

Electrical energy flows everywhere. It provides light, heat and movement. As a family-owned company operating worldwide, we guarantee the safe distribution of electrical energy in industry, commerce and infrastructure.

With over 1,000 employees, 640 of them in Germany, 14 subsidiaries in Germany and abroad, we have been operating successfully in the market for over 90 years. We work enthusiastically to take our products and services to the next level. Solutions for photovoltaics and e-mobility are becoming increasingly important. In this way, we are making an active contribution to the energy transition and working towards a safer electric future.

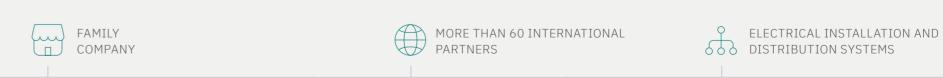
Please scan the QR code or see our website www.hensel-electric.de for more detailed information.



### **International presence**

HENSEL guarantees local support and a high degree of availability thanks to its 4 locations in Germany, 10 locations own by HENSEL and 60 international partners.







13 SUBSIDIARIES NATIONALLY
AND INTERNATIONALLY

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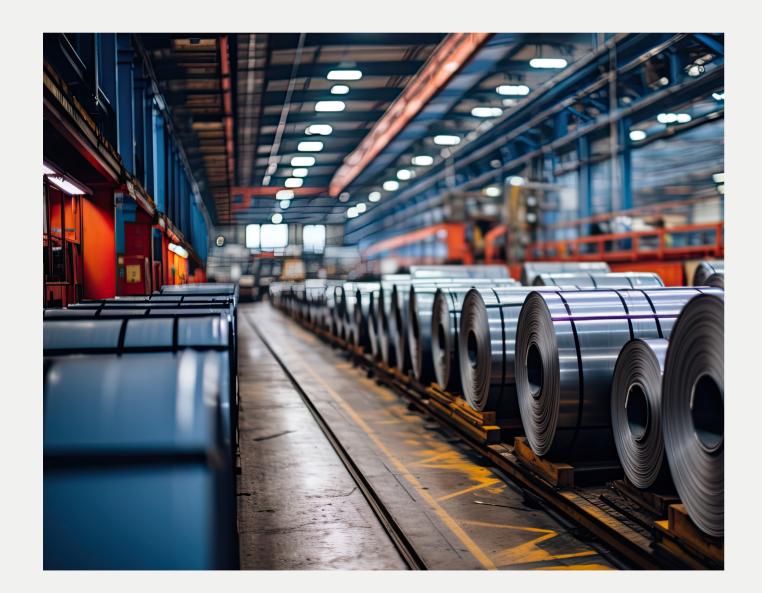
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# SWITCHGEAR FOR DEMANDING APPLICATIONS

### Safe in dust, dirt, moisture and harsh industrial atmospheres

### Material

- + Burning behaviour: Glow wire test IEC 60695-2-11, self-extinguishing, flame retardant
- + UV-resistant in accordance with IEC 61439-1, para. 10.2.4: The material is tested for UV resistance.
- + Toxic behaviour: silicone- and halogen-free
- + Chemical resistance: resistant to acids, alkalis, petrol and mineral oil



## HIGH-QUALITY MATERIAL

### HENSEL

### For demanding applications



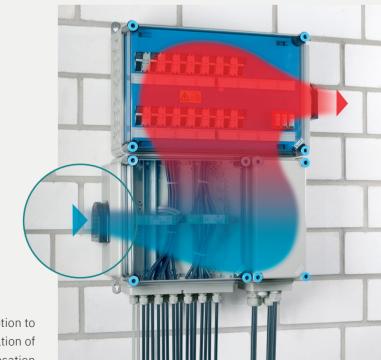
+ Flame-retardant, self-extinguishing Burning behaviour: Glow wire test 960°C in accordance with IEC 60695-2-11

+ UV-resistant

Robust and resistant: Resistant to dust and water, Mi distribution boards withstand heavy loads.



Safe, even in extreme outdoors weather conditions, e.g. with predective roof.



Ventilation option to reduce the formation of condensation

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## MODULAR ENCLOSURE SYSTEM

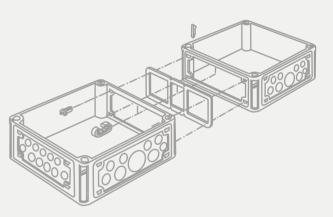
to built up power switchgear and controlgear assemblies

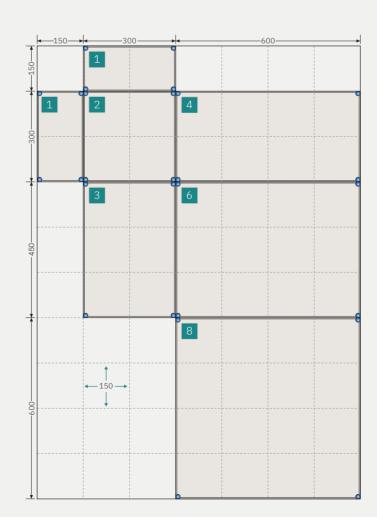


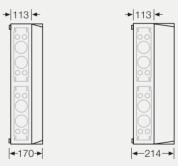
### Combinable in all directions

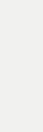
- + Six box sizes can be freely combined in all directions and can also be used as individual boxes
- + The combinable enclosure system is ideally suited for the quick and easy construction of power switchgear assemblies (PSC) up to 1600 A
- + Box size 6 (600 x 450 mm): Due to an enlarged terminal compartment directly in the housing, some electrical functions can be installed more economical.
- + 6 box sizes:
- 1\_150 x 300 mm
- 2\_300 x 300 mm
- 3\_450 x 300 mm
- 4\_600 x 300 mm
- 5 600 x 450 mm
- 6\_600 x 600 mm











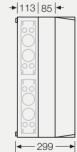
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**←**255**→** 



**Enclosure depths** Different enclosure depths allow the installation of deeper devices.

# **Extension frame**



for box sizes 4, 6 and 8 increase the enclosure depth by 85 mm in each case.



### DEPENDENT ON THE SYSTEM

### **Electrical parameters**



Rated voltage: max. 690 V a.c.

Rated insulation voltage: 690 V a.c., 1000 V d.c.

Rated current max. 1600 A

Rated short-time withstand current max: max. 36 kA / 1 s

Rated values

### **System properties**



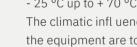
**Environmental** conditions

Ambient temperature

- + for distribution boards in accordance with IEC 61439: -5 °C up to 35 °C, max. + 40 °C, Relative humidity: 50% at 40 °C,
- 100% at 25 °C + for empty enclosures: - 25 °C up to + 70 °C The climatic infl uences and effects on the equipment are to be considered,



Impact strength



Insulated enclosures (Predection Class II)

see technical details /operating and ambient conditions



**Application** area

The enclosures are suitable for predected outdoor installation.

However, the climatic influences and effects on the operating equipment must be taken into account.



Dust-proof Degree of predection IP **6**5

Degree of predection against

accordance with IEC 50102

mechanical load IK 08 (5 Joules) in

Predection against foreign solid objects and direct contact



Insulation

Predected against water jets Degree of predection IP 65

**Predection against** ingress of water with harmful effects

### DEPENDENT ON MATERIAL

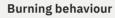
### **Material properties: Polycarbonate**



Glow wire test 960 °C in accordance with IEC 60695-2-11 self-extinguishing, flame retardant



Resistance against acids 10% and alkaline 10%, petrol and mineral oil





UV resistance according to IEC 61439-1 para. 10.2.4: The material is examined for UV resistance.



Chemical

resistance

Silicone- and halogen-free

**UV** resistance

Toxic behaviour

MI 1600 A COMPONENTS PANELBUILDER INTERNATIONAL

### HENSEL



### MiU 0100

ENYMOD bottom part

Dimensions H x W x D: 150 x 300 x 114 mm

- + Number of cable entries: 30
- + Metric knockouts: 1 x M20 (wall left+right)
- 1 x M32, M40 (wall left+right)
- 2 x M20 (wall top+bottom)
- 10 x M25 (wall top+bottom)
- 1 x M32, M40 (wall top+bottom)
- + Number of openings for flange plates: 4
- + Box size: 1



### MiU 0200

ENYMOD bottom part

Dimensions H x W x D: 300 x 300 x 114 mm

- + Number of cable entries: 40
- + Metric knockouts: 3 x M40, M50 (wall left+right)
- 4 x M25 (wall left+right)
- 2 x M20 (wall top+bottom)
- 10 x M25 (wall top+bottom)
- 1 x M32, M40 (wall top+bottom)
- + Number of openings for flange plates: 4
- + Box size: 2



### MiU 0300

**ENYMOD** bottom part

Dimensions H x W x D: 450 x 300 x 114 mm

- + Number of cable entries: 44
- + Metric knockouts: 3 x M40, M50 (wall left+right)
- 1 x M32, M40 (wall left+right)
- 4 x M25 (wall left+right)
- 1 x M20 (wall left+right)
- 2 x M20 (wall top+bottom)
- 10 x M25 (wall top+bottom)
- 1 x M32, M40 (wall top+bottom)
- + Number of openings for flange plates: 6
- + Box size: 3



### MiU 0400

ENYMOD bottom part

Dimensions H x W x D: 600 x 300 x 114 mm

- + Number of cable entries: 44
- + Metric knockouts: 4 x M40, M50 (wall left+right)
- 8 x M32 (wall left+right)
- 2 x M20 (wall top)
- 10 x M25 (wall top)
- 1 x M32, M40 (wall top)
- 4 x M25 (wall bottom)
- 3 x M40, M50 (wall bottom)
- + Number of openings for flange plates: 6
- + Box size: 4



### MiU 0600

ENYMOD bottom part

Dimensions H x W x D: 450 x 600 x 114 mm

- + Number of cable entries: 70
- + Metric knockouts: 4 x M20 (wall top+bottom)
- 20 x M25 (wall top+bottom)
- 2 x M32, M40 (wall top+bottom)
- 1 x M20 (wall left+right)
- 4 x M25 (wall left+right)
- 1 x M32, M40 (wall left+right)
- 3 x M40, M50 (wall left+right)
- + Number of openings for flange plates: 8
- + Box size: 6



### MiU 0800

ENYMOD bottom part

Dimensions H x W x D: 600 x 600 x 114 mm

- + Number of openings for flange plates: 8
- + Box size: 8
- ullet Cable entry only possible via flange

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### MiD 0100

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 150 x 300 x 57 mm

+ Box size: 1



### MiD 0101

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 150 x 300 x 57 mm

+ Box size: 1



### MiD 0200

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 300 x 300 x 57 mm

+ Box size: 2



### MiD 0201

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 300 x 300 x 57 mm

+ Box size: 2



### MiD 0210

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 300 x 300 x 101 mm

+ Box size: 2



### MiD 0211

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 300 x 300 x 101 mm

+ Box size: 2



### MiD 0220

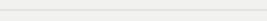
ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 300 x 300 x 69 mm

+ Box size: 2







### MiD 0221

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 300 x 300 x 69 mm

+ Box size: 2



### MiD 0301

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 450 x 300 x 57 mm

+ Box size: 3



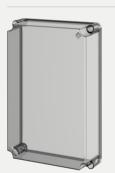
### MiD 0300

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 450 x 300 x 57 mm

+ Box size: 3



### MiD 0310

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 450 x 300 x 101 mm

+ Box size: 3



### MiD 0311

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 450 x 300 x 101 mm

+ Box size: 3



### MiD 0400

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 600 x 300 x 57 mm

+ Box size: 4



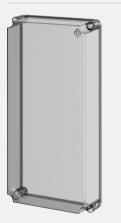
### MiD 0401

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 450 x 300 x 57 mm

+ Box size: 4



### MiD 0410

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 450 x 300 x 101 mm

+ Box size: 4



### MiD 0411

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 450 x 300 x 101 mm

+ Box size: 4



### MiD 0600

ENYMOD lid

Colour of the lid: transparent

Dimensions H x W x D: 450 x 600 x 57 mm

+ Box size: 6



### MiD 0601

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 450 x 600 x 57 mm

+ Box size: 6



### MiD 0800

ENYMOD lid

Colour of the lid: transparent Dimensions H x W x D: 600 x 600 x 57 mm

+ Box size: 8



### MiD 0801

ENYMOD lid

Colour of the lid: grey

Dimensions H x W x D: 600 x 600 x 57 mm

+ Box size: 8

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## ACCESSORIES





### Mi ST 25

### Rated current of busbar 250 A

### Busbar support

- + For: Empty boxes
- + Busbar dimensions: L1-L3: 12 mm x 10 mm N, PE: 12 mm x 5 mm
- + N conductor with the same current carrying capacity as the phase conductors
- + Number of poles: 5
- + Included accessories: fastening material

Centreline spacing of busbars 60 mm



### Mi ST 41

### Rated current of busbar 400 A

### Busbar support

- + For: Empty boxes
- + Busbar dimensions: L1-L3: 20 mm x 10 mm N: 12 mm x 10 mm PE: 12 mm x 5 mm
- + N conductor with the same current carrying capacity as the phase con-
- + Number of poles: 5
- + Included accessories: fastening material

Centreline spacing of busbars 60 mm



### Mi ST 63

### Rated current of busbar 630 A

### Busbar support

- + For: Empty boxes
- + Busbar dimensions: L1-L3: 30 mm x 10 mm N: 25 mm x 10 mm PE: 12 mm x 10 mm
- + N conductor with the same current carrying capacity as the phase conductors
- + Number of poles: 5
- + Included accessories: fastening material

Centreline spacing of busbars 60 mm



### Mi ST 10

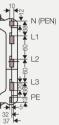
### Rated current of busbar 1000 A

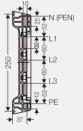
### Busbar support

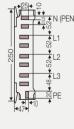
- + For: Empty boxes
- + Busbar dimensions: L1-L3: 30 mm x 10 mm N: 25 mm x 10 mm PE: 20 mm x 10 mm
- + N conductor with the same current carrying capacity as the phase conductors
- + Number of poles: 5
- + Included accessories: fastening material

Centreline spacing of busbars 60 mm













### Mi SV 10

Rated current of busbar 1000 A Busbar connectors

- + For: Busbar box
- + N conductor with the same current carrying capacity as the phase conductors
- + Set with 8 pieces
- + Included accessories: fastening material

Centreline spacing of busbars 60 mm

Copper conducto	r				
Туре	Busbar connect	diameter	Flexible railkoper	For railkoper	1000 A 1600 A (= 2 x 1000 A)* N: 2 x 25 x 10 L1-L3: 2 x 30 x 10
KS 35 P	M6	2 x 1,5 - 35 mm <sup>2</sup>	-	-	N L1 L2 L3
KS 240 P	M12	1 x 35 - 240 mm²	_	_	N L1 L2 L3
KS 12 P	-	-	250 A: Mi VS 250 400 A: Mi VS 400	12 x mm	N L1 L2 L2 L3
KS 20 P	-	_	630 A: Mi VS 630	20 x mm	N L1 L2 L3
KS 50 P	-	-	_	25 - 50 x mm	N L1 L2 L3
KS 60 P	-	-	_	60 x mm	N L1 L2 L2 L3

Remark: \*Rail system 1600 A consists of 2 x 1000 A rail system.



### MiV 10

ENYMOD lid fastener Hand operation

+ Colour: blue



### MiV 60

ENYMOD lid fastener Tool operation

+ Colour: blue



### MiV 20

ENYMOD lid fastener

Sealing

+ Colour: red



### Mi SV 2

Locking device insertion conversion kit for padlock (clip Ø max. 10 mm)

- + Set with 2 pieces
- + Can be used instead of fasteners for hand or tool operation in order to prevent unauthorised opening of the lids



### Mi KL 6

Hinged flap

Opening dimension: 60 x 117 mm



- + Lockable with hinged flap lock
- + Sealable without accessories
- + Included accessories: fastening material, Drill and saw template



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### Mi BS 6

### Closed cover

- + For Mi KL 6
- + Dimensions H x W: 46 x 108 mm
- + For retrofitting
- + Suitable for Hinged flap
- + As protection cover or for the installation of devices
- + Included accessories: fastening material





### Mi KL 12

### Hinged flap

Opening dimension: 60 x 220 mm

### With hinged flap

- + Modules 1 x 12 modules x 18 mm
- + Lockable with hinged flap lock
- + Sealable without accessories
- + Included accessories: fastening material, Drill and saw template



### Mi BS 12

### Closed cover

- + For Mi KL 12, Mi 1111, Mi 1222, Mi 1333, Mi 1443, Mi 1444, Mi 1445, Mi 1117, Mi 1227, Mi 1337, Mi 1119, Mi 1229, Mi 1339, Mi 1449
- + Dimensions H x W: 46 x 216 mm
- + For retrofitting
- + Suitable for Hinged flap
- $\mbox{\ \, + \ \, }$  As protection cover or for the installation of devices
- + Included accessories: fastening material



### Mi SK 01

### Locking device

- + For retrofitting in hinged flaps of 6 or 12 modules width
- + Included accessories: fastening material



### Mi ZS 40

#### Hinge

- + Suitable for box sizes: 1, 2, 3, 4, 6, 8
- + Set with 2 pieces
- + For operating installation device within a large area. The lid keeps permanently connected to the box..
- + Wall connectors or flanges are necessary for assembly.
- + Not applicable in boxes with covers.
- + Included accessories: fastening material



### Mi 7S 60

### Hinge

- + Suitable for Enclosure with extension frame size: 4, 6, 8
- + Set with 2 pieces
- + For operating installation device within a large area. The lid keeps permanently connected to the box..
- + Wall connectors or flanges are necessary for assembly.
- + Not applicable in boxes with covers.
- + Included accessories: fastening material



### Mi ZS 20

### Hinge

- + Suitable for box sizes: 1, 2, 3, 4
- + Set with 2 pieces
- + For operating installation device within a large area. The lid keeps permanently connected to the box..
- + When assembling several boxes, the insertion can only be carried out for the external boxes.
- + Included accessories: fastening material



### NZ KL 54

### Hinged flap

Opening dimension: 310 x 140 mm







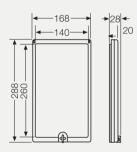
+ Sealable without accessories

+ Included accessories: fastening material



### Mi SF

### Hinged lid







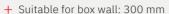
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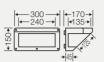


### Mi CB 10

### Connection Box



- Suitable for box wall. 500 fillif
- + For the installation of devices that must be operated externally, such as plug devices, push buttons and switches
- + Position for mounting: bottom, side
- + Hinged mounting area
- + Included accessories: fastening material







### Flange

Knockoutss: none

- + Suitable for box wall: 150 mm
- + Built-in dimensions height: 88 mm width: 65 mm
- + Included accessories: fastening material





### Mi FM 15

### Flange

Knockouts: 3 x M20 1 x M32, M40, M50

- + Suitable for box wall: 150 mm
- + Included accessories: fastening material





## Mi FP 20

### Flange

Knockoutss: none

- + Suitable for box wall: 300 mm
- + Built-in dimensions height: 88 mm width: 215 mm
- + Included accessories: fastening material

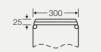


### Mi FM 20

### Flange

Knockouts: 15 x M16, 15 x M20

- + Suitable for box wall: 300 mm
- + Included accessories: fastening material





### Mi FM 25

### Flange



- + Suitable for box wall: 300 mm
- + Included accessories: fastening material



### Mi FM 32

### Flange

Knockouts: 1 x M25, M32, M40 8 x M25, M32

- + Suitable for box wall: 300 mm
- + Included accessories: fastening material



### Mi FM 40

### Flange

Knockouts: 2 x M25, M32 5 x M32, M40

- + Suitable for box wall: 300 mm
- + Included accessories: fastening material



### Mi FM 50

### Flange

Knockouts: 2 x M20 4 x M32, M40, M50

- + Suitable for box wall: 300 mm
- + Included accessories: fastening material



### Mi FM 60

### Flange

Knockouts: 3 x M40, M50, M63

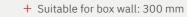
- + Suitable for box wall: 300 mm
- + Included accessories: fastening material



### Mi FM 63

### Flange

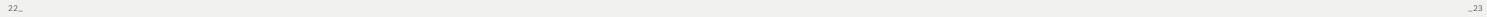
Knockouts: 3 x M40, M50, M63 with additional manoeuvring space



+ Included accessories: fastening material













### Mi FP 38

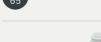
### Flange

### Sealing range:



- + Cable entry via integrated elastic membranes
- + Suitable for box wall: 300 mm
- + Included accessories: fastening material





### Mi FP 70

### Flange

Sealing range:

1 x 30 mm - 72 mm



- + Cable entry via integrated elastic membranes
- + Suitable for box wall: 300 mm + Included accessories: fastening material

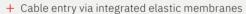


### Mi FP 72

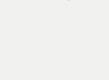
### Flange

Sealing range:

2 x 30 mm - 72 mm



- + Suitable for box wall: 300 mm
- + Included accessories: fastening material





### Mi FP 82

### Flange

Sealing range:

2 x 30 mm - 72 mm

- + Suitable for box wall: 300 mm
- + Degree of protection IP 54 only with additional strain and pressure relief (e.g. Mi ZE 62)
- + Included accessories: fastening material



### Mi ZE 62

### Strain relief

- + for 2 cables with max. 60 mm external diameter
- + To be used only in connection with Mi FP 82
- + Included accessories: fastening material



### Mi GS 30

### Box fin

- + Suitable for box wall: 300 mm
- + for inserting cables across 2 boxes
- + Removable
- + For retrofitting
- + Included accessories: fastening material



### Mi FP 30

#### Metal insert

- + Suitable for box wall: 300 mm
- + Knockoutss: none
- + Included accessories: fastening material
- + For grounding steel-armored cables



### Mi BF 44

### Ventilation flange

- + Suitable for box wall: 300 mm
- + For ventilation of Mi-Distribution boards in the event of extremely high internal temperatures or a risk of water condensation
- + Included accessories: fastening material





### BE 44

Ventilation insert









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Mi DB 15

Canopy

suitable for box wall: 150 mm

+ Included accessories: fastening material

Surface treatment

powder-coated





Canopy

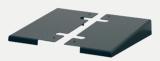
suitable for box wall: 300 mm

+ Included accessories: fastening material

Surface treatment

powder-coated

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### Mi DB 01

Canopy end plate

- + Set with 2 pieces
- + For canopy Mi DB xx
- + Included accessories: fastening material

Surface treatment

powder-coated



### Mi MB 1

Pipe and pole mounting set

- + Suitable for box sizes: 1
- + Suitable for pipe/pole diameters of 60 150 mm
- + Set with 2 pieces
- + Suitable for box wall: fastening screws, clamps

Material	Stainless steel V2A

Maximum load 25 kg



### Mi MB 2

Pipe and pole mounting set

- + Suitable for box sizes: 1, 2, 3, 4
- + Suitable for pipe/pole diameters of 60 150 mm
- + Set with 2 pieces
- + Suitable for box wall: fastening screws, clamps

Material	Stainless steel V2A
Maximum load	25 kg



### Mi AL 40

External brackets

- + Set with 4 pieces
- + For external fixing of enclosures
- + Included accessories: fastening material

Material Stainless steel V2A



### Mi MS 2

Mounting profile

- + For Mi distribution board assemblies up to 900 x 1200 mm
- + Included accessories: fastening material

Height	1950 mm
Surface treatment	powder-coated, sendzimir ga

vanised



### Lackstift RAL 7016

Varnishing pen

12 ml





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### Mi MR 69

### Mounting frame

- + Fixing brackets (Mi BL xx) are required for wall mounting
- + Set consisting of 3x 2m rail, 6x 2-way connection and 20x mounting screw
- + For approx. 1,6 m<sup>2</sup>
- + For Mi distributions up to 900 x 1800 mm
- + Included accessories: fastening material

Surface treatment

hot-dip galvanised



### Mi MR 49

### Mounting frame

- + Fixing brackets (Mi BL xx) are required for wall mounting
- + Set consisting of 2x 2m rail, 4x 2-way connection and 20x mounting screw
- + For approx. 1 m<sup>2</sup>
- + For Mi distributions up to 600 x 1200 mm or 900 x 900 mm
- + Included accessories: fastening material

Surface treatment

hot-dip galvanised



### Mi MR 20

### Mounting frame

- + Fixing brackets (Mi BL xx) are required for wall mounting
- + Set consisting of 1x 2m rail, 2x 2-way connection and 20x mounting screw
- + Included accessories: fastening material

Surface treatment

hot-dip galvanised



### Mi BL 30

### Fixing brackets

Depth: 30 mm

- + Set with 4 pieces
- + Suitable for Connection with the mounting frame
- + Included accessories: fastening material



### Mi BL 50

### Fixing brackets

Depth: 50 mm

- + Set with 4 pieces
- + Suitable for Connection with the mounting frame
- + Included accessories: fastening material



### Mi BL 75

### Fixing brackets

Depth: 75 mm

- + Set with 4 pieces
- + Suitable for Connection with the mounting frame
- + Included accessories: fastening material



### Mi BL 99

## Fixing brackets

Depth: 100 mm

- + Set with 4 pieces
- + Suitable for Connection with the mounting frame
- + Included accessories: fastening material



### Mi VB 22

### Connector, 2-way

- + Set with 2 pieces
- + Suitable for Connection of 2 rails of the mounting frame
- + Included accessories: fastening material



### Mi VB 32

### Connector, 3-way

- + Set with 2 pieces
- + Suitable for Connection of 3 rails of the mounting frame
- + Included accessories: fastening material

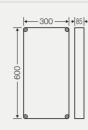
i MORE INFORMATION ON HENSEL-ELECTRIC.DE



### Mi 7R 4

### Extension frame

- + Suitable for box sizes: 4
- + To increase the mounting depths by 85 mm
- + Degree of protection IP 65 is maintained with use of up to two extension frames
- + Included accessories: fastening material





### Mi ZR 6

### Extension frame

- + Suitable for box sizes: 6
- + To increase the mounting depths by 85 mm
- + Degree of protection IP 65 is maintained with use of up to two extension frames
- + Included accessories: fastening material

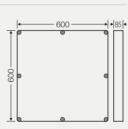




### Mi ZR 8

### Extension frame

- + Suitable for box sizes: 8
- + To increase the mounting depths by 85 mm
- + Degree of protection IP 65 is maintained with use of up to two extension frames
- + Included accessories: fastening material





### Mi FP 01

### Closed cover

- + Suitable for Empty boxes size: 1
- + Dimensions H x W: 286 x 136 mm
- + For retrofitting
- + As protection cover or for the installation of devices
- + Included accessories: fastening material



### Mi EP 02

#### Closed cover

- + Suitable for Empty boxes size: 2
- + Dimensions H x W: 286 x 286 mm
- + For retrofitting
- + As protection cover or for the installation of devices
- + Included accessories: fastening material

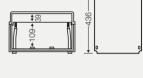




### Mi EP 03

### Closed cover

- + Suitable for Empty boxes size: 3, 6
- + Dimensions H x W: 436 x 286 mm
- + For retrofitting
- + As protection cover or for the installation of devices
- + Included accessories: fastening material

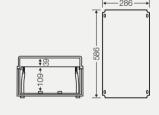




### Mi EP 04

### Closed cover

- + Suitable for Empty boxes size: 4
- + Dimensions H x W: 586 x 286 mm
- + For retrofitting
- + As protection cover or for the installation of devices
- + Included accessories: fastening material

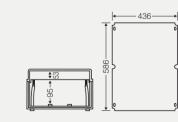




### Mi EP 06

### Closed cover

- + Suitable for Empty boxes size: 6
- + Dimensions H x W: 586 x 436 mm
- + For retrofitting
- + As protection cover or for the installation of devices
- + Included accessories: fastening material



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 MI 1600 A COMPONENTS PANELBUILDER INTERNATIONAL — SONSTIGES ZUBEHÖR





### Mi SA 2

Dust predection cover

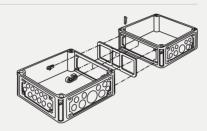
- + Suitable for box sizes: 1, 2, 3, 4, 6, 8
- + Set with 2 pieces



### Mi WD 2

Wall gasket

- + Suitable for box wall: 150 mm, 300 mm
- + For the assembly of Mi boxes
- + Included accessories: fastening material



### Mi WT 1

Wall separator

- + Suitable for box wall: 300 mm
- + For connecting different box walls
- + Included accessories: fastening material



### Mi ZW 30

Partition

for mounting between Mi boxes

- + Suitable for box wall: 300 mm
- + Included accessories: fastening material



### Mi BZ 11

Fixing screw

- + Length: 11 mm
- + For mounting on the housing base
- + Suitable for material thickness: 1 mm 2.5 mm
- + Self-tapping

Surface treatment

Galvanic / electrolytically galva-



### Mi BZ 13

Fixing screw

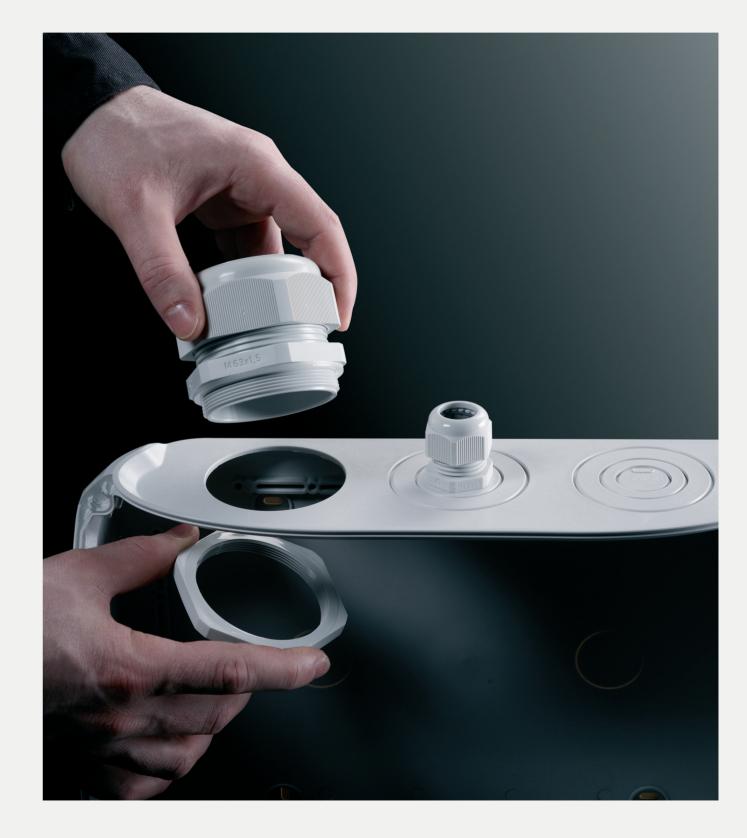
- + Length: 13 mm
- + For mounting on the housing base
- + Suitable for material thickness: 2.5 mm 4 mm
- + Self-tapping

Surface treatment

Galvanic / electrolytically galva-

nized

## **ENYFIT**





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Cable glands

for knockouts M12

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 4 mm 6 mm
- + Bore-hole: Ø 12.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C



Outdoor installation



### **AKM 16**

Cable glands

for knockouts M16

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 5 mm 10 mm
- + Bore-hole: Ø 16.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C



Outdoor installation



IP 66/67 69

### AKM 20

Cable glands

for knockouts M20

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 6.5 mm 13.5 mm
- + Bore-hole: Ø 20.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C



Outdoor installation



IP 66/67 (DNV)

### AKM 25

Cable glands

for knockouts M25

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 11 mm 17 mm
- + Bore-hole: Ø 25.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



IP 66/67 0NV



### **AKM 32**

Cable glands

for knockouts M32

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 15 mm 21 mm
- + Bore-hole: Ø 32.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



### AKM 40

Cable glands

for knockouts M40

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 19 mm 28 mm
- + Bore-hole: Ø 40.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



IP 66/67 0NV

### AKM 50

Cable glands

for knockouts M50

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 27 mm 35 mm
- + Bore-hole: Ø 50.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



### **AKM 63**

Cable glands

for knockouts M63

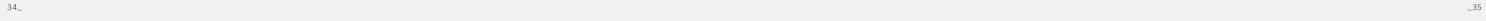
- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 35 mm 42 mm
- + Bore-hole: Ø 63.3 mm
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



























































































### KBM 20

### Combi climate glands

### for knockouts M20

- + To reduce condensation through pressure compensation
- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 6 mm 13 mm
- + Bore-hole: Ø 20.5 mm
- + Maximum enclosure volume per pressure compensation element: 6 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
- + Suitable for wall thickness: bis 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



### **KBM 25**

### Combi climate glands

### for knockouts M25

- + To reduce condensation through pressure compensation
- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 9 mm 17 mm
- + Bore-hole: Ø 25.5 mm
- + Maximum enclosure volume per pressure compensation element: 10 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
- + Suitable for wall thickness: bis 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

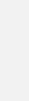
Outdoor installation



### KBM 32

### for knockouts M32

- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 13 mm 21 mm
- + Bore-hole: Ø 32.5 mm
- + Maximum enclosure volume per pressure compensation element: 12 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
- + Suitable for wall thickness: bis 3.5 mm
- + Maximum ambient temperature 24 h: 55 °C

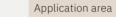




### Combi climate glands

### for knockouts M40

- + To reduce condensation through pressure compensation
- + Twith strain relief and locknut
- + Sealing range of the cable entry: Ø 16 mm 28 mm
- + Bore-hole: Ø 40.5 mm
- + Maximum enclosure volume per pressure compensation element: 16 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
- + Suitable for wall thickness: bis 3 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C



Outdoor installation



### **VSB 13**

### Sealing plug

- + Bore-hole: Ø 13 mm
- + For sealing combi climate glands, which are not used for cable entry
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C

Application area

Indoor installation



### **VSB 21**

### Sealing plug

- + Bore-hole: Ø 21 mm
- + For sealing combi climate glands, which are not used for cable entry
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C

Application area

Indoor installation





### Combi climate glands

- + To reduce condensation through pressure compensation

- + Ambient temperature: up to +

Application area

Outdoor installation





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### BM 20G

### Pressure compensation element for knockouts M20



- + Bore-hole: Ø 20.3 mm
- + To reduce condensation through pressure compensation bei Verteilersystemen
- + Maximum enclosure volume per pressure compensation element: 28 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
- + Suitable for wall thickness: bis 8 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



### BM 40G

### Pressure compensation element for knockouts M40



- + To reduce condensation through pressure compensation bei Verteilersystemen
- + Maximum enclosure volume per pressure compensation element: 122 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
- + Suitable for wall thickness: bis 8 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 55 °C

Application area

Outdoor installation



### ESM 16

#### Grommets

### for knockouts M16

- + Sealing range of the cable entry: Ø 4.8 mm 11 mm
- + Bore-hole: Ø 16.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Application area

Indoor installation



### ESM 20

### Grommets

### for knockouts M20

- + Sealing range of the cable entry: Ø 6 mm 13 mm
- + Bore-hole: Ø 20.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Application area

Indoor installation



### ESM 25

#### Grommets

#### for knockouts M25

- + Sealing range of the cable entry: Ø 9 mm 17 mm
- + Bore-hole: Ø 25.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Application area

Indoor installation



### ESM 32

### Grommets

#### for knockouts M32

- + Sealing range of the cable entry: Ø 9 mm 23 mm
- + Bore-hole: Ø 32.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Application area

Indoor installation

Indoor installation



### ESM 40

### Grommets

Application area

### for knockouts M40

- + Sealing range of the cable entry: Ø 17 mm 30 mm
- + Bore-hole: Ø 40.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



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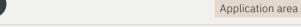


### STM 16

### Stepped grommets

#### for knockouts M16

- + Sealing range of the cable entry: Ø 3.5 mm 12 mm
- + Bore-hole: Ø 16.5 mm
- + Suitable for wall thickness: 1.5 mm 4 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Indoor installation



### STM 20

### Stepped grommets

### for knockouts M20

- + Sealing range of the cable entry: Ø 5 mm 16 mm
- + Bore-hole: Ø 20.5 mm
- + Suitable for wall thickness: 1.5 mm 4 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C

Application area

Indoor installation

Indoor installation

Indoor installation



### STM 25

### Stepped grommets

#### for knockouts M25

- + Sealing range of the cable entry: Ø 5 mm 21 mm
- + Bore-hole: Ø 25.5 mm
- + Suitable for wall thickness: 1.5 mm 4 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



### STM 32

Application area

### Stepped grommets

#### for knockouts M32

- + Sealing range of the cable entry: Ø 13 mm 26.5 mm
- + Bore-hole: Ø 32.5 mm
- + Suitable for wall thickness: 1.5 mm 4 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



### Application area STM 40

### Stepped grommets

#### for knockouts M40

- + Sealing range of the cable entry: Ø 13 mm 34 mm
- + Bore-hole: Ø 40.5 mm
- + Suitable for wall thickness: 1.5 mm 4 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



40\_

Application area

Indoor installation



**ENYFIT** — GROMMETS

### **EDK 16**

#### Grommets

#### for knockouts M16

- + Sealing range of the cable entry: Ø 5 mm 10 mm
- + Bore-hole: Ø 16.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C

Indoor installation

Indoor installation

Indoor installation

Indoor installation



#### Application area

### **EDK 20** Grommets

### for knockouts M20

- + Sealing range of the cable entry: Ø 6 mm 13 mm
- + Bore-hole: Ø 20.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



### **EDK 25**

### Grommets

Application area

### for knockouts M25

- + Sealing range of the cable entry: Ø 9 mm 17 mm
- + Bore-hole: Ø 25.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



### Application area

### **EDK 32** Grommets

### for knockouts M32

- + Sealing range of the cable entry: Ø 8 mm 23 mm
- + Bore-hole: Ø 32.5 mm
- + Suitable for wall thickness: 1.5 mm 3.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



### Application area

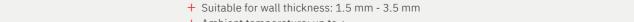
### **EDK 40** Grommets

### for knockouts M40

- + Sealing range of the cable entry: Ø 11 mm 30 mm
- + Bore-hole: Ø 40.5 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



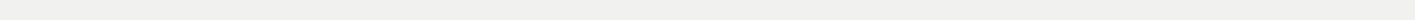
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Application area

Indoor installation















































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### EDR 16

### Grommets for conduits

### for knockouts M16

- + Bore-hole: Ø 16.5 mm
- + Pipe size: M16
- + Suitable for wall thickness: 1.5 mm 3.2 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Application area



Indoor installation



### EDR 20

### Grommets for conduits

for knockouts M20

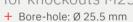
- + Bore-hole: Ø 20.5 mm
- + Pipe size: M20
- + Suitable for wall thickness: 1.5 mm 3.2 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C





### Grommets for conduits

for knockouts M25



- + Pipe size: M25
- + Suitable for wall thickness: 1.5 mm 3.2 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



EDR 32

Application area

### Grommets for conduits

for knockouts M32

- + Bore-hole: Ø 32.5 mm
- + Pipe size: M32
- + Suitable for wall thickness: 1.5 mm 3.2 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Application area

Indoor installation

Indoor installation



### EDR 40

### Grommets for conduits

for knockouts M40

- + Bore-hole: Ø 40.5 mm
- + Pipe size: M40
- + Suitable for wall thickness: 1.5 mm 3.2 mm
- + Ambient temperature: up to +
- + Maximum ambient temperature 24 h: 35 °C



Application area

Indoor installation



## NOTES



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