

Compact Custom Circuit Modules UMK

The compact custom circuit module UMK is used where simple adaption and interconnection functions as well as comprehensive electronic circuits require individual and rail mountable installation. They comprise various single elements with differing dimensions and functions. Dependent upon desired module size and necessary space requirement, the various individual elements are linked together to form a module. The custom circuit base modules UMK are available in a 22.5-33.75-45 etc. pitch.

Two side elements each 11.25 mm wide produce - when engaged - the smallest module of 22.5x77 mm. As the various base elements of 11.25-22.5 or 45 mm width can be added the individually required module dimensions are created.

Dependent upon the module size one or several foot elements are to be provided.

Advantages:

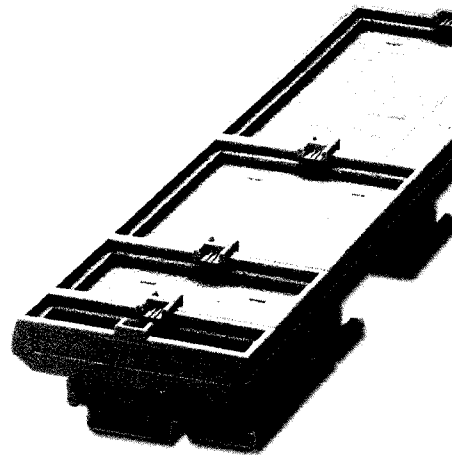
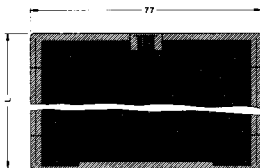
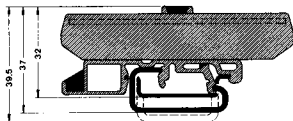
- Fast assembly due to the plug-in modular principle. The tight engagement of the individual elements ensures a high connection strength.
- Due to the universal foot the module snaps on commercially available DIN EN mounting rails.
- The modules can either be marked using the labelling grooves in the side elements or using the Phoenix module marking PMB, which snaps in a hole (4 mm Ø) in the printed circuit board.
- A wide range of connection possibilities for the external conductor connection due to the large selection of electronic printed circuit board terminal blocks, the screw and tab connections and the COMBICON plug connectors etc. (see pages 24-93).

Type of housing

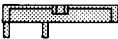


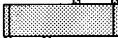




krielen = 6.6 polyamide, see page 14
color: green

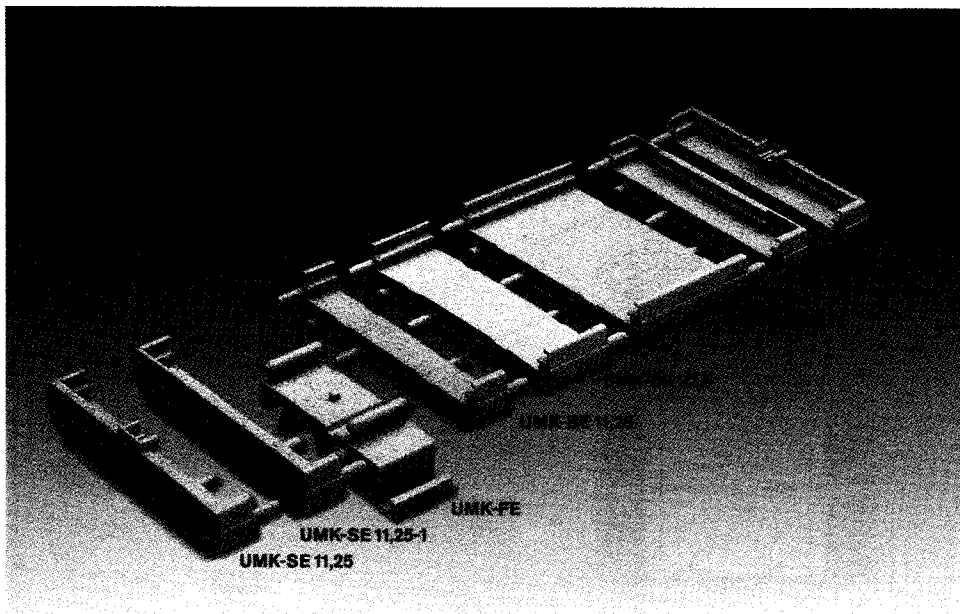
Marking material see page 322

Mounting material see page 344



UMK

Description	Type	Order No.	Pcs. Pkt.
Universal module , comprising: Side element , 11.25 mm wide, with label groove	 UMK-SE 11,25	29 70 00 2	10
Side element , 11.25 mm wide, without label groove	 UMK-SE 11,25-1	29 70 44 2	10
Base element , 11.25 mm wide	 UMK-BE 11,25	29 71 53 5	10
Base element , 22.5 mm wide	 UMK-BE 22,5	29 70 02 8	10
Base element , 45 mm wide	 UMK-BE 45	29 70 01 5	10
Foot element , for mounting on  or  , slideable between base and side elements	 UMK-FE	29 70 03 1	10



Assembly drawing of the universal module UMK

PCB dimensions [mm]	Module length L [mm]	Side element UMK-SE...	Base element UMK-BE 11.25	Base element UMK-BE 22.5	Base element UMK-BE 45	Foot element UMK-FE
20.00 × 72 × 1.5	22.50	2	–	–	–	1
31.25 × 72 × 1.5	33.75	2	1	–	–	1
42.50 × 72 × 1.5	45.00	2	–	1	–	2
53.75 × 72 × 1.5	56.25	2	1	1	–	2
65.00 × 72 × 1.5	67.50	2	–	–	1	2
76.25 × 72 × 1.5	78.75	2	1	–	1	2
87.50 × 72 × 1.5	90.00	2	–	1	1	2
98.75 × 72 × 1.5	101.25	2	1	1	1	2
110.00 × 72 × 1.5	112.50	2	–	–	2	2
121.25 × 72 × 1.5	123.75	2	1	–	2	2
132.50 × 72 × 1.5	135.00	2	–	1	2	2
143.75 × 72 × 1.5	146.25	2	1	1	2	3
155.00 × 72 × 1.5	157.50	2	–	–	3	3
166.25 × 72 × 1.5	168.75	2	1	–	3	3
177.50 × 72 × 1.5	180.00	2	–	1	3	3

Ordering example:

UMK module, length 90 mm, for printed circuit boards

87.5 × 72 × 1.5

comprising

29 70 00 2	2 side elements	UMK-SE 11,25
29 70 02 8	1 base element	UMK-BE 22,5
29 70 01 5	1 base element	UMK-BE 45
29 70 03 1	2 foot elements	UMK-FE

PCB terminal blocks see page 30

Universal Module UM for Custom Circuits

Type of housing

krilen = 6.6 polyamide, see page 14
color: green

U profile cover

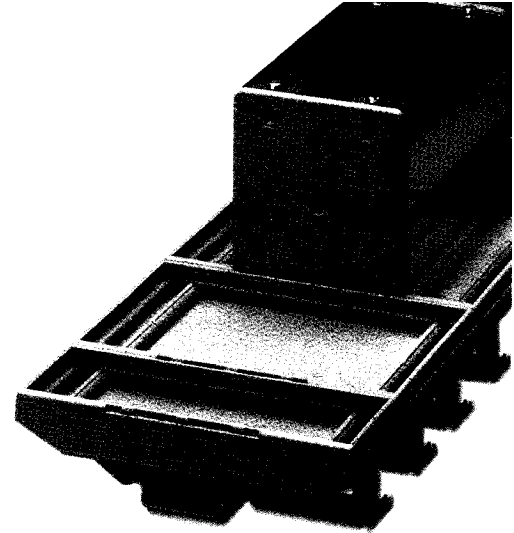
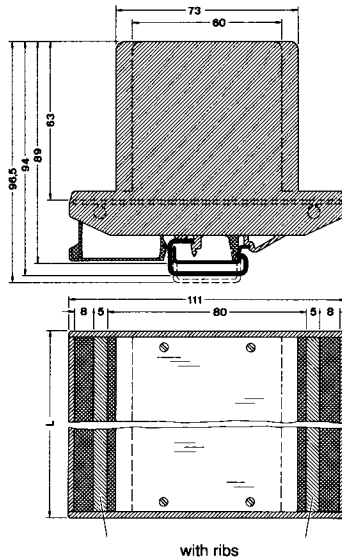
PVC, unbreakable
max. temperature: 70 °C

Transparent cover

Polycarbonate, unbreakable,
difficult to ignite and self extinguishing,
max. hood temperature: 100 °C

Marking material see page 322

Mounting material see page 344



UM

with ribs for mechanical PCB support

The universal modules UM are suitable for accommodating one printed circuit board with the purpose of making individual electronic circuits, e. g. programmable controls. They comprise individual elements with various dimensions and functions. By arranging individual base elements in a row the printed circuit board surface can be multiplied. Metal pins engage with the individual base elements to form a sturdy unit. The various base elements are available with and without ribs to support the printed circuit board. Do not locate solder points or component fixings in the area of these ribs. Dependent on the module size one or more base elements are fitted with a snap foot, which easily engages on DIN EN mounting rails.

The side elements cover the aligned base elements on both sides and are available in three versions:

- the low side element UM-SE,
- the tall side element UM-SE-A 60 for 60 mm wide U profile covers and
- the tall side element UM-SE-A 73 for 73 mm wide U profile covers.

The tall side elements are available without and with guide grooves for mechanical fixing of the printed circuit board vertically to the base PCB.


The transparent U profile covers are available in various lengths, which depend upon the number of base elements used. They are screw fitted to the tall side elements. Furthermore, an engageable transparent hood is available for a base element, with snap foot for the lower side elements.

An adaptor rail is available for inserting the European format cards. It is pushed laterally over the edge of the base elements thus reducing the width to the European format card dimension. Furthermore, various modules are available for European format cards.

A comprehensive range of electronic printed circuit terminal blocks is available for the conductor connection (see pages 24–93).

Description

Universal module, individual assembly, consisting of:

Base element with snap foot, for mounting on ,

a) with ribs, L = 35 mm

b) without ribs, L = 35 mm, or

Base element without snap foot, for aligning several base elements

a) with ribs, L = 35 mm

b) without ribs, L = 35 mm, or

Base element without snap foot, for aligning several base elements

a) with ribs, L = 16.5 mm

b) without ribs, L = 16.5 mm

Connection pin, brass, for joining several base elements into one unit

Side element, low version, for connection on both ends of the base element UM-BEFE.

Side element, tall version, for connection on both ends of the base element UM-BEFE.

for 60 mm wide U profile cover for 73 mm wide U profile cover

Side element, as above, however with guide grooves for vertically arranged printed circuit boards for 60 mm wide U profile cover for 73 mm wide U profile cover

U profile cover, transparent,

a) 60 mm wide, screw fitting on side element UM-SE-A 60

for 1 base element UM-BE...35

2 base elements UM-BE...35

3 base elements UM-BE...35

4 base elements UM-BE...35 and

1 base element UM-BE 16,5 for European format card 100 × 160 × 1.5 mm

b) 73 mm wide, screw fitting on side element UM-SE-A 73

for 1 base element UM-BE...35

2 base elements UM-BE...35

3 base elements UM-BE...35

4 base elements UM-BE...35 and

1 base element UM-BE 16,5 for European format card 100 × 160 × 1.5 mm

Transparent cover, for one base element, UM-BEFE (with 2 UM-SE) engageable, 60 mm wide, 50 mm high

Adaptor, necessary for European format cards, pushed laterally over the edge of the base elements, reduces width to 100 mm, marking with labelling strip SKS, see page 30, plastic, length: 156.5 mm

Universal module, complete, accepting one European format card 100 × 160 mm, without U profile cover

Universal module, as above, however with an additional 60 mm wide U profile cover

Universal module, as above, however with an additional 73 mm wide U profile cover

Type

Order No.

Pcs. Pkt.

a) **UM-BEFE 35**

29 55 56 4

10

a) **UM-BE 35**

29 55 57 7

10

a) **UM-BE 16,5**

29 56 90 3

50

UM-VS

29 55 58 0

50

UM-SE

29 55 59 3

10

UM-SE-A 60

29 55 61 6

10

UM-SE-A 73

29 55 60 3

10

UM-SE-A 60-R

29 56 89 3

10

UM-SE-A 73-R

29 56 74 1

10

UM-A/U 60-35

29 55 65 8

10

UM-A/U 60-70

29 55 66 1

10

UM-A/U 60-105

29 55 67 4

10

UM-A/U 60-156,5

29 55 55 1

10

UM-A/U 73-35

29 55 62 9

10

UM-A/U 73-70

29 55 63 2

10

UM-A/U 73-105

29 55 64 5

10

UM-A/U 73-156,5

29 56 16 5

10

UM-H

29 55 44 1

10

UM-AE

29 56 48 2

10

UM-LG 160

29 56 94 5

5

UM-LG 160/A 60

29 56 95 8

5

UM-LG 160/A 73

29 56 97 4

5