



Technical Data Sheet

CANFORD MAINS DISTRIBUTION UNITS

42-8548 MDU14SF AC MDU 12x IEC out, Powercon in, switch, filter

DESCRIPTION

The MDU14 is a twelve-way, IEC outlet, AC mains power distribution panel, with a 20amp, Powercon locking inlet connector. It is housed in a compact 1U rackmount steel case.

On the front panel is an illuminated, red power rocker switch, fuse and dual LED indication of power status for each of the output channels.

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.

The rear panel has a 20 amp Powercon locking inlet connector and twelve 10 amp IEC outlets. An earth stud is fitted.

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.

A high-performance filter is fitted that helps to protect sensitive electronic components connected to the MDU against mains-borne interference and to reduce the audible effects of spikes and dips in the mains supply.

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.

A single-rod lacing-bar is fitted, which can be moved to an alternative fixing position if desired. An additional lacing rod may be ordered and fitted. This is particularly useful as it allows excess cable to be doubled back along the second rod. 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

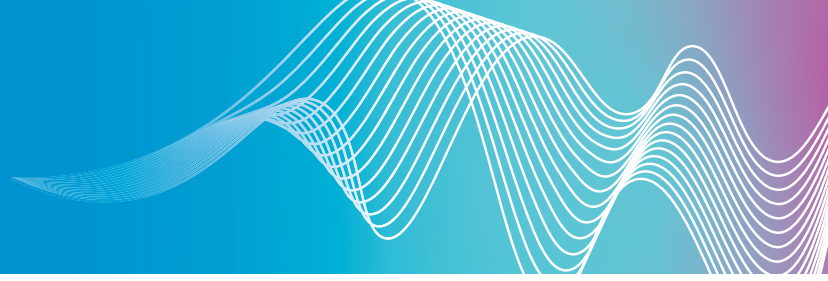
WARNING

**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, 2.5² mm cable, connect one end to the earthing post on the rear of the unit. Connect the other end to permanent independent earth.



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 2.5mm² cable.

THIS EQUIPMENT MUST BE EARTHED

FAULT CONDITIONS

Under normal operating conditions the "Power Input" LED or mains rocker switch should be illuminated. 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.

MATING CONNECTORS

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

Mains input connector: 42-021 Powercon NAC3FCA

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

33-344 Flexible mains cable, 3 core, 1.5² mm, orange arctic, pvc.

33-354 Flexible mains cable, 3 core, 2.5² mm, orange arctic, pvc

ACCESSORIES

Switch guard plates: 42-0002

Additional Lacing Bar Kit: 42-0005

Fasteners:

Rack mount fasteners 16-023 to 16-085

M6 bolt 16-087

Plastic cup washer 16-085

Spare designation-strip inserts:

Label 45-3082

Clear cover 45-3092

TECHNICAL SPECIFICATION

| | |
|-----------------------------|---------------------------------|
| Input voltage: | 198 – 254 VAC |
| Output load: | 10A per outlet |
| Total load: | 16A |
| Outlet fuses: | 10A(T) HBC ceramic, to BS 60127 |
| Max in-rush current: | 100A for MDU-S version |

Dimensions and weight:

| | Depth excluding lacing-bar | Depth including lacing-bar | Weight (maximum) |
|----------|----------------------------|----------------------------|------------------|
| Standard | 250mm | 350mm | 4.0kg |

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

