtering to the SCOE racks or the Units Under Test (UUT) from noise or other unwanted signals or parasites.*

It is housed in a 34U Rack Cabinet. Measurements for Main input and output power are provided on digital displays on the unit's front panel.

The iSAFT-MPDU-3263 is designed to provide all necessary functions to supply power on SCOEs or on Units Under Test and it is fully compliant with CE regulations standards.

It is integrated with Type-B Residual-current devices, which can detect sinusoidal AC, pulsating DC, composite of multi-frequency as well as smooth DC residual currents, ensuring a timely tripping and a high degree of safety.

Main Features

- Input & output power measurement displays.
- Input Overvoltage Suppressor.
- RCDs Type B.
- Power supply cable (10m) with CEE input plug connector.
- Option A: Customised output sockets connectors.
- Option B: Additional separate power measurement displays for each output group.
- Option C: Customised input plug connector and power supply cable length.
- Option D: Customised output harness.

Competitive advantages

- Timely tripping and a high degree of safety.
- Separate ground points for input and output.
- Ground bar for SCOEs and UUT connection
- Selectable ground schema.

Key Benefits

- Proven industrial solution in various EU customers.
- Supplied in various EGSE / AIT testbeds for the aerospace sector.
- Selectable Input Power, according to power requirements.

Standards

- EN 61558-1:2005/A1:2009
- EN 61558-2-4:2009
- EN 61011-1:2010

Order Information

- iSAFT-MPDU-3263 (without Isolation Transformer)

Residual-current Protection

The iSAFT-MPDU is equipped with dedicated RCDs for each three phase outlet and grouped RCDs for single phase outlets, using RCDs Type B. Such RCDs are suitable in all cases in which faulty currents take place with continuous wave form or with frequency values and harmonic components, that do not ensure the correct intervention of an RCD Type A.

Technical Data

iSAFT-MPDU-	3263
INPUT	
Phase	Three
Voltage	400VAC
Frequency	50-60 Hz
Current	63A or 32A
OUTPUT	
Voltage	400VAC
Frequency	50-60Hz
Current	63A or 32A
Output Sockets	
	Group A: 21 x domestic CEE 7/5 230V 16A
	Group B: 6 x industrial CEE 1 phase 230V 16A
	Group C: 6 x industrial CEE 3 phase 400V 16A
	Group D: 6 x industrial CEE 3 phase 400V 32A
	Auxiliary front: 4 x domestic 230V 16A
ENVIRONMENTAL	
Ambient Temperature	0°C to 40°C
Operating Humidity	< 95 %
Altitude	<1000m
Storage Temperature	10°C to +50°C
Form Factor	34U Standalone Rack Cabinet