



## Technical Data Sheet

### CANFORD MAINS DISTRIBUTION UNITS

**MDU18** AC MDU 12X IEC OUT, IEC LOOP-OUT IN, CURRENT METER

**MDU18S** AC MDU 12X IEC OUT, IEC LOOP-OUT IN, CURRENT METER, SWITCH

#### DESCRIPTION

This range of twelve-way, IEC outlet, AC mains power distribution panels, with a 10amp IEC inlet and IEC 'loop-out' is housed in a compact 1U rackmount steel case. The loop-out feature provides an un-switched, direct loop-through power outlet to supply equipment that must remain powered when the MDU is switched off, or to supply to a second MDU. All versions have on the front panel a current meter plus fuse and bi-colour LED indication of power status for each of the output channels. Switch option models have an illuminated power rocker switch. Inlet and outlets are on the rear panel.

**NOTE: Current drawn from the 'loop-output' must be included in the total current calculation. Care must be taken not to exceed the maximum total load of the MDU.**

The fuses on the front panel have an adjacent bi-colour LED. Green illuminated indicates that the circuit is powered correctly. Red illuminated indicates that the fuse has failed. Outputs are numbered front and rear for easy identification and a designation-strip holder with snap-on cover is fitted on the front panel. The paper strips supplied may be inserted before or after installation; 7.5mm of printable height is available. Templates for printing designation strip labels, available as a DWG file for AutoCAD and compatible applications, can be downloaded from the appropriate product page on the Canford website.

#### AVAILABLE VERSIONS

All versions have front panels that are finished in Dawn Grey or Black.

#### Standard (MDU18, MDU18S)

The front panel has an illuminated switch or is un-switched, independent outlet fuses with status indicators. The rear panel has a 10 amp IEC inlet, 10 amp IEC 'loop-out' outlet and twelve 10 amp IEC outlets. An earth stud is fitted.

An earth stud is fitted.

#### Features by model

	Switched	Sequential	Filtered
MDU18			
MDU18S	•		

42-8384 MDU18 AC MDU 12x IEC out, IEC loop-out in, current meter, black

42-8386 MDU18S AC MDU 12x IEC out, IEC loop-out in, current meter, switch, green, black

42-8388 MDU18S AC MDU 12x IEC out, IEC loop-out in, switch, red, black

#### LACING BARS

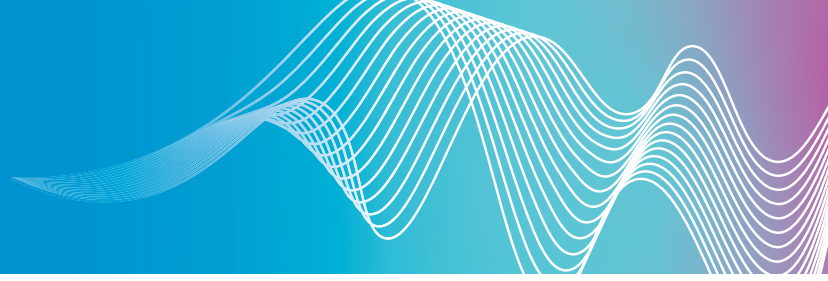
As IEC cable plugs vary enormously in size and design it is not possible to define a 'universal' connector wire retaining clip. To overcome the challenge of securing all IEC connector types both re-wireable and moulded, a single lacing-bar is fitted as standard. The stainless rods may be fitted in a variety of positions to take account of cable connector size. An additional rod may be ordered separately and fitted, which is particularly suitable where connectors of different heights are inserted or where excess cable must be doubled back. An example would be when 'double ended', fixed length, moulded AC mains cords, such as the IEC-Lock types, are used..

#### INSTALLATION

THIS EQUIPMENT MUST BE INSTALLED BY SUITABLY QUALIFIED PERSONNEL

#### WARNING

**HIGH LEAKAGE CURRENT  
EARTH CONNECTION ESSENTIAL  
BEFORE CONNECTING MAINS VOLTAGES**



## THIS EQUIPMENT MUST BE EARTHED. DISCONNECT THE SUPPLY BEFORE REMOVING TOP COVER.

**CE** The CE mark is applied to this product in respect of the Low Voltage Directive. This apparatus complies with the safety requirements of this Directive when used as intended in domestic, commercial, light industrial and similar general indoor use. It must not be subjected to splashing or dripping.

Only remove top cover to adjust timing delay.

The distribution unit should be fixed firmly in a 19" rack using suitable hardware. Appropriate attention **MUST** be paid to protective earthing of the rack itself. Using a suitable, 2.5<sup>2</sup> mm cable, connect one end to the earthing post on the rear of the unit. Connect the other end to permanent independent earth.

### THIS EQUIPMENT MUST BE EARTHED

The distribution units should be provided with an adequate mains power supply.

### FAULT CONDITIONS

Under normal operating conditions the Current meter will illuminate once the unit is powered. The mains rocker switch (where fitted) should be illuminated once operated. All channel "Output" LEDs should be green, whether or not a load is present.

If a front panel fuse fails because of a fault with the connected equipment the LED will illuminate red. Remove the load and repair/replace the load equipment. Replace the front panel fuse with that stipulated (see Technical Specifications below.) Re-connect the load and check that the unit is functioning correctly.

**Note that even if the panel fuse fails there will still be approximately 100V appearing on the output connector. This is limited to a few milliamps, however. It is essential that any connected equipment is removed before any repair work commences.**

### POWER WIRING AND FUSING

Replacement mains fuses must be of a 250V rated European approved type with identical current and time characteristics.

The power outlets should be cabled to the equipment to be powered using cable to suit both the load and the outlet's fuse. The fuses supplied limit the maximum output from

each connector to 10 amps. This fuse rating should not be exceeded, however, smaller values may be used. Before the fuses are changed, power to the unit should be disconnected. Replace fuses only with HBC ceramic types to BS EN60127. Fuse values should be chosen to protect the cable used to wire to the powered equipment.

The power inlet should be connected using 2.5mm<sup>2</sup> cable.

### MATING CONNECTORS

Mating connectors are **NOT** included and should be ordered separately as required.

**Mains output connectors:** 42-153 (Bulgin)  
42-054 (Schurter)

**Mains input connector:** 42-154 (Bulgin)  
42-051 (Schurter)

**Moulded mains leads:** A large range are offered, see AC Mains Power Leads.

**Locking, moulded, mains leads:** Patented, locking IEC leads, see AC Mains Power Leads - IEC-Lock.

### MAINS CABLE

33-340 Flexible mains cable, 3 core, 1.5mm<sup>2</sup>, black arctic, pvc.  
33-344 Flexible mains cable, 3 core, 1.5mm<sup>2</sup>, orange arctic, pvc  
33-354 Flexible mains cable, 3 core, 2.5 mm<sup>2</sup>, orange arctic, pvc

### ACCESSORIES

**Switch guard plates:** 42-0001 Grey  
42-0002 Black

**Additional Lacing Bar Kit:** 42-0005

**Spare designation-strip inserts:** Label 45-3082  
Clear cover 45-3092

**Fasteners:**  
16-023 to 16-085 Rack mount fasteners  
16-087 M6 bolt  
16-085 Plastic cup washer

## TECHNICAL SPECIFICATION

<b>Input voltage:</b>	198 – 254 VAC
<b>Output load:</b>	10A per outlet
<b>Total load:</b>	10A including loop-outlet
<b>Outlet fuses:</b>	10A(T) HBC ceramic, to BS 60127
<b>Max in-rush current:</b>	100A for MDU-S versions

### Dimensions and weight:

	Depth excluding lacing-bar	Depth including lacing-bar	Weight (maximum)
<b>Standard</b>	130mm	230mm	1.7kg

All types are 1U, 19-inch rack mounting, 44 x 483 (h x w) mm.



NOTES

Lined area for notes with horizontal blue lines.