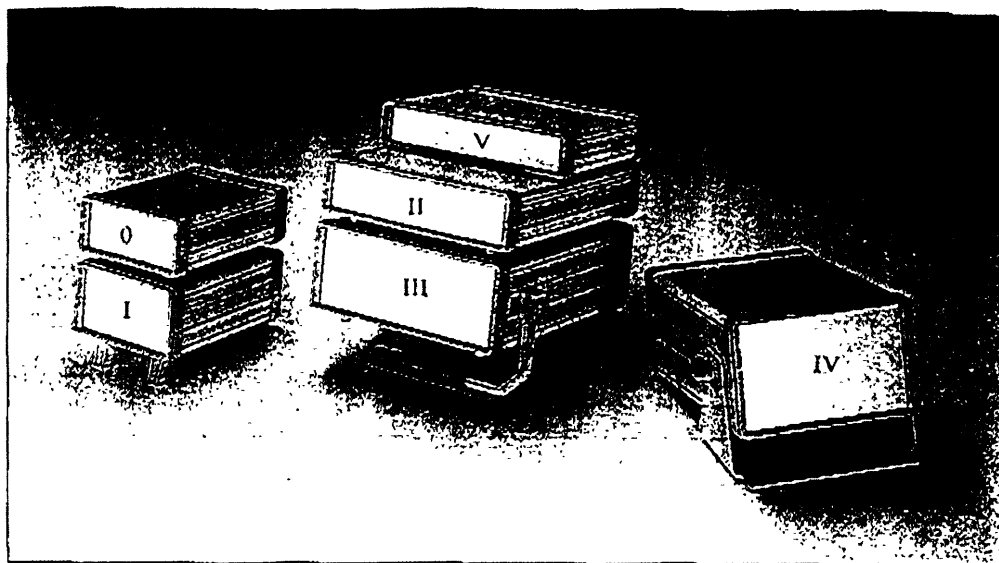


ELMA**Compact case Type 33****Basic case design**

616-588
 590
 606
 618
 620
 631
 643
 655
 667
 679

**Description:**

The ELMA type 33 case is manufactured of only 2 aluminium sections. A U-shaped section forms the bottom with integrated sides and provides superior strength. The extruded cover is held in place by the screws used for front/rear panel mounting. The main features of this vibration-proof case are its rugged construction, easy assembly and serviceability as well as its modern design.

The four screws used to assemble the case, and the fastenings for the feet and handle, are not visible.

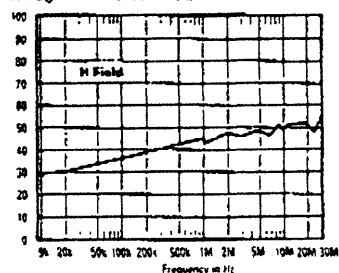
The position of the feet is infinitely variable, allowing the case to be tilted to any angle within certain limits.

The aluminium design provides a high level of interference attenuation. This compact case is available with or without ventilation slots in the base and front/rear panels. Protection to IP30 is assured with ventilation slots. A special sealing set allows the case to be adapted to conform to protection class IP54.

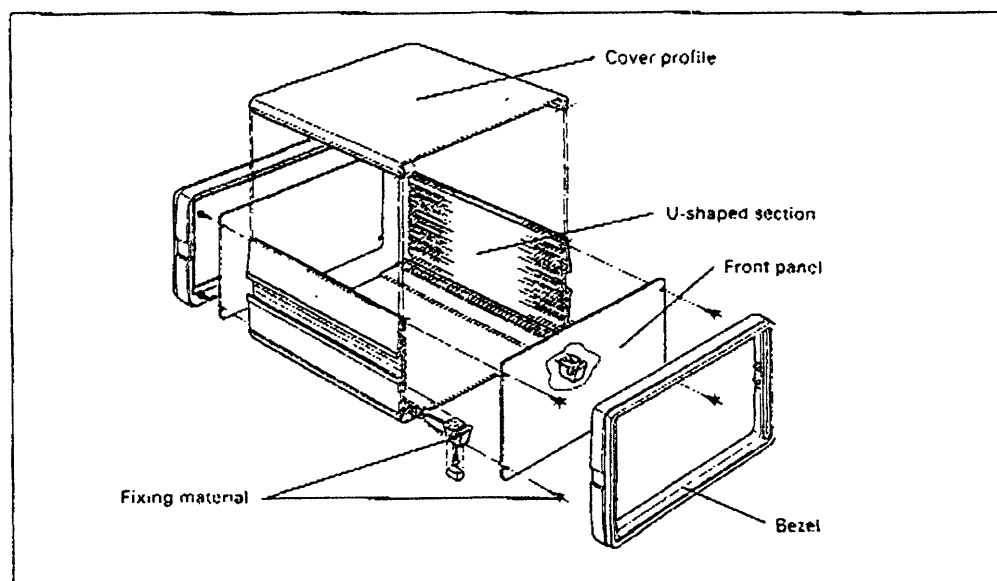
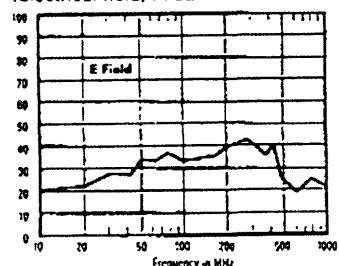
Application:

This compact case is ideally used for test and measurement instruments, drive modules as well as for controls where rugged construction, design, colour and easy serviceability are important. The case can easily accept single and double Eurocards as well as other non-standard board sizes or other components.

Typical shielding effectiveness
(Magnetic field) in dB



Typical shielding effectiveness
(Electrical field) in dB





Compact case Type 33

Basic case design

Form of supply:

In kit form

Description	Material	Finish	Quantity
U-shaped section	Al	powder-coated	1
Cover profile	Al	powder-coated	1
Bezel	ABS (UL94V-0)	-	2
Fixing material incl. feet	-	-	1

Various types of front and rear panels are available. These are therefore not included in the basic design, but must be ordered separately (see pages 7.6-7.7).

Colours:

The bezels are finished to RAL 7030 (stone-grey). Cover profiles and U-shaped section are powder-coated to RAL 7032 (pebble-grey). The plastic front panels conform to RAL 7035 (light grey). The aluminium front panels are anodized in a neutral colour.

Order numbers:

For basic design without ventilation slots

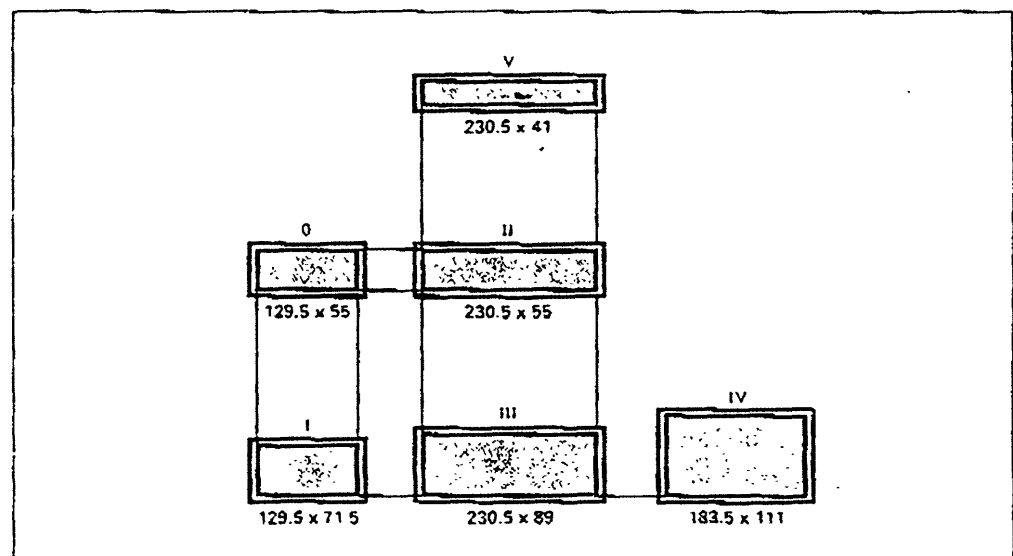
Case size	Depth t mm (inches)			
	120 (4.72")	180 (7.08")	240 (9.44")	300 (11.81")
0 (129.5×55)	33-02112-00	33-02118-00	33-02124-00	-
I (129.5×71.5)	33-01112-00	33-01118-00	33-01124-00	-
II (230.5×55)	-	-	33-02224-00	33-02230-00
III (230.5×89)	-	-	33-03224-00	33-03230-00
IV (183.5×111)	-	33-04418-00	33-04424-00	33-04430-00
V (230.5×41)	-	33-05418-00	33-05424-00	-

For basic design with ventilation slots

Case size	Depth t mm (inches)			
	120 (4.72")	180 (7.08")	240 (9.44")	300 (11.81")
0 (129.5×55)	-	-	-	-
I (129.5×71.5)	-	-	-	-
II (230.5×55)	-	-	33-02224-02	33-02230-02
III (230.5×89)	-	-	33-03224-02	33-03230-02
IV (183.5×111)	-	-	33-04424-02	33-04430-02
V (230.5×41)	-	-	-	-

Blank finish or other colours available on request.

Sizes:

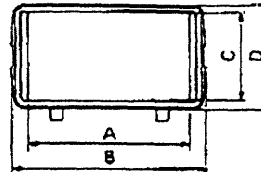


ELMA

Bas

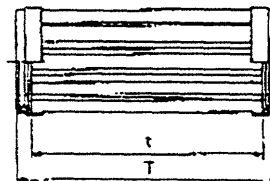
Impact case Type 33

Basic case design



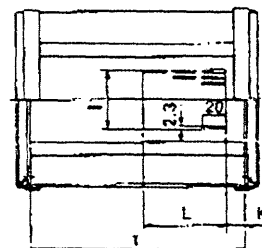
Size	A	B	C	D
0	129.5 (5.09")	155.5 (6.12")	55 (2.16")	69 (2.71")
I	129.5 (5.09")	155.5 (6.12")	71.5 (2.81")	85.5 (3.36")
II	230.5 (9.07")	256.5 (10.09")	55 (2.16")	69 (2.71")
III	230.5 (9.07")	257.5 (10.13")	89 (3.50")	103 (4.05")
IV	183.5 (7.22")	210.5 (8.28")	111 (4.37")	125 (4.92")
V	230.5 (9.07")	256.5 (10.09")	41 (1.61")	56 (2.20")

Side view



Size	0-IV	I-V	0-V	II-IV
Depth T	144 (5.66")	204 (8.03")	264 (10.39")	324 (12.75")
Usable depth t	120 (4.72")	180 (7.08")	240 (9.44")	300 (11.81")

Ventilation slots in base



Size	Depth t	I	K	L
II	240 (9.44")	148.1 (5.83")	15 (0.59")	45 (1.77")
	300 (11.81")	148.1 (5.83")	15 (0.59")	45 (1.77")
III	240 (9.44")	148.1 (5.83")	15 (0.59")	45 (1.77")
	300 (11.81")	148.1 (5.83")	15 (0.59")	70 (2.75")
IV	240 (9.44")	104.9 (4.13")	15 (0.59")	70 (2.75")
	300 (11.81")	104.9 (4.13")	15 (0.59")	70 (2.75")



Compact case Type 33

Front/rear panels

Standard version

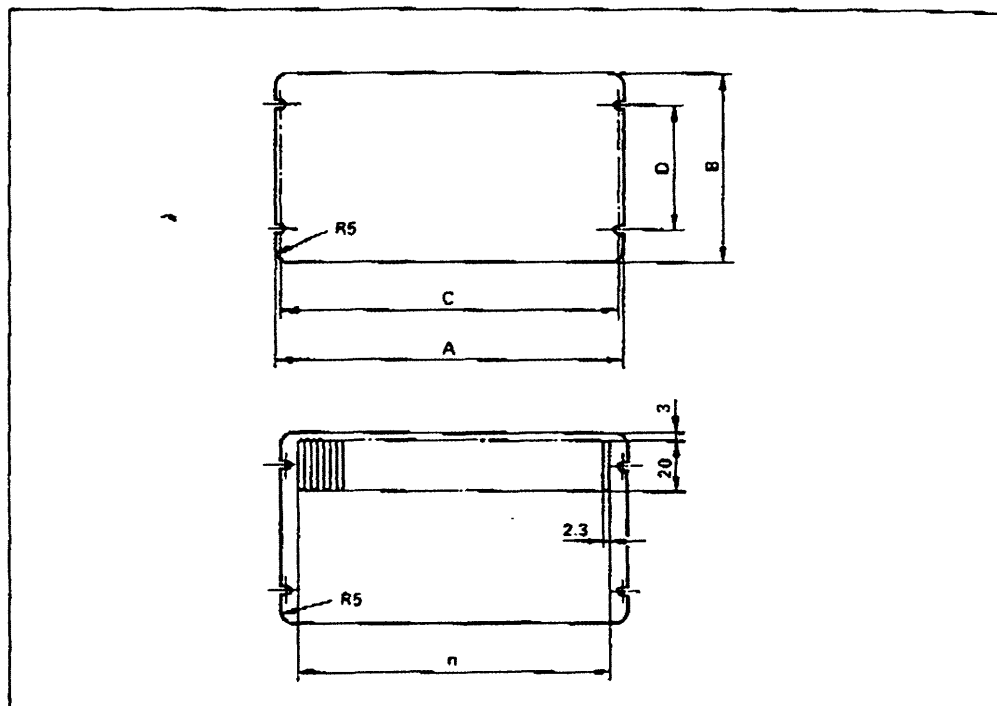
Description:

The 2.5-mm (0.09") front plates of anodized aluminium serve both as front and rear panels. They are screwed to the front end of the case profiles to give the snap-on bezel the required stability. The plates are available with or without perforations.

Form of supply:

Individual panels, with protective film (assembly material included with basic case)

Line drawing:



Size	A	B	C	D	n
0	142.3 (5.60")	63.5 (2.50")	137.0 (5.39")	35 (1.37")	126.5 (4.98")
I	142.3 (5.60")	80 (3.14")	137.0 (5.39")	51.5 (2.02")	-
II	243.3 (9.57")	63.5 (2.50")	238.4 (9.38")	35 (1.37")	212.9 (8.38")
III	244.4 (9.62")	97.5 (3.83")	238.4 (9.38")	69 (2.71")	212.9 (8.38")
IV	197.5 (7.77")	119.5 (4.70")	190.6 (7.50")	91 (3.58")	169.7 (6.68")
V	243.3 (9.57")	49.5 (1.94")	238.4 (9.38")	21 (0.82")	-

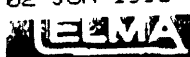
Order numbers:

For aluminium panels, without perforations

Size	0	I	II	III	IV	V
	33-400-50	33-401-50	33-402-50	33-403-50	33-404-50	33-405-50

For aluminium panels, with perforations

Size	0	I	II	III	IV	V
	33-400-51	-	33-402-51	33-403-51	33-404-51	-

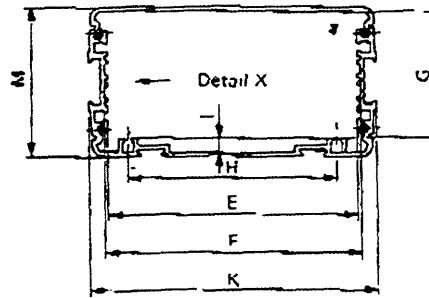


Compact case Type 33

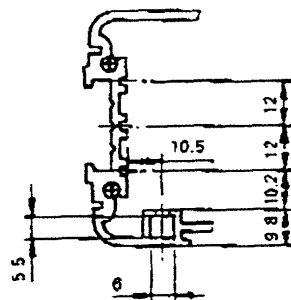
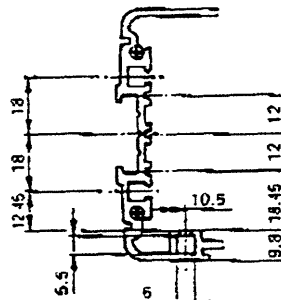
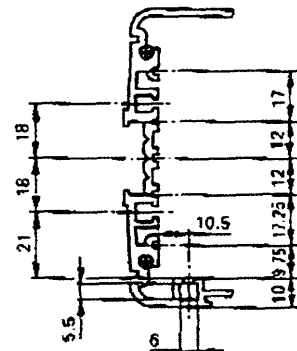
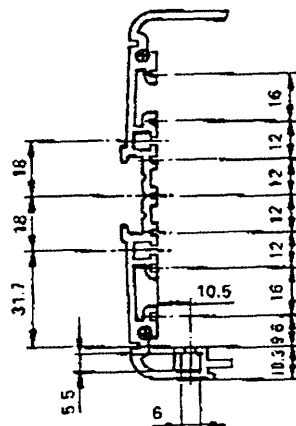
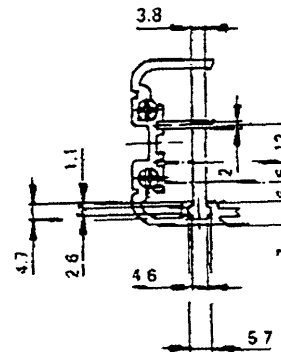
Basic case design

Line drawings:

Mounting:

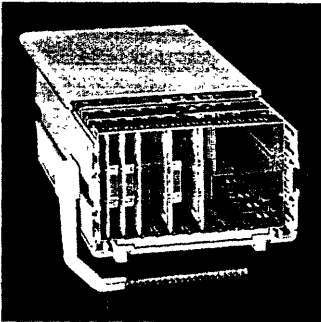


Size	E	F		G	H	K	I	M ±0.5
		Overall int.	Usable int.					
U	130 (5.11")	134 (5.27")	133 (5.23")	51.7 (2.03")	109 (4.29")	151 (5.94")	7.5 (0.29")	64 (2.51")
I	130 (5.11")	134 (5.27")	133 (5.23")	68.4 (2.69")	109 (4.29")	151 (5.94")	7.5 (0.29")	80.5 (3.18")
II	231 (9.09")	235 (9.25")	233.35 (9.18")	51.7 (2.03")	210 (8.26")	252 (9.92")	7.5 (0.29")	64 (2.51")
III	231 (9.09")	235 (9.25")	233.35 (9.18")	85.5 (3.36")	210 (8.26")	253 (9.96")	7.5 (0.29")	98 (3.85")
IV	184 (7.24")	188 (7.40")	186.6 (7.34")	106.9 (4.20")	163 (6.41")	206 (8.11")	7.5 (0.29")	120 (4.72")
V	231 (9.09")	235 (9.25")	233.35 (9.18")	43 (1.69")	210 (8.26")	249.5 (9.82")	4.7 (0.18")	50 (1.96")

Detail X for
case size U + IIDetail X for
case size IDetail X for
case size IIIDetail X for
case size IVDetail X for
case size V

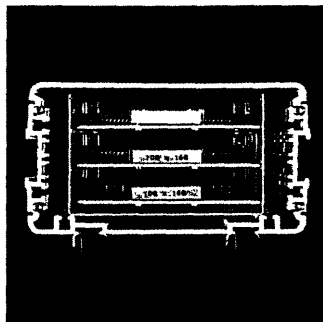
Type 33 Compact case - Versatile

Simple mounting sets are available for single-Eurocards and double-Eurocards, as well as for receptacles for drives. By using the slotted, ventilating mounting plate, you can mount non-standard components wherever you wish.



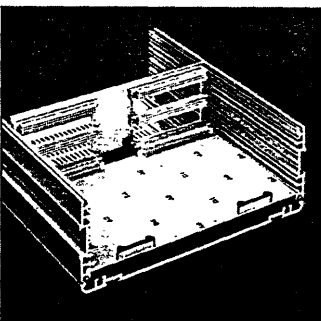
Vertical card carrier mounting

The new stable card carrier for 8-11 Eurocards 100 x 160 mm can be attached without assembly material and then be provided with connectors, wired, tested and finally fitted in the case.



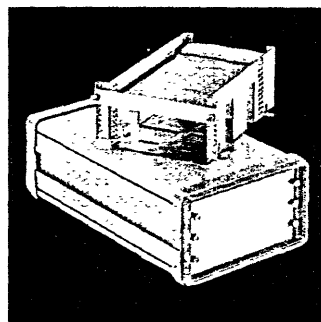
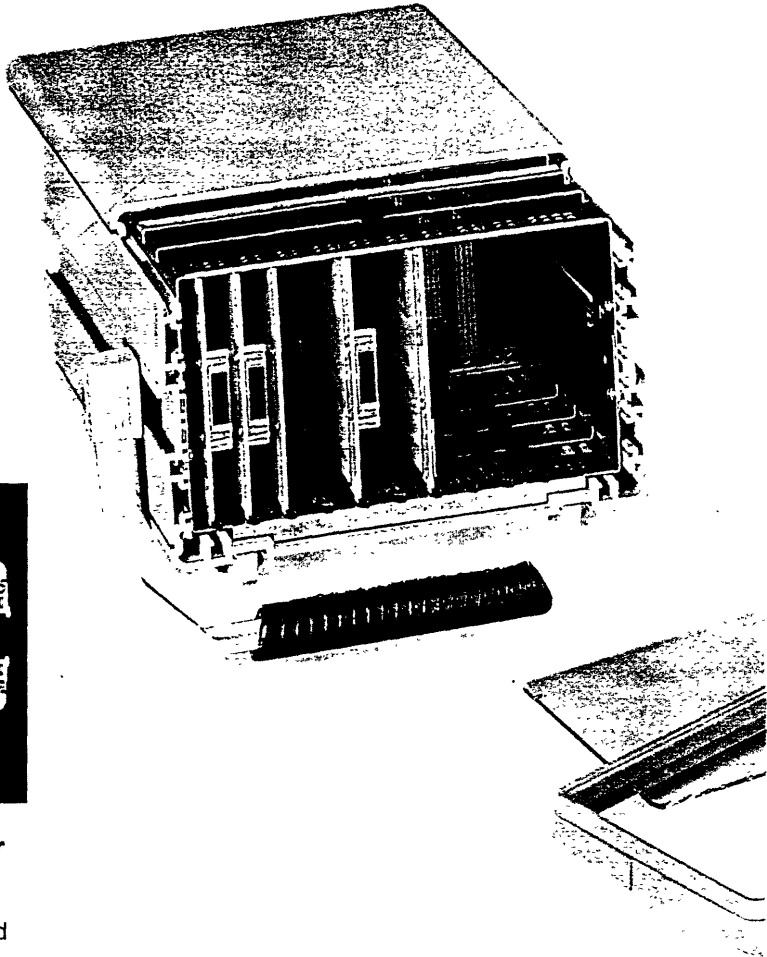
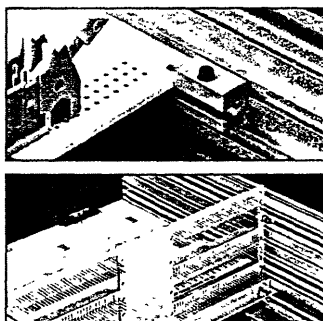
Horizontal card carrier mounting

For the smaller cases the card carrier can be mounted directly to the U-shaped section. The slotted mounting plate is used for the larger cases.



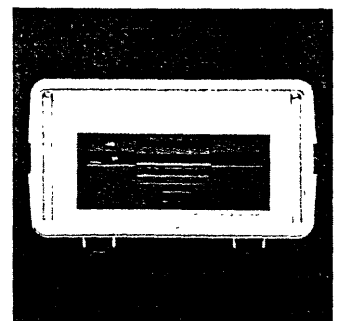
Double-Eurocard mounting set

The case profile itself guides the double-Eurocards into position when they are being mounted. The edge connectors are fastened by means of a mounting plate. When there are no plug-in connectors, the cards are held by card-stops attached in the case grooves.



Mounting set for plug-in units (single Eurocards)

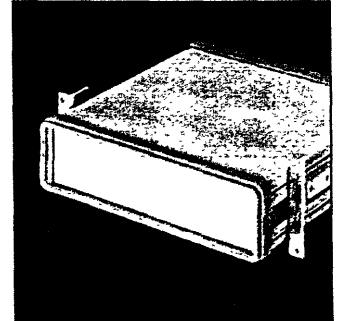
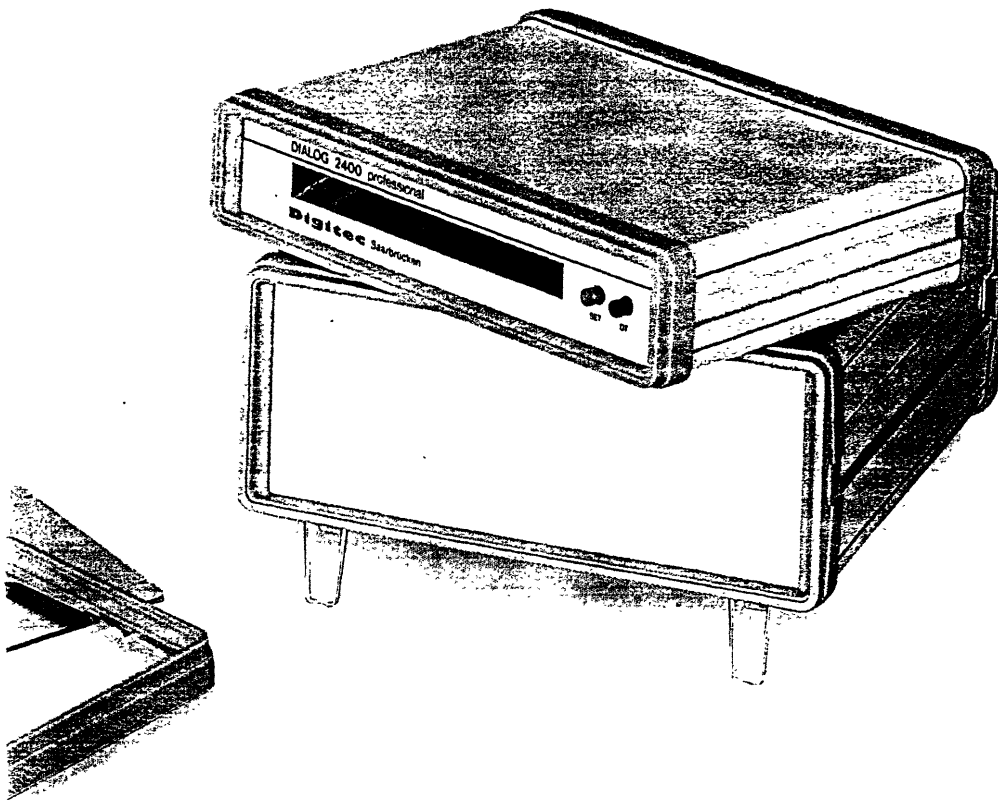
Galvanized sheet steel plug-in sub-unit allowing 3U plug-in units to be mounted horizontally in the compact case.



Receptacles for 3 1/2" and 5 1/4"

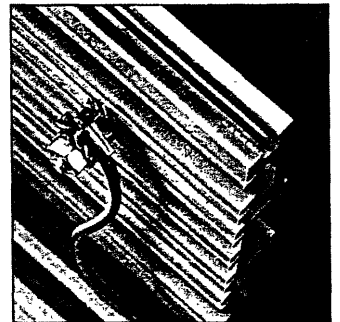
The aluminium support and front panels are suitable for most commercially available drives.

inting capablility



Bracket for mounting in consoles

3-mm sheet aluminium mounting bracket is inserted into the slots on the sides of the compact case and positioned using 2 M4 x 6 mm set screws.



VDE/SEV

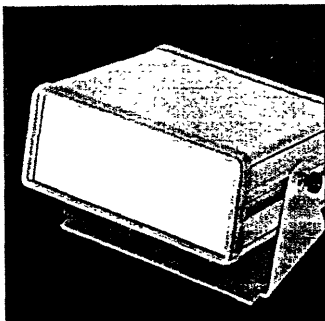
The grounding terminal provides grounding of the compact case in accordance with VDE/SEV standards.

Front and rear panels in different versions

The 2,5 mm thick front and rear panels are available in either aluminium or plastic, and are delivered covered with a protective plastic film. Aluminium panels with ventilation slots are also delivered from stock.

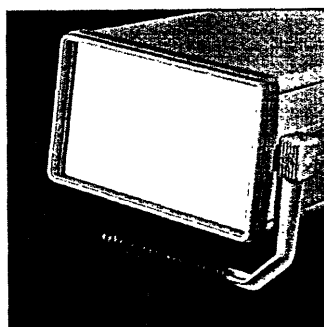
Sealing kit for IP54

A special seal, matched to the contours of the case and made of foamed plastic, ensures reliable sealing of the case.



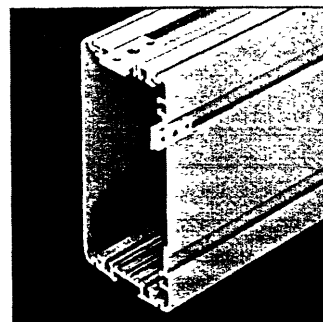
Case mount

The case mount can be attached at any point along the slots in the side of the compact case. The mount allows the compact case to be tilted at a maximum angle of 45° to the horizontal axis. Two knurled screws are tightened to fix the case in the desired position.



Strong handle

The handle is inserted into the side groove on the case and can be fixed in any position. During normal operation the handle is snap-locked in position, but can easily be released for carrying.

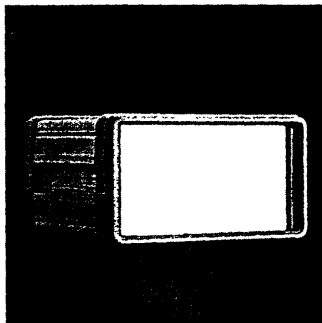


Sliding blocks for handle and feet slots

The sliding blocks (extruded aluminium, alodine) provide an optional means of attachment for the compact case. The blocks are inserted in the handle slot on the side of the case or in place of the feet.

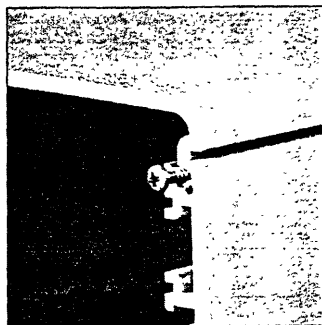
The intelligent case concept!

- good design
- effective heat dissipation
- high shielding effectiveness



Bezels with design function

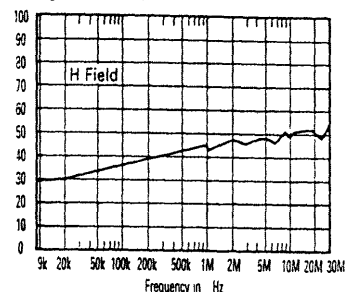
The front and rear bezels are press-fitted onto the case and conceal all of the screw fastenings.



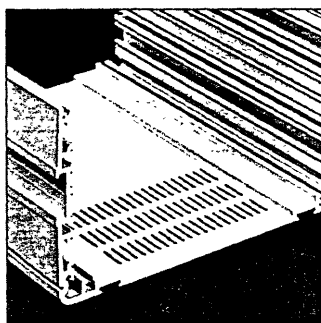
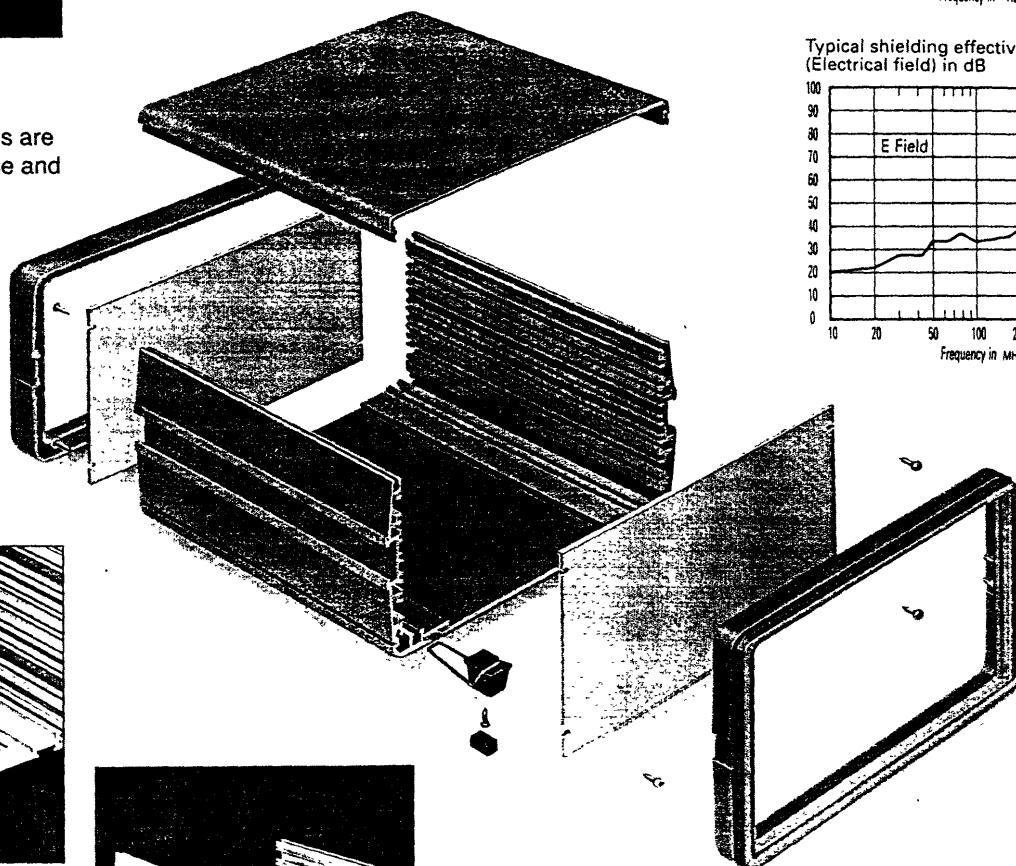
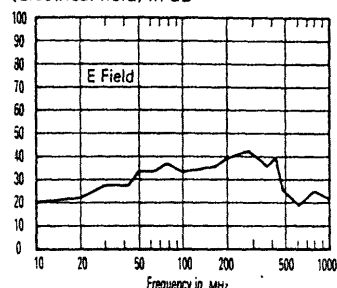
Easy fastening of cover

The case cover is fastened directly to the U-shaped section using the screws used to mount the front and rear panels.

Typical shielding effectiveness (Magnetic field) in dB

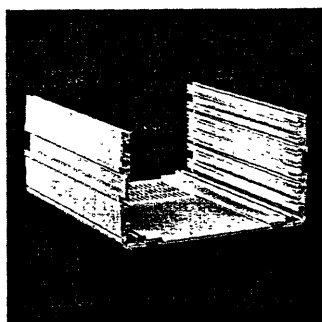


Typical shielding effectiveness (Electrical field) in dB



U-shaped section with ventilation slots

The ventilation slots are located in the base of these U-shaped sections. They are also available ex store.



Sturdy U-shaped section

Since the sides are integrated, the compact case is highly stable. Mounting grooves in the base and on

the sides permit universal extension. The closed aluminium construction guarantees good screening against interference and emissions.

Radiatron Components Ltd

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 ☎ 081-891 1221, Telex 267807
 Telefax 081-891-6839 (G3/G2)