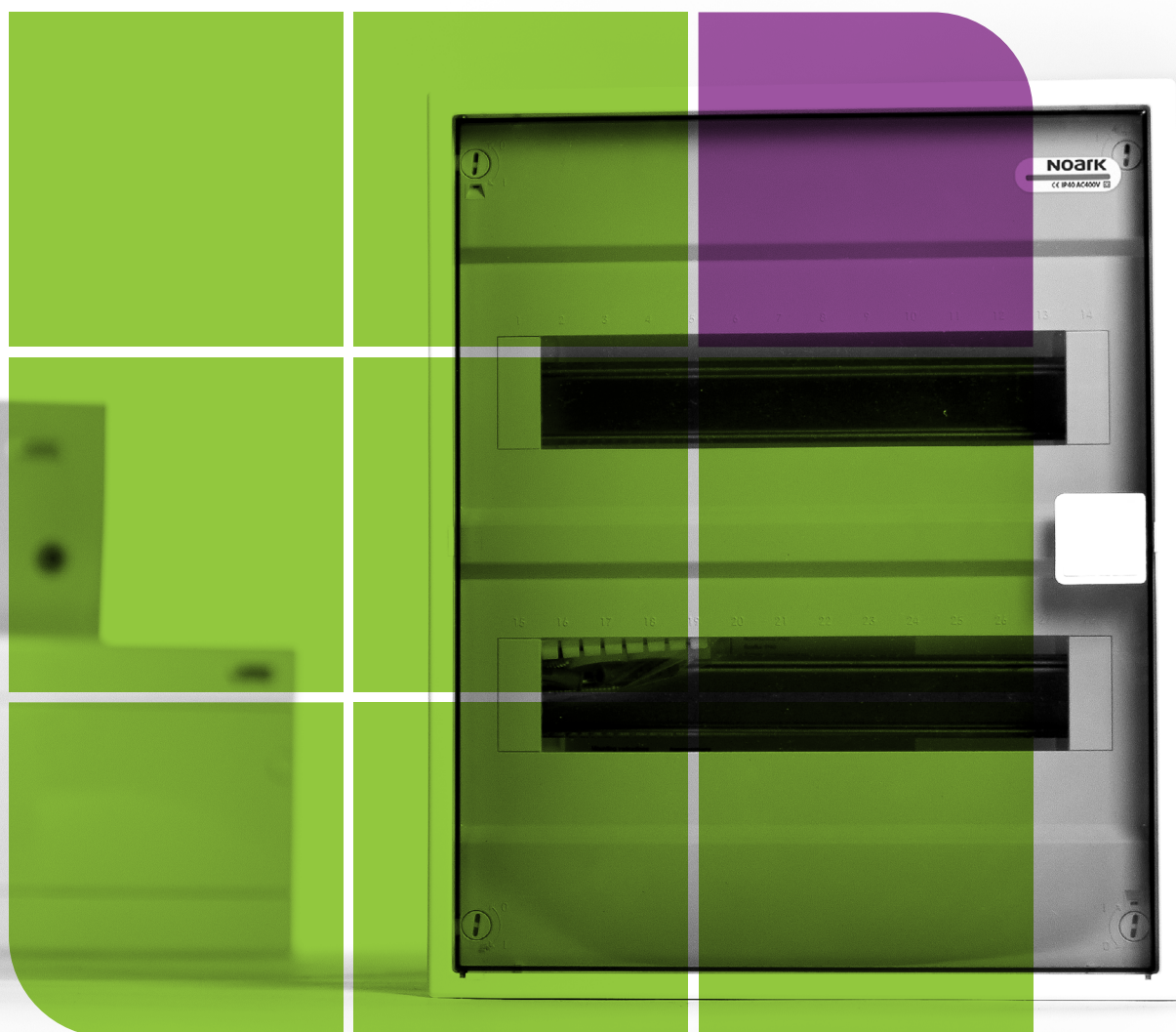


# CONSUMER UNITS

CATALOGUE  
OF PLASTIC, METAL AND  
CONSUMER UNITS,  
BUSBAR SYSTEMS AND TERMINALS

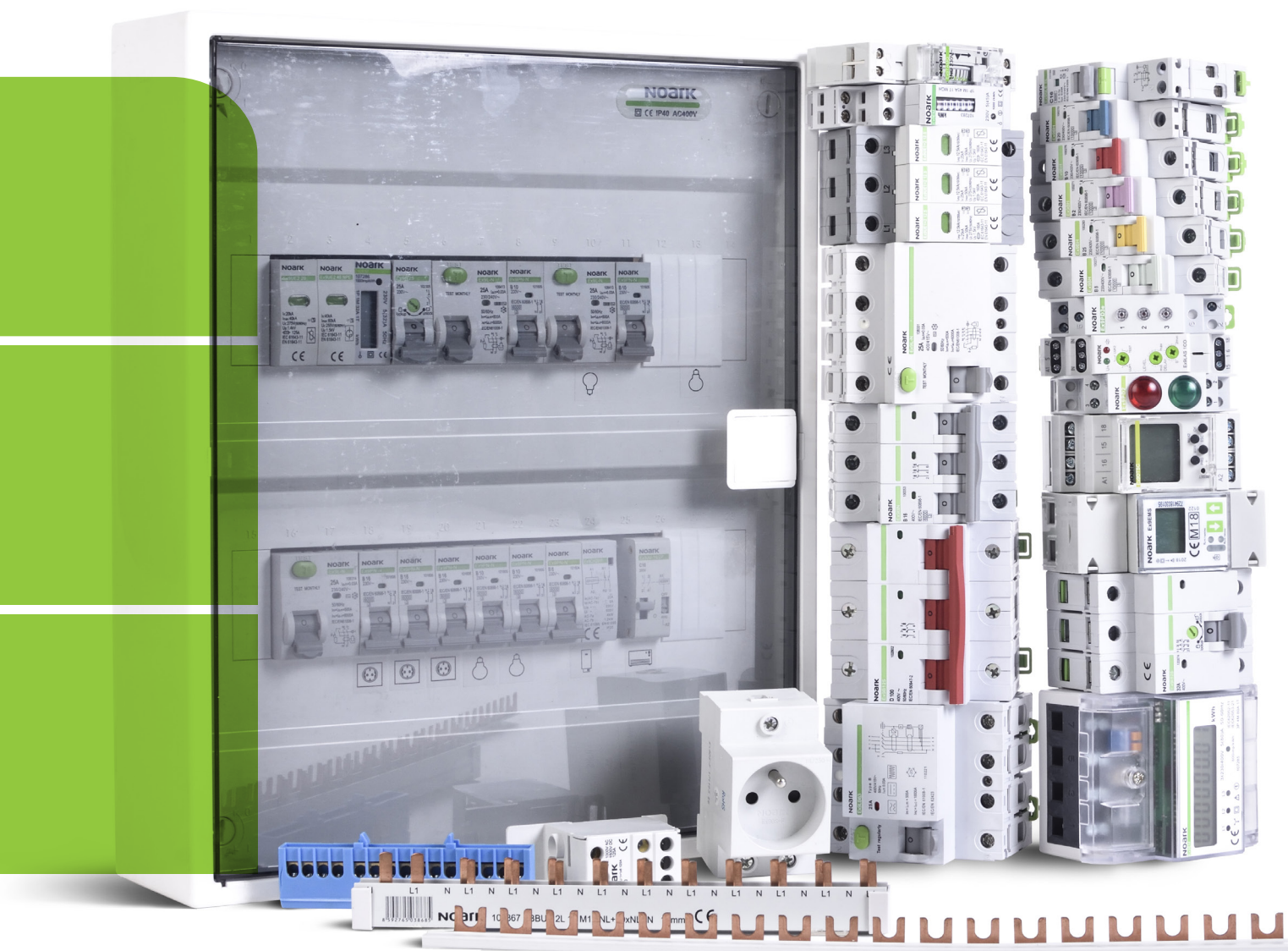


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# Noark



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|                                      |     |
|--------------------------------------|-----|
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| BBUM busbars .....                   | 125 |
| IT insulated terminals .....         | 127 |
| PDB power distribution blocks .....  | 128 |
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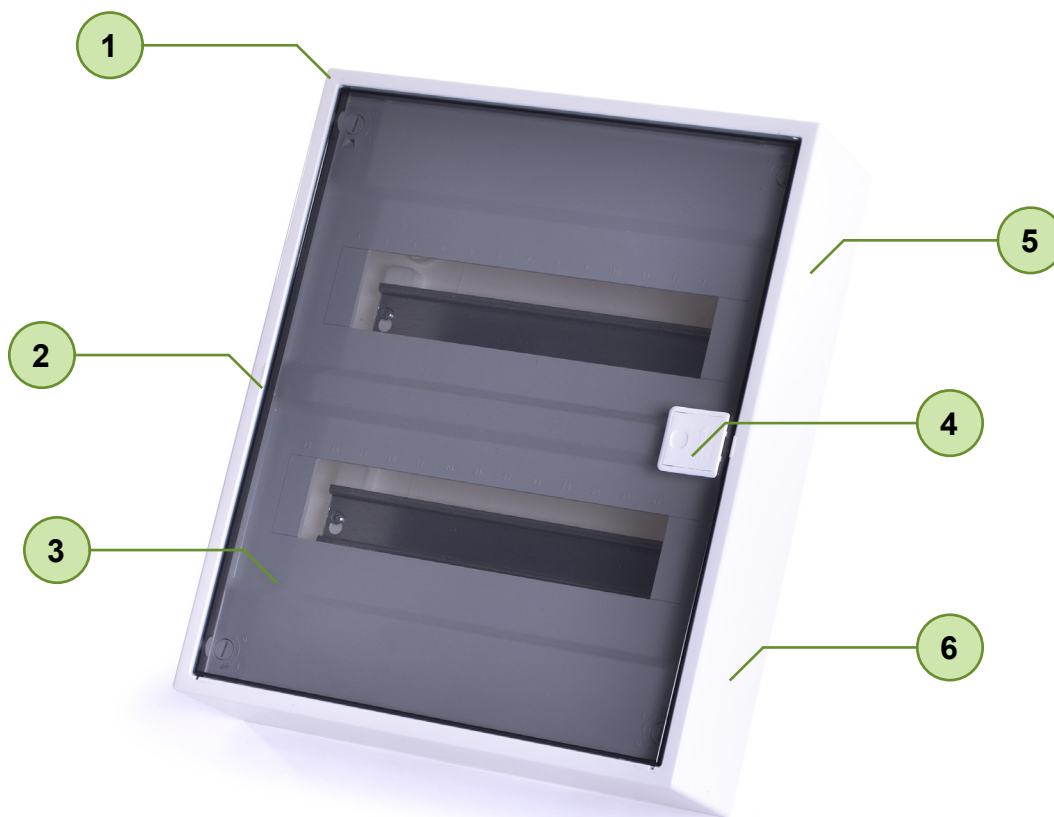


# Plastic Consumer Units



# Plastic Consumer Units

## Professional Tips



1 5 years warranty

2 Surface and flush mounting version

3 Transparent and plain door

4 Wide range of accessories and spare parts

5 Special version for hollow walls

6 Desing version

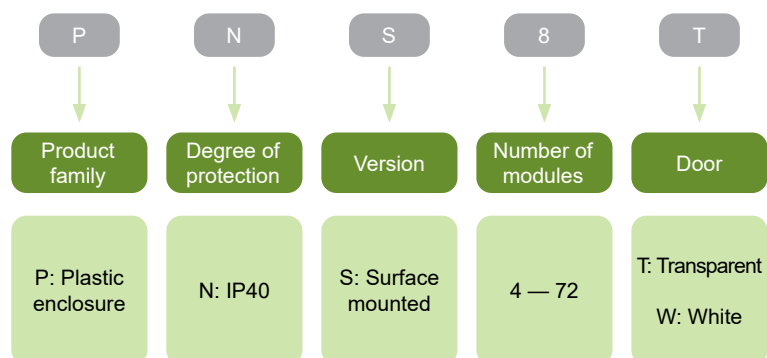
# Surface-mounted IP40 Consumer Units PNS



- Surface-mounted consumer units PNS
- Degree of protection IP40
- 4 up to 72 modules
- 1 up to 4 rows
- Transparent or white door

Consumer units PNS are intended mainly for domestic applications. Their design is suitable for surface mounting. Scope of delivery consists of enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place and mounting material.

## Type Key



## Certification marks



# Surface-mounted IP40 Consumer Units PNS

## Consumer units PNS with transparent door

- Surface mounted version
- 4, 8, 12, 18 or 24 modules per row
- 1 up to 4 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type      | Packing |
|----------------|----------------|---------------|-------------|-----------|---------|
| 4+4            | 1              | 4             | 110815      | PNS 4T    | 1       |
| 8+8            | 1              | 8             | 101497      | PNS 8T    | 1       |
| 10+10          | 1              | 12            | 101498      | PNS 12T   | 1       |
| 13+13          | 1              | 18            | 101499      | PNS 18T   | 1       |
| 13+13          | 1              | 24            | 113298      | PNS 1x24T | 1       |
| 13+13          | 2              | 24            | 101500      | PNS 24T   | 1       |
| 15+15          | 2              | 36            | 101501      | PNS 2x18T | 1       |
| 15+15          | 3              | 36            | 101502      | PNS 36T   | 1       |
| 20+20          | 4              | 48            | 101503      | PNS 48T   | 1       |
| 26+26          | 3              | 54            | 106196      | PNS 3x18T | 1       |
| 30+30          | 4              | 72            | 110816      | PNS 4x18T | 1       |

## Consumer units PNS with white door

- Surface mounted version
- 4, 8, 12, 18 or 24 modules per row
- 1 up to 4 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type      | Packing |
|----------------|----------------|---------------|-------------|-----------|---------|
| 4+4            | 1              | 4             | 110817      | PNS 4W    | 1       |
| 8+8            | 1              | 8             | 101504      | PNS 8W    | 1       |
| 10+10          | 1              | 12            | 101505      | PNS 12W   | 1       |
| 13+13          | 1              | 18            | 101506      | PNS 18W   | 1       |
| 13+13          | 1              | 24            | 113299      | PNS 1x24W | 1       |
| 13+13          | 2              | 24            | 101507      | PNS 24W   | 1       |
| 15+15          | 2              | 36            | 101508      | PNS 2x18W | 1       |
| 15+15          | 3              | 36            | 101509      | PNS 36W   | 1       |
| 20+20          | 4              | 48            | 101510      | PNS 48W   | 1       |
| 26+26          | 3              | 54            | 106197      | PNS 3x18W | 1       |
| 30+30          | 4              | 72            | 113272      | PNS 4x18W | 1       |



# Surface-mounted IP40 Consumer Units PNS

## Spare door, transparent

- Spare door for consumer unit
- Same version for PNS as well for PNF line of consumer units
- Packed separately



| Version     | For consumer units   | Article No. | Type         | Packing |
|-------------|----------------------|-------------|--------------|---------|
| Transparent | PNS 4T, PNF 4T       | 113281      | DR PNS 4T    | 1       |
| Transparent | PNS 8T, PNF 8T       | 101538      | DR PNS 8T    | 1       |
| Transparent | PNS 12T, PNF 12T     | 101539      | DR PNS 12T   | 1       |
| Transparent | PNS 18T, PNF 18T     | 101540      | DR PNS 18T   | 1       |
| Transparent | PNS 1x24T            | 113428      | DR PNS 1x24T | 1       |
| Transparent | PNS 24T, PNF 24T     | 101541      | DR PNS 24T   | 1       |
| Transparent | PNS 2x18T, PNF 2x18T | 101542      | DR PNS 2x18T | 1       |
| Transparent | PNS 36T, PNF 36T     | 101543      | DR PNS 36T   | 1       |
| Transparent | PNS 48T              | 101544      | DR PNS 48T   | 1       |
| Transparent | PNS 3x18T, PNF 3x18T | 106200      | DR PNS 3x18T | 1       |
| Transparent | PNS 4x18T, PNF 4x18T | 113427      | DR PNS 4x18T | 1       |

## Spare door, white

- Spare door for consumer unit
- Same version for PNS as well for PNF line of consumer units
- Packed separately



| Version | For consumer units   | Article No. | Type         | Packing |
|---------|----------------------|-------------|--------------|---------|
| White   | PNS 4W, PNF 4W       | 113282      | DR PNS 4W    | 1       |
| White   | PNS 8W, PNF 8W       | 101545      | DR PNS 8W    | 1       |
| White   | PNS 12W, PNF 12W     | 101546      | DR PNS 12W   | 1       |
| White   | PNS 18W, PNF 18W     | 101547      | DR PNS 18W   | 1       |
| White   | PNS 1x24W            | 113429      | DR PNS 1x24W | 1       |
| White   | PNS 24W, PNF 24W     | 101548      | DR PNS 24W   | 1       |
| White   | PNS 2x18W, PNF 2x18W | 101549      | DR PNS 2x18W | 1       |
| White   | PNS 36W, PNF 36W     | 101550      | DR PNS 36W   | 1       |
| White   | PNS 48W              | 101551      | DR PNS 48W   | 1       |
| White   | PNS 3x18W, PNF 3x18W | 106201      | DR PNS 3x18W | 1       |
| White   | PNS 4x18W, PNF 4x18W | 113288      | DR PNS 4x18W | 1       |

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door
- Metal version of lock



| Version of lock | For consumer units | Article No. | Type    | Packing |
|-----------------|--------------------|-------------|---------|---------|
| Metal           | PNS, PNF, PNF-HW   | 101573      | LK PN M | 1       |

# Surface-mounted IP40 Consumer Units PNS

## Additional insulated terminal

- Additional insulated terminal with holder
- Grey colour
- 2 x 10 or 2 x 15 terminals



| Description        | Number of<br>N + PE terminals | Article No. | Type     | Packing |
|--------------------|-------------------------------|-------------|----------|---------|
| Insulated terminal | 10 + 15                       | 109053      | TH CUB D | 1       |
| Insulated terminal | 15 + 15                       | 101577      | TH CUB P | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

## Cover for empty place

- Cover for unused 45 mm device cutout
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

## Spare mounting material

- For IP40 surface mounted consumer units
- Package contains: screws, wall plugs, stickers, empty place cover



| Description                   | Article No. | Type      | Packing |
|-------------------------------|-------------|-----------|---------|
| Spare mounting material, IP40 | 106184      | SMM IP40S | 1 pack  |

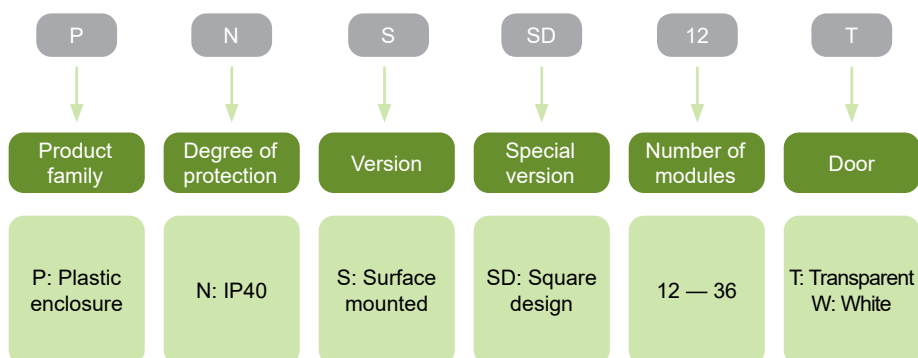
# Surface-mounted IP40 Consumer Units PNS-SD



- Surface-mounted consumer units PNS-SD
- Degree of protection IP40
- 12(+2) up to 36(+6) modules
- 1 up to 3 rows
- Transparent or white door
- White color RAL 9003

Consumer units PNS-SD are intended mainly for domestic applications. Their design is suitable for surface mounting. Scope of delivery consists of enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place and mounting material.

## Type Key



## Certification marks



# Surface-mounted IP40 Consumer Units PNS-SD

## Consumer units PNS with transparent door

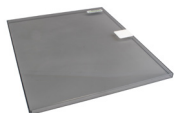
- Surface mounted version
- 12(+2) modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type       | Packing |
|----------------|----------------|---------------|-------------|------------|---------|
| 10+10          | 1              | 12(+2)        | 107274      | PNS-SD 12T | 1       |
| 13+13          | 2              | 24(+4)        | 107275      | PNS-SD 24T | 1       |
| 15+15          | 3              | 36(+6)        | 107276      | PNS-SD 36T | 1       |

## Spare door, transparent

- Spare door for consumer unit
- Packed separately



| Version     | For consumer units | Article No. | Type          | Packing |
|-------------|--------------------|-------------|---------------|---------|
| Transparent | PNS-SD 12T         | 107277      | DR PNS-SD 12T | 1       |
| Transparent | PNS-SD 24T         | 107278      | DR PNS-SD 24T | 1       |
| Transparent | PNS-SD 36T         | 107378      | DR PNS-SD 36T | 1       |

## Consumer units PNS with white door

- Surface mounted version
- 12(+2) modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type       | Packing |
|----------------|----------------|---------------|-------------|------------|---------|
| 10+10          | 1              | 12(+2)        | 113280      | PNS-SD 12W | 1       |
| 13+13          | 2              | 24(+4)        | 113283      | PNS-SD 24W | 1       |
| 15+15          | 3              | 36(+6)        | 113284      | PNS-SD 36W | 1       |

## Spare door, white

- Spare door for consumer unit
- Packed separately



| Version | For consumer units | Article No. | Type          | Packing |
|---------|--------------------|-------------|---------------|---------|
| White   | PNS-SD 12W         | 113285      | DR PNS-SD 12W | 1       |
| White   | PNS-SD 24W         | 113286      | DR PNS-SD 24W | 1       |
| White   | PNS-SD 36W         | 113287      | DR PNS-SD 36W | 1       |

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# Surface-mounted IP40 Consumer Units PNS-SD

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door



| Version of lock | For consumer units | Article No. | Type    | Packing |
|-----------------|--------------------|-------------|---------|---------|
| Metal           | PMF, PNS-SD        | 105494      | LK PM M | 1       |

## Spare plastic lock

- For PMF and PNS-SD line of consumer units
- Spare part, lock is in the standard scope of delivery



| Description             | Article No. | Type   | Packing |
|-------------------------|-------------|--------|---------|
| Spare lock, PMF, PNS-SD | 107121      | SL PMF | 1       |

## Additional insulated terminals

- Additional insulated terminal with holder
- Grey colour
- 2 x 10 or 2 x 15 terminals



| Description        | Number of N + PE terminals | Article No. | Type     | Packing |
|--------------------|----------------------------|-------------|----------|---------|
| Insulated terminal | 10 + 10                    | 109053      | TH CUB D | 1       |
| Insulated terminal | 15 + 15                    | 101577      | TH CUB P | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

## Covers for empty places

- Cover for unused 45 mm device cutout
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

# Notes

A large rectangular area filled with a grid of small, dashed lines, intended for handwritten notes.



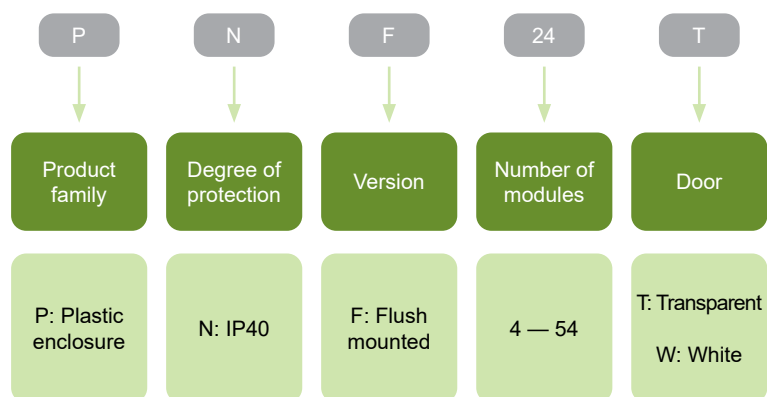
# Flush-mounted IP40 Consumer Units PNF



- Flush-mounted consumer units PNF
- Degree of protection IP40
- 4 up to 54 modules
- 1 up to 3 rows
- Transparent or white door

Consumer units PNF are intended mainly for domestic applications. Their design is suitable for flush mounting. Scope of delivery consists of enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material.

## Type Key



## Certification marks



# Flush-mounted IP40 Consumer Units PNF

## Consumer units PNF with transparent door

- Flush mounted version
- 4, 8, 12 or 18 modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type      | Packing |
|----------------|----------------|---------------|-------------|-----------|---------|
| 4+4            | 1              | 4             | 110818      | PNF 4T    | 1       |
| 8+8            | 1              | 8             | 101511      | PNF 8T    | 1       |
| 10+10          | 1              | 12            | 101512      | PNF 12T   | 1       |
| 13+13          | 1              | 18            | 101513      | PNF 18T   | 1       |
| 13+13          | 2              | 24            | 101514      | PNF 24T   | 1       |
| 15+15          | 2              | 36            | 101515      | PNF 2x18T | 1       |
| 15+15          | 3              | 36            | 101516      | PNF 36T   | 1       |
| 26+26          | 3              | 54            | 106198      | PNF 3x18T | 1       |

## Consumer units PNF with white door

- Flush mounted version
- 4, 8, 12 or 18 modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type      | Packing |
|----------------|----------------|---------------|-------------|-----------|---------|
| 4+4            | 1              | 4             | 110819      | PNF 4W    | 1       |
| 8+8            | 1              | 8             | 101517      | PNF 8W    | 1       |
| 10+10          | 1              | 12            | 101518      | PNF 12W   | 1       |
| 13+13          | 1              | 18            | 101519      | PNF 18W   | 1       |
| 13+13          | 2              | 24            | 101520      | PNF 24W   | 1       |
| 15+15          | 2              | 36            | 101521      | PNF 2x18W | 1       |
| 15+15          | 3              | 36            | 101522      | PNF 36W   | 1       |
| 26+26          | 3              | 54            | 106199      | PNF 3x18W | 1       |

# Flush-mounted IP40 Consumer Units PNF

## Spare door, transparent

- Spare door for consumer unit
- Same version for PNS, PNF as well for -HW line of consumer units
- Packed separately



| Version     | For consumer units   | Article No. | Type         | Packing |
|-------------|----------------------|-------------|--------------|---------|
| Transparent | PNS 4T, PNF 4T       | 113281      | DR PNS 4T    | 1       |
| Transparent | PNS 8T, PNF 8T       | 101538      | DR PNS 8T    | 1       |
| Transparent | PNS 12T, PNF 12T     | 101539      | DR PNS 12T   | 1       |
| Transparent | PNS 18T, PNF 18T     | 101540      | DR PNS 18T   | 1       |
| Transparent | PNS 24T, PNF 24T     | 101541      | DR PNS 24T   | 1       |
| Transparent | PNS 2x18T, PNF 2x18T | 101542      | DR PNS 2x18T | 1       |
| Transparent | PNS 36T, PNF 36T     | 101543      | DR PNS 36T   | 1       |
| Transparent | PNS 3x18T, PNF 3x18T | 106200      | DR PNS 3x18T | 1       |

## Spare door, white

- Spare door for consumer unit
- Same version for PNS, PNF as well for -HW line of consumer units
- Packed separately



| Version | For consumer units   | Article No. | Type         | Packing |
|---------|----------------------|-------------|--------------|---------|
| White   | PNS 4W, PNF 4W       | 113282      | DR PNS 4W    | 1       |
| White   | PNS 8W, PNF 8W       | 101545      | DR PNS 8W    | 1       |
| White   | PNS 12W, PNF 12W     | 101546      | DR PNS 12W   | 1       |
| White   | PNS 18W, PNF 18W     | 101547      | DR PNS 18W   | 1       |
| White   | PNS 24W, PNF 24W     | 101548      | DR PNS 24W   | 1       |
| White   | PNS 2x18W, PNF 2x18W | 101549      | DR PNS 2x18W | 1       |
| White   | PNS 36W, PNF 36W     | 101550      | DR PNS 36W   | 1       |
| White   | PNS 3x18W, PNF 3x18W | 106201      | DR PNS 3x18W | 1       |

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door
- Metal version of lock



| Version of lock | For consumer units | Article No. | Type    | Packing |
|-----------------|--------------------|-------------|---------|---------|
| Metal           | PNS, PNF, PNF-HW   | 101573      | LK PN M | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

# Flush-mounted IP40 Consumer Units PNF

## Additional insulated terminals

- Additional insulated terminals with holder
- Grey colour
- 2 x 10 or 2 x 15 terminals



| Description        | Number of<br>N + PE terminals | Article No. | Type     | Packing |
|--------------------|-------------------------------|-------------|----------|---------|
| Insulated terminal | 10 + 10                       | 109053      | TH CUB D | 1       |
| Insulated terminal | 15 + 15                       | 101577      | TH CUB P | 1       |

## Covers for empty places

- Covers for unused 45 mm device cutouts
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

## Spare mounting material

- For IP40 flush mounted consumer units
- Package contains: wall holders, stickers, empty place cover



| Description                   | Article No. | Type      | Packing |
|-------------------------------|-------------|-----------|---------|
| Spare mounting material, IP40 | 106183      | SMM IP40F | 1 pack  |

## Mounting frame

- DIN rails connected to mounting frame for easier manipulation and installation



| Description                        | Article No. | Type        | Packing |
|------------------------------------|-------------|-------------|---------|
| Mounting frame for PNF 24 (2x12MU) | 106158      | MF PNF 24   | 1       |
| Mounting frame for PNF 36 (3x12MU) | 106159      | MF PNF 36   | 1       |
| Mounting frame for PNF 36 (2x18MU) | 106160      | MF PNF 2x18 | 1       |
| Mounting frame for PNF 3x18        | 107029      | MF PNF 3x18 | 1       |

# Flush-mounted IP40 Consumer Units PNF-HW

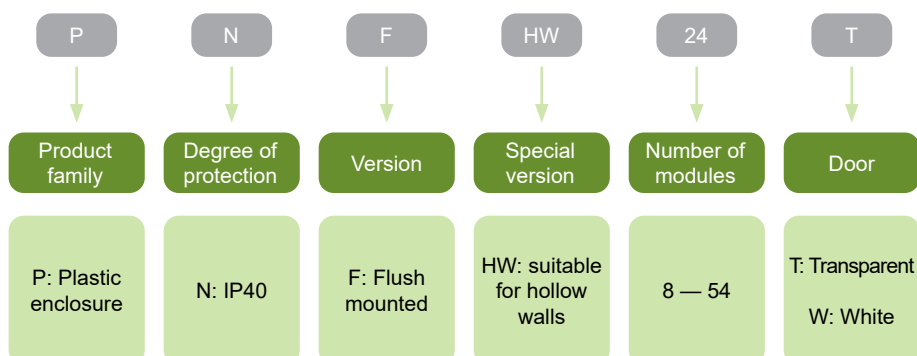


- Flush-mounted consumer units PNF-HW suitable for hollow-walls mounting
- Bottom part moulded from high-resistance plastic to fulfill requirements for hollow wall installation by means of glow wire test at 850 °C
- Degree of protection IP40
- 8 up to 54 modules
- 1 up to 3 rows
- Transparent or white door
- Special brackets for easy mounting into hollow walls

Consumer units PNF-HW are intended mainly for domestic applications. Their design is suitable for flush mounting. Dual fixing system allows using also for hollow walls. Tested with glow wire test at 850°C.

Scope of delivery consists of enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place and mounting material.

## Type Key



## Certification marks



# Flush-mounted IP40 Consumer Units PNF-HW

## Consumer units PNF-HW for hollow walls with transparent door

- Flush mounted version, suitable for hollow walls
- Glow wire test at 850°C
- 8, 12 or 18 modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type         | Packing |
|----------------|----------------|---------------|-------------|--------------|---------|
| 8+8            | 1              | 8             | 106165      | PNF-HW 8T    | 1       |
| 10+10          | 1              | 12            | 106166      | PNF-HW 12T   | 1       |
| 13+13          | 1              | 18            | 106167      | PNF-HW 18T   | 1       |
| 13+13          | 2              | 24            | 106168      | PNF-HW 24T   | 1       |
| 15+15          | 2              | 36            | 106169      | PNF-HW 2x18T | 1       |
| 15+15          | 3              | 36            | 106170      | PNF-HW 36T   | 1       |
| 26+26          | 3              | 54            | 106202      | PNF-HW 3x18T | 1       |

## Consumer units PNF-HW for hollow walls with white door

- Flush mounted version, suitable for hollow walls
- Glow wire test at 850°C
- 8, 12 or 18 modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type         | Packing |
|----------------|----------------|---------------|-------------|--------------|---------|
| 8+8            | 1              | 8             | 106171      | PNF-HW 8W    | 1       |
| 10+10          | 1              | 12            | 106172      | PNF-HW 12W   | 1       |
| 13+13          | 1              | 18            | 106173      | PNF-HW 18W   | 1       |
| 13+13          | 2              | 24            | 106174      | PNF-HW 24W   | 1       |
| 15+15          | 2              | 36            | 106175      | PNF-HW 2x18W | 1       |
| 15+15          | 3              | 36            | 106176      | PNF-HW 36W   | 1       |
| 26+26          | 3              | 54            | 106203      | PNF-HW 3x18W | 1       |

# Flush-mounted IP40 Consumer Units PNF-HW

## Spare door, transparent

- Spare door for consumer unit
- Same version for PNS, PNF as well for PNF-HW line of consumer units
- Packed separately



| Version     | For consumer units | Article No. | Type         | Packing |
|-------------|--------------------|-------------|--------------|---------|
| Transparent | PNF-HW 8T          | 101538      | DR PNS 8T    | 1       |
| Transparent | PNF-HW 12T         | 101539      | DR PNS 12T   | 1       |
| Transparent | PNF-HW 18T         | 101540      | DR PNS 18T   | 1       |
| Transparent | PNF-HW 24T         | 101541      | DR PNS 24T   | 1       |
| Transparent | PNF-HW 2x18T       | 101542      | DR PNS 2x18T | 1       |
| Transparent | PNF-HW 36T         | 101543      | DR PNS 36T   | 1       |
| Transparent | PNF-HW 3x18T       | 106200      | DR PNS 3x18T | 1       |

## Spare door, white

- Spare door for consumer unit
- Same version for PNS, PNF as well for PNF-HW line of consumer units
- Packed separately



| Version | For consumer units | Article No. | Type         | Packing |
|---------|--------------------|-------------|--------------|---------|
| White   | PNF-HW 8W          | 101545      | DR PNS 8W    | 1       |
| White   | PNF-HW 12W         | 101546      | DR PNS 12W   | 1       |
| White   | PNF-HW 18W         | 101547      | DR PNS 18W   | 1       |
| White   | PNF-HW 24W         | 101548      | DR PNS 24W   | 1       |
| White   | PNF-HW 2x18W       | 101549      | DR PNS 2x18W | 1       |
| White   | PNF-HW 36W         | 101550      | DR PNS 36W   | 1       |
| White   | PNF-HW 3x18W       | 106201      | DR PNS 3x18W | 1       |

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door
- Metal version of lock



| Version of lock cover | For consumer units | Article No. | Type    | Packing |
|-----------------------|--------------------|-------------|---------|---------|
| Metal                 | PNS, PNF, PNF-HW   | 101573      | LK PN M | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |



# Flush-mounted IP40 Consumer Units PNF-HW

## Additional insulated terminal

- Additional insulated terminal with holder
- Grey colour
- 2 x 10 or 2 x 15 terminals



| Description        | Number of<br>N + PE terminals | Article No. | Type     | Packing |
|--------------------|-------------------------------|-------------|----------|---------|
| Insulated terminal | 10 + 10                       | 109053      | TH CUB D | 1       |
| Insulated terminal | 15 + 15                       | 101577      | TH CUB P | 1       |

## Covers for empty place

- Covers for unused 45 mm device cutouts
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

## Spare mounting material

- For IP40 flush mounted consumer units
- Package contains: wall holders, stickers, empty place cover



| Description                          | Article No. | Type    | Packing |
|--------------------------------------|-------------|---------|---------|
| Spare mounting material PNF-HW, IP40 | 106163      | SHW PNF | 1 pack  |

## Mounting frame

- DIN rails connected to mounting frame for easier manipulation and installation



| Description                        | Article No. | Type        | Packing |
|------------------------------------|-------------|-------------|---------|
| Mounting frame for PNF 24 (2x12MU) | 106158      | MF PNF 24   | 1       |
| Mounting frame for PNF 36 (3x12MU) | 106159      | MF PNF 36   | 1       |
| Mounting frame for PNF 36 (2x18MU) | 106160      | MF PNF 2x18 | 1       |
| Mounting frame for PNF 3x18        | 107029      | MF PNF 3x18 | 1       |

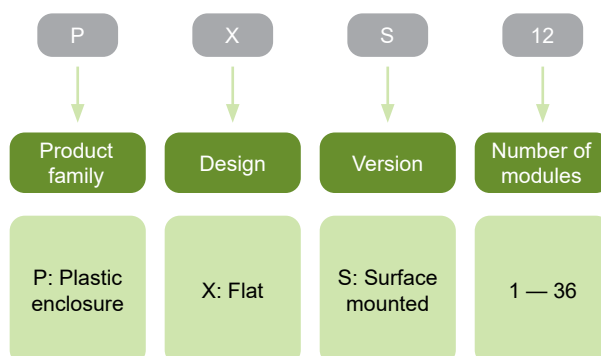
# Surface-mounted IP30 Consumer Units PXS



- Surface-mounted consumer units PXS
- Degree of protection IP30
- 1 up to 36 modules
- 1 up to 3 rows
- Without door

Consumer units PXS are intended mainly for domestic applications. Their design is suitable for surface mounting. Scope of delivery consists of enclosure, device DIN rails, N + PE terminals (excl. PXS 1 and PXS 2), front cover with device cutout, cover for empty place, mounting material. Delivered without door.

## Type Key



## Certification marks



# Surface-mounted IP30 Consumer Units PXS

## Consumer units PXS

- Surface mounted version
- 1, 2, 3 or 12 modules per row
- 1 up to 3 rows
- Without door
- Scope of delivery: enclosure, device DIN rails, N + PE terminals (excl. PXS 1 and PXS 2), front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type   | Packing |
|----------------|----------------|---------------|-------------|--------|---------|
| —              | 1              | 1             | 113275      | PXS 1  | 1       |
| —              | 1              | 2             | 113276      | PXS 2  | 1       |
| 4+4            | 1              | 3             | 101525      | PXS 3  | 1       |
| 10+10          | 1              | 12            | 101526      | PXS 12 | 1       |
| 13+13          | 2              | 24            | 101527      | PXS 24 | 1       |
| 15+15          | 3              | 36            | 101528      | PXS 36 | 1       |

## Additional insulated terminals

- Additional insulated terminals with holder
- Grey colour
- 2x10 or 2 x 15 terminals



| Number of N + PE terminals | Article No. | Type     | Packing |
|----------------------------|-------------|----------|---------|
| 10 + 10                    | 109053      | TH CUB D | 1       |
| 15 + 15                    | 101577      | TH CUB P | 1       |

## Holder for double terminal

- Adding possibility to connect two insulated terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

## Covers for empty place

- Covers for unused 45 mm device cutout
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

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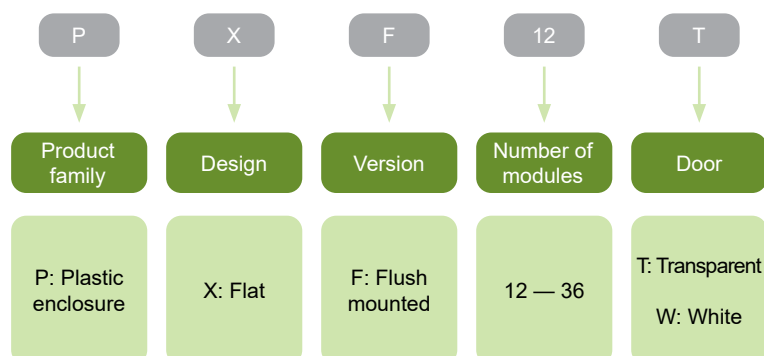
# Flush-mounted IP40 Consumer Units PXF



- Flush-mounted consumer units PXF
- Degree of protection IP40
- 12 up to 36 modules
- 1 up to 3 rows
- Transparent or white door

Consumer units PXF are intended mainly for domestic applications. Their design is suitable for flush mounting. Scope of delivery consists of enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material.

## Type Key



## Certification marks



# Flush-mounted IP40 Consumer Units PXF

## Consumer units PXF with transparent door

- Flush mounted version
- 12 modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type    | Packing |
|----------------|----------------|---------------|-------------|---------|---------|
| 10+10          | 1              | 12            | 101529      | PXF 12T | 1       |
| 13+13          | 2              | 24            | 101530      | PXF 24T | 1       |
| 15+15          | 3              | 36            | 101531      | PXF 36T | 1       |

## Consumer units PXF with white door

- Flush mounted version
- 12 modules per row
- 1 up to 3 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type    | Packing |
|----------------|----------------|---------------|-------------|---------|---------|
| 10+10          | 1              | 12            | 101532      | PXF 12W | 1       |
| 13+13          | 2              | 24            | 101523      | PXF 24W | 1       |
| 15+15          | 3              | 36            | 101524      | PXF 36W | 1       |

# Flush-mounted IP40 Consumer Units PXF

## Spare door, transparent

- Spare door for consumer unit
- For PXF line of consumer units
- Packed separately



| Version     | For consumer units | Article No. | Type       | Packing |
|-------------|--------------------|-------------|------------|---------|
| Transparent | PXF 12T            | 101564      | DR PXF 12T | 1       |
| Transparent | PXF 24T            | 101565      | DR PXF 24T | 1       |
| Transparent | PXF 36T            | 101566      | DR PXF 36T | 1       |

## Spare door, white

- Spare door for consumer unit
- For PXF line of consumer units
- Packed separately



| Version | For consumer units | Article No. | Type       | Packing |
|---------|--------------------|-------------|------------|---------|
| White   | PXF 12W            | 101567      | DR PXF 12W | 1       |
| White   | PXF 24W            | 101568      | DR PXF 24W | 1       |
| White   | PXF 36W            | 101569      | DR PXF 36W | 1       |

## Additional insulated terminals

- Additional insulated terminal with holder
- Grey colour
- 2 x 10 or 2 x 15 terminals



| Description | Number of N + PE terminals | Article No. | Type     | Packing |
|-------------|----------------------------|-------------|----------|---------|
| Svorkovnice | 10 + 10                    | 109053      | TH CUB D | 1       |
| Svorkovnice | 15 + 15                    | 101577      | TH CUB P | 1       |

## Cover for empty places

- Cover for unused 45 mm device cutout
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

# Flush-mounted IP40 Consumer Units PXF

## Spare mounting material

- For IP40 flush mounted consumer units
- Package contains: wall holders, stickers, empty place cover



| Description                   | Article No. | Type      | Packing |
|-------------------------------|-------------|-----------|---------|
| Spare mounting material, IP40 | 106183      | SMM IP40F | 1 pack  |

## Mounting frame

- DIN rails connected to mounting frame for easier manipulation and installation



| Description                        | Article No. | Type      | Packing |
|------------------------------------|-------------|-----------|---------|
| Mounting frame for PXF 24 (2x12MU) | 106161      | MF PXF 24 | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

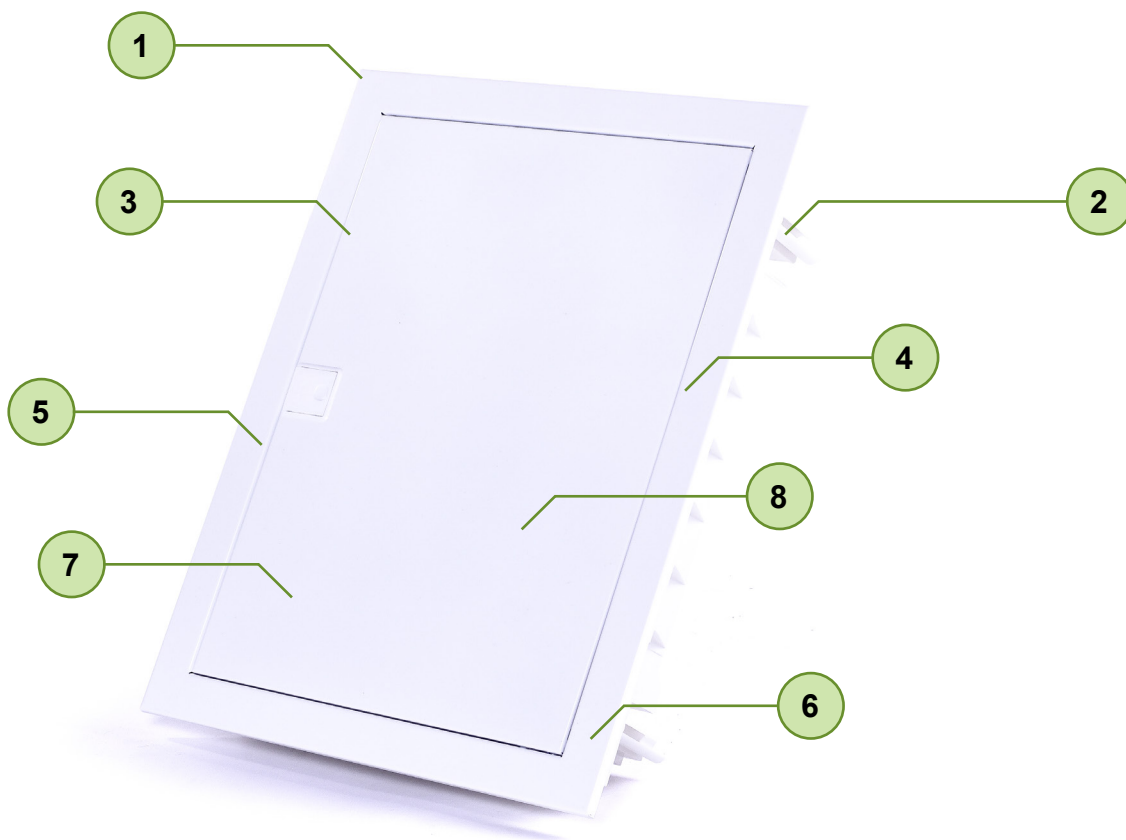
# Plastic Consumer Units with Sheet Steel Door





# Plastic Consumer Units with Sheet Steel Door

## Professional Tips



1 5 years warranty

2 Mounting depth only 87 mm

3 1 up to 5 rows

4 Glow wire test 850 °C

5 Degree of protection IP40 (PMF), IP30 (PMF-MM + PMF-C)

6 Multimedia version with accesories

7 Mounting plates for data devices

8 Heat dissipation metal door with perforation

# Consumer Units PMF



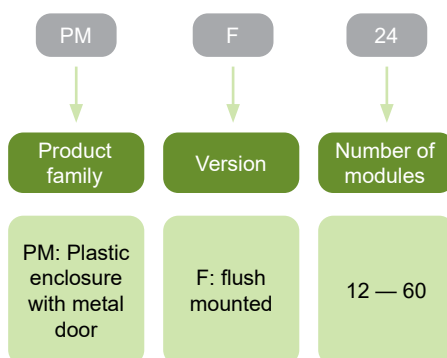
- Flush-mounted consumer units with sheet-steel door PMF
- Tested according to EN 60670 and EN 62208
- Rated current up to 63 A
- Degree of protection IP40
- 12 modules per a row, can be extended to 14
- 1 up to 5 rows
- White (RAL 9016) colour of the door
- Easy mounting into hollow walls
- Mounting depth 87 mm only
- Wall box with a relief for mechanical fixing of cables

Consumer units PMF are intended mainly for domestic applications. Their design is suitable for flush mounting. Dual fixing system allows using also for hollow walls. Tested with glow wire test at 850°C. The height-adjustable front metal frame allows to compensate wall surface imperfections.

The units are available in versions from 12 up to 60 modules with 12 (+2) modules per a row. Degree of protection is IP40, degree of protection against mechanical impact IK06.

Scope of delivery consists of enclosure, metal frame with door, mounting frame with device DIN rails, N + PE terminals, sealable front cover with device cutout, cover for empty place, mounting material and instructions.

## Type Key



## Certification marks



# Consumer Units PMF

## Consumer units PMF with white metal door

- Flush mounted
- 12 (+2) modules per row
- 1 up to 5 rows
- Scope of delivery: enclosure, metal frame with door, mounting frame with device DIN rails, insulated N + PE terminals, sealable front cover with device cutout, cover for empty place, mounting material and instructions



| N+PE terminals | Number of rows | Total modules | Article No. | Type   | Packing |
|----------------|----------------|---------------|-------------|--------|---------|
| 10 + 10        | 1              | 12 (+2)       | 107101      | PMF 12 | 1       |
| 13 + 13        | 2              | 24 (+4)       | 107102      | PMF 24 | 1       |
| 15 + 15        | 3              | 36 (+6)       | 107103      | PMF 36 | 1       |
| 20 + 20        | 4              | 48 (+8)       | 107104      | PMF 48 | 1       |
| 30 + 30        | 5              | 60 (+10)      | 107262      | PMF 60 | 1       |

## Spare metal frame with door

- Spare metal frame with door for PMF line consumer unit
- Packed separately



| For consumer units | Article No. | Type      | Packing |
|--------------------|-------------|-----------|---------|
| PMF 12             | 107105      | DR PMF 12 | 1       |
| PMF 24             | 107106      | DR PMF 24 | 1       |
| PMF 36             | 107107      | DR PMF 36 | 1       |
| PMF 48             | 107108      | DR PMF 48 | 1       |
| PMF 60             | 107263      | DR PMF 60 | 1       |

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door



| Version of lock | For consumer units | Article No. | Type    | Packing |
|-----------------|--------------------|-------------|---------|---------|
| Metal           | PMF, PNS-SD        | 105494      | LK PM M | 1       |

## Connection bracket

- For PMF line of consumer units only
- Connection bar for series installation of several enclosures
- Made from zinc steel sheet
- Installation: 2 pieces for two enclosures



| Description                       | Article No. | Type   | Packing |
|-----------------------------------|-------------|--------|---------|
| Vertical connection bracket PMF   | 107280      | VCB PM | 1       |
| Horizontal connection bracket PMF | 108053      | HCB PM | 1       |

# Consumer Units PMF

## Additional insulated terminal

- Additional insulated terminal with holder, one insulated terminal in the standard scope of delivery
- Grey colour
- 2 x 10 or 2 x 15 terminals
- PMF consumer units allow to mount terminals on the top as well as bottom



| Description        | Number of<br>N + PE terminals | Article No. | Type     | Packing |
|--------------------|-------------------------------|-------------|----------|---------|
| Insulated terminal | 10 + 10                       | 109053      | TH CUB D | 1       |
| Insulated terminal | 15 + 15                       | 101577      | TH CUB P | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

## Covers for empty places

- Covers for unused 45 mm device cutout
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

## Spare mounting material

- For PMF line mounted consumer units
- Scope of delivery SMM PMF: wall holders (including hollow walls), stickers, empty place cover, screws  
SDDA PMF: height-adjustable pads and lock parts for front cover, screws
- Spare parts, both packages are in the standard scope of delivery



| Description                                 | Article No. | Type     | Packing |
|---------------------------------------------|-------------|----------|---------|
| Spare mounting material, PMF                | 107120      | SMM PMF  | 1 set   |
| Height-adjustable pads for front cover, PMF | 107122      | SDDA PMF | 1 set   |

## Spare lock

- For PMF and PNS-SD line of consumer units
- Spare part, lock is in the standard scope of delivery



| Description            | Article No. | Type   | Packing |
|------------------------|-------------|--------|---------|
| Spare lock, PMF PNS-SD | 107121      | SL PMF | 1       |

# Notes

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# Multimedia Consumer Units PMF-MM



- Flush-mounted consumer units PMF-MM
- Tested according to EN 62208 and EN 60670
- Rated current up to 63 A
- Degree of protection IP30 (IP40 for plastic door)
- 1 up to 5 rows
- Heat dissipation metal door with perforation or plastic door
- White (RAL 9016) colour of the door or transparent plastic door
- Easy mounting into hollow walls
- Mounting depth 87 mm only
- Suitable for routers and modems

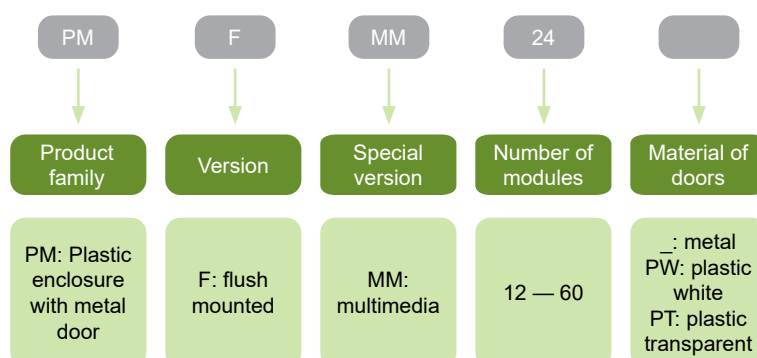
Consumer units PMF- MM are intended mainly for domestic applications. Their design is suitable for flush mounting. Dual fixing system allows using also for hollow walls. Tested with glow wire test at 850°C. The height-adjustable front frame allows to compensate wall surface imperfections.

The units are available in versions from 1 up to 5 mounting plates. Degree of protection is IP40 for plastic door and IP30 for metal door with perforation, degree of protection against mechanical impact IK06.

Scope of delivery consists of enclosure, frame with perforated door or plastic door, mounting plate, mounting material and instructions.

Possibility of installation accessories (N+PE terminals) and DIN rails.

## Type Key



## Certification marks



# Multimedia Consumer Units PMF-MM

## Multimedia consumer units PMF-MM with perforated white metal door

- Flush mounted
- 1 mounting plate per row
- 1 up to 5 rows
- Scope of delivery: enclosure, metal frame with perforated heat dissipation door, mounting plates, mounting material and instructions
- Possibility of installation accessories (N+PE terminals) and DIN rails



| Material of door  | Number of rows | Mounting plates | Article No. | Type      | Packing |
|-------------------|----------------|-----------------|-------------|-----------|---------|
| Metal, perforated | 1              | 1               | 107264      | PMF-MM 12 | 1       |
| Metal, perforated | 2              | 2               | 107265      | PMF-MM 24 | 1       |
| Metal, perforated | 3              | 3               | 107266      | PMF-MM 36 | 1       |
| Metal, perforated | 4              | 4               | 107267      | PMF-MM 48 | 1       |
| Metal, perforated | 5              | 5               | 107268      | PMF-MM 60 | 1       |

## Multimedia consumer units PMF-MM with plastic door

- Flush mounted
- 1 mounting plate per row
- 1 up to 3 rows
- Scope of delivery: enclosure, plastic frame with plastic door, mounting plates, mounting material and instructions
- Possibility of installation accessories (N+PE terminals) and DIN rails



| Material of door     | Number of rows | Mounting plates | Article No. | Type         | Packing |
|----------------------|----------------|-----------------|-------------|--------------|---------|
| Plastic, white       | 1              | 1               | 111143      | PMF-MM 12 PW | 1       |
| Plastic, white       | 2              | 2               | 111144      | PMF-MM 24 PW | 1       |
| Plastic, white       | 3              | 3               | 110708      | PMF-MM 36 PW | 1       |
| Plastic, transparent | 1              | 1               | 111141      | PMF-MM 12 PT | 1       |
| Plastic, transparent | 2              | 2               | 111142      | PMF-MM 24 PT | 1       |
| Plastic, transparent | 3              | 3               | 110707      | PMF-MM 36 PT | 1       |

## Spare metal frame with perforated door

- Spare metal frame with perforated door for PMF-MM line consumer unit
- Packed separately



| For consumer units | Article No. | Type         | Packing |
|--------------------|-------------|--------------|---------|
| PMF-MM 12          | 107269      | DR PMF-MM 12 | 1       |
| PMF-MM 24          | 107270      | DR PMF-MM 24 | 1       |
| PMF-MM 36          | 107271      | DR PMF-MM 36 | 1       |
| PMF-MM 48          | 107272      | DR PMF-MM 48 | 1       |
| PMF-MM 60          | 107273      | DR PMF-MM 60 | 1       |

# Multimedia Consumer Units PMF-MM

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door



| Version of lock | For consumer units | Article No. | Type    | Packing |
|-----------------|--------------------|-------------|---------|---------|
| Metal           | PMF, PNS-SD        | 105494      | LK PM M | 1       |

## Spare plastic lock

- For PMF and PNS-SD line of consumer units only
- Spare part, lock is in the standard scope of delivery



| Description             | Article No. | Type   | Packing |
|-------------------------|-------------|--------|---------|
| Spare lock, PMF, PNS-SD | 107121      | SL PMF | 1       |

## Perforated mounting plate

- Made from zinc steel sheet
- Height 110 mm
- One mounting plate per row



| Description    | Height | Article No. | Type  | Packing |
|----------------|--------|-------------|-------|---------|
| Mounting plate | 110 mm | 108052      | MP PM | 1       |

## DIN rail

- Single DIN rail for 12 modules



| Description           | Article No. | Type      | Packing |
|-----------------------|-------------|-----------|---------|
| DIN rail (12 MU), PMF | 108093      | MF PNF 12 | 1       |

## Connection bracket

- For PMF line of consumer units only
- Connection bar for series installation of several enclosures
- Made from zinc steel sheet
- Installation: 2 pieces for two enclosures



| Description                       | Article No. | Type   | Packing |
|-----------------------------------|-------------|--------|---------|
| Vertical connection bracket PMF   | 107280      | VCB PM | 1       |
| Horizontal connection bracket PMF | 108053      | HCB PM | 1       |



# Multimedia Consumer Units PMF-MM

## Network devices holder

- Multi-functional holder for routers and switches up to 5 cm width



| Description            | Article No. | Type      | Packing |
|------------------------|-------------|-----------|---------|
| Network devices holder | 109047      | RH PMF-MM | 1       |

## Additional insulated terminals

- Additional insulated terminals with holder, one insulated terminal in the standard scope of delivery
- Grey colour
- 2 x 10 or 2 x 15 terminals
- PMF consumer units allow to mount terminals on the top as well as bottom



| Description        | Number of<br>N + PE terminals | Article No. | Type     | Packing |
|--------------------|-------------------------------|-------------|----------|---------|
| Insulated terminal | 10 + 10                       | 109053      | TH CUB D | 1       |
| Insulated terminal | 15 + 15                       | 101577      | TH CUB P | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

## Spare mounting material

- For PMF line mounted consumer units
- Scope of delivery SMM PMF: wall holders (including hollow walls), stickers, empty place cover, screws  
SDDA PMF: height-adjustable pads and lock parts for front cover, screws
- Spare parts, both packages are in the standard scope of delivery



| Description                                 | Article No. | Type     | Packing |
|---------------------------------------------|-------------|----------|---------|
| Spare mounting material, PMF                | 107120      | SMM PMF  | 1 set   |
| Height-adjustable pads for front cover, PMF | 107122      | SDDA PMF | 1 set   |

# Combo Consumer Units PMF-C



- Combine energetics and IT equipment
- Tested according to EN 62208 and EN 60670
- Rated current up to 63 A
- Degree of protection IP30
- 3 up to 5 rows
- 1 up to 3 DIN-rails
- 1 up to 4 mounting plates
- Heat dissipation metal door with perforation
- Mounting depth 87 mm only
- Suitable for routers and modems

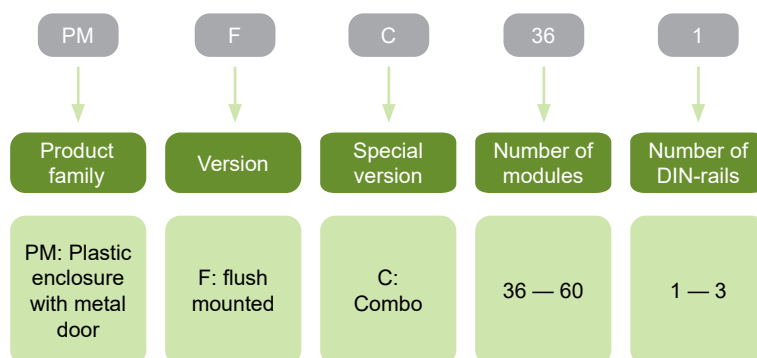
Consumer units PMF-C are intended mainly for domestic applications. Combine energetics and IT equipment, with a possibility to be placed all in one enclosure. This solution saves space and contributes to a greater comfort of housing. Their design is suitable for flush mounting. Dual fixing system allows usage also for hollow walls. Tested with glow wire test at 850°C. The height-adjustable front metal frame allows to compensate wall surface imperfections.

The units are available in versions from 1 up to 4 mounting plates and up to 3 DIN-rails. Degree of protection is IP30, degree of protection against mechanical impact IK06.

Scope of delivery consists of enclosure, metal frame with perforated door, mounting plates, DIN-rails, partition without socket, mounting material and instructions.

Possibility of installation accessories.

## Type Key



## Certification marks



# Combo Consumer Units PMF-C

## Combo consumer units PMF-C with perforated white metal door

- Flush mounted
- Up to 4 mounting plates
- Up to 3 DIN-rails
- 3 up to 5 rows
- Scope of delivery: enclosure, metal frame with perforated door, mounting plates, DIN-rails, partition without socket, mounting material and instructions



| Number of modules | Mounting plates | Number of DIN-rails | Article No. | Type       | Packing |
|-------------------|-----------------|---------------------|-------------|------------|---------|
| 36                | 2               | 1                   | 110709      | PMF-C 36-1 | 1       |
| 48                | 3               | 1                   | 110710      | PMF-C 48-1 | 1       |
| 48                | 2               | 2                   | 110711      | PMF-C 48-2 | 1       |
| 60                | 4               | 1                   | 110712      | PMF-C 60-1 | 1       |
| 60                | 3               | 2                   | 110713      | PMF-C 60-2 | 1       |
| 60                | 1               | 3                   | 110714      | PMF-C 60-3 | 1       |

## Spare metal frame with perforated door

- Spare metal frame with perforated door for PMF line consumer unit
- Packed separately



| For consumer units  | Article No. | Type         | Packing |
|---------------------|-------------|--------------|---------|
| PMF MM-36, PMF-C 36 | 107271      | DR PMF-MM 36 | 1       |
| PMF MM 48, PMF-C 48 | 107272      | DR PMF-MM 48 | 1       |
| PMF-MM 60, PMF-C 60 | 107273      | DR PMF-MM 60 | 1       |

# Combo Consumer Units PMF-C

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door



| Version of lock | For consumer units | Article No. | Type    | Packing |
|-----------------|--------------------|-------------|---------|---------|
| Metal           | PMF, PNS-SD        | 105494      | LK PM M | 1       |

## Spare plastic lock

- For PMF and PNS-SD line of consumer units only
- Spare part, lock is in the standard scope of delivery



| Description             | Article No. | Type   | Packing |
|-------------------------|-------------|--------|---------|
| Spare lock, PMF, PNS-SD | 107121      | SL PMF | 1       |

## Perforated mounting plate

- Made from zinc steel sheet
- Height 110 mm
- One mounting plate per row



| Description    | Height | Article No. | Type  | Packing |
|----------------|--------|-------------|-------|---------|
| Mounting plate | 110 mm | 108052      | MP PM | 1       |

## DIN rail

- Single DIN rail for 12 modules



| Description           | Article No. | Type      | Packing |
|-----------------------|-------------|-----------|---------|
| DIN rail (12 MU), PMF | 108093      | MF PNF 12 | 1       |

# Combo Consumer Units PMF-C

## Additional insulated terminal

- Additional insulated terminal with holder, one insulated terminal in the standard scope of delivery
- Grey colour
- 2 x 10 or 2 x 15 terminals
- PMF consumer units allow to mount terminals on the top as well as bottom



| Description        | Number of<br>N + PE terminals | Article No. | Type     | Packing |
|--------------------|-------------------------------|-------------|----------|---------|
| Insulated terminal | 10 + 10                       | 109053      | TH CUB D | 1       |
| Insulated terminal | 15 + 15                       | 101577      | TH CUB P | 1       |

## Holder for double terminal

- Adding possibility to connect two insulate terminals together
- 1 set = 2 pieces (one per side)



| Description                | Article No. | Type | Packing |
|----------------------------|-------------|------|---------|
| Holder for double terminal | 110820      | DTH  | 1 set   |

## Partition for integrated socket

- Spare partition between IT and energetics parts



| Material | Article No. | Type      | Packing |
|----------|-------------|-----------|---------|
| Plastic  | 110715      | PWS PMF-C | 1       |

## Integrated socket for patrition

- Rated current up to 16A
- Rated insulation voltage 1000 V AC
- Terminal capacity up to 6mm<sup>2</sup>



| Voltage  | Type      | Article No. | Type     | Packing |
|----------|-----------|-------------|----------|---------|
| 250 V AC | Schuko    | 110716      | GS PMF-C | 1/5     |
| 250 V AC | Earth pin | 110717      | FS PMF-C | 1/5     |

# Combo Consumer Units PMF-C

## Network devices holder

- Multi-functional holder for routers and switches up to 5 cm width



| Description            | Article No. | Type      | Packing |
|------------------------|-------------|-----------|---------|
| Network devices holder | 109047      | RH PMF-MM | 1       |

## Connection bracket

- For PMF line of consumer units only
- Connection bar for series installation of several enclosures
- Made from zinc steel sheet
- Installation: 2 pieces for two enclosures



| Description                       | Article No. | Type   | Packing |
|-----------------------------------|-------------|--------|---------|
| Vertical connection bracket PMF   | 107280      | VCB PM | 1       |
| Horizontal connection bracket PMF | 108053      | HCB PM | 1       |

## Spare mounting material

- For PMF line mounted consumer units
- Scope of delivery SMM PMF: wall holders (including hollow walls), stickers, empty place cover, screws  
SDDA PMF: height-adjustable pads and lock parts for front cover, screws
- Spare parts, both packages are in the standard scope of delivery



| Description                                 | Article No. | Type     | Packing |
|---------------------------------------------|-------------|----------|---------|
| Spare mounting material, PMF                | 107120      | SMM PMF  | 1 set   |
| Height-adjustable pads for front cover, PMF | 107122      | SDDA PMF | 1 set   |

# Notes

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# Plastic Consumer Units for Outdoor Use





# Plastic Consumer Units for Outdoor Use

## Professional Tips



1 5 years warranty

2 Degree of protection IP65

3 4 up to 36 modules

4 Transparent door

5 Surface mounting version

6 Wide range of accessories and spare parts

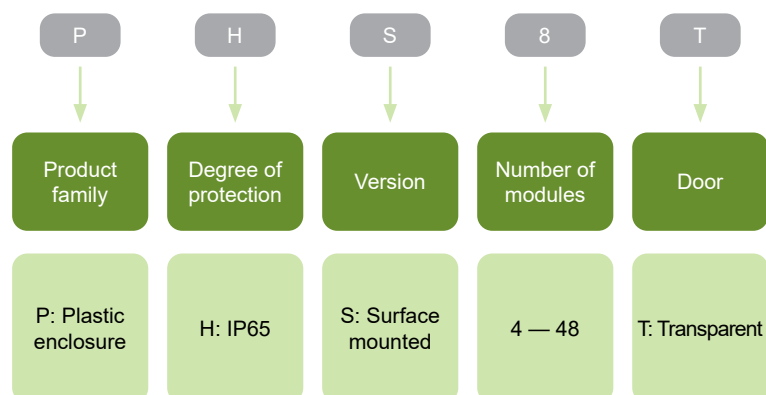
# Surface-mounted IP65 Consumer Units PHS



- Surface-mounted consumer units PHS
- Rated oper. voltage 400 V AC, 1500 V DC
- Degree of protection IP65
- 4 up to 48 modules
- 1 up to 4 rows
- Transparent door

Consumer units PHS are intended for general applications including industrial ones with requirements for high degree of IP protection. Their design is suitable for surface mounting. Scope of delivery consists of enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material.

## Type Key



## Certification marks



# Surface-mounted IP65 Consumer Units PHS

## Consumer units PHS with transparent door

- Surface mounted version
- 4, 6, 8, 12 or 18 modules per row
- 1 up to 4 rows
- Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material



| N+PE terminals | Number of rows | Total modules | Article No. | Type    | Packing |
|----------------|----------------|---------------|-------------|---------|---------|
| 4+4            | 1              | 4             | 101492      | PHS 4T  | 1       |
| 6+6            | 1              | 6             | 113262      | PHS 6T  | 1       |
| 8+8            | 1              | 8             | 101493      | PHS 8T  | 1       |
| 10+10          | 1              | 12            | 101494      | PHS 12T | 1       |
| 13+13          | 1              | 18            | 113263      | PHS 18T | 1       |
| 13+13          | 2              | 24            | 101495      | PHS 24T | 1       |
| 15+15          | 3              | 36            | 101496      | PHS 36T | 1       |
| 20+20          | 4              | 48            | 110814      | PHS 48T | 1       |

## Spare door, transparent

- Spare door for consumer unit
- Suitable for PHS line of consumer units
- Packed separately



| Version     | For consumer units | Article No. | Type       | Packing |
|-------------|--------------------|-------------|------------|---------|
| Transparent | PHS 4T             | 101533      | DR PHS 4T  | 1       |
| Transparent | PHS 6T             | 113278      | DR PHS 6T  | 1       |
| Transparent | PHS 8T             | 101534      | DR PHS 8T  | 1       |
| Transparent | PHS 12T            | 101535      | DR PHS 12T | 1       |
| Transparent | PHS 18T            | 113279      | DR PHS 18T | 1       |
| Transparent | PHS 24T            | 101536      | DR PHS 24T | 1       |
| Transparent | PHS 36T            | 101537      | DR PHS 36T | 1       |
| Transparent | PHS 48T            | 111174      | DR PHS 48T | 1       |

# Surface-mounted IP65 Consumer Units PHS

## Lock with key

- Lock with key
- For subsequent mounting onto enclosure door
- Metal version of lock



| Version of lock | For consumer units | Article No. | Type    | Packing |
|-----------------|--------------------|-------------|---------|---------|
| Metal           | PHS                | 101571      | LK PH M | 1       |

## Cover for empty place

- Cover for unused 45 mm device cutout
- White, grey or black colour
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm



| Colour | Width  | Article No. | Type     | Packing |
|--------|--------|-------------|----------|---------|
| White  | 224 mm | 101574      | B CC45   | 1/500   |
| Grey   | 224 mm | 113277      | B CC45 G | 1/500   |
| Black  | 224 mm | 110192      | B CC45 B | 1/500   |

## Spare mounting material

- For IP65 surface mounted consumer units
- Package contains: screws, wall plugs, screw covers, stickers, empty place cover



| Description                   | Article No. | Type      | Packing |
|-------------------------------|-------------|-----------|---------|
| Spare mounting material, IP65 | 106182      | SMM IP65S | 1 pack  |

## Cable grommets

- Cable grommets suitable for cutouts prepared on the enclosures
- Used material allows to use various diameter of the conductors (up to 50 mm<sup>2</sup>)
- Packed separately



| Description   | Diameter | Article No. | Type     | Packing |
|---------------|----------|-------------|----------|---------|
| Cable grommet | 16 mm    | 106860      | CGQS M16 | 1       |
| Cable grommet | 20 mm    | 106208      | CGQS M20 | 1       |
| Cable grommet | 25 mm    | 106209      | CGQS M25 | 1       |
| Cable grommet | 32 mm    | 106210      | CGQS M32 | 1       |

# Notes

Plastic Consumer  
Units  
for Outdoor Use

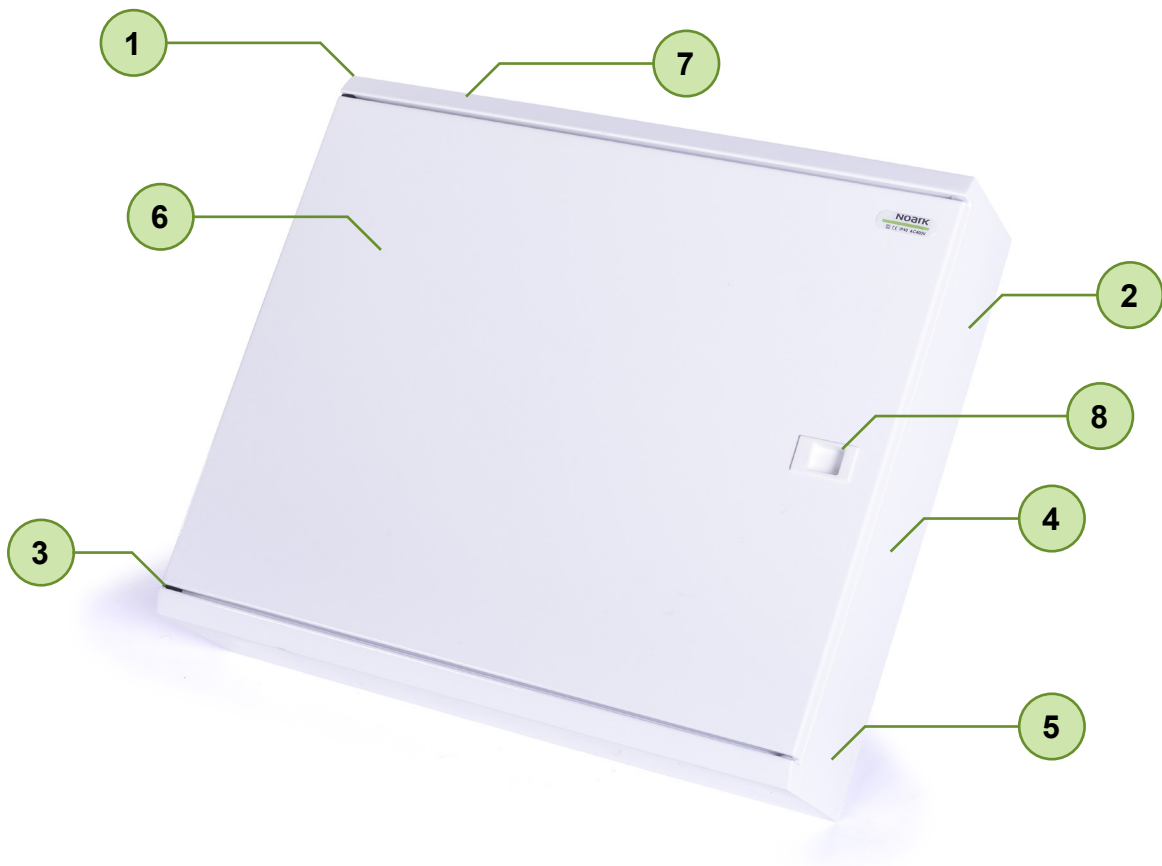
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# Metal Flat Enclosure



# Metal Flat Enclosure

## Professional Tips



- 1 5 years warranty
- 2 Surface and flush mounting version
- 3 Adjustable door frame
- 4 Comfortable mounting into all types of walls
- 5 Pre-cut openings for conductors
- 6 Easy change of door
- 7 Pre-pressed openings for cable grommets
- 8 Standardized key-lock system

# Metal flat enclosures EMF



- Metal (sheet-steel) flat enclosures EMF
- Complies to EN 62208
- Variants for surface and flush mounting
- Versions with 24 and 33 modules per a row, 2 up to 6 rows
- Degree of protection IP30
- Protection against mechanical impact IK07
- White colour
- Mounting depth lower than 118 mm, suitable also for narrow walls

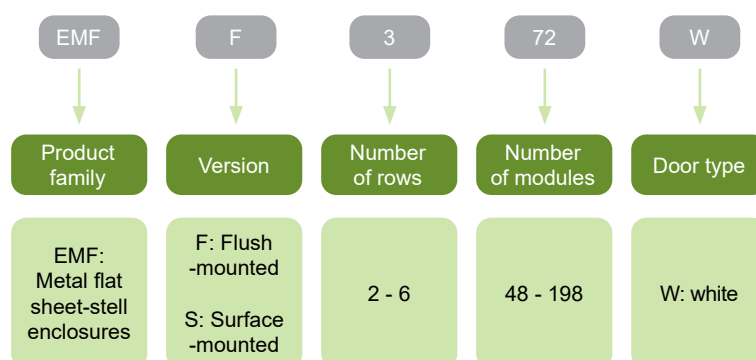
Sheet-steel enclosures EMFF/EMFS are suitable for various applications mainly in domestic and commercial installations. Their flat design and technical solution allow easy mounting onto wall or into relatively narrow walls, including plasterboard ones.

Removable adjustable doorframe allows to avoid possible damage during mounting and especially to compensate wall surface imperfections, including slight rotation. The door opening direction can be easily changed thanks to the applied system of hinges.

On the enclosures there are prepared pre-cut openings for conductors or cable grommets. The adjusting before connecting can thus be done very quickly. All variants are equipped with a removable mounting frame with DIN rails. Whole installation part is covered with self-earthed sheet-steel front plates.

An important part of enclosures EMF is a wide range of accessories for their customisation. There are offered mounting plates, space separators, front plates, cable grommets, cable fixing rail, key-locks and others.

## Type Key

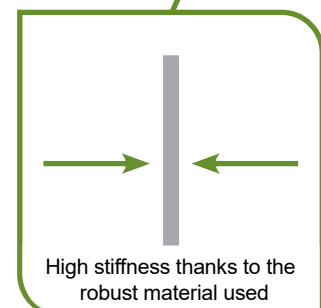


## Certification marks

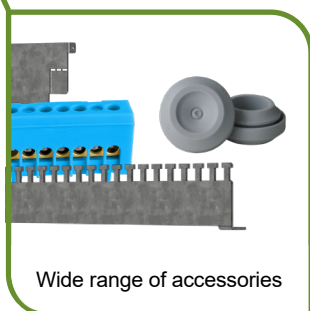
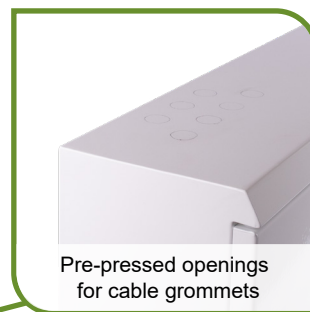
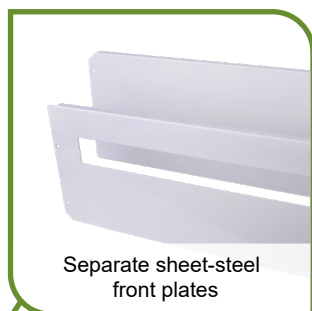




# Metal flat enclosures EMF



# Metal flat enclosures EMF



# Metal flat enclosures EMF

## Flush mounted versions, sheet-steel door

- Flush mounted
- 24 or 33 modules per a row
- 2 up to 6 rows
- White door colour
- Scope of delivery: enclosure, metal frame with door, mounting frame with device DIN rails, N + PE terminals, front plates with device cutout, grounding cable for door connection, mounting material and instruction sheet



| Modules per a row | Number of rows | Total modules | N+PE terminals | Article No. | Type       | Packing |
|-------------------|----------------|---------------|----------------|-------------|------------|---------|
| 24                | 2              | 48            | 2x (1+44)      | 109809      | EMFF2 48W  | 1       |
| 24                | 3              | 72            | 2x (1+44)      | 109810      | EMFF3 72W  | 1       |
| 24                | 4              | 96            | 2x (1+44)      | 109811      | EMFF4 96W  | 1       |
| 24                | 5              | 120           | 2x (1+44)      | 109812      | EMFF5 120W | 1       |
| 24                | 6              | 144           | 2x (1+44)      | 109813      | EMFF6 144W | 1       |
| 33                | 2              | 66            | 2x (1+44)      | 109819      | EMFF2 66W  | 1       |
| 33                | 3              | 99            | 2x (1+44)      | 109820      | EMFF3 99W  | 1       |
| 33                | 4              | 132           | 2x (1+44)      | 109821      | EMFF4 132W | 1       |
| 33                | 5              | 165           | 2x (1+44)      | 109822      | EMFF5 165W | 1       |
| 33                | 6              | 198           | 2x (1+44)      | 109823      | EMFF6 198W | 1       |

## Surface mounted versions, sheet-steel door

- Surface mounted
- 24 or 33 modules per a row
- 2 up to 6 rows
- White door colour
- Scope of delivery: enclosure, metal frame with door, mounting frame with device DIN rails, N + PE terminals, front plates with device cutout, grounding cable for door connection, mounting material and instruction sheet



| Modules per a row | Number of rows | Total modules | N+PE terminals | Article No. | Type       | Packing |
|-------------------|----------------|---------------|----------------|-------------|------------|---------|
| 24                | 2              | 48            | 2x (1+44)      | 109814      | EMFS2 48W  | 1       |
| 24                | 3              | 72            | 2x (1+44)      | 109815      | EMFS3 72W  | 1       |
| 24                | 4              | 96            | 2x (1+44)      | 109816      | EMFS4 96W  | 1       |
| 24                | 5              | 120           | 2x (1+44)      | 109817      | EMFS5 120W | 1       |
| 24                | 6              | 144           | 2x (1+44)      | 109818      | EMFS6 144W | 1       |
| 33                | 2              | 66            | 2x (1+44)      | 109824      | EMFS2 66W  | 1       |
| 33                | 3              | 99            | 2x (1+44)      | 109825      | EMFS3 99W  | 1       |
| 33                | 4              | 132           | 2x (1+44)      | 109826      | EMFS4 132W | 1       |
| 33                | 5              | 165           | 2x (1+44)      | 109827      | EMFS5 165W | 1       |
| 33                | 6              | 198           | 2x (1+44)      | 109828      | EMFS6 198W | 1       |

# Metal flat enclosures EMF

## Spare door

- Spare door with plastic lock for EMF
- Common for flush and surface mounted enclosure's door
- 24 or 33 modules per a row
- 2 up to 6 rows
- White coloured sheet-steel parts of door
- Packed separately
- Door hinges are not included



| Modules per a row | Number of rows | Total modules | Article No. | Type         | Packing |
|-------------------|----------------|---------------|-------------|--------------|---------|
| 24                | 2              | 48            | 109939      | EMF DR2 48W  | 1       |
| 24                | 3              | 72            | 109940      | EMF DR3 72W  | 1       |
| 24                | 4              | 96            | 109941      | EMF DR4 96W  | 1       |
| 24                | 5              | 120           | 109942      | EMF DR5 120W | 1       |
| 24                | 6              | 144           | 109943      | EMF DR6 144W | 1       |
| 33                | 2              | 66            | 109944      | EMF DR2 66W  | 1       |
| 33                | 3              | 99            | 109945      | EMF DR3 99W  | 1       |
| 33                | 4              | 132           | 109946      | EMF DR4 132W | 1       |
| 33                | 5              | 165           | 109947      | EMF DR5 165W | 1       |
| 33                | 6              | 198           | 109948      | EMF DR6 198W | 1       |

## Spare door hinges

- Spare door hinges set (1 set necessary for 1 door)
- Common for flush and surface mounted enclosure's door
- Packed separately
- In the scope of delivery: plastic holders, metal hinges



| Description       | Article No. | Type    | Packing |
|-------------------|-------------|---------|---------|
| Spare door hinges | 109831      | EMF SDH | 1 set   |

# Metal flat enclosures EMF

## Metal front plates

- Various types and sizes of spare front plates for covering of internal space in enclosures according to used devices and needs
- Common for flush and surface mounted enclosures
- 24 or 33 modules per a row variants
- White coloured sheet-steel
- Packed separately
- Mounting screws in the scope of delivery

### Metal front plates with device cutout 45 mm



| Description      | Modules per a row | Height | Article No. | Type         | Packing |
|------------------|-------------------|--------|-------------|--------------|---------|
| Standard plate   | 24                | 141 mm | 109935      | EMF FP 1 24  | 1       |
| Wide outer plate | 24                | 212 mm | 109937      | EMF FP 1+ 24 | 1       |
| Standard plate   | 33                | 141 mm | 109936      | EMF FP 1 33  | 1       |
| Wide outer plate | 33                | 212 mm | 109938      | EMF FP 1+ 33 | 1       |

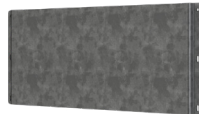
### Blind metal front plates



| Description        | Modules per a row | Height | Article No. | Type          | Packing |
|--------------------|-------------------|--------|-------------|---------------|---------|
| Narrow outer plate | 24                | 71 mm  | 109835      | EMF FPB 0+ 24 | 1       |
| Narrow outer plate | 33                | 71 mm  | 109933      | EMF FPB 0+ 33 | 1       |

## Universal mounting plates

- Universal mounting plates for mounting of arbitrary devices of appropriate dimensions with screws
- Can be fitted also by means of pressed screws in order to not overlap outer dimensions of the enclosure
- Common for flush and surface mounted enclosures
- 24 or 33 modules per row variants
- Galvanized sheet-steel
- Packed separately
- Mounting material in the scope of delivery

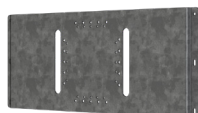


| Description              | Modules per a row | Height | Article No. | Type           | Packing |
|--------------------------|-------------------|--------|-------------|----------------|---------|
| Universal mounting plate | 24                | 80 mm  | 109836      | EMF UMP 80 24  | 1       |
| Universal mounting plate | 24                | 160 mm | 109838      | EMF UMP 160 24 | 1       |
| Universal mounting plate | 33                | 80 mm  | 109932      | EMF UMP 80 33  | 1       |
| Universal mounting plate | 33                | 160 mm | 109934      | EMF UMP 160 33 | 1       |

# Metal flat enclosures EMF

## Mounting plates for MCCBs line Ex9M

- Tailored pre-drilled mounting plates for mounting of MCCBs of Ex9M line, frame sizes M1 and M2
- Mounting holes with thread for easy mounting of Ex9M1 and Ex9M2
- In case common mounting depth of the M1 size breaker's front panel is requested, it is necessary to use mounting depth spacers WG 10
- Common for flush and surface mounted enclosures
- 24 or 33 modules per row variants
- Galvanized sheet-sheet
- Packed separately
- Mounting material in the scope of delivery



| Description              | Modules per row | Article No. | Type          | Packing |
|--------------------------|-----------------|-------------|---------------|---------|
| Mounting plate for MCCBs | 24              | 110699      | EMF MP M12 24 | 1       |
| Mounting plate for MCCBs | 33              | 110700      | EMF MP M12 33 | 1       |

## Horizontal separators

- Horizontal space separators can be used e.g. for separation of electronic and electric part of installation
- Common for flush and surface mounted enclosures
- 24 modules per a row
- Galvanized sheet-sheet
- Packed separately
- Mounting material in the scope of delivery



| Description          | Modules per a row | Article No. | Type      | Packing |
|----------------------|-------------------|-------------|-----------|---------|
| Horizontal separator | 24                | 109837      | EMF HS 24 | 1       |

## Cable fixing rails

- Metal rail suitable for cable fixing in the enclosure
- Common for flush and surface mounted enclosures
- 24 modules per row
- Galvanized sheet-sheet
- Packed separately
- Mounting material in the scope of delivery



| Description       | Modules per a row | Article No. | Type      | Packing |
|-------------------|-------------------|-------------|-----------|---------|
| Cable fixing rail | 24                | 109839      | EMF CFR24 | 1       |

# Metal flat enclosures EMF

## Mounting holders

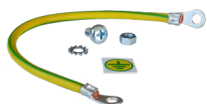
- Set of metal straps for fixing and easier mounting of flush mounted enclosures into the walls
- Can be used as mounting holders when installing into brick walls or for fixing into construction of plaster boards, when the wall supports are not located directly at the edge of the enclosure
- Packed separately
- Four pieces in the scope of delivery



| Description                                          | Article No. | Type    | Packing |
|------------------------------------------------------|-------------|---------|---------|
| Set of mounting holders for flush mounted enclosures | 109931      | EMFF MH | 1 set   |

## Spare mounting material

- Spare mounting material for EMF line enclosures
- Scope of delivery: grounding cable for door with pads and nuts, screws



| Description                                            | Article No. | Type     | Packing |
|--------------------------------------------------------|-------------|----------|---------|
| Spare mounting material for flush mounted enclosures   | 109832      | EMFF SMM | 1 set   |
| Spare mounting material for surface mounted enclosures | 109833      | EMFS SMM | 1 set   |

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## Additional N/PE terminals

- Rated current up to 63 A
- Packed separately

### Horizontal terminal bar holders



| Description                     | Article No. | Type    | Packing |
|---------------------------------|-------------|---------|---------|
| Horizontal terminal bar holders | 109830      | EMF TBH | 1 set   |

### Terminal bars



| Description       | Terminals                            | Article No. | Type       | Packing |
|-------------------|--------------------------------------|-------------|------------|---------|
| N/PE terminal bar | 2x (1x 25 + 46x 16 mm <sup>2</sup> ) | 109829      | EMF TB45+2 | 1       |

# Metal flat enclosures EMF

## Set for mounting of EMF DLK lock-keys

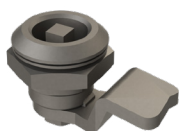
- Set (two tailored metal cover plates) for mounting of lock-key to the plastic lock cutout in enclosure's door
- Suitable EMF DLK lock-key to be ordered separately
- Common for flush and surface mounted enclosures
- White coloured sheet-steel
- Packed separately without lock-key



| Description                          | Article No. | Type    | Packing |
|--------------------------------------|-------------|---------|---------|
| Set for mounting of EMF DLK lock-key | 109834      | EMF LMS | 1 set   |

## Lock-keys

- Suitable sets of lock-keys for mounting set EMF LMS
- Various types of inserts
- Housing diameter 28 mm, height 18 mm
- Cam length 35 mm
- Packed separately without EMF LMS
- In the scope of delivery: housing, insert, flat external seal, nut, cam, screw



| Insert shape         |                                                                                     | Article No. | Type       | Packing |
|----------------------|-------------------------------------------------------------------------------------|-------------|------------|---------|
| square socket, 6 mm  |  | 106826      | MF DLK SQ6 | 1 set   |
| square pin, 6 mm     |  | 106863      | MF DLK SP6 | 1 set   |
| double bit, 3 mm pin |  | 106825      | MF DLK DB3 | 1 set   |
| double bit, 5 mm pin |  | 106828      | MF DLK DB5 | 1 set   |
| slotted 2x4mm        |  | 106829      | MF DLK S24 | 1 set   |
| Czech crescent       |  | 106827      | MF DLK CZ  | 1 set   |
| Daimler-Benz         |  | 106830      | MF DLK D   | 1 set   |
| Lock with key        |  | 109048      | MF DLK K   | 1 set   |



# Metal flat enclosures EMF

## Covered neutral and grounding terminal bars

- Rated current up to 63 A
- Rated operational voltage 690 V AC
- All side finger-safe
- One-side closed conductor notch
- Plastic DIN-rail clip
- For wires up to 16 mm<sup>2</sup>



| Terminals | Terminal capacity        | Colour | Article No. | Type      | Packing |
|-----------|--------------------------|--------|-------------|-----------|---------|
| 7         | up to 16 mm <sup>2</sup> | blue   | 103850      | TBB 7x16  | 1/10    |
| 7         | up to 16 mm <sup>2</sup> | green  | 103851      | TBG 7x16  | 1/10    |
| 15        | up to 16 mm <sup>2</sup> | blue   | 103852      | TBB 15x16 | 1/10    |
| 15        | up to 16 mm <sup>2</sup> | green  | 103853      | TBG 15x16 | 1/10    |

## Uncovered neutral and grounding terminal bars

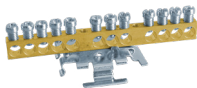
- Rated current up to 63 A
- Rated operational voltage 690 V AC
- Plastic DIN-rail clip
- For wires up to 10 mm<sup>2</sup>



| Terminals | Terminal capacity  | Colour | Article No. | Type      | Packing |
|-----------|--------------------|--------|-------------|-----------|---------|
| 7         | 10 mm <sup>2</sup> | blue   | 103854      | TBB 7x10  | 1/10    |
| 7         | 10 mm <sup>2</sup> | green  | 103855      | TBG 7x10  | 1/10    |
| 12        | 10 mm <sup>2</sup> | blue   | 103856      | TBB 12x10 | 1/10    |
| 12        | 10 mm <sup>2</sup> | green  | 103857      | TBG 12x10 | 1/10    |

## Terminal bars up to 63 A with steel DIN rail clip

- Rated current up to 63 A
- Rated operational voltage 690 V AC
- Steel-sheet DIN-rail clip, self-earthed
- For wires up to 10 mm<sup>2</sup>



| Terminals | Terminal capacity  | Article No. | Type     | Packing |
|-----------|--------------------|-------------|----------|---------|
| 7         | 10 mm <sup>2</sup> | 103858      | TB 7x10  | 1/10    |
| 12        | 10 mm <sup>2</sup> | 103859      | TB 12x10 | 1/10    |

# Metal flat enclosures EMF

## Plastic cover for empty place

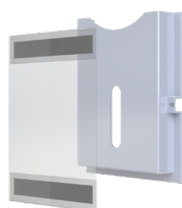
- Plastic cover for unused 45 mm device cutouts
- Total width 224 mm, can be shortened
- Segmented as 1x 15 mm, 22 x 1/2 module width, 1x 15 mm
- White colour plastic
- Packed separately



| Description                                  | Article No. | Type   | Packing |
|----------------------------------------------|-------------|--------|---------|
| Plastic cover for unused 45 mm device cutout | 101574      | B CC45 | 1/500   |

## Plastic documentation pocket

- Self-adhesive pocket for documentation
- Suitable for A4 paper size documents
- Two versions according to number of pages
- PVC material
- Packed separately



| Description                              | Size | Article No. | Type       | Packing |
|------------------------------------------|------|-------------|------------|---------|
| Self-adhesive documentation pocket       | A4   | 106831      | MF PDP A4  | 1       |
| Self-adhesive documentation pocket, slim | A4   | 106832      | MF PDP A4S | 1       |

## Cable grommets

- Cable grommets suitable for cutouts prepared on the topside of surface mounted enclosures
- Top panels of EMFS enclosures are pre-cut for 16 mm diameter grommets
- Used material allows to use various diameter of the conductors (up to 50 mm<sup>2</sup>)
- Packed separately



| Description                       | Diameter | Article No. | Type     | Packing |
|-----------------------------------|----------|-------------|----------|---------|
| Cable grommet for EMFS enclosures | 16 mm    | 106860      | CGQS M16 | 1       |
| Cable grommet                     | 20 mm    | 106208      | CGQS M20 | 1       |
| Cable grommet                     | 25 mm    | 106209      | CGQS M25 | 1       |
| Cable grommet                     | 32 mm    | 106210      | CGQS M32 | 1       |

# Metal flat enclosures EMF

## Type label

- Pre-printed type label for distribution boards according to EN 61439
- Box texts in EN, CZ, SK, PL, RO, DE, FR, RU, UK, BG, HR, HU, IT, LT, LV, EE language
- Material: Aluminium foil, resistive to chemical cleaners
- Self-adhesive



| Description                                             | Article No. | Type  | Packing |
|---------------------------------------------------------|-------------|-------|---------|
| Empty type label for distribution boards, self-adhesive | 107841      | MF TL | 10      |

## Special colour on request

- Enclosures EMF can be produced in non-standard colours
- Standards RAL codes can be chosen
- Please contact NOARK staff with specification, based on which real possibility will be checked

## Special version on request

- Enclosures EMF can be produced in modified design
- Changes must not affect general parameters of the enclosure
- Typical changes - e.g. non-standard dimensions (within the range of smallest and biggest type), different internal configuration, etc.
- Please contact NOARK staff with specification, based on which real possibility will be checked

# Metal Enclosures with Mounting Plates



# Metal Enclosures with Mounting Plates

## Professional Tips



1 5 years warranty

2 High protection degree IP66

3 Fully welded construction

4 Top and bottom gland plates

5 Robust design with IK10

6 Durable powder coating RAL 7035

7 Thick galvanized mounting plate

8 Wide range of accessories

# IP66 Metal enclosures MHS



- Metal enclosures with high protection degree MHS
- According to IEC/EN 62208 standard
- Variants for surface mounting
- IP66 for single door enclosures, IP55 for double door enclosures
- Fully welded construction
- Light grey RAL 7035 powder coating
- Top and bottom gland plates
- Complementary accessories

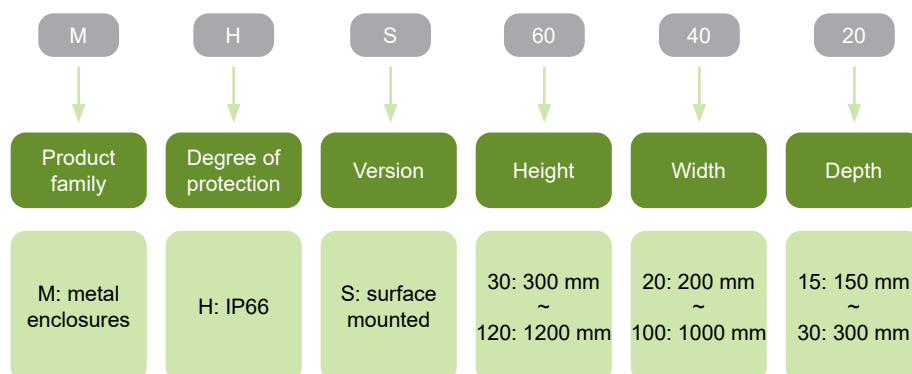
Metal enclosures MHS with mounting plates are surface mounted enclosures suitable mainly for industrial applications where high protection degree (IP) is needed. Protection degree IP66 for single door enclosures and IP55 for double door enclosures.

Usage of quality sheet steel and fully welded construction are the key elements for robustness and rigidity with IK10. Gland plates on bottom and top of enclosure can provide you a maximum possibility of adaptation your application requests. Also due to enclosure symmetry, you can change the position of doors by simply putting it up side down.

We offer complementary accessories as rain canopies, mounting frames for cover plates, cover plates with or without cutout for modules, glazed doors, pole mountings and earthing cables. Spare parts as mounting plates, solid doors and wall brackets you can also find in our portfolio .

In scope of delivery is enclosure, door, mounting plate, gland plates, wall brackets and mounting material.

## Type Key



## Certification marks



# IP66 Metal enclosures MHS

## Metal enclosure MHS with mounting plate

- Surface mounted metal enclosures with mounting plate and solid door
- High degree of protection IP66 for single door, IP55 for double door
- Top and bottom gland plate
- Scope of delivery: enclosure, solid door, mounting plate, gland plates, wall brackets and mounting material (earthing cable is not included)



| Height  | Width   | Depth  | Number of doors | Article No. | Type           | Packing |
|---------|---------|--------|-----------------|-------------|----------------|---------|
| 300 mm  | 200 mm  | 150 mm | 1               | 110562      | MHS 30 20 15   | 1       |
| 300 mm  | 300 mm  | 150 mm | 1               | 110563      | MHS 30 30 15   | 1       |
| 300 mm  | 300 mm  | 200 mm | 1               | 110564      | MHS 30 30 20   | 1       |
| 400 mm  | 300 mm  | 150 mm | 1               | 110565      | MHS 40 30 15   | 1       |
| 400 mm  | 300 mm  | 200 mm | 1               | 110566      | MHS 40 30 20   | 1       |
| 400 mm  | 400 mm  | 200 mm | 1               | 110567      | MHS 40 40 20   | 1       |
| 500 mm  | 400 mm  | 150 mm | 1               | 110568      | MHS 50 40 15   | 1       |
| 500 mm  | 400 mm  | 200 mm | 1               | 110569      | MHS 50 40 20   | 1       |
| 600 mm  | 400 mm  | 200 mm | 1               | 110570      | MHS 60 40 20   | 1       |
| 600 mm  | 400 mm  | 300 mm | 1               | 110571      | MHS 60 40 30   | 1       |
| 600 mm  | 500 mm  | 200 mm | 1               | 110572      | MHS 60 50 20   | 1       |
| 600 mm  | 600 mm  | 200 mm | 1               | 110573      | MHS 60 60 20   | 1       |
| 600 mm  | 600 mm  | 300 mm | 1               | 110574      | MHS 60 60 30   | 1       |
| 600 mm  | 800 mm  | 300 mm | 2               | 110575      | MHS 60 80 30   | 1       |
| 700 mm  | 500 mm  | 200 mm | 1               | 110576      | MHS 70 50 20   | 1       |
| 700 mm  | 500 mm  | 300 mm | 1               | 110577      | MHS 70 50 30   | 1       |
| 800 mm  | 600 mm  | 200 mm | 1               | 110578      | MHS 80 60 20   | 1       |
| 800 mm  | 600 mm  | 300 mm | 1               | 110579      | MHS 80 60 30   | 1       |
| 1000 mm | 600 mm  | 300 mm | 1               | 110580      | MHS 100 60 30  | 1       |
| 1000 mm | 800 mm  | 300 mm | 1               | 110581      | MHS 100 80 30  | 1       |
| 1000 mm | 1000 mm | 300 mm | 2               | 110582      | MHS 100 100 30 | 1       |
| 1200 mm | 600 mm  | 300 mm | 1               | 110583      | MHS 120 60 30  | 1       |
| 1200 mm | 800 mm  | 300 mm | 1               | 110584      | MHS 120 80 30  | 1       |
| 1200 mm | 1000 mm | 300 mm | 2               | 110585      | MHS 120 100 30 | 1       |

# IP66 Metal enclosures MHS

## Solid doors

- Solid door as a spare part for MHS enclosures
- Scope of delivery: solid door, lock



| Height  | Width   | Double door | Article No. | Type             | Packing |
|---------|---------|-------------|-------------|------------------|---------|
| 300 mm  | 200 mm  | -           | 110643      | SD MHS 30 20     | 1       |
| 300 mm  | 300 mm  | -           | 110644      | SD MHS 30 30     | 1       |
| 400 mm  | 300 mm  | -           | 110645      | SD MHS 40 30     | 1       |
| 400 mm  | 400 mm  | -           | 110646      | SD MHS 40 40     | 1       |
| 500 mm  | 400 mm  | -           | 110647      | SD MHS 50 40     | 1       |
| 600 mm  | 400 mm  | -           | 110648      | SD MHS 60 40     | 1       |
| 600 mm  | 500 mm  | -           | 110649      | SD MHS 60 50     | 1       |
| 700 mm  | 500 mm  | -           | 110650      | SD MHS 70 50     | 1       |
| 600 mm  | 600 mm  | -           | 110651      | SD MHS 60 60     | 1       |
| 800 mm  | 600 mm  | -           | 110652      | SD MHS 80 60     | 1       |
| 1000 mm | 600 mm  | -           | 110653      | SD MHS 100 60    | 1       |
| 1200 mm | 600 mm  | -           | 110654      | SD MHS 120 60    | 1       |
| 600 mm  | 800 mm  | -           | 110655      | SD MHS 60 80     | 1       |
| 600 mm  | 800 mm  | yes         | 110656      | SD MHS 60 80 D   | 1       |
| 1000 mm | 800 mm  | -           | 110657      | SD MHS 100 80    | 1       |
| 1200 mm | 800 mm  | -           | 110658      | SD MHS 120 80    | 1       |
| 1000 mm | 1000 mm | yes         | 110659      | SD MHS 100 100 D | 1       |
| 1200 mm | 1000 mm | yes         | 110660      | SD MHS 120 100 D | 1       |

## Glazed doors

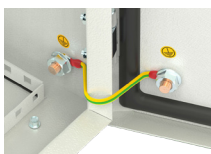
- Glazed door as a complementary part for MHS enclosures
- If used, protection degree of enclosure will be downgrade to IP65
- Tempered glass of thickness 4 mm
- Scope of delivery: glazed door, lock



| Height  | Width  | Double door | Article No. | Type          | Packing |
|---------|--------|-------------|-------------|---------------|---------|
| 300 mm  | 300 mm | -           | 110661      | GD MHS 30 30  | 1       |
| 400 mm  | 300 mm | -           | 110662      | GD MHS 40 30  | 1       |
| 400 mm  | 400 mm | -           | 110663      | GD MHS 40 40  | 1       |
| 500 mm  | 400 mm | -           | 110664      | GD MHS 50 40  | 1       |
| 600 mm  | 400 mm | -           | 110665      | GD MHS 60 40  | 1       |
| 600 mm  | 500 mm | -           | 110666      | GD MHS 60 50  | 1       |
| 700 mm  | 500 mm | -           | 110667      | GD MHS 70 50  | 1       |
| 600 mm  | 600 mm | -           | 110668      | GD MHS 60 60  | 1       |
| 800 mm  | 600 mm | -           | 110669      | GD MHS 80 60  | 1       |
| 1000 mm | 600 mm | -           | 110670      | GD MHS 100 60 | 1       |
| 1200 mm | 600 mm | -           | 110671      | GD MHS 120 60 | 1       |
| 600 mm  | 800 mm | -           | 110672      | GD MHS 60 80  | 1       |
| 1000 mm | 800 mm | -           | 110673      | GD MHS 100 80 | 1       |
| 1200 mm | 800 mm | -           | 110674      | GD MHS 120 80 | 1       |

## Earthing cables

- Earthing cable for connecting door and body of MHS enclosures
- Scope of delivery: earthing cable



| For screws | Length | Article No. | Type   | Packing |
|------------|--------|-------------|--------|---------|
| M8 - M8    | 190 mm | 110683      | EC MHS | 1/100   |



# IP66 Metal enclosures MHS

## Mounting plates

- Galvanized mounting plates as spare part for MHS enclosures
- Scope of delivery: mounting plate, mounting material



| Height  | Width   | Article No. | Type           | Packing |
|---------|---------|-------------|----------------|---------|
| 300 mm  | 200 mm  | 110586      | MP MHS 30 20   | 1/10    |
| 300 mm  | 300 mm  | 110587      | MP MHS 30 30   | 1/10    |
| 400 mm  | 300 mm  | 110588      | MP MHS 40 30   | 1/10    |
| 400 mm  | 400 mm  | 110589      | MP MHS 40 40   | 1/10    |
| 500 mm  | 400 mm  | 110590      | MP MHS 50 40   | 1/10    |
| 600 mm  | 400 mm  | 110591      | MP MHS 60 40   | 1/2     |
| 600 mm  | 500 mm  | 110592      | MP MHS 60 50   | 1/2     |
| 700 mm  | 500 mm  | 110593      | MP MHS 70 50   | 1/2     |
| 600 mm  | 600 mm  | 110594      | MP MHS 60 60   | 1/2     |
| 800 mm  | 600 mm  | 110595      | MP MHS 80 60   | 1/2     |
| 1000 mm | 600 mm  | 110596      | MP MHS 100 60  | 1/2     |
| 1200 mm | 600 mm  | 110597      | MP MHS 120 60  | 1/2     |
| 600 mm  | 800 mm  | 110598      | MP MHS 60 80   | 1/2     |
| 1000 mm | 800 mm  | 110599      | MP MHS 100 80  | 1/2     |
| 1200 mm | 800 mm  | 110600      | MP MHS 120 80  | 1/2     |
| 1000 mm | 1000 mm | 110601      | MP MHS 100 100 | 1/2     |
| 1200 mm | 1000 mm | 110602      | MP MHS 120 100 | 1/2     |

## Rain canopies

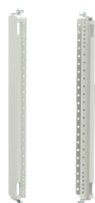
- Rain canopy for MHS enclosure
- Scope of delivery: rain canopy, mounting material



| Height | Width   | Depth  | Article No. | Type             | Packing |
|--------|---------|--------|-------------|------------------|---------|
| -      | 300 mm  | 150 mm | 110631      | RC MHS 00 30 15  | 1       |
| -      | 300 mm  | 200 mm | 110632      | RC MHS 00 30 20  | 1       |
| -      | 400 mm  | 150 mm | 110633      | RC MHS 00 40 15  | 1       |
| -      | 400 mm  | 200 mm | 110634      | RC MHS 00 40 20  | 1       |
| -      | 400 mm  | 300 mm | 110635      | RC MHS 00 40 30  | 1       |
| -      | 500 mm  | 200 mm | 110636      | RC MHS 00 50 20  | 1       |
| -      | 500 mm  | 300 mm | 110637      | RC MHS 00 50 30  | 1       |
| -      | 600 mm  | 200 mm | 110638      | RC MHS 00 60 20  | 1       |
| -      | 600 mm  | 300 mm | 110639      | RC MHS 00 60 30  | 1       |
| -      | 800 mm  | 200 mm | 110640      | RC MHS 00 80 20  | 1       |
| -      | 800 mm  | 300 mm | 110641      | RC MHS 00 80 30  | 1       |
| -      | 1000 mm | 300 mm | 110642      | RC MHS 00 100 30 | 1       |

## Cover plate mounting frames

- Mounting frame for placing the cover plates
- Scope of delivery: left and right part of frame, mounting material



| Height  | Article No. | Type       | Packing |
|---------|-------------|------------|---------|
| 300 mm  | 110603      | MF MHS 30  | 1       |
| 400 mm  | 110604      | MF MHS 40  | 1       |
| 500 mm  | 110605      | MF MHS 50  | 1       |
| 600 mm  | 110606      | MF MHS 60  | 1       |
| 700 mm  | 110607      | MF MHS 70  | 1       |
| 800 mm  | 110608      | MF MHS 80  | 1       |
| 1000 mm | 110609      | MF MHS 100 | 1       |
| 1200 mm | 110610      | MF MHS 120 | 1       |

# IP66 Metal enclosures MHS

## Cover plates

- Cover plate with or without cutout for modular devices
- Total height of cover plates must be at least 20 mm less than height of enclosure
- Scope of delivery: cover plate, mounting material



| Height | For enclosure width | Number of modules | Article No. | Type             | Packing |
|--------|---------------------|-------------------|-------------|------------------|---------|
| 100 mm | 300 mm              | -                 | 110611      | CP MHS 10 30     | 1       |
| 120 mm | 300 mm              | -                 | 110612      | CP MHS 12 30     | 1       |
| 160 mm | 300 mm              | -                 | 110613      | CP MHS 16 30     | 1       |
| 100 mm | 400 mm              | -                 | 110614      | CP MHS 10 40     | 1       |
| 120 mm | 400 mm              | -                 | 110615      | CP MHS 12 40     | 1       |
| 160 mm | 400 mm              | -                 | 110616      | CP MHS 16 40     | 1       |
| 100 mm | 500 mm              | -                 | 110617      | CP MHS 10 50     | 1       |
| 120 mm | 500 mm              | -                 | 110618      | CP MHS 12 50     | 1       |
| 160 mm | 500 mm              | -                 | 110619      | CP MHS 16 50     | 1       |
| 100 mm | 600 mm              | -                 | 110620      | CP MHS 10 60     | 1       |
| 120 mm | 600 mm              | -                 | 110621      | CP MHS 12 60     | 1       |
| 160 mm | 600 mm              | -                 | 110622      | CP MHS 16 60     | 1       |
| 120 mm | 300 mm              | 12                | 110623      | CP MHS 12 30 12M | 1       |
| 160 mm | 300 mm              | 12                | 110624      | CP MHS 16 30 12M | 1       |
| 120 mm | 400 mm              | 18                | 110625      | CP MHS 12 40 18M | 1       |
| 160 mm | 400 mm              | 18                | 110626      | CP MHS 16 40 18M | 1       |
| 120 mm | 500 mm              | 24                | 110627      | CP MHS 12 50 24M | 1       |
| 160 mm | 500 mm              | 24                | 110628      | CP MHS 16 50 24M | 1       |
| 120 mm | 600 mm              | 29                | 110629      | CP MHS 12 60 29M | 1       |
| 160 mm | 600 mm              | 29                | 110630      | CP MHS 16 60 29M | 1       |

## Wall brackets

- Wall brackets as a spare part for MHS enclosures
- Scope of delivery: wall brackets, mounting material



| Quantity | Article No. | Type     | Packing |
|----------|-------------|----------|---------|
| 4 pcs    | 110675      | WB MHS 4 | 1 set   |
| 6 pcs    | 110676      | WB MHS 6 | 1 set   |

## Pole mountings

- Pole mounting for MHS enclosures
- Scope of delivery: pole mounting set, mounting material



| Height | For enclosure width | Number of grips | Article No. | Type           | Packing |
|--------|---------------------|-----------------|-------------|----------------|---------|
| -      | 300 mm              | 2               | 110677      | PM MHS 00 30   | 1 set   |
| -      | 400 mm              | 2               | 110678      | PM MHS 00 40   | 1 set   |
| -      | 500 mm              | 2               | 110679      | PM MHS 00 50   | 1 set   |
| -      | 600 mm              | 2               | 110680      | PM MHS 00 60   | 1 set   |
| -      | 600 mm              | 3               | 110681      | PM MHS 00 60-3 | 1 set   |
| -      | 800 mm              | 3               | 110682      | PM MHS 00 80   | 1 set   |

# IP66 Metal enclosures MHS

## Lock key

- Lock key suitable for MHS enclosures as replacement of supplied lock
- Only for single door enclosures (please check number of lock per enclosure)
- Cam length 22 mm
- Packed separately



| Insert shape  |                                                                                   | Article No. | Type     | Packing |
|---------------|-----------------------------------------------------------------------------------|-------------|----------|---------|
| Lock with key |  | 110704      | LK MHS K | 1       |

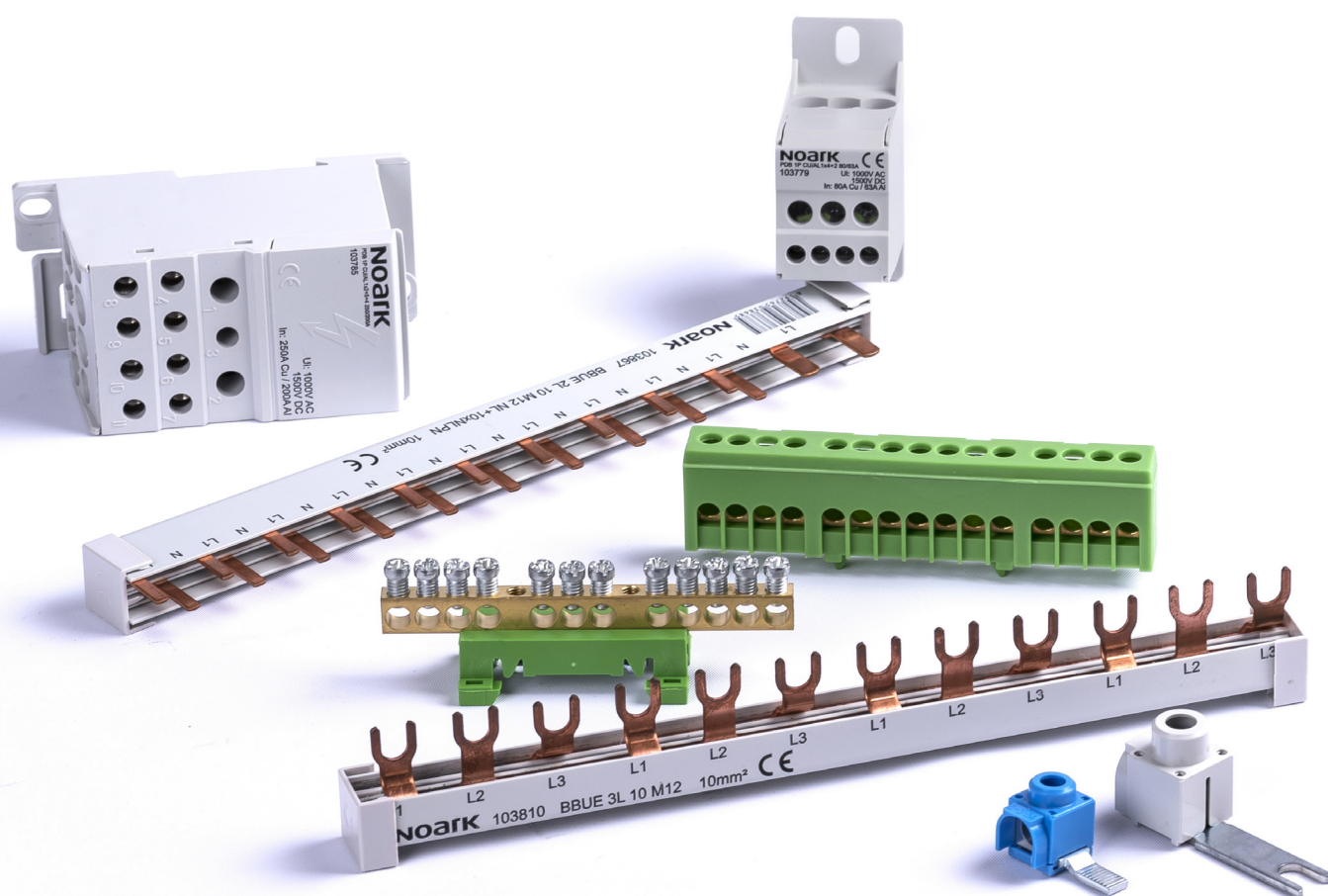
## Cable brush entry

- Height of brush 35 or 55 mm
- Roll of 25 m
- Materials: body - thermoplastic elastomer (TPE); brushes - polypropylene (PP)



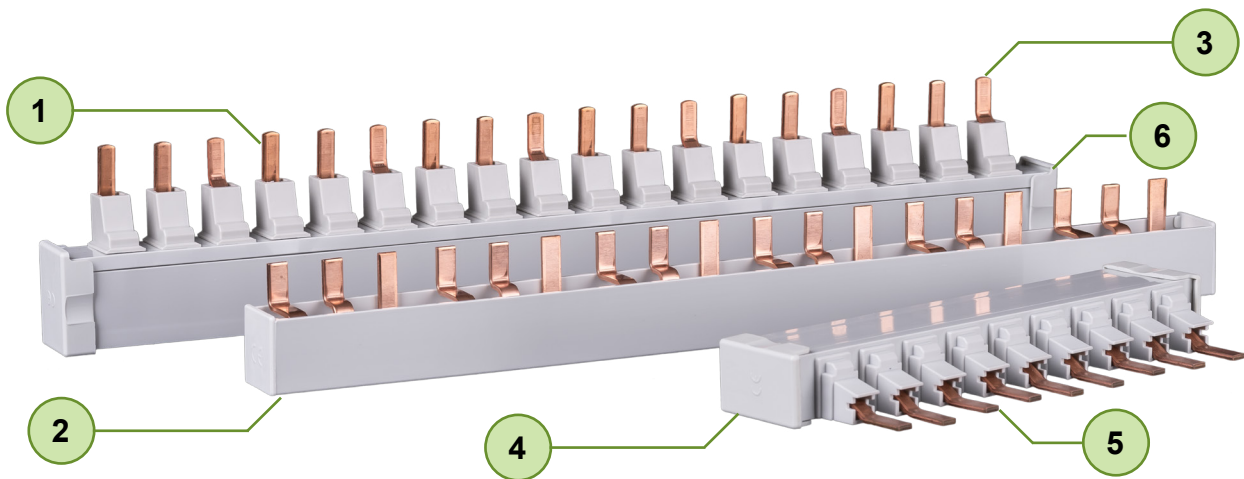
| Height of brush | Article No. | Type       | Packing |
|-----------------|-------------|------------|---------|
| 55 mm           | 110811      | CB MHS 5.5 | 1 roll  |
| 35 mm           | 110812      | CB MHS 3.5 | 1 roll  |

# Interconnection Systems



# Interconnection Systems

## Professional Tips



1 5 years warranty

2 Wide range of different busbars

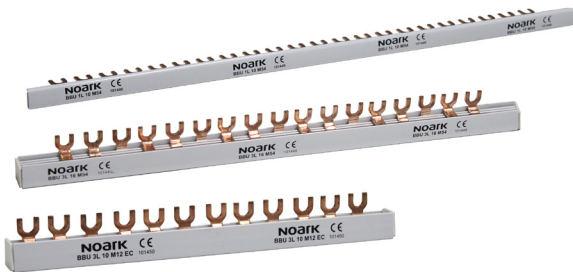
3 Fork and pin type connection points

4 Distribution blocks up to 400 A

5 Various combinations of outputs and inputs

6 Different types of spare terminals

# Busbars BBU, BBP and BBUE



- Busbars BBU, BBP and BBUE for connection of installation devices
- 1, 2, 3 and 4-pole versions
- 10 mm<sup>2</sup> for 63 A, 16 mm<sup>2</sup> for 80 A and 35 mm<sup>2</sup> for 125 A circuits
- 1 meter long or shortened versions
- Fork and pin type connection points
- 9, 13.5, 18 or 27 mm connection point step
- Tailored versions for specific combinations of Noark devices

Busbars for simple and reliable interconnection of installation devices.

Some versions are equipped with end caps. There are available separately packed end caps for all types of busbars.

## Type Key

| BBUE                    | 3L                                                                                                                                                     | 10                                                                                                   | M                       | 12                                                                  |                          | P                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------|
| Product family          | Number of separate conductors                                                                                                                          | Cross section                                                                                        | Step                    | Length in modules                                                   | Special conductors order | Connection point type                                                      |
| BBU, BBP, BBUE: Busbars | 1L: 1 way (L1 L1 L1 L1 ...)<br>2L: 2 ways (L1 N L1 N ...)<br>3L: 3 ways (L1 L2 L3 L1...)<br>4L: 4 ways (L1 L2 L3 N ...)<br>4LN: 4 ways (L1 N L2 N ...) | 10: 10 mm <sup>2</sup><br>16: 16 mm <sup>2</sup><br>30: 30 mm <sup>2</sup><br>35: 35 mm <sup>2</sup> | M: 18 mm<br>M1,5: 27 mm | 2<br>6<br>9<br>12<br>18<br>54 (1m)<br>56 (1m)<br>57 (1m)<br>72 (1m) |                          | _: fork type<br>P: pin type<br>PN: pin type (for Ex9PN devices, step 9 mm) |

## Certification mark



# Busbars BBU

## 1 meter BBU busbars

- 1 and 3-phase busbars
- With 54 fork type connection points
- 10 mm<sup>2</sup> for rated current up to 63 A  
16 mm<sup>2</sup> for rated current up to 80 A
- Delivered without end caps



| Number of phases | Length MU | Cross section      | Article No. | Type          | Packing |
|------------------|-----------|--------------------|-------------|---------------|---------|
| 1                | 54 MU     | 10 mm <sup>2</sup> | 101446      | BBU 1L 10 M54 | 1/100   |
| 1                | 54 MU     | 16 mm <sup>2</sup> | 101447      | BBU 1L 16 M54 | 1/100   |
| 3                | 54 MU     | 10 mm <sup>2</sup> | 101448      | BBU 3L 10 M54 | 1/50    |
| 3                | 54 MU     | 16 mm <sup>2</sup> | 101449      | BBU 3L 16 M54 | 1/50    |

## Shortened BBU busbars

- 3-phase busbars
- 10 mm<sup>2</sup> for rated current up to 63 A  
16 mm<sup>2</sup> for rated current up to 80 A
- Delivered with end caps



| Number of phases | Length MU | Cross section      | Article No. | Type             | Packing  |
|------------------|-----------|--------------------|-------------|------------------|----------|
| 3                | 12 MU     | 10 mm <sup>2</sup> | 101450      | BBU 3L 10 M12 EC | 1/10/200 |
| 3                | 12 MU     | 16 mm <sup>2</sup> | 101451      | BBU 3L 16 M12 EC | 1/10/200 |
| 3                | 6 MU      | 10 mm <sup>2</sup> | 110830      | BBU 3L 10 M6 EU  | 1/5/400  |
| 3                | 6 MU      | 16 mm <sup>2</sup> | 110832      | BBU 3L 16 M6 EU  | 1/5/400  |
| 3                | 9 MU      | 10 mm <sup>2</sup> | 110831      | BBU 3L 10 M9 EU  | 1/5/250  |
| 3                | 9 MU      | 16 mm <sup>2</sup> | 110833      | BBU 3L 16 M9 EU  | 1/5/250  |

# Busbars BBP

## 1 meter pin type busbars

- 1 and 3-phase busbars
- With 54 pin type connection points
- 10 mm<sup>2</sup> for rated current up to 63 A
- Delivered without end caps



| Number of phases | Length MU | Cross section      | Article No. | Type             | Packing |
|------------------|-----------|--------------------|-------------|------------------|---------|
| 1                | 54 MU     | 10 mm <sup>2</sup> | 113240      | BBP 1L 10 M54 EU | 1/5/50  |
| 3                | 54 MU     | 10 mm <sup>2</sup> | 113241      | BBP 3L 10 M54 EU | 1/5/20  |

## Pin type shortened busbars

- 1 and 3-phase busbars
- With 54 pin type connection points
- 10 mm<sup>2</sup> for rated current up to 63 A
- Delivered without end caps



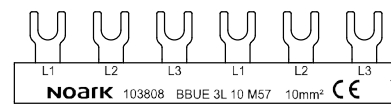
| Number of phases | Length MU | Cross section      | Article No. | Type             | Packing  |
|------------------|-----------|--------------------|-------------|------------------|----------|
| 1                | 12        | 10 mm <sup>2</sup> | 113242      | BBP 1L 10 M12 EU | 1/10/500 |
| 3                | 12        | 10 mm <sup>2</sup> | 113243      | BBP 3L 10 M12 EU | 1/5/180  |



# Busbars BBUE

## 1 meter fork type busbars

- 1, 2, 3 and 4-phase versions
- Length 1 meter (can be shortened)
- Step between connection points 18 mm
- Fork type connection points
- 10 mm<sup>2</sup> for 63 A or 16 mm<sup>2</sup> for 80 A rated current
- Delivered without end caps



| Number of phases | Length MU | Cross section      | Article No. | Type           | Packing |
|------------------|-----------|--------------------|-------------|----------------|---------|
| 1P               | 56 (1m)   | 10 mm <sup>2</sup> | 103798      | BBUE 1L 10 M56 | 1/10    |
| 1P               | 56 (1m)   | 16 mm <sup>2</sup> | 103804      | BBUE 1L 16 M56 | 1/10    |
| 2P               | 56 (1m)   | 10 mm <sup>2</sup> | 103864      | BBUE 2L 10 M56 | 1/10    |
| 2P               | 56 (1m)   | 16 mm <sup>2</sup> | 103865      | BBUE 2L 16 M56 | 1/10    |
| 3P               | 57 (1m)   | 10 mm <sup>2</sup> | 103808      | BBUE 3L 10 M57 | 1/10    |
| 3P               | 57 (1m)   | 16 mm <sup>2</sup> | 103812      | BBUE 3L 16 M57 | 1/10    |
| 4P               | 56 (1m)   | 10 mm <sup>2</sup> | 103816      | BBUE 4L 10 M56 | 1/10    |
| 4P               | 56 (1m)   | 16 mm <sup>2</sup> | 103817      | BBUE 4L 16 M56 | 1/10    |

## Shortened fork type busbars

- 1 and 3-phase versions
- 10 mm<sup>2</sup> for 63 A or 16 mm<sup>2</sup> for 80 A rated current
- Step between connection points 18 mm
- Fork type connection points
- Delivered without end caps

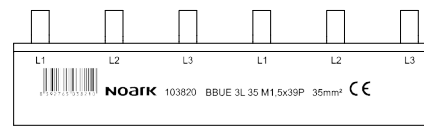


| Number of phases | Length MU | Cross section      | Article No. | Type           | Packing |
|------------------|-----------|--------------------|-------------|----------------|---------|
| 1                | 2         | 10 mm <sup>2</sup> | 103799      | BBUE 1L 10 M2  | 1/25    |
| 1                | 6         | 10 mm <sup>2</sup> | 103800      | BBUE 1L 10 M6  | 1/25    |
| 1                | 9         | 10 mm <sup>2</sup> | 103801      | BBUE 1L 10 M9  | 1/25    |
| 1                | 12        | 10 mm <sup>2</sup> | 103802      | BBUE 1L 10 M12 | 1/25    |
| 1                | 12        | 16 mm <sup>2</sup> | 103805      | BBUE 1L 16 M12 | 1/25    |
| 1                | 18        | 10 mm <sup>2</sup> | 103803      | BBUE 1L 10 M18 | 1/25    |
| 1                | 18        | 16 mm <sup>2</sup> | 103806      | BBUE 1L 16 M18 | 1/25    |
| 3                | 9         | 10 mm <sup>2</sup> | 103809      | BBUE 3L 10 M9  | 1/25    |
| 3                | 9         | 16 mm <sup>2</sup> | 103813      | BBUE 3L 16 M9  | 1/25    |
| 3                | 12        | 10 mm <sup>2</sup> | 103810      | BBUE 3L 10 M12 | 1/25    |
| 3                | 12        | 16 mm <sup>2</sup> | 103814      | BBUE 3L 16 M12 | 1/25    |
| 3                | 18        | 10 mm <sup>2</sup> | 103811      | BBUE 3L 10 M18 | 1/25    |
| 3                | 18        | 16 mm <sup>2</sup> | 103815      | BBUE 3L 16 M18 | 1/25    |

# Busbars BBP and BBUE

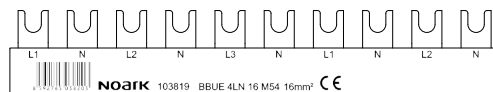
## 1 meter special type busbars

- 1, 3 and 4-phase versions
- Suitable for Ex9B125 line MCBs
- For rated current up to 125 A
- Step between connection points 27 mm
- Pin type connection points
- Delivered without end caps



| Number of phases | Length MU | Cross section      | Article No. | Type                | Packing |
|------------------|-----------|--------------------|-------------|---------------------|---------|
| 1                | 37 (1m)   | 35 mm <sup>2</sup> | 103807      | BBUE 1L 35 M1,5x37P | 1/10    |
| 3                | 39 (1m)   | 35 mm <sup>2</sup> | 103820      | BBUE 3L 35 M1,5x39P | 1/10    |
| 4                | 40 (1m)   | 30 mm <sup>2</sup> | 103821      | BBUE 4L 30 M1,5x40P | 1/10    |

- 4-phase busbars - configuration L1 N L2 N L3 N L1 ...
- Suitable for 2MU 1P+N-pole MCBs line Ex9B
- 10 mm<sup>2</sup> for rated current up to 63 A
- 16 mm<sup>2</sup> for rated current up to 80 A
- Step between connection points 18 mm
- Fork type connection points
- Delivered without end caps



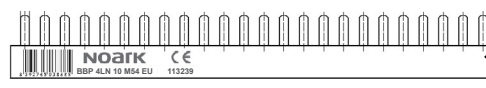
| Number of phases | Length MU | Cross section      | Article No. | Type            | Packing |
|------------------|-----------|--------------------|-------------|-----------------|---------|
| 4                | 54 (1m)   | 10 mm <sup>2</sup> | 103818      | BBUE 4LN 10 M54 | 1/10    |
| 4                | 54 (1m)   | 16 mm <sup>2</sup> | 103819      | BBUE 4LN 16 M54 | 1/10    |

- 2-phase busbar - configuration N L1 N L1 N ...
- Suitable for 1MU 1P+N-pole MCBs line Ex9PN
- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between connection points 8.7 mm
- Pin type connection points
- Delivered without end caps
- Busbar is designed for connecting devices from the bottom side, the order of the devices is quoted from left



| Number of phases | Length MU | Cross section      | Article No. | Type                | Packing |
|------------------|-----------|--------------------|-------------|---------------------|---------|
| 2                | 56 (1m)   | 10 mm <sup>2</sup> | 103866      | BBUE 2L 10 M56 NLPN | 1/10    |

- 2-phase busbar - configuration N L1 N L1 N ...
- 4-phase busbar - configuration N L1 N L2 N L3 N L1...
- Suitable for 1MU 1P+N-pole MCBs line Ex9PN and 1MU RCBO Ex9NLE
- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between connection points 8,7 mm
- Pin type connection points
- Delivered without end caps
- Busbar is designed for connecting devices from the top side, the order of the devices is quoted from left

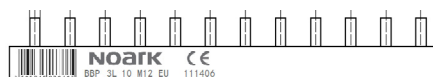


| Number of phases | Length MU | Cross section      | Article No. | Type              | Packing |
|------------------|-----------|--------------------|-------------|-------------------|---------|
| 2                | 54 (1m)   | 10 mm <sup>2</sup> | 113238      | BBP 2LN 10 M54 EU | 1/5/25  |
| 4                | 54 (1m)   | 10 mm <sup>2</sup> | 113239      | BBP 4LN 10 M54 EU | 1/5/20  |

# Busbars BBP and BBUE

## 1 meter special type busbars

- Suitable for 3/4MU Ex9B40J line MCBs
- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between connection points 13,5 mm
- Pin type connection points
- Delivered without end caps
- For 72 slim MCBs in line



| Number of phases | Length 3/4MU | Cross section      | Article No. | Type                    | Packing |
|------------------|--------------|--------------------|-------------|-------------------------|---------|
| 1                | 72           | 10 mm <sup>2</sup> | 113236      | BBP 1L 10 M72 13.5mm EU | 1/10/50 |
| 3                | 72           | 10 mm <sup>2</sup> | 113237      | BBP 3L 10 M72 13.5mm EU | 1/5/20  |

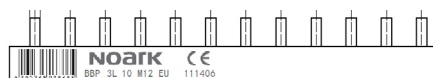
## Special type shortened busbars

- 2-phase busbar - configuration N L1 N L1 N L1...
- 4-phase busbar - configuration N L1 N L2 N L3 N L1 ...
- Suitable for 1MU 1P+N-pole MCBs line Ex9PN and 1M RCBO Ex9NLE
- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between connection points 8.7 mm
- Pin type connection points
- Delivered with end caps
- Busbar is designed for connecting devices from the top side, the order of the devices is quoted from left



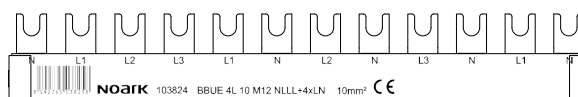
| Number of phases | Length MU | Cross section      | Article No. | Type              | Packing |
|------------------|-----------|--------------------|-------------|-------------------|---------|
| 2                | 12        | 10 mm <sup>2</sup> | 111407      | BBP 2LN 10 M12 EU | 1/5/150 |
| 4                | 12        | 10 mm <sup>2</sup> | 111408      | BBP 4LN 10 M12 EU | 1/5/100 |

- Suitable for 3/4MU MCBs line Ex9B40J
- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between connection points 13.5 mm
- Pin type connection points
- Delivered with end caps
- For 12 MCBs in line



| Number of phases | Length 3/4MU | Cross section      | Article No. | Type             | Packing  |
|------------------|--------------|--------------------|-------------|------------------|----------|
| 1                | 12           | 10 mm <sup>2</sup> | 111405      | BBP 1L 10 M12 EU | 1/10/300 |
| 3                | 12           | 10 mm <sup>2</sup> | 111406      | BBP 3L 10 M12 EU | 1/5/150  |

- 2 and 4-phase busbars for combination of Ex9L RCCB with 1P+N-pole Ex9B line MCBs
- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between MCB connection points 18 mm
- Fork type connection point
- Delivered with end caps
- Busbar is designed for connecting devices from the bottom side, the order of the devices is quoted from left



| Number of phases | Length MU | Cross section      | Article No. | Type                     | Packing |
|------------------|-----------|--------------------|-------------|--------------------------|---------|
| 2                | 12        | 10 mm <sup>2</sup> | 103868      | BBUE 2L 10 M12 NL+5xLN   | 1/25    |
| 4                | 12        | 10 mm <sup>2</sup> | 103824      | BBUE 4L 10 M12 NLLL+4xLN | 1/25    |
| 4                | 18        | 10 mm <sup>2</sup> | 103825      | BBUE 4L 10 M18 NLLL+7xLN | 1/25    |

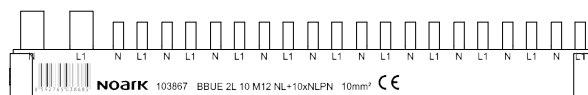
# Busbars BBU and BBUE

## Special type shortened busbars

- 2 and 4-phase busbars for combination of Ex9L RCCB with Ex9PN line MCBs

- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between MCB connection points 8.7 mm
- Pin type connection points
- Delivered with end caps

- Busbar is designed for connecting devices from the bottom side, the order of the devices is quoted from left



| Number of phases | Length MU | Cross section      | Article No. | Type                       | Packing |
|------------------|-----------|--------------------|-------------|----------------------------|---------|
| 2                | 12        | 10 mm <sup>2</sup> | 103867      | BBUE 2L 10 M12 NL+10xNLPN  | 1/25    |
| 4                | 12        | 10 mm <sup>2</sup> | 103822      | BBUE 4L 10 M12 NLLL+8xNLPN | 1/25    |

- 2-phase busbar for combination of RCCB of line Ex9BL and Ex9PN line MCBs

- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between MCB connection points 8.7 mm
- Pin type connection point
- Delivered with end caps

- Busbar is designed for connecting devices from the bottom side, the order of the devices is quoted from left

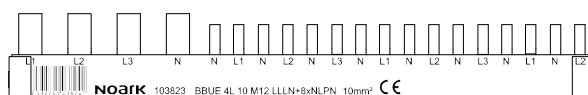


| Number of phases | Length MU | Cross section      | Article No. | Type                      | Packing |
|------------------|-----------|--------------------|-------------|---------------------------|---------|
| 2                | 12        | 10 mm <sup>2</sup> | 107114      | BBUE 2L 10 M12 LN+10xNLPN | 1/25    |

- 4-pole busbar for combination of RCD with N-pole on right hand side and Ex9PN line MCBs

- 10 mm<sup>2</sup> for rated current up to 63 A
- Step between MCB connection points 8.7 mm
- Pin type connection point
- Delivered with end caps

- Busbar is designed for connecting devices from the bottom side, the order of the devices is quoted from left



| Number of phases | Length MU | Cross section      | Article No. | Type                       | Packing |
|------------------|-----------|--------------------|-------------|----------------------------|---------|
| 4                | 12        | 10 mm <sup>2</sup> | 103823      | BBUE 4L 10 M12 LLLN+8xNLPN | 1/25    |

# Busbars BBU, BBP and BBUE

## End caps for BBU and BBP busbars

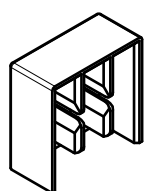
- End caps for 1 and 3-phase BBU and BBP busbars



| Cross section           | For number of phases | Article No. | Type       | Packing |
|-------------------------|----------------------|-------------|------------|---------|
| 10 / 16 mm <sup>2</sup> | 1                    | 101452      | ECU 1L     | 1/1000  |
| 10 mm <sup>2</sup>      | 2                    | 113244      | ECU 2LN 10 | 1/1000  |
| 16 mm <sup>2</sup>      | 2                    | 113245      | ECU 2LN 16 | 1/1000  |
| 10 mm <sup>2</sup>      | 3                    | 113246      | ECU 3L 10  | 1/1000  |
| 16 mm <sup>2</sup>      | 3                    | 101453      | ECU 3L 16  | 1/1000  |
| 10 / 16 mm <sup>2</sup> | 4                    | 113247      | ECU 4LN    | 1/500   |

## End caps for BBUE busbars

- End caps for BBUE busbars



| For busbar | For number of phases | Article No. | Type       | Packing |
|------------|----------------------|-------------|------------|---------|
| BBUE 1L    | 1                    | 103826      | ECUE 1L    | 1/50    |
| BBUE 2L    | 2                    | 103827      | ECUE 2L    | 1/50    |
| BBUE 3L    | 3                    | 103828      | ECUE 3L    | 1/50    |
| BBUE 4L    | 4                    | 103829      | ECUE 4L    | 1/50    |
| BBUE 1L 35 | 1                    | 103831      | ECUE 1L 35 | 1/50    |
| BBUE 3L 35 | 3                    | 103830      | ECUE 3L 35 | 1/50    |

## Protection covers for busbars

- Protection covers for unused connection points on BBUE busbars
- 5 pieces connected together, breakable



| Cover type | Cross section         | Colour | Article No. | Type  | Packing |
|------------|-----------------------|--------|-------------|-------|---------|
| L-type     | 10/16 mm <sup>2</sup> | yellow | 105728      | SPBB1 | 5/50    |

- suitable for 1-phase (103798, 103799, 103800, 103801, 103802, 103803, 103804, 103805, 103806), 2-phase (103864, 103865) and 4-phase (103816, 103817, 103818, 103819) busbars



|           |                       |        |        |       |      |
|-----------|-----------------------|--------|--------|-------|------|
| Roof-type | 10/16 mm <sup>2</sup> | yellow | 105729 | SPBB2 | 5/50 |
|-----------|-----------------------|--------|--------|-------|------|

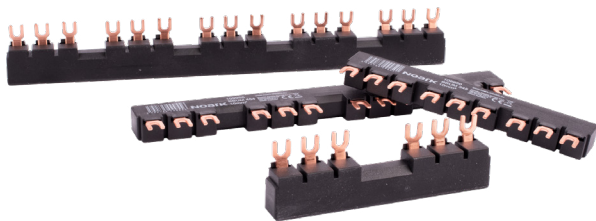
- suitable for 3-phase (103808, 103809, 103810, 103811, 103812, 103813, 103814, 103815) busbars



|        |                       |        |        |       |      |
|--------|-----------------------|--------|--------|-------|------|
| L-type | 30/35 mm <sup>2</sup> | yellow | 105730 | SPBB3 | 5/50 |
|--------|-----------------------|--------|--------|-------|------|

- suitable for 30 and 35 mm<sup>2</sup> (103807, 103820, 103821) busbars

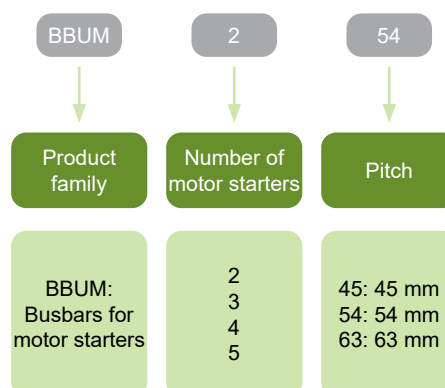
# Busbars BBUM



- Busbars BBUM for connection of Motor Protective Circuit Breakers
- For up to 5 motor starters
- 10 mm<sup>2</sup> for 63 A circuits
- Fork type connection points
- 45, 54 or 63 mm connection point step

Busbars for simple and reliable interconnection of motor protective circuit breakers.

## Type Key



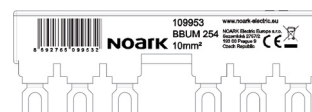
## Certification mark



# Busbars BBUM

## BBUM busbars

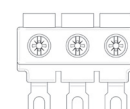
- For up to 5 motor protective circuit breakers
- 45, 54 or 63 mm pitch
- Fork type connection points
- 10 mm<sup>2</sup> for rated current up to 63 A



| Number of motor starters | Pitch | Article No. | Type     | Packing  |
|--------------------------|-------|-------------|----------|----------|
| 2                        | 45 mm | 109949      | BBUM 245 | 1/10/200 |
| 3                        | 45 mm | 109950      | BBUM 345 | 1/10/200 |
| 4                        | 45 mm | 109951      | BBUM 445 | 1/10/100 |
| 5                        | 45 mm | 109952      | BBUM 545 | 1/10/100 |
| 2                        | 54 mm | 109953      | BBUM 254 | 1/10/250 |
| 3                        | 54 mm | 109954      | BBUM 354 | 1/10/200 |
| 4                        | 54 mm | 109955      | BBUM 454 | 1/10/100 |
| 5                        | 54 mm | 109956      | BBUM 554 | 1/10/100 |
| 2                        | 63 mm | 109957      | BBUM 263 | 1/10/100 |
| 3                        | 63 mm | 109958      | BBUM 363 | 1/10/100 |
| 4                        | 63 mm | 109959      | BBUM 463 | 1/10/100 |
| 5                        | 63 mm | 109960      | BBUM 563 | 1/10/200 |

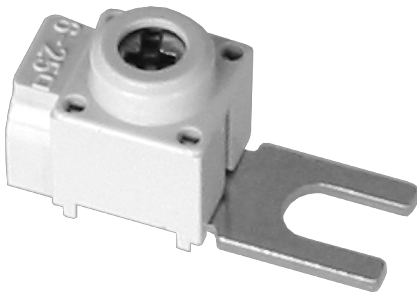
## Feeder terminal

- Fork type connection points
- 10 mm<sup>2</sup> for rated current up to 63 A



| Description     | Article No. | Type | Packing  |
|-----------------|-------------|------|----------|
| Feeder terminal | 109961      | FBUM | 1/10/200 |

# Insulated terminals IT



- Insulated terminals
- Tested according to EN 60439-1
- Rated current up to 125 A
- Connection lengthwise or across
- Fork or pin connection point type
- Gray or blue terminal colour versions

The terminals IT are intended as feeder terminals in, for example, busbars connections. Can be used also for connecting a wire of a type which is not suitable for a device terminal. Different length and shape variants allow the installation in boards with low space for wire bending.

## Type key

| IT                         | L                          | L                                  | F                     | 63A                    | G                  |
|----------------------------|----------------------------|------------------------------------|-----------------------|------------------------|--------------------|
| ↓                          | ↓                          | ↓                                  | ↓                     | ↓                      | ↓                  |
| Product                    | Connection direction       | Connection point size              | Connection point type | Rated current          | Colour             |
| IT:<br>Insulated terminals | L: lengthwise<br>A: across | _ : standard<br>L: long<br>W: wide | F: fork<br>P: pin     | 63: 63 A<br>100: 125 A | G: gray<br>B: blue |

## Certification marks





# Insulated terminals IT

## Insulated terminals up to 63 A, fork connection point type

- Rated current up to 63 A
- Rated operational voltage 690 V AC
- Fork with cutout for M5 screw
- For single/multi wire 6 - 25 mm<sup>2</sup>,  
fine wired with sleeve 4 - 16 mm<sup>2</sup>



| Connection direction | Connection point size | Colour | Article No. | Type        | Packing |
|----------------------|-----------------------|--------|-------------|-------------|---------|
| lengthwise           | 13.5 x 11 x 2 mm      | gray   | 103832      | ITL F 63A G | 1/25    |
| lengthwise           | 13.5 x 11 x 2 mm      | blue   | 103833      | ITL F 63A B | 1/25    |
| across               | 13.5 x 11 x 2 mm      | gray   | 103834      | ITA F 63A G | 1/25    |
| across               | 13.5 x 11 x 2 mm      | blue   | 103835      | ITA F 63A B | 1/25    |



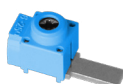
|            |                |      |        |              |      |
|------------|----------------|------|--------|--------------|------|
| lengthwise | 28 x 11 x 2 mm | gray | 103836 | ITLL F 63A G | 1/25 |
| lengthwise | 28 x 11 x 2 mm | blue | 103837 | ITLL F 63A B | 1/25 |
| across     | 28 x 11 x 2 mm | gray | 103838 | ITAL F 63A G | 1/25 |
| across     | 28 x 11 x 2 mm | blue | 103839 | ITAL F 63A B | 1/25 |

## Insulated terminals up to 63 A, pin connection point type

- Rated current up to 63 A
- Rated operational voltage 690 V AC
- For single/multi wire 6 - 25 mm<sup>2</sup>,  
fine wired with sleeve 4 - 16 mm<sup>2</sup>



| Connection direction | Connection point size | Colour | Article No. | Type        | Packing |
|----------------------|-----------------------|--------|-------------|-------------|---------|
| lengthwise           | 13.5 x 4,3 x 2 mm     | gray   | 103840      | ITL P 63A G | 1/25    |
| lengthwise           | 13.5 x 4,3 x 2 mm     | blue   | 103841      | ITL P 63A B | 1/25    |
| across               | 13.5 x 4,3 x 2 mm     | gray   | 103842      | ITA P 63A G | 1/25    |
| across               | 13.5 x 4,3 x 2 mm     | blue   | 103843      | ITA P 63A B | 1/25    |



|            |                 |      |        |              |      |
|------------|-----------------|------|--------|--------------|------|
| lengthwise | 13.5 x 6 x 2 mm | gray | 103844 | ITLW P 63A G | 1/25 |
| lengthwise | 13.5 x 6 x 2 mm | blue | 103845 | ITLW P 63A B | 1/25 |
| across     | 13.5 x 6 x 2 mm | gray | 103846 | ITAW P 63A G | 1/25 |
| across     | 13.5 x 6 x 2 mm | blue | 103847 | ITAW P 63A B | 1/25 |

## Insulated terminals up to 125 A, pin connection point type

- Rated current up to 125 A
- Rated operational voltage 690 V AC
- For single/multi wire 6 - 50 mm<sup>2</sup>,  
fine wired with sleeve 4 - 35 mm<sup>2</sup>



| Connection direction | Connection point size | Colour | Article No. | Type         | Packing |
|----------------------|-----------------------|--------|-------------|--------------|---------|
| lengthwise           | 13.5 x 7 x 2 mm       | gray   | 103848      | ITL P 100A G | 1/25    |
| lengthwise           | 13.5 x 7 x 2 mm       | blue   | 103849      | ITL P 100A B | 1/25    |

# Power distribution blocks PDB

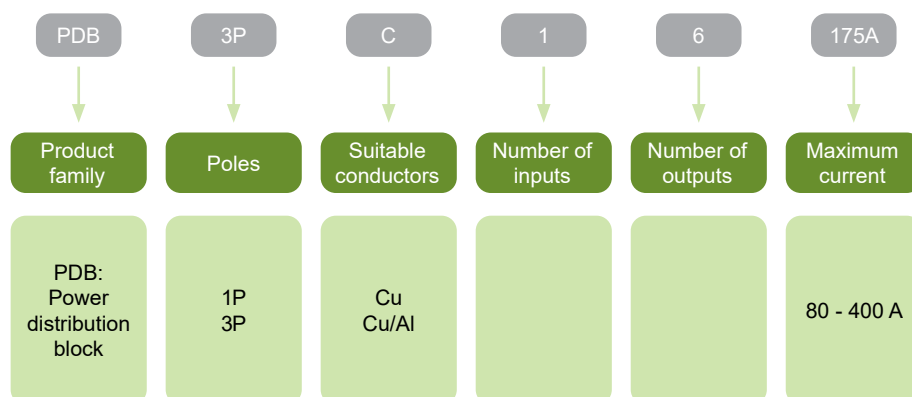


- Power distribution blocks
- Meets requirements of EN 60947-7-1
- Versions suitable for Cu or Cu/Al conductors
- Maximum current  $I_{max}$  up to 400 A
- Various combinations of outputs and inputs
- Mounting onto 35 mm DIN rail or onto panel

Power distribution blocks are used for saving time and space on distribution board wiring. You can save up to 80% of used space.

Due to modular construction it is possible to interconnect the power distribution blocks together and create multipole combinations.

## Type Key



## Certification marks

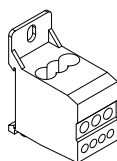


# Power distribution blocks PDB

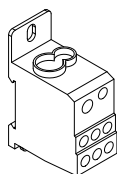
## 1-pole versions

- Suitable for copper (Cu) or copper/aluminium (Cu/Al) conductors - Al connections are not maintenance free
- Mounting onto DIN-rail or onto panel
- Rigid cables assumed for maximum currents and maximum connection cable cross sections

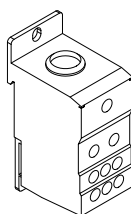
| Maximum current (Cu/Al) | Inputs                                                      | Outputs                                                                                     | Suitable for | Article No. | Type                          | Packing |
|-------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------|-------------|-------------------------------|---------|
| 80 A                    | 1x 2.5 - 16 mm <sup>2</sup>                                 | 4x 2.5 - 6 mm <sup>2</sup><br>2x 2.5 - 16 mm <sup>2</sup>                                   | Cu           | 103778      | PDB 1P CU 1x4+2 80A           | 1/25    |
| 125 A                   | 1x 10 - 35 mm <sup>2</sup><br>+ 1x 2.5 - 16 mm <sup>2</sup> | 6x 2.5 - 16 mm <sup>2</sup>                                                                 | Cu           | 103780      | PDB 1P CU 1+1x6 125A          | 1/25    |
| 160 A                   | 1x 10 - 70 mm <sup>2</sup>                                  | 6x 2.5 - 16 mm <sup>2</sup>                                                                 | Cu           | 103782      | PDB 1P CU 1x6 160A            | 1/20    |
| 250 A                   | 1x 35 - 120 mm <sup>2</sup>                                 | 2x 6 - 35 mm <sup>2</sup><br>+ 5x 1.5 - 16 mm <sup>2</sup><br>+ 4x 1.5 - 10 mm <sup>2</sup> | Cu           | 103784      | PDB 1P CU 1x2+5+4 250A        | 1/20    |
| 400 A                   | 1x 95 - 185 mm <sup>2</sup>                                 | 2x 6 - 35 mm <sup>2</sup><br>+ 5x 1.5 - 16 mm <sup>2</sup><br>+ 4x 1.5 - 10 mm <sup>2</sup> | Cu           | 103786      | PDB 1P CU 1x2+5+4 400A        | 1/20    |
| 80/63 A                 | 1x 2.5 - 16 mm <sup>2</sup>                                 | 4x 2.5 - 6 mm <sup>2</sup><br>+ 2x 2.5 - 16 mm <sup>2</sup>                                 | Cu/Al        | 103779      | PDB 1P CU/AL 1x4+2 80/63A     | 1/25    |
| 125/100 A               | 1x 10 - 35 mm <sup>2</sup><br>+ 1x 2.5 - 16 mm <sup>2</sup> | 6x 2.5 - 16 mm <sup>2</sup>                                                                 | Cu/Al        | 103781      | PDB 1P CU/AL 1+1x6 125/100A   | 1/25    |
| 160/125 A               | 1x 10 - 70 mm <sup>2</sup>                                  | 6x 2.5 - 16 mm <sup>2</sup>                                                                 | Cu/Al        | 103783      | PDB 1P CU/AL 1x6 160/125A     | 1/20    |
| 250/200 A               | 1x 35 - 120 mm <sup>2</sup>                                 | 2x 6 - 35 mm <sup>2</sup><br>+ 5x 1.5 - 16 mm <sup>2</sup><br>+ 4x 1.5 - 10 mm <sup>2</sup> | Cu/Al        | 103785      | PDB 1P CU/AL 1x2+5+4 250/200A | 1/20    |
| 400/300 A               | 1x 95 - 185 mm <sup>2</sup>                                 | 2x 6 - 35 mm <sup>2</sup><br>+ 5x 1.5 - 16 mm <sup>2</sup><br>+ 4x 1.5 - 10 mm <sup>2</sup> | Cu/Al        | 103787      | PDB 1P CU/AL 1x2+5+4 400/300A | 1/20    |



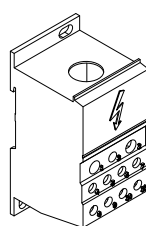
103778  
103779



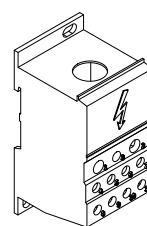
103780  
103781



103782  
103783



103784  
103785



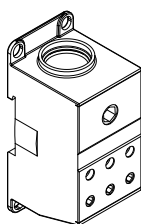
103786  
103787

# Power distribution blocks PDB

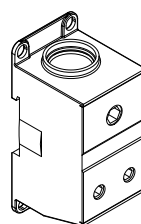
## 1-pole versions

- Suitable for copper (Cu) or copper/aluminium (Cu/Al) conductors - Al connections are not maintenance free
- Mounting onto DIN-rail or onto panel
- Rigid cables assumed for maximum currents and maximum connection cable cross sections

| Maximum current (Cu/Al) | Inputs                      | Outputs                     | Suitable for | Article No. | Type                      | Packing |
|-------------------------|-----------------------------|-----------------------------|--------------|-------------|---------------------------|---------|
| 400 A                   | 1x 95 - 240 mm <sup>2</sup> | 6x 10 - 50 mm <sup>2</sup>  | Cu           | 105509      | PDB 1P CU 1x6 400A        | 1/10    |
| 400 A                   | 1x 95 - 240 mm <sup>2</sup> | 2x 50 - 120 mm <sup>2</sup> | Cu           | 105510      | PDB 1P CU 1x2 400A        | 1/10    |
| 400/350 A               | 1x 95 - 240 mm <sup>2</sup> | 6x 10 - 50 mm <sup>2</sup>  | Cu/Al        | 103795      | PDB 1P CU/AL 1x6 400/350A | 1/10    |
| 400/350 A               | 1x 95 - 240 mm <sup>2</sup> | 2x 50 - 120 mm <sup>2</sup> | Cu/Al        | 103796      | PDB 1P CU/AL 1x2 400/350A | 1/10    |



103795



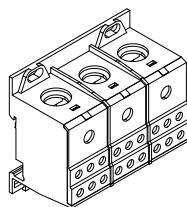
103796

# Power distribution blocks PDB

## 3-pole versions

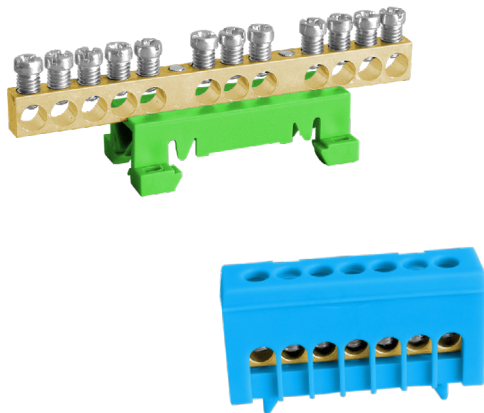
- Suitable for copper (Cu) or copper/aluminium (Cu/Al) conductors - Al connections are not maintenance free
- Mounting onto DIN-rail or onto panel
- Rigid cables assumed for maximum currents and maximum connection cable cross sections

| Maximum current (Cu/Al) | Inputs                     | Outputs                     | Suitable for | Article No. | Type                      | Packing |
|-------------------------|----------------------------|-----------------------------|--------------|-------------|---------------------------|---------|
| 175 A                   | 1x 16 - 70 mm <sup>2</sup> | 6x 2.5 - 16 mm <sup>2</sup> | Cu           | 103788      | PDB 3P CU 1x6 175A        | 1/10    |
| 175/125 A               | 1x 16 - 70 mm <sup>2</sup> | 6x 2.5 - 16 mm <sup>2</sup> | Cu/Al        | 103789      | PDB 3P CU/AL 1x6 175/125A | 1/10    |



103788  
103789

# Terminal bars TB

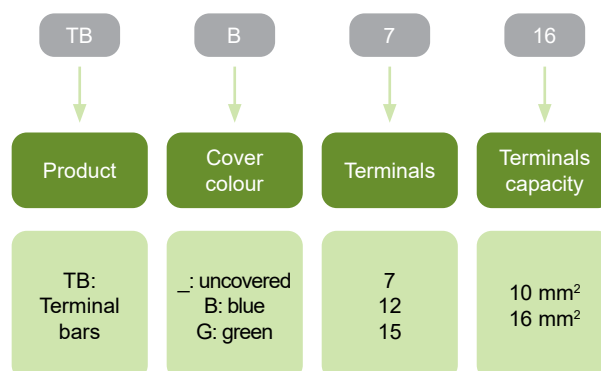


- Neutral and grounding terminal bars
- Tested according to EN 60998-1, -2-1
- Rated currents up to 63 A
- Rated isolation voltage 690 V AC
- 7, 12 and 15 terminal versions
- Terminals capacity 10 and 16 mm<sup>2</sup>
- Uncovered and covered coloured versions
- DIN-rail mounting

Terminal bars TB are used as additional terminals in most of distribution boards. Their design and compact size allows it usage in various applications with rated current up to 63 A.

Terminals are offered in various sizes. All types are equipped with either coloured (N, PE) plastic DIN rail holder or DIN rail clip.

## Type key



## Certification marks



# Terminal bars TB

## Covered neutral and grounding terminal bars up to 63 A

- Rated current up to 63 A
- Rated isolation voltage 690 V AC
- All side finger-safe
- One-side closed conductor notch
- For wires up to 16 mm<sup>2</sup>



| Terminals | Terminal capacity        | Colour | Article No. | Type      | Packing |
|-----------|--------------------------|--------|-------------|-----------|---------|
| 7         | up to 16 mm <sup>2</sup> | blue   | 103850      | TBB 7x16  | 1/10    |
| 7         | up to 16 mm <sup>2</sup> | green  | 103851      | TBG 7x16  | 1/10    |
| 15        | up to 16 mm <sup>2</sup> | blue   | 103852      | TBB 15x16 | 1/10    |
| 15        | up to 16 mm <sup>2</sup> | green  | 103853      | TBG 15x16 | 1/10    |

## Uncovered neutral and grounding terminal bars up to 63 A

- Rated current up to 63 A
- Rated isolation voltage 690 V AC
- For wires up to 10 mm<sup>2</sup>



| Terminals | Terminal capacity  | Colour | Article No. | Type      | Packing |
|-----------|--------------------|--------|-------------|-----------|---------|
| 7         | 10 mm <sup>2</sup> | blue   | 103854      | TBB 7x10  | 1/10    |
| 7         | 10 mm <sup>2</sup> | green  | 103855      | TBG 7x10  | 1/10    |
| 12        | 10 mm <sup>2</sup> | blue   | 103856      | TBB 12x10 | 1/10    |
| 12        | 10 mm <sup>2</sup> | green  | 103857      | TBG 12x10 | 1/10    |

## Terminal bars up to 63 A with steel DIN rail clip

- Rated current up to 63 A
- Rated isolation voltage 690 V AC
- For wires up to 10 mm<sup>2</sup>



| Terminals | Terminal capacity  | Article No. | Type     | Packing |
|-----------|--------------------|-------------|----------|---------|
| 7         | 10 mm <sup>2</sup> | 103858      | TB 7x10  | 1/10    |
| 12        | 10 mm <sup>2</sup> | 103859      | TB 12x10 | 1/10    |

# DIN rail service socket Ex9DS



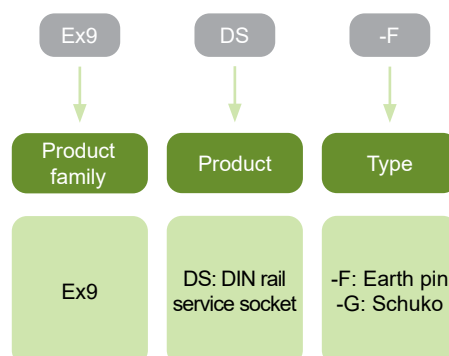
- Tested according to IEC/EN 60884-1
- Rated currents up to 16 A
- Rated operating voltage 250 V AC
- Rated insulation voltage 1000 V AC
- Terminals capacity 6 mm<sup>2</sup>
- DIN-rail mounting

DIN rail service socket is available in two version. Schuko standard and Earth pin standard socket are with 45mm housing for fitting onto symmetrical DIN rail.

DIN rail servise sockets can be quickly fitted and connected in enclosures.

These modular electrical sockets allow the use of auxiliary devices, tools or electrical and electronic non modular equipments in civil and industrial electrical switchboards.

## Type key



## Certification marks





# DIN rail service socket Ex9DS

## DIN rail service socket - Earth pin standard

- Rated current up to 16 A
- Rated insulation voltage 1000 V AC
- Terminal capacity up to 6 mm<sup>2</sup>



| Operating voltage | Article No. | Type    | Packing |
|-------------------|-------------|---------|---------|
| 250 V AC          | 106194      | Ex9DS-F | 1/5/100 |

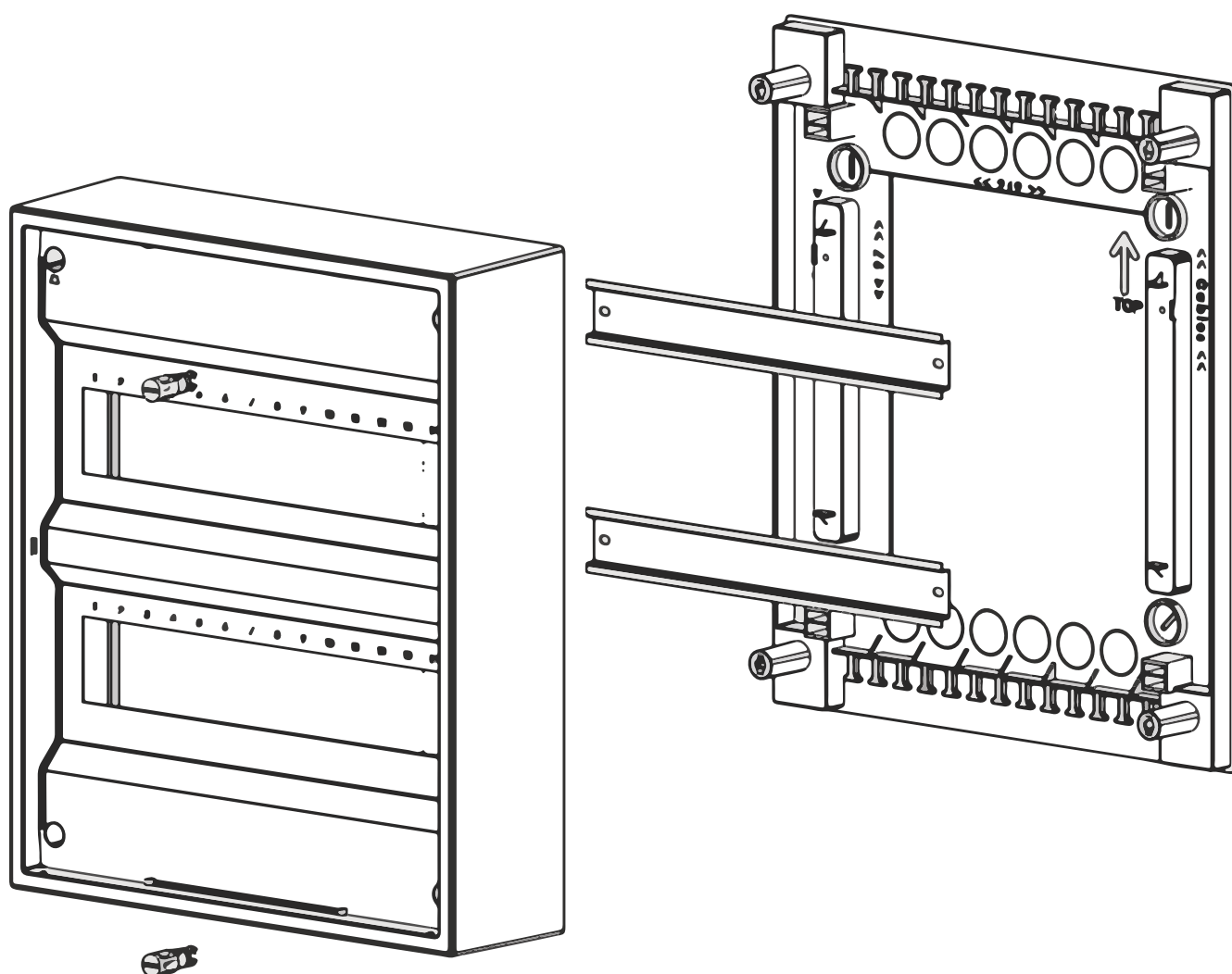
## DIN rail service socket - Schuko standard

- Rated current up to 16 A
- Rated insulation voltage 1000 V AC
- Terminal capacity up to 6 mm<sup>2</sup>



| Operating voltage | Article No. | Type    | Packing |
|-------------------|-------------|---------|---------|
| 250 V AC          | 106195      | Ex9DS-G | 1/5/100 |

# Technical Data



# Content

## Technical Data

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# Technical Data PNS

## Plastic consumer units, IP40, surface mounted

### General parameters

Consumer units for domestic applications mainly

Surface mounted version

Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material

### Electrical parameters

|                                                                                 |          |
|---------------------------------------------------------------------------------|----------|
| Tested according to                                                             | EN 60670 |
| Rated operational voltage                                                       | 400 V AC |
| Rated frequency                                                                 | 50 Hz    |
| Degree of protection                                                            | IP40     |
| Protection class                                                                | II       |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |          |
| PNS 4T / PNS 4W                                                                 | 10 W     |
| PNS 8T / PNS 8W                                                                 | 16 W     |
| PNS 12T / PNS 12W                                                               | 25 W     |
| PNS 18T / PNS 18W                                                               | 25 W     |
| PNS 1x24T / PNS 1x24W                                                           | 30 W     |
| PNS 24T / PNS 24W                                                               | 30 W     |
| PNS 2x18T / PNS 2x18W                                                           | 30 W     |
| PNS 36T / PNS 36W                                                               | 30 W     |
| PNS 48T / PNS 48W                                                               | 35 W     |
| PNS 3x18T / PNS 3x18W                                                           | 35 W     |
| PNS 4x18T / PNS 4x18W                                                           | 40 W     |

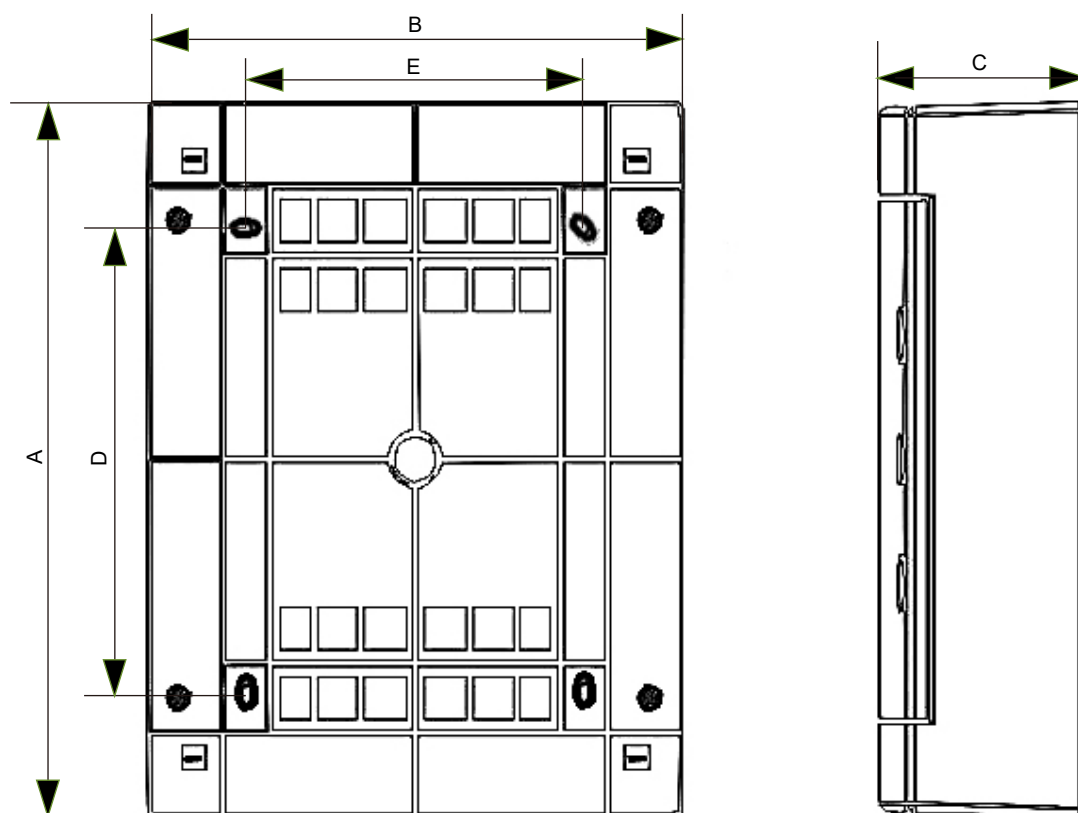
### Mechanical parameters

|                              |                                 |
|------------------------------|---------------------------------|
| Glow-wire test               | 650 °C                          |
| Mechanical impact resistance | IK08                            |
| Used plastics                | Halogen-free                    |
| Body color                   | RAL9003                         |
| Operating temperature        | -25°C – +60°C                   |
| Material                     | Acrylonitrile butadiene styrene |

# Technical Data PNS

Plastic consumer units, IP40, surface mounted

## Dimensional drawings



## Dimensions

| Type                  | Dimensions [mm] |     |     |     |     |
|-----------------------|-----------------|-----|-----|-----|-----|
|                       | A               | B   | C   | D   | E   |
| PNS 4T / PNS 4W       | 235             | 143 | 98  | 127 | 46  |
| PNS 8T / PNS 8W       | 236             | 287 | 102 | 107 | 120 |
| PNS 12T / PNS 12W     | 236             | 287 | 112 | 107 | 180 |
| PNS 18T / PNS 18W     | 236             | 396 | 112 | 107 | 289 |
| PNS 1x24T / PNS 1x24W | 236             | 503 | 112 | 107 | 396 |
| PNS 24T / PNS 24W     | 361             | 287 | 112 | 232 | 180 |
| PNS 2x18T / PNS 2x18W | 361             | 396 | 112 | 232 | 289 |
| PNS 36T / PNS 36W     | 485             | 287 | 112 | 357 | 180 |
| PNS 48T / PNS 48W     | 652             | 287 | 112 | 482 | 180 |
| PNS 3x18T / PNS 3x18W | 526             | 396 | 112 | 357 | 289 |
| PNS 4x18T / PNS 4x18W | 651             | 396 | 112 | 482 | 289 |

# Technical Data PNS-SD

## Plastic consumer units, IP40, surface mounted

### General parameters

Consumer units for domestic applications mainly

Surface mounted version

Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material

### Electrical parameters

|                                                                                 |                    |
|---------------------------------------------------------------------------------|--------------------|
| Tested according to                                                             | EN 60670, EN 62208 |
| Rated operational voltage                                                       | 400 V AC           |
| Rated frequency                                                                 | 50 Hz              |
| Degree of protection                                                            | IP40               |
| Protection class                                                                | II                 |
| Rated current I <sub>c</sub>                                                    | Up to 63A          |
| Operating temperature                                                           | -25°C – +60°C      |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                    |
| PNS-SD 12T / PNS-SD 12W                                                         | 30 W               |
| PNS-SD 24T / PNS-SD 24W                                                         | 40 W               |
| PNS-SD 36T / PNS-SD 36W                                                         | 60 W               |

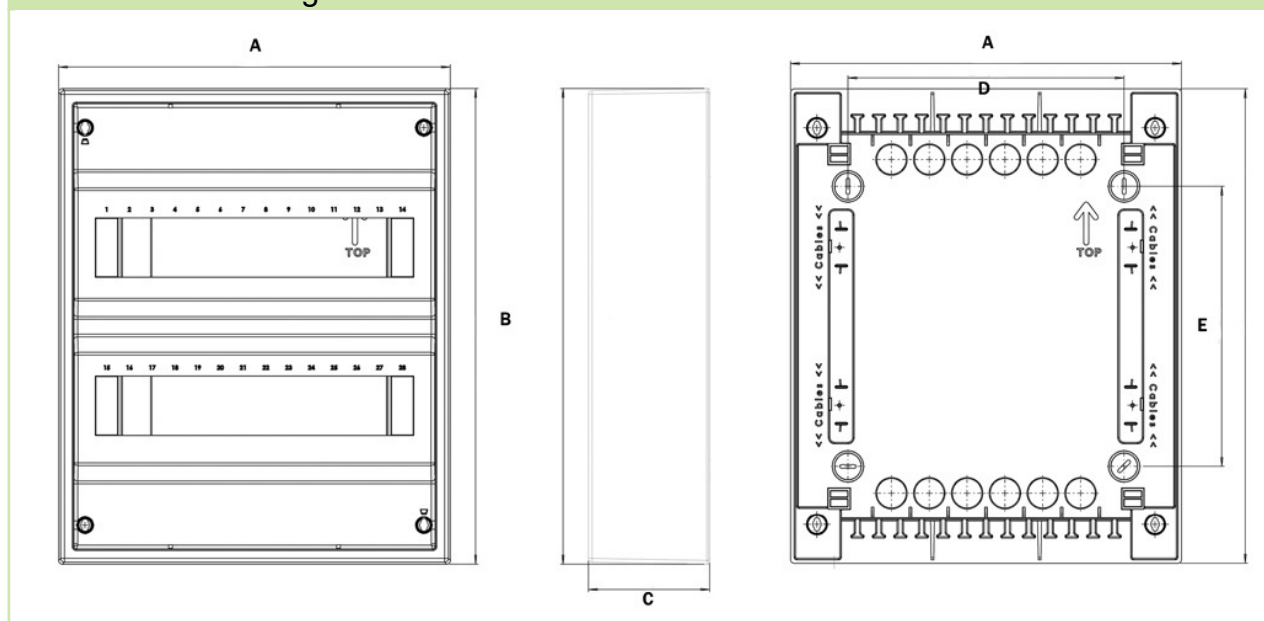
### Mechanical parameters

|                              |                  |
|------------------------------|------------------|
| Glow-wire test               | 650 °C           |
| Mechanical impact resistance | IK07             |
| Used plastics                | ABS-Halogen-free |

# Technical Data PNS-SD

Plastic consumer units, IP40, surface mounted

## Dimensional drawings



## Dimensions

| Type                    | Dimensions [mm] |     |    |     |     | Weight [kg] |
|-------------------------|-----------------|-----|----|-----|-----|-------------|
|                         | A               | B   | C  | D   | E   |             |
| PNS-SD 12T / PNS-SD 12W | 310             | 251 | 96 | 125 | 126 | 1.2         |
| PNS-SD 24T / PNS-SD 24W | 310             | 377 | 96 | 223 | 126 | 1.6         |
| PNS-SD 36T / PNS-SD 36W | 310             | 505 | 96 | 125 | 126 | 2.0         |

# Technical Data PNF

## Plastic consumer units, IP40, flush mounted

### General parameters

Consumer units for domestic applications mainly

Flush mounted version

Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material

### Electrical parameters

|                                                                                 |                    |
|---------------------------------------------------------------------------------|--------------------|
| Tested according to                                                             | EN 60670, EN 62208 |
| Rated operational voltage                                                       | 400 V AC           |
| Rated frequency                                                                 | 50 Hz              |
| Degree of protection                                                            | IP40               |
| Protection class                                                                | II                 |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                    |
| PNF 4T / PNF 4W                                                                 | 10 W               |
| PNF 8T / PNF 8W                                                                 | 16 W               |
| PNF 12T / PNF 12W                                                               | 25 W               |
| PNF 18T / PNF 18W                                                               | 25 W               |
| PNF 24T / PNF 24W                                                               | 30 W               |
| PNF 2x18T / PNF 2x18W                                                           | 30 W               |
| PNF 36T / PNF 36W                                                               | 30 W               |
| PNF 3x18T / PNF 3x18W                                                           | 35 W               |

### Mechanical parameters

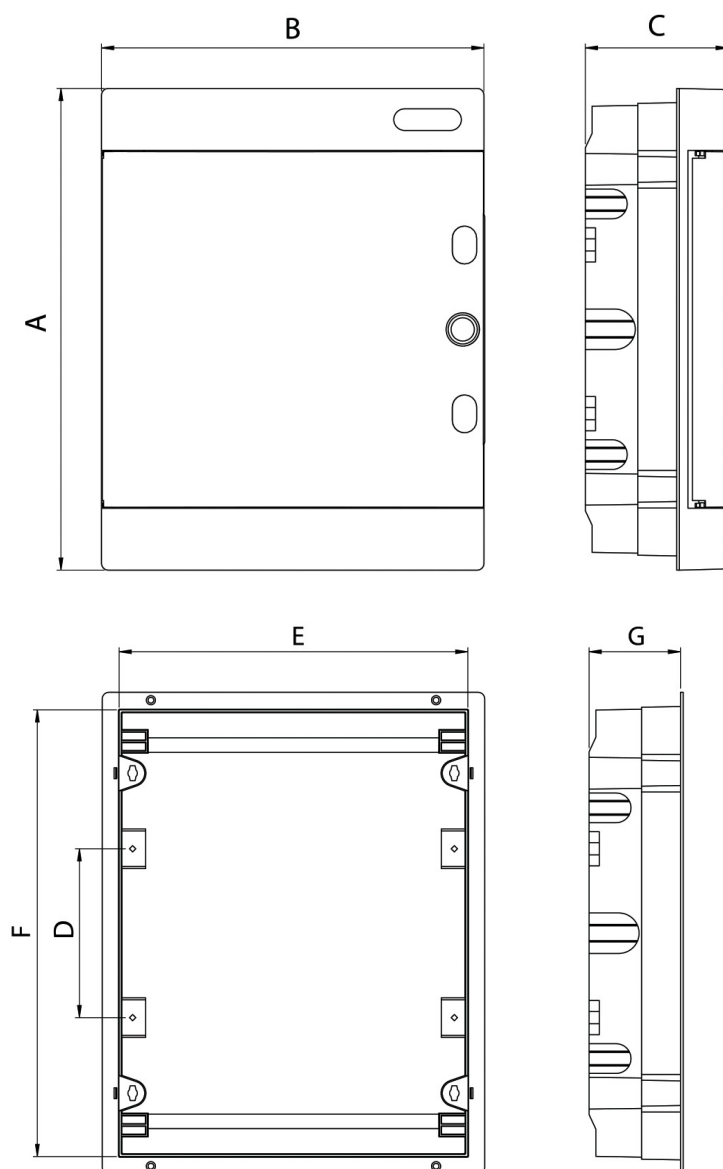
|                              |                                 |
|------------------------------|---------------------------------|
| Glow-wire test               | 650 °C                          |
| Mechanical impact resistance | IK08                            |
| Used plastics                | Halogen-free                    |
| Body color                   | RAL9003                         |
| Operating temperature        | -25°C – +60°C                   |
| Material                     | Acrylonitrile butadiene styrene |



# Technical Data PNF

Plastic consumer units, IP40, flush mounted

## Dimensional drawings



## Dimensions

| Type                  | Dimensions [mm] |     |     |     |     |     |    |
|-----------------------|-----------------|-----|-----|-----|-----|-----|----|
|                       | A               | B   | C   | D   | E   | F   | G  |
| PNF 4T / PNF 4W       | 232             | 139 | 99  | —   | 123 | 216 | 69 |
| PNF 8T / PNF 8W       | 232             | 211 | 99  | —   | 201 | 212 | 68 |
| PNF 12T / PNF 12W     | 232             | 283 | 106 | —   | 273 | 212 | 68 |
| PNF 18T / PNF 18W     | 232             | 392 | 106 | —   | 382 | 212 | 68 |
| PNF 24T / PNF 24W     | 357             | 283 | 106 | 125 | 273 | 336 | 68 |
| PNF 2x18T / PNF 2x18W | 357             | 392 | 106 | 125 | 382 | 336 | 68 |
| PNF 36T / PNF 36W     | 482             | 283 | 106 | 125 | 273 | 462 | 68 |
| PNF 3x18T / PNF 3x18W | 522             | 392 | 106 | 125 | 382 | 502 | 68 |

# Technical Data PNF-HW

## Plastic consumer units suitable for hollow-walls, IP40, flush mounted

### General parameters

Consumer units for domestic applications mainly

Flush mounted version, suitable for hollow-walls mounting

Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material

### Electrical parameters

|                                                                                 |                    |
|---------------------------------------------------------------------------------|--------------------|
| Tested according to                                                             | EN 60670, EN 62208 |
| Rated op. voltage                                                               | 400 V AC           |
| Rated frequency                                                                 | 50 Hz              |
| Degree of protection                                                            | IP40               |
| Protection class                                                                | II                 |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                    |
| PNF-HW 8T / PNF-HW 8W                                                           | 16 W               |
| PNF-HW 12T / PNF-HW 12W                                                         | 25 W               |
| PNF-HW 18T / PNF-HW 18W                                                         | 25 W               |
| PNF-HW 24T / PNF-HW 24W                                                         | 30 W               |
| PNF-HW 2x18T / PNF-HW 2x18W                                                     | 30 W               |
| PNF-HW 36T / PNF-HW 36W                                                         | 30 W               |
| PNF-HW 3x18T / PNF-HW 3x18W                                                     | 35 W               |

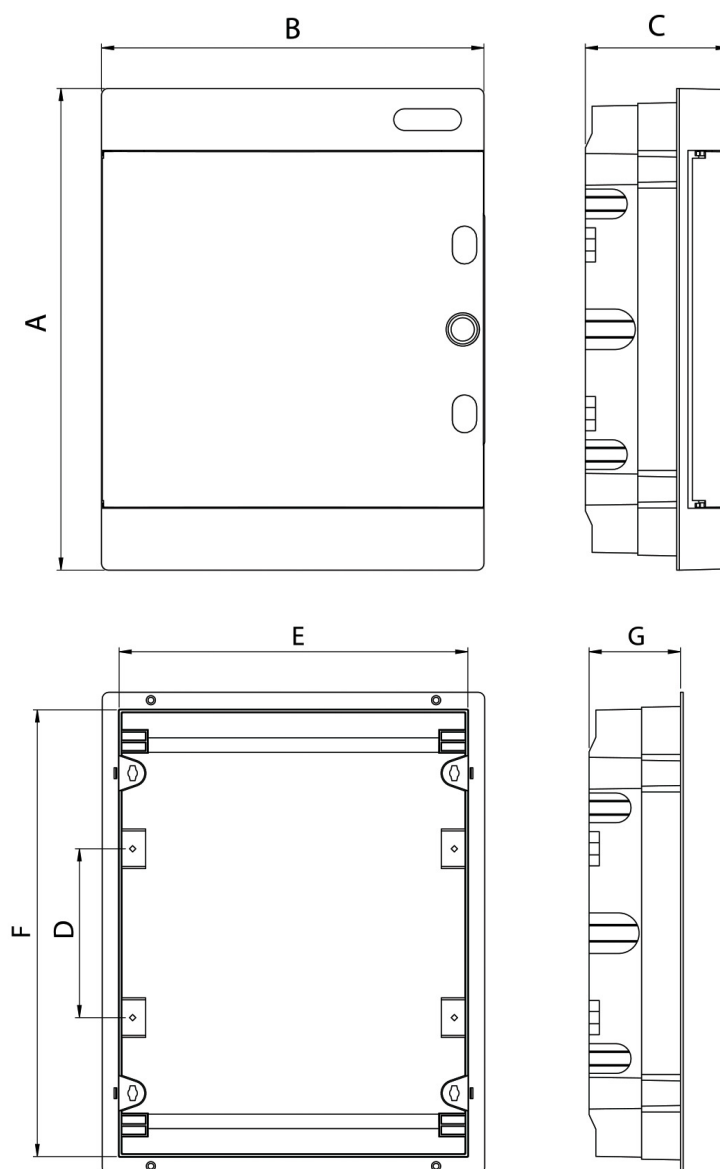
### Mechanical parameters

|                              |                      |
|------------------------------|----------------------|
| Glow-wire test               | 850 °C (bottom part) |
| Mechanical impact resistance | IK08                 |
| Used plastics                | Halogen-free         |
| Body color                   | RAL9003              |
| Operating temperature        | -25°C – +60°C        |
| Material                     |                      |

# Technical Data PNF-HW

Plastic consumer units suitable for hollow-walls, IP40, flush mounted

## Dimensional drawings



## Dimensions

| Type                        | Dimensions [mm] |     |     |     |     |     |    |
|-----------------------------|-----------------|-----|-----|-----|-----|-----|----|
|                             | A               | B   | C   | D   | E   | F   | G  |
| PNF-HW 8T / PNF-HW 8W       | 232             | 211 | 99  | —   | 201 | 212 | 68 |
| PNF-HW 12T / PNF-HW 12W     | 232             | 283 | 106 | —   | 273 | 212 | 68 |
| PNF-HW 18T / PNF-HW 18W     | 232             | 392 | 106 | —   | 382 | 212 | 68 |
| PNF-HW 24T / PNF-HW 24W     | 357             | 283 | 106 | 125 | 273 | 336 | 68 |
| PNF-HW 2x18T / PNF-HW 2x18W | 357             | 392 | 106 | 125 | 382 | 336 | 68 |
| PNF-HW 36T / PNF-HW 36W     | 482             | 283 | 106 | 125 | 273 | 462 | 68 |
| PNF-HW 3x18T / PNF-HW 3x18W | 522             | 392 | 106 | 125 | 382 | 502 | 68 |

# Technical Data PXS

## Plastic consumer units, IP30, surface mounted

### General parameters

Consumer units for domestic applications mainly

Surface mounted version

Scope of delivery: enclosure, device DIN rails, N + PE terminals (excl. PXS 1 and PXS 2), front cover with device cutout, cover for empty place, mounting material

### Electrical parameters

|                                                                                 |                |
|---------------------------------------------------------------------------------|----------------|
| Tested according to                                                             | EN 60670       |
| Rated operational voltage                                                       | 230 / 400 V AC |
| Rated frequency                                                                 | 50 Hz          |
| Degree of protection                                                            | IP30           |
| Protection class                                                                | II             |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                |
| PXS 1                                                                           | 14 W           |
| PXS 2                                                                           | 14 W           |
| PXS 3                                                                           | 14 W           |
| PXS 12                                                                          | 22 W           |
| PXS 24                                                                          | 22 W           |
| PXS 36                                                                          | 26 W           |

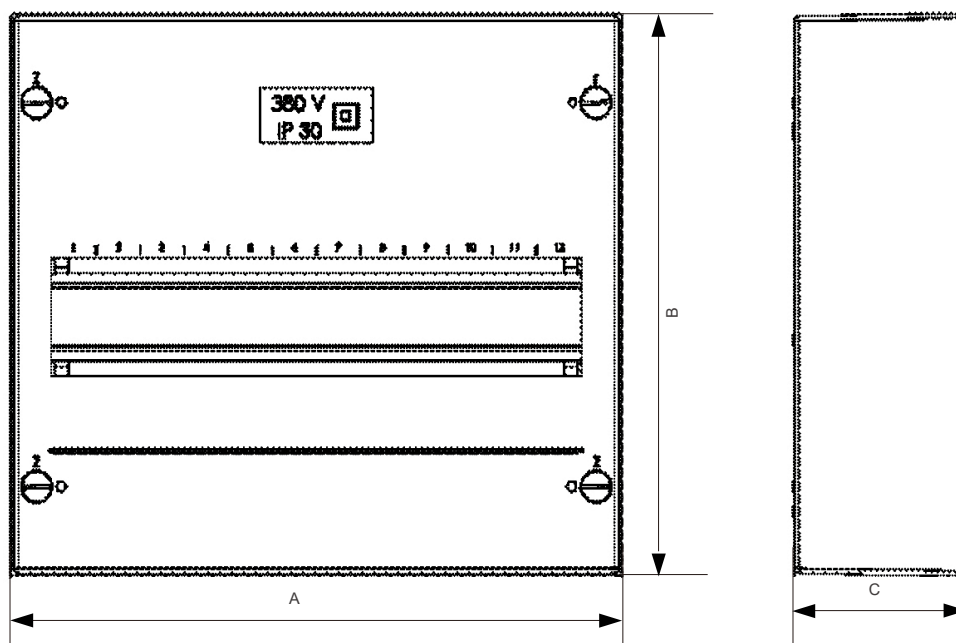
### Mechanical parameters

|                              |               |
|------------------------------|---------------|
| Glow-wire test               | 650 °C        |
| Mechanical impact resistance | IK07          |
| Used plastics                | Halogen-free  |
| Body color                   | RAL9003       |
| Operating temperature        | -25°C – +60°C |
| Material                     | Styrene       |

# Technical Data PXS

Plastic consumer units, IP30, surface mounted

## Dimensional drawings



## Dimensions

| Type   | Dimensions [mm] |     |    |
|--------|-----------------|-----|----|
|        | A               | B   | C  |
| PXS 1  | 51              | 130 | 57 |
| PXS 2  | 87              | 130 | 57 |
| PXS 3  | 97              | 155 | 57 |
| PXS 12 | 250             | 225 | 70 |
| PXS 24 | 250             | 353 | 70 |
| PXS 36 | 250             | 463 | 70 |

# Technical Data PXF

## Plastic consumer units, IP40, flush mounted

### General parameters

Consumer units for domestic applications mainly

Flush mounted version

Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material

### Electrical parameters

|                                                                                 |          |
|---------------------------------------------------------------------------------|----------|
| Tested according to                                                             | EN 60670 |
| Rated operational voltage                                                       | 400 V AC |
| Rated frequency                                                                 | 50 Hz    |
| Degree of protection                                                            | IP40     |
| Protection class                                                                | II       |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |          |
| PXF 12T / PXF 12W                                                               | 53 W     |
| PXF 24T / PXF 24W                                                               | 69 W     |
| PXF 36T / PXF 36W                                                               | 84 W     |

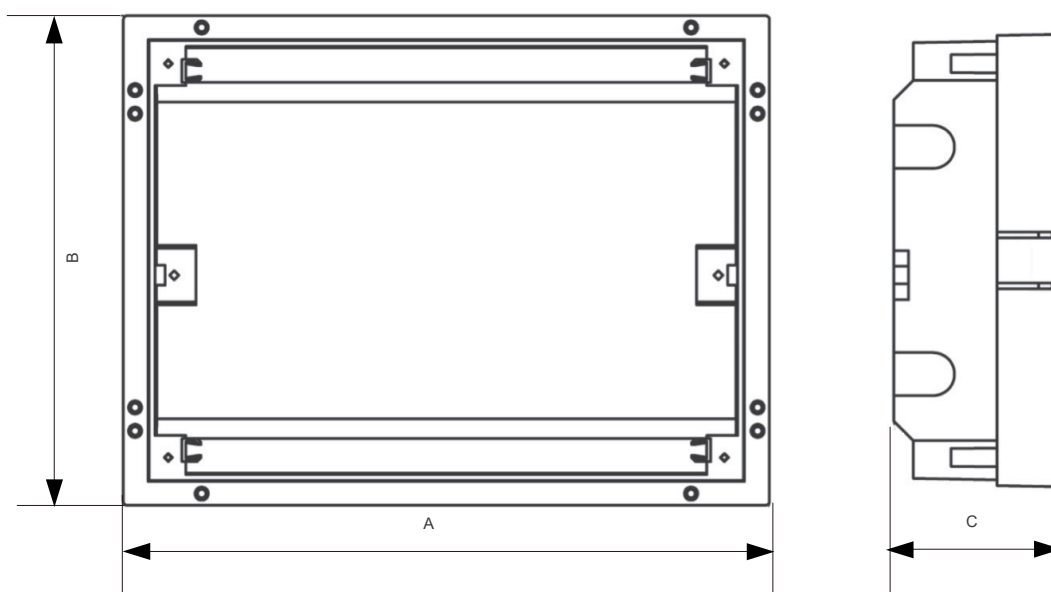
### Mechanical parameters

|                              |               |
|------------------------------|---------------|
| Glow-wire test               | 650 °C        |
| Mechanical impact resistance | IK07          |
| Used plastics                | Halogen-free  |
| Body color                   | RAL9003       |
| Operating temperature        | -25°C – +60°C |
| Material                     | Styrene       |

# Technical Data PXF

Plastic consumer units, IP40, flush mounted

## Dimensional drawings



## Dimensions

| Type              | Dimensions [mm] |     |    |
|-------------------|-----------------|-----|----|
|                   | A               | B   | C  |
| PXF 12T / PXF 12W | 338             | 260 | 88 |
| PXF 24T / PXF 24W | 338             | 380 | 92 |
| PXF 36T / PXF 36W | 338             | 508 | 92 |

# Technical Data PMF

## Flush-mounted plastic consumer units with sheet-steel doors

### General parameters

Consumer units for domestic applications

Flush-mounted version, suitable also for hollow-walls mounting

Scope of delivery: enclosure, metal frame with door, mounting frame with device DIN rails, N + PE terminals, sealable front cover with device cutout, cover for empty place, mounting material and instructions

### Electrical parameters

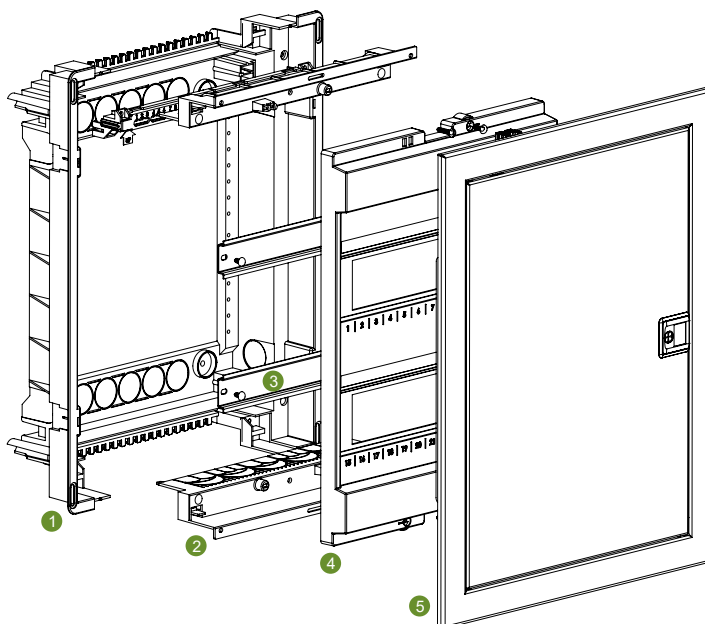
|                                                                                 |                    |
|---------------------------------------------------------------------------------|--------------------|
| Tested according to                                                             | EN 62208, EN 60670 |
| Rated operational voltage $U_e$                                                 | 400 V AC           |
| Rated current $I_e$                                                             | up to 63 A         |
| Rated frequency                                                                 | 50 Hz              |
| Insulation voltage $U_i$                                                        | 400 V AC           |
| Degree of protection                                                            | IP40               |
| Degree of protection against mechanical impact                                  | IK06               |
| Protection class                                                                | II                 |
| Operating temperature                                                           | -25°C – +60°C      |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                    |
| PMF 12                                                                          | 31 W               |
| PMF 24                                                                          | 40 W               |
| PMF 36                                                                          | 50 W               |
| PMF 48                                                                          | 60 W               |
| PMF 60                                                                          | 70 W               |

### Mechanical parameters

|                    |                                      |
|--------------------|--------------------------------------|
| Glow-wire test     | 850 °C                               |
| Used plastics      | Halogen-free                         |
| Metal parts colour | powder coated, white, flat, RAL 9016 |

### Mechanical parameters

|    |                                                            |
|----|------------------------------------------------------------|
| 1. | enclosure wall box with N+PE terminals                     |
| 2. | removable top and bottom box side with cable cutout relief |
| 3. | DIN-rail mounting frame                                    |
| 4. | sealable front cover with device cutout                    |
| 5. | front metal frame with door                                |

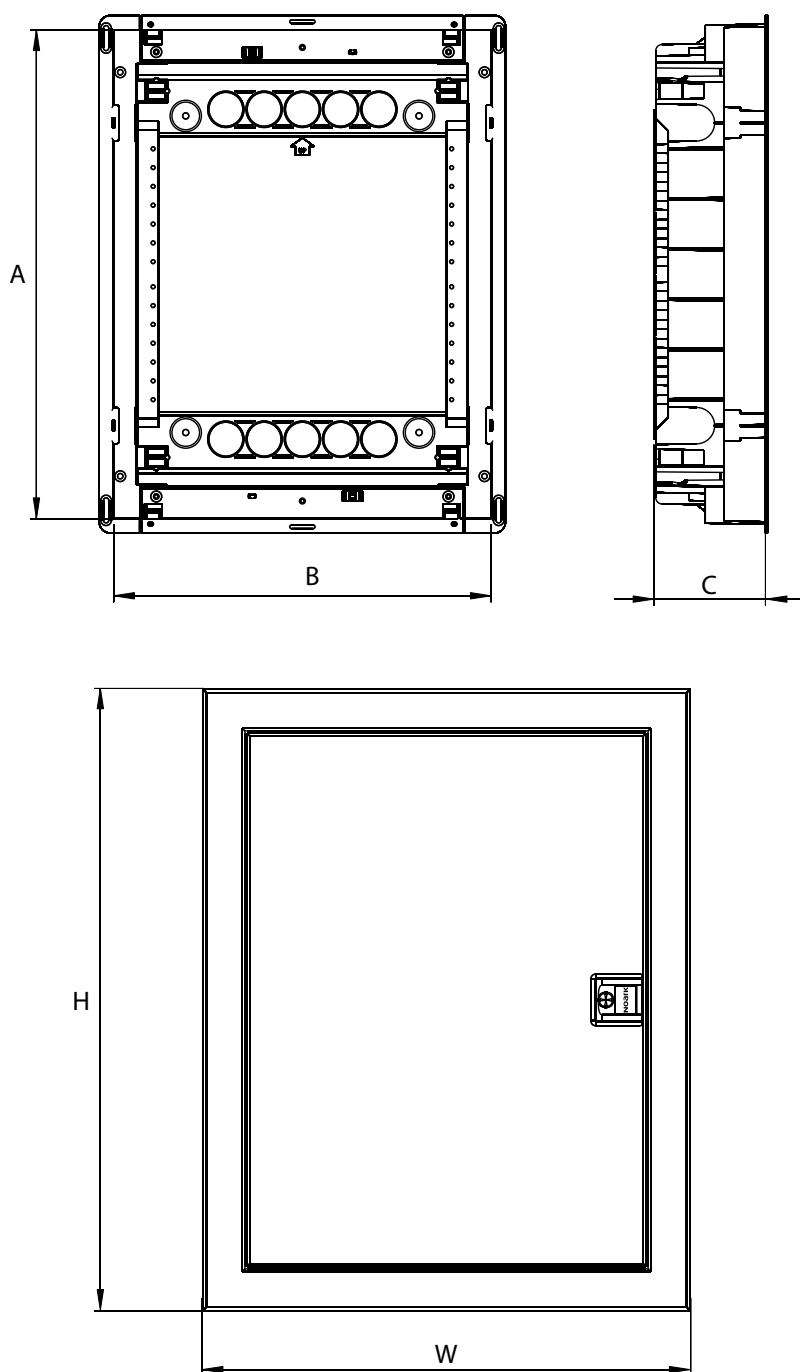




# Technical Data PMF

Flush-mounted plastic consumer units with sheet-steel doors

## Dimensional drawings



## Dimensions

| Type   | Dimensions [mm] |     |    |     |     | Weight [kg] |
|--------|-----------------|-----|----|-----|-----|-------------|
|        | A               | B   | C  | H   | W   |             |
| PMF 12 | 274             | 306 | 87 | 317 | 346 | 2.0         |
| PMF 24 | 399             | 306 | 87 | 442 | 346 | 2.5         |
| PMF 36 | 549             | 306 | 87 | 592 | 346 | 3.0         |
| PMF 48 | 673             | 306 | 87 | 717 | 346 | 3.5         |
| PMF 60 | 799             | 306 | 87 | 842 | 346 | 4.5         |

# Technical Data PMF-MM

## Flush-mounted multimedia consumer units

### General parameters

Consumer units for domestic applications

Flush-mounted version, suitable also for hollow-walls mounting

Scope of delivery: enclosure, frame with perforated door or plastic door, mounting plates, mounting material and instructions

### Electrical parameters

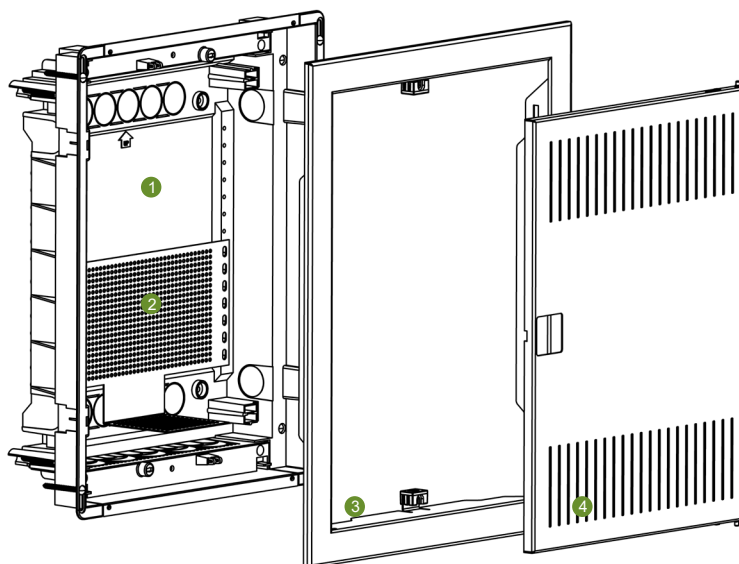
|                                                                                 |                              |
|---------------------------------------------------------------------------------|------------------------------|
| Tested according to                                                             | EN 62208, EN 60670           |
| Rated operational voltage $U_e$                                                 | 400 V AC                     |
| Rated current $I_e$                                                             | up to 63 A                   |
| Rated frequency                                                                 | 50 Hz                        |
| Insulation voltage $U_i$                                                        | 400 V AC                     |
| Degree of protection                                                            | IP30 (IP40 for plastic door) |
| Degree of protection against mechanical impact                                  | IK06                         |
| Protection class                                                                | II                           |
| Operating temperature                                                           | -25°C – +60°C                |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                              |
| PMF-MM 12                                                                       | 31 W                         |
| PMF-MM 24                                                                       | 40 W                         |
| PMF-MM 36                                                                       | 50 W                         |
| PMF-MM 48                                                                       | 60 W                         |
| PMF-MM 60                                                                       | 70 W                         |

### Mechanical parameters

|                    |                               |
|--------------------|-------------------------------|
| Glow-wire test     | 850 °C                        |
| Used plastics      | Halogen-free                  |
| Metal parts colour | powder coated white, RAL 9016 |

### Mechanical parameters

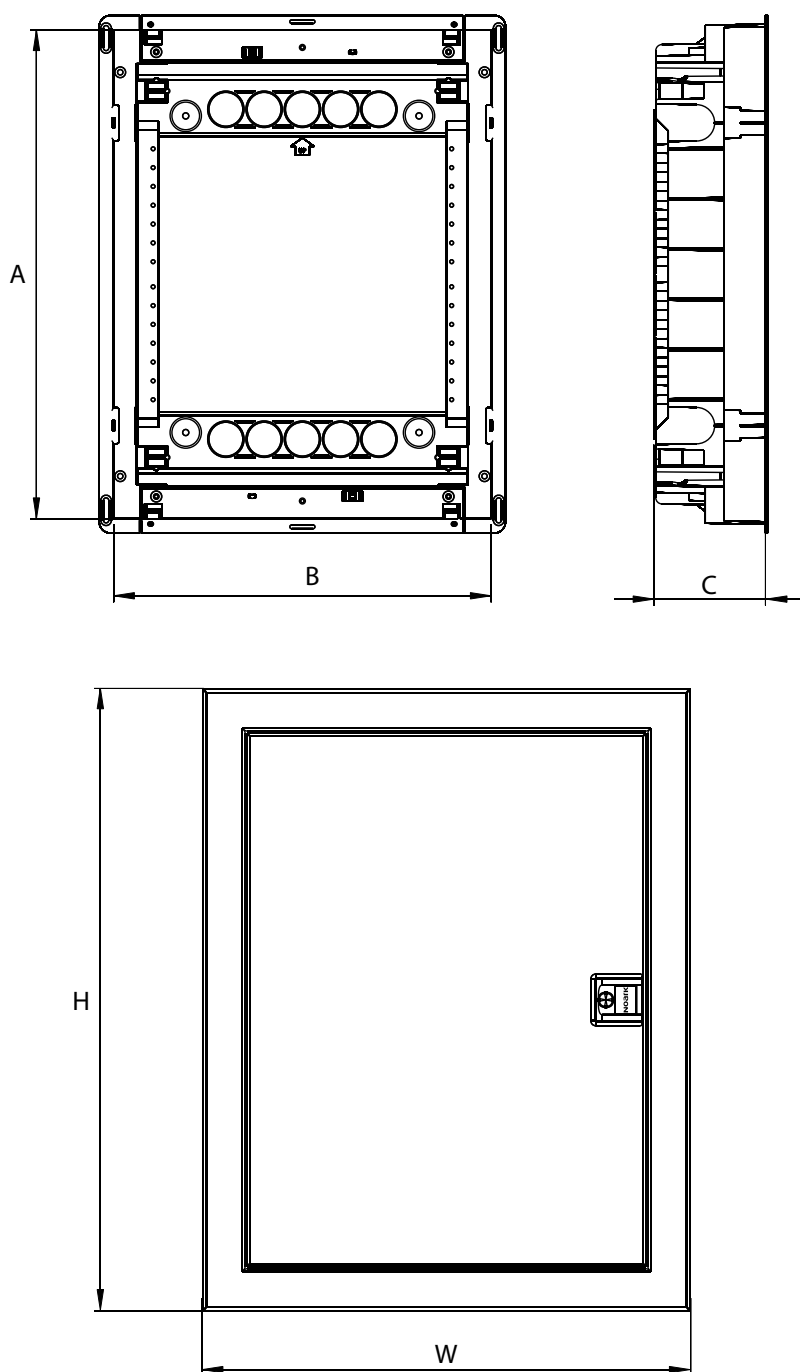
|    |                                       |
|----|---------------------------------------|
| 1. | Enclosure wall box                    |
| 2. | Mounting plates                       |
| 3. | Front metal or plastic frame          |
| 4. | Metal perforated door or plastic door |



# Technical Data PMF-MM

## Flush-mounted multimedia consumer units

### Dimensional drawings



### Dimensions

| Type      | Dimensions [mm] |     |    |     |     | Weight [kg] |              |
|-----------|-----------------|-----|----|-----|-----|-------------|--------------|
|           | A               | B   | C  | H   | W   | Metal door  | Plastic door |
| PMF-MM 12 | 274             | 306 | 87 | 317 | 346 | 1.8         | 1.75         |
| PMF-MM 24 | 399             | 306 | 87 | 442 | 346 | 2.3         | 2.2          |
| PMF-MM 36 | 549             | 306 | 87 | 592 | 346 | 2.8         | 2.7          |
| PMF-MM 48 | 673             | 306 | 87 | 717 | 346 | 3.3         | -            |
| PMF-MM 60 | 799             | 306 | 87 | 842 | 346 | 3.8         | -            |

# Technical Data PMF-C

## Flush-mounted plastic consumer units with sheet-steel perforated doors

### General parameters

Consumer units for domestic applications

Flush-mounted version, suitable also for hollow-walls mounting

Scope of delivery: enclosure, metal frame with perforated door, mounting plates, DIN-rails, partition without socket, mounting material and instructions

### Electrical parameters

|                                                                                 |                    |
|---------------------------------------------------------------------------------|--------------------|
| Tested according to                                                             | EN 62208, EN 60670 |
| Rated operational voltage $U_e$                                                 | 400 V AC           |
| Rated current $I_e$                                                             | up to 63 A         |
| Rated frequency                                                                 | 50 Hz              |
| Insulation voltage $U_i$                                                        | 400 V AC           |
| Degree of protection                                                            | IP30               |
| Degree of protection against mechanical impact                                  | IK06               |
| Protection class                                                                | II                 |
| Operating temperature                                                           | -25°C – +60°C      |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                    |
| PMF-C 36                                                                        | 50 W               |
| PMF-C 48                                                                        | 60 W               |
| PMF-C 60                                                                        | 70 W               |

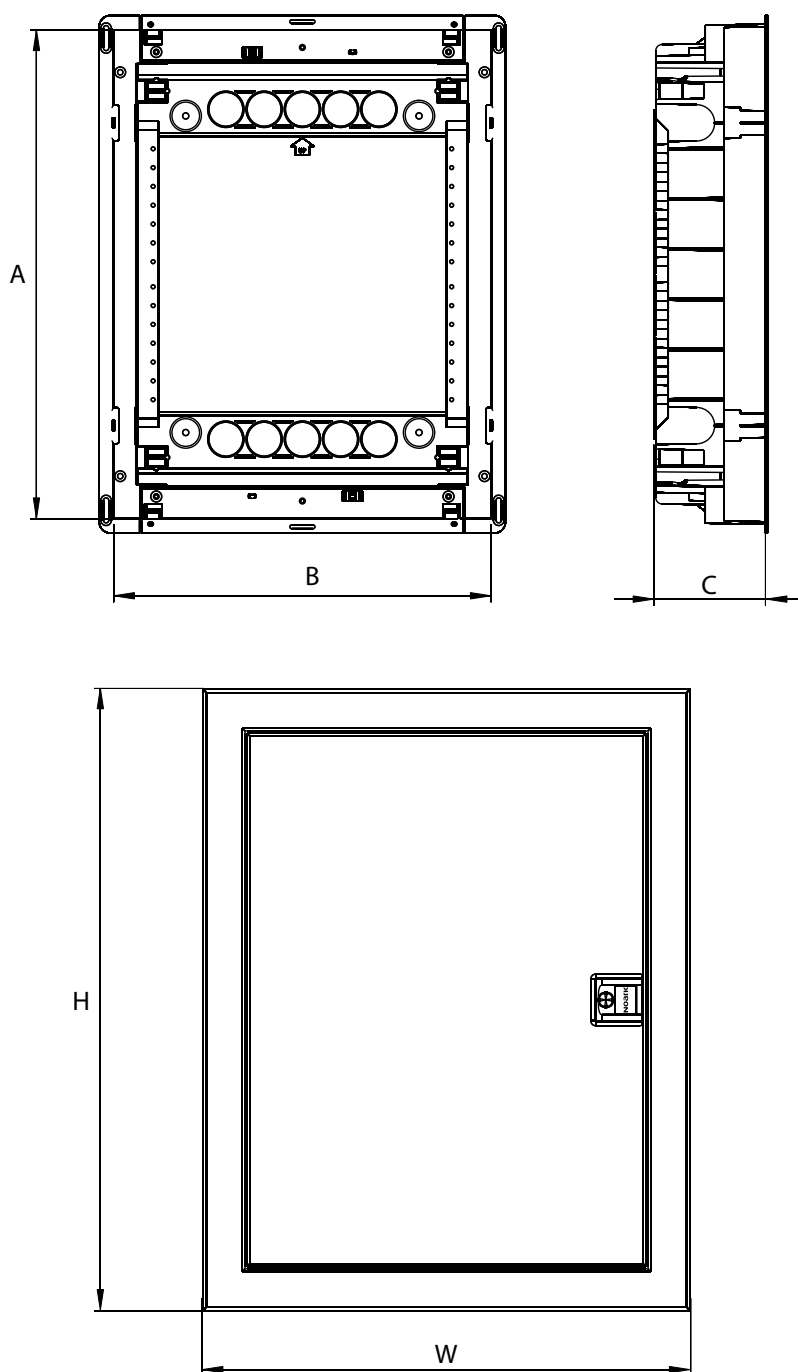
### Mechanical parameters

|                    |                               |
|--------------------|-------------------------------|
| Glow-wire test     | 850 °C                        |
| Used plastics      | Halogen-free                  |
| Metal parts colour | powder coated white, RAL 9016 |

# Technical Data PMF-C

Flush-mounted plastic consumer units with sheet-steel perforated doors

## Dimensional drawings



## Dimensions

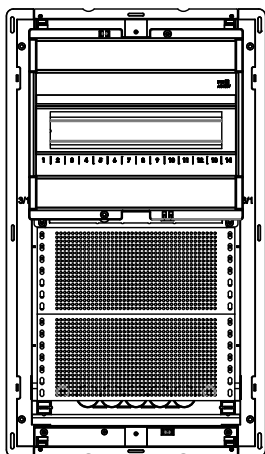
| Type     | Dimensions [mm] |     |    |     |     | Weight [kg] |
|----------|-----------------|-----|----|-----|-----|-------------|
|          | A               | B   | C  | H   | W   |             |
| PMF-C 36 | 549             | 306 | 92 | 592 | 346 | 3.0         |
| PMF-C 48 | 673             | 306 | 92 | 717 | 346 | 3.5         |
| PMF-C 60 | 799             | 306 | 92 | 842 | 346 | 4.5         |

# Technical Data PMF-C

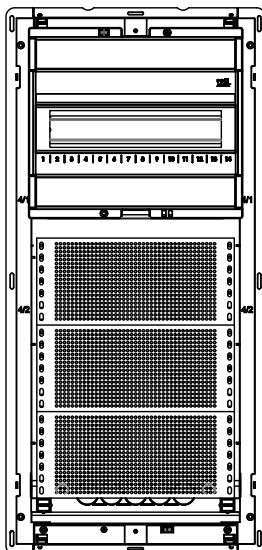
Flush-mounted plastic consumer units with sheet-steel perforated doors

## Internal structure of enclosures

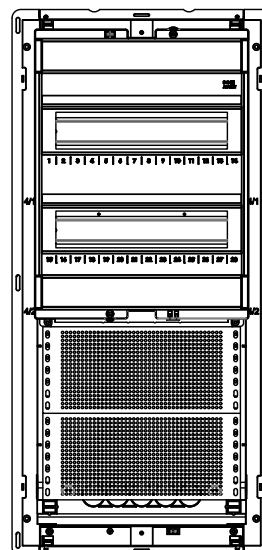
PMF-C 36-1



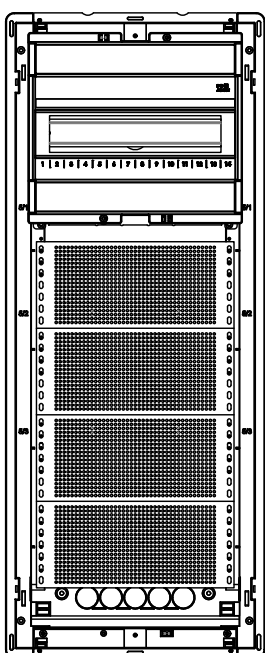
PMF-C 48-1



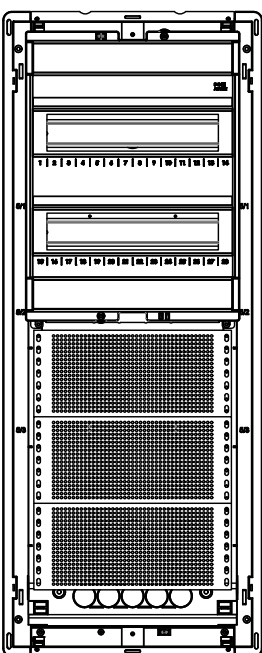
PMF-C 48-2



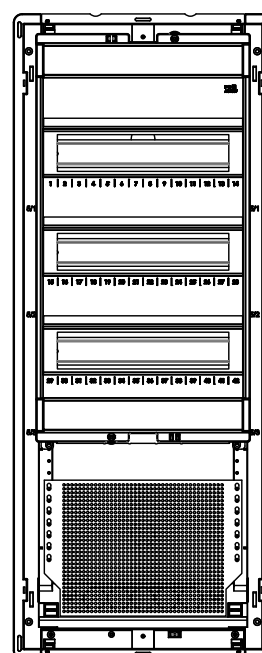
PMF-C 60-1



PMF-C 60-2



PMF-C 60-3



# Technical Data PHS

## Plastic consumer units, IP65, surface mounted

### General parameters

Consumer units for general and industrial applications

Surface mounted version

Scope of delivery: enclosure, door, device DIN rails, N + PE terminals, front cover with device cutout, cover for empty place, mounting material

### Electrical parameters

|                                                                                 |                       |
|---------------------------------------------------------------------------------|-----------------------|
| Tested according to                                                             | EN 60670, EN 62208    |
| Rated op. voltage $U_n$                                                         | 400 V AC<br>1500 V DC |
| Rated current $I_n$                                                             | 63 A                  |
| Rated frequency                                                                 | 50 Hz                 |
| Degree of protection                                                            | IP65                  |
| Protection class                                                                | II                    |
| Rated insulating voltage $U_i$                                                  | 690 V AC<br>1500 V DC |
| Maximum power dissipation of all installed devices at ambient temperature 30 °C |                       |
| PHS 4T                                                                          | 10 W                  |
| PHS 6T                                                                          | 10 W                  |
| PHS 8T                                                                          | 13 W                  |
| PHS 12T                                                                         | 16 W                  |
| PHS 18T                                                                         | 20 W                  |
| PHS 24T                                                                         | 24 W                  |
| PHS 36T                                                                         | 26 W                  |
| PHS 48T                                                                         | 35 W                  |

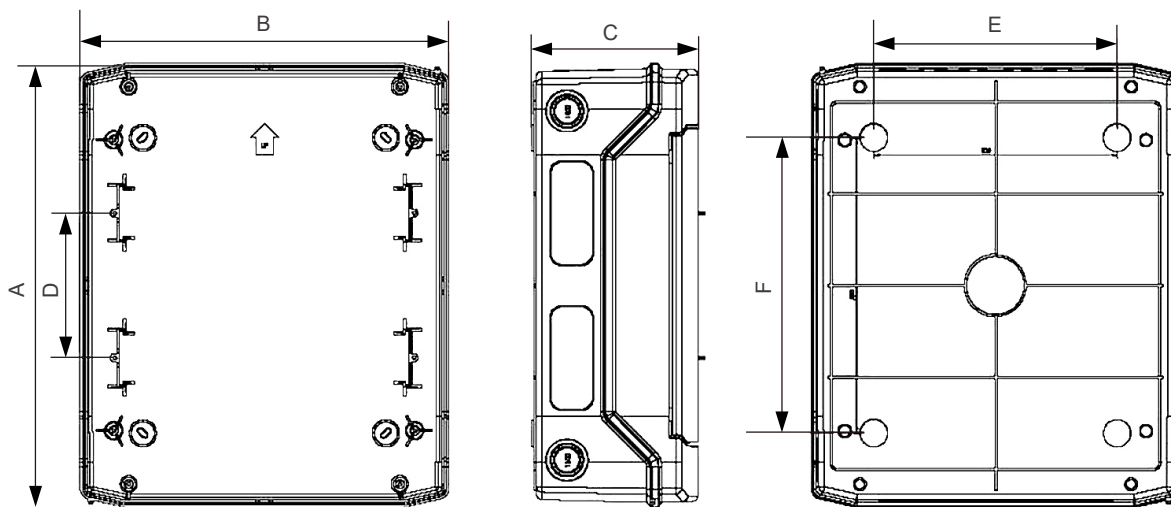
### Mechanical parameters

|                              |                               |
|------------------------------|-------------------------------|
| Glow-wire test               | 650 °C                        |
| Mechanical impact resistance | IK08                          |
| Used plastics                | Halogen-free                  |
| Body color                   | RAL7035                       |
| UV stable                    | Yes                           |
| Temperature                  | -25°C – +60°C                 |
| Material                     | Acrylonitrile acrylic styrene |

# Technical Data PHS

Plastic consumer units, IP65, surface mounted

## Dimensional drawings



## Dimensions

| Type    | Dimensions [mm] |     |     |     |     |     |
|---------|-----------------|-----|-----|-----|-----|-----|
|         | A               | B   | C   | D   | E   | F   |
| PHS 4T  | 201             | 128 | 120 | —   | —   | 140 |
| PHS 6T  | 201             | 165 | 118 | —   | 63  | 140 |
| PHS 8T  | 201             | 202 | 120 | —   | 100 | 140 |
| PHS 12T | 259             | 319 | 144 | —   | 210 | 130 |
| PHS 18T | 259             | 428 | 144 | —   | 259 | 130 |
| PHS 24T | 384             | 319 | 144 | 125 | 210 | 255 |
| PHS 36T | 508             | 319 | 144 | 125 | 210 | 380 |
| PHS 48T | 664             | 319 | 144 | 125 | 210 | 505 |



# Technical Data EMF

## Metal (sheet-steel) flat enclosures

### General parameters

|                                                                                                           |
|-----------------------------------------------------------------------------------------------------------|
| Sheet-steel enclosures suitable for various applications mainly in domestic and commercial applications   |
| Variants for surface and flush mounting, usable also for hollow walls including plasterboard ones         |
| Removable adjustable doorframe allows to compensate wall surface imperfections, including slight rotation |
| Prepared pre-cut openings for conductors or cable grommets                                                |
| Wide range of accessories                                                                                 |

### Electrical parameters

|                                                         |          |
|---------------------------------------------------------|----------|
| Tested according to                                     | EN 62208 |
| Rated operational voltage $U_e$                         | 400 V AC |
| Rated frequency                                         | 50 Hz    |
| Insulation voltage $U_i$                                | 415 V AC |
| Degree of protection                                    | IP30     |
| Degree of protection against external mechanical impact | IK07     |
| Protection class                                        | I        |
| Overvoltage category                                    | IV       |
| Pollution degree                                        | 1        |

### Mechanical parameters

|                                                                                                  |                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of modules (MU) per row                                                                   | 24, 33                                                                                                                                                               |
| Number of rows                                                                                   | 2, 3, 4, 5, 6                                                                                                                                                        |
| Mounting                                                                                         | surface and flush-mounting                                                                                                                                           |
| Mounting depth (EMFF)                                                                            | 118 mm                                                                                                                                                               |
| Door                                                                                             | white sheet-steel                                                                                                                                                    |
| Door opening                                                                                     | left and right                                                                                                                                                       |
| Door load                                                                                        | 1 kg                                                                                                                                                                 |
| Door to front plates distance<br>EMFF / EMFS                                                     | 34 / 34 mm                                                                                                                                                           |
| Maximum door opening angle                                                                       | 110°                                                                                                                                                                 |
| Used metal material<br>- enclosure, door, front plates,<br>separators, etc.<br>- mounting plates | <p>                     painted sheet-steel<br/>                     thickness 1 mm                 </p> <p>                     thickness 2 mm                 </p> |
| Painted metal parts colour                                                                       | powder coated, white, flat, RAL 9003                                                                                                                                 |

### N/PE terminals in the scope of delivery

|                                      |                                                  |
|--------------------------------------|--------------------------------------------------|
| Max. rated current of N/PE terminals | 63 A                                             |
| Suitable material of conductors      | Cu                                               |
| Number of N/PE terminal bars         | 2                                                |
| Terminal capacity                    | 1x 25 mm <sup>2</sup> + 46x 16 mm <sup>2</sup> ) |
| Width                                | 332 mm                                           |

# Technical Data EMF

## Metal (sheet-steel) flat enclosures

### Maximum static load

Maximum allowed load of all installed devices and other non-standard parts

|                   |         |                   |         |
|-------------------|---------|-------------------|---------|
| <b>EMFF2 48W</b>  | 10.8 kg | <b>EMFS2 48W</b>  | 11 kg   |
| <b>EMFF3 72W</b>  | 15.6 kg | <b>EMFS3 72W</b>  | 16 kg   |
| <b>EMFF4 96W</b>  | 20.2 kg | <b>EMFS4 96W</b>  | 20.8 kg |
| <b>EMFF5 120W</b> | 23.4 kg | <b>EMFS5 120W</b> | 24.3 kg |
| <b>EMFF6 144W</b> | 25.9 kg | <b>EMFS6 144W</b> | 28 kg   |
| <b>EMFF2 66W</b>  | 13.9 kg | <b>EMFS2 66W</b>  | 14.4 kg |
| <b>EMFF3 99W</b>  | 20 kg   | <b>EMFS3 99W</b>  | 20.8 kg |
| <b>EMFF4 132W</b> | 25.7 kg | <b>EMFS4 132W</b> | 26.7 kg |
| <b>EMFF5 165W</b> | 29.7 kg | <b>EMFS5 165W</b> | 32 kg   |
| <b>EMFF6 198W</b> | 32 kg   | <b>EMFS6 198W</b> | 37 kg   |

### Power dissipation

Maximum power dissipation of all installed devices at ambient temperature 30 °C

|                   |       |                   |       |
|-------------------|-------|-------------------|-------|
| <b>EMFF2 48W</b>  | 69 W  | <b>EMFS2 48W</b>  | 76 W  |
| <b>EMFF3 72W</b>  | 82 W  | <b>EMFS3 72W</b>  | 90 W  |
| <b>EMFF4 96W</b>  | 95 W  | <b>EMFS4 96W</b>  | 105 W |
| <b>EMFF5 120W</b> | 109 W | <b>EMFS5 120W</b> | 117 W |
| <b>EMFF6 144W</b> | 123 W | <b>EMFS6 144W</b> | 130 W |
| <b>EMFF2 66W</b>  | 78 W  | <b>EMFS2 66W</b>  | 88 W  |
| <b>EMFF3 99W</b>  | 102 W | <b>EMFS3 99W</b>  | 110 W |
| <b>EMFF4 132W</b> | 120 W | <b>EMFS4 132W</b> | 128 W |
| <b>EMFF5 165W</b> | 135 W | <b>EMFS5 165W</b> | 141 W |
| <b>EMFF6 198W</b> | 144 W | <b>EMFS6 198W</b> | 156 W |

### Weight

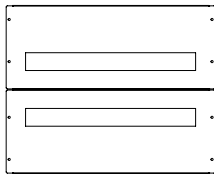
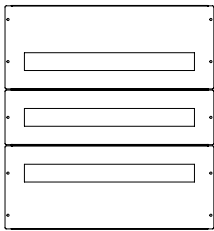
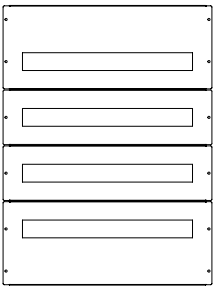
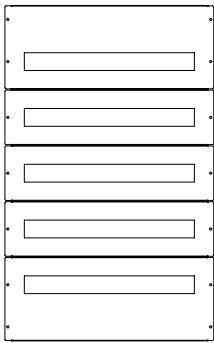
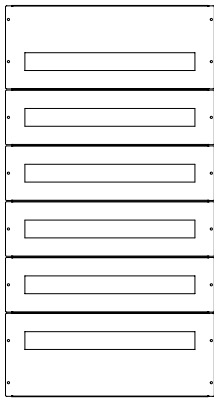
Total weight of complete enclosure (including doors, front plates, mounting frame, etc.) without devices

|                   |           |                   |         |
|-------------------|-----------|-------------------|---------|
| <b>EMFF2 48W</b>  | 10.5 kg   | <b>EMFS2 48W</b>  | 10.0 kg |
| <b>EMFF3 72W</b>  | 13.2 / kg | <b>EMFS3 72W</b>  | 12.7 kg |
| <b>EMFF4 96W</b>  | 15.9 kg   | <b>EMFS4 96W</b>  | 16.8 kg |
| <b>EMFF5 120W</b> | 18.5 kg   | <b>EMFS5 120W</b> | 17.8 kg |
| <b>EMFF6 144W</b> | 21.1 kg   | <b>EMFS6 144W</b> | 20.5 kg |
| <b>EMFF2 66W</b>  | 12.6 kg   | <b>EMFS2 66W</b>  | 12.2 kg |
| <b>EMFF3 99W</b>  | 15.7 kg   | <b>EMFS3 99W</b>  | 15.3 kg |
| <b>EMFF4 132W</b> | 18.8 kg   | <b>EMFS4 132W</b> | 18.5 kg |
| <b>EMFF5 165W</b> | 21.9 kg   | <b>EMFS5 165W</b> | 21.8 kg |
| <b>EMFF6 198W</b> | 25.1 kg   | <b>EMFS6 198W</b> | 24.9 kg |

# Technical Data EMF

## Metal (sheet-steel) flat enclosures

### Front plates in the scope of delivery

|                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| <b>EMFF2/EMFS2</b>                                                                | <b>EMFF3/EMFS3</b>                                                                | <b>EMFF4/EMFS4</b>                                                                | <b>EMFF5/EMFS5</b>                                                                 | <b>EMFF6/EMFS6</b>                                                                  |

### Pre-cut openings for conductors or cable grommets - flush-mounted versions

|                                                                                |                                                                                                                                                       |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EMFF2 48W</b><br><b>EMFF3 72W</b><br><b>EMFF4 96W</b><br><b>EMFF5 120W</b>  | 4x 47x85 mm (back side, center)<br>+ 4x 47x85 mm (top)<br>+ 4x 47x85 mm (bottom)<br>+ 2x 47x85 mm (left-hand side)<br>+ 2x 47x85 mm (right-hand side) |
| <b>EMFF6 144W</b>                                                              | 4x 47x85 mm (back side, center)<br>+ 4x 47x85 mm (top)<br>+ 4x 47x85 mm (bottom)<br>+ 2x 47x85 mm (left-hand side)<br>+ 2x 47x85 mm (right-hand side) |
| <b>EMFF2 66W</b><br><b>EMFF3 99W</b><br><b>EMFF4 132W</b><br><b>EMFF5 165W</b> | 4x 47x85 mm (back side, center)<br>+ 5x 47x85 mm (top)<br>+ 5x 47x85 mm (bottom)<br>+ 2x 47x85 mm (left-hand side)<br>+ 2x 47x85 mm (right-hand side) |
| <b>EMFF6 198 W</b>                                                             | 4x 47x85 mm (back side, center)<br>+ 5x 47x85 mm (top)<br>+ 5x 47x85 mm (bottom)<br>+ 3x 47x85 mm (left-hand side)<br>+ 3x 47x85 mm (right-hand side) |

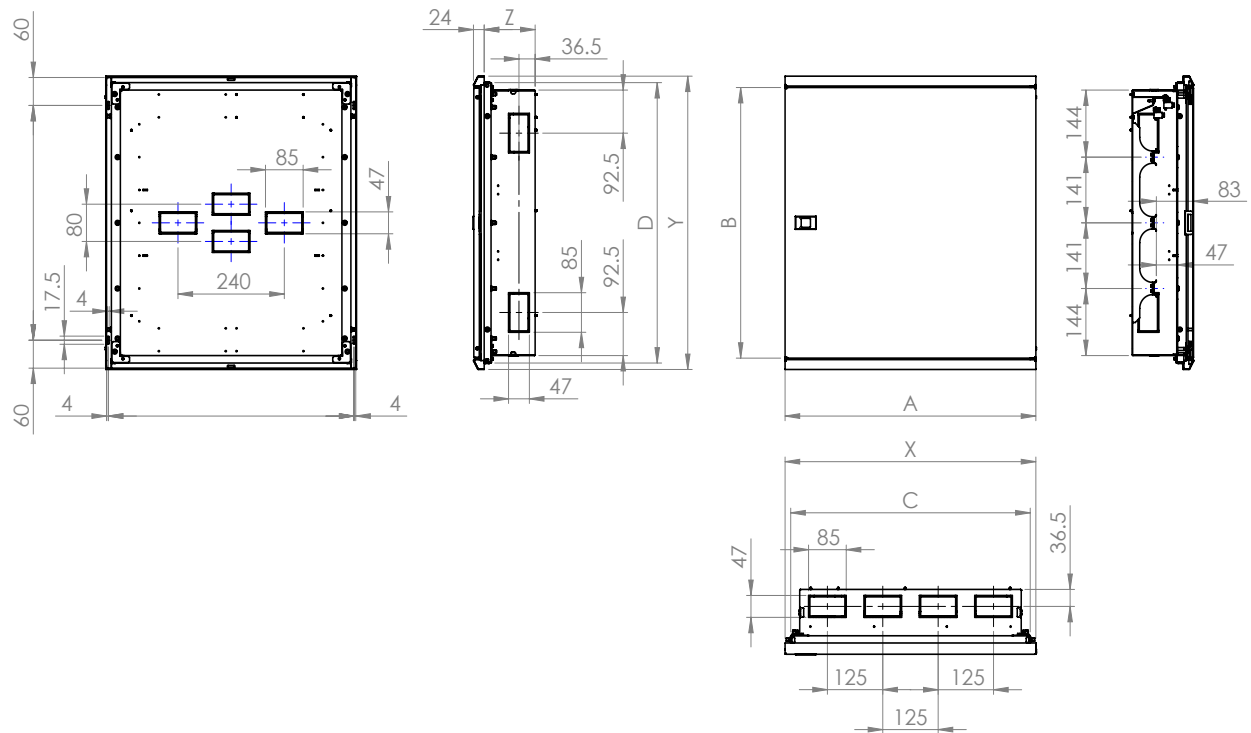
### Pre-cut openings for conductors or cable grommets - surface-mounted versions

|                          |                                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------------------------|
| <b>all EMFS variants</b> | 4x 47x55.6 mm (back side, center)<br>+ 4x 47x85 mm (back size, corners)<br>+ 14x round Ø20 mm (top) |
|--------------------------|-----------------------------------------------------------------------------------------------------|

# Technical Data EMF

## Metal (sheet-steel) flat enclosures

### Dimensional drawings - flush-mounted versions



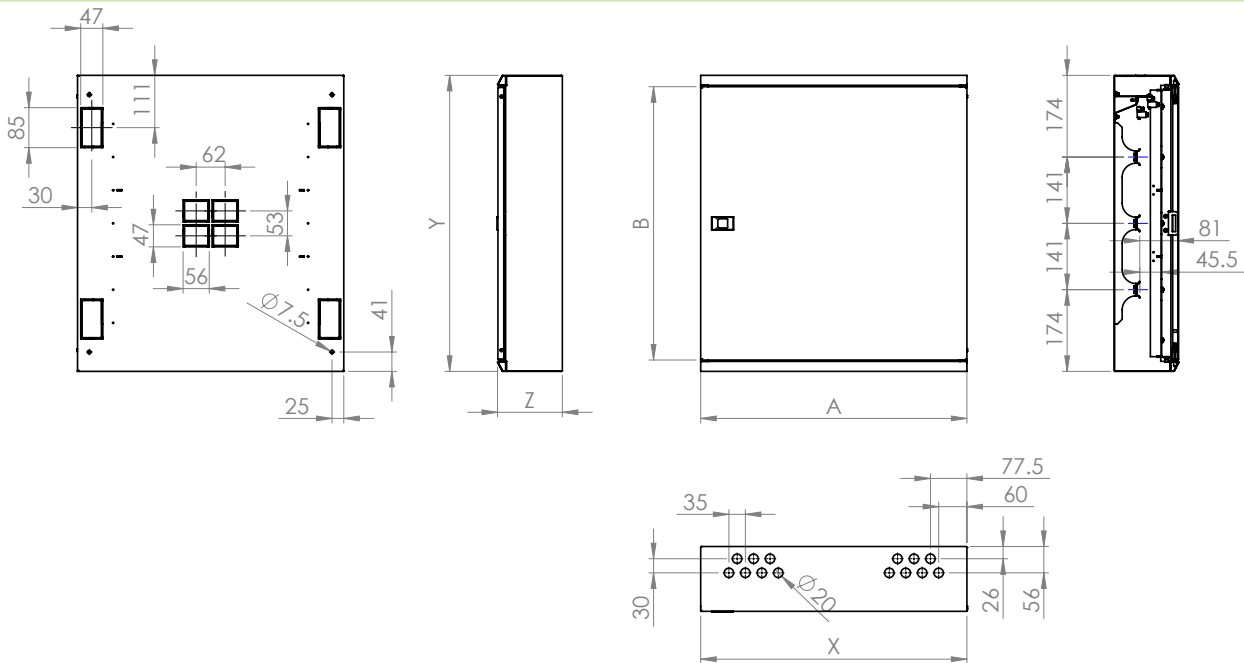
### Dimensions

| Type       | Dimensions [mm] |            |                    |                |                 |                        |                         |
|------------|-----------------|------------|--------------------|----------------|-----------------|------------------------|-------------------------|
|            | Width (X)       | Height (Y) | Mounting depth (Z) | Door width (A) | Door height (B) | Wall opening width (C) | Wall opening height (D) |
| EMFF2 48W  | 566             | 489        | 115                | 566            | 440             | 541                    | 461                     |
| EMFF3 72W  | 566             | 630        | 115                | 566            | 581             | 541                    | 602                     |
| EMFF4 96W  | 566             | 771        | 115                | 566            | 722             | 541                    | 743                     |
| EMFF5 120W | 566             | 912        | 115                | 566            | 863             | 541                    | 884                     |
| EMFF6 144W | 566             | 1053       | 115                | 566            | 1004            | 541                    | 1025                    |
| EMFF2 66W  | 730             | 489        | 115                | 730            | 440             | 705                    | 461                     |
| EMFF3 99W  | 730             | 630        | 115                | 730            | 581             | 705                    | 602                     |
| EMFF4 132W | 730             | 771        | 115                | 730            | 722             | 705                    | 743                     |
| EMFF5 165W | 730             | 912        | 115                | 730            | 863             | 705                    | 884                     |
| EMFF6 198W | 730             | 1053       | 115                | 730            | 1004            | 705                    | 1025                    |

# Technical Data EMF

## Metal (sheet-steel) flat enclosures

### Dimensional drawings - surface-mounted versions



### Dimensions

| Type       | Dimensions [mm] |            |           |                |                 |
|------------|-----------------|------------|-----------|----------------|-----------------|
|            | Width (X)       | Height (Y) | Depth (Z) | Door width (A) | Door height (B) |
| EMFS2 48W  | 566             | 489        | 137       | 566            | 440             |
| EMFS3 72W  | 566             | 630        | 137       | 566            | 581             |
| EMFS4 96W  | 566             | 771        | 137       | 566            | 722             |
| EMFS5 120W | 566             | 912        | 137       | 566            | 863             |
| EMFS6 144W | 566             | 1053       | 137       | 566            | 1004            |
| EMFS2 66W  | 730             | 489        | 137       | 730            | 440             |
| EMFS3 99W  | 730             | 630        | 137       | 730            | 581             |
| EMFS4 132W | 730             | 771        | 137       | 730            | 722             |
| EMFS5 165W | 730             | 912        | 137       | 730            | 863             |
| EMFS6 198W | 730             | 1053       | 137       | 730            | 1004            |

# Technical Data MHS

## IP66 Metal enclosures MHS

### General parameters

|                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------|
| For heavy duty uses with IP66 protection rating, IP55 for big enclosures with double door and IP65 while using a glazed door |
| Fully welded construction                                                                                                    |
| Top and bottom gland plates with PE gasket for maximum adjustability                                                         |
| Foamed-in door PU sealing gasket                                                                                             |

### Electrical parameters

|                                        |                                                                      |
|----------------------------------------|----------------------------------------------------------------------|
| Tested according to                    | IEC/EN 62208                                                         |
| Rated operational voltage $U_e$        | 1 000 V AC                                                           |
| Rated frequency $f$                    | up to 1 000 Hz                                                       |
| Rated impulse voltage $U_{imp}$        | 8 kV                                                                 |
| Insulation voltage $U_i$               | 1000 V AC                                                            |
| Maximum short-circuit current $I_{dc}$ | 35 kA                                                                |
| Degree of protection                   | IP66 (single door),<br>IP55 (double door)<br>IP65 (with glazed door) |
| Mechanical impact protection           | IK10 (solid door)                                                    |
| Insulation class                       | I                                                                    |

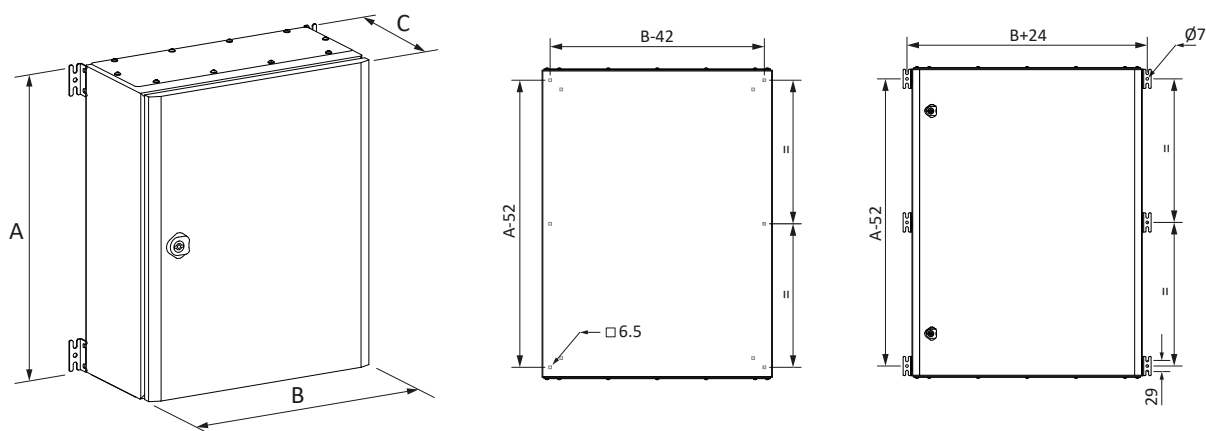
### Mechanical parameters

|                             |                  |
|-----------------------------|------------------|
| Material of enclosure       | sheet steel      |
| Thickness of body and door  | 1.2 or 1.5 mm    |
| Maximum door opening angle  | 155°             |
| Colour                      | RAL 7035         |
| Material of mounting plate  | galvanized steel |
| Thickness of mounting plate | 1.5 or 2 mm      |
| Ambient temperature         | -40 – +100 °C    |

# Technical Data MHS

## IP66 Metal enclosures MHS

### Dimensional drawings



### Dimensions

| Type           | Dimensions [mm] |      |     | Door | Lock | Hinge | Wall bracket | Glazed door | Cover plate* | Rain canopy | Power dissipation [W] | Weight [kg] |
|----------------|-----------------|------|-----|------|------|-------|--------------|-------------|--------------|-------------|-----------------------|-------------|
|                | A               | B    | C   |      |      |       |              |             |              |             |                       |             |
| MHS 30 20 15   | 300             | 200  | 150 | 1    | 1    | 2     | 4            | —           | —            | —           | 10                    | 4.2         |
| MHS 30 30 15   | 300             | 300  | 150 | 1    | 1    | 2     | 4            | •           | —            | •           | 16                    | 5.6         |
| MHS 30 30 20   | 300             | 300  | 200 | 1    | 1    | 2     | 4            | •           | •            | •           | 18                    | 6.3         |
| MHS 40 30 15   | 400             | 300  | 150 | 1    | 1    | 2     | 4            | •           | —            | •           | 19                    | 7.0         |
| MHS 40 30 20   | 400             | 300  | 200 | 1    | 1    | 2     | 4            | •           | •            | •           | 21                    | 7.9         |
| MHS 40 40 20   | 400             | 400  | 200 | 1    | 1    | 2     | 4            | •           | •            | •           | 26                    | 9.8         |
| MHS 50 40 15   | 500             | 400  | 150 | 1    | 1    | 2     | 4            | •           | —            | •           | 27                    | 10.5        |
| MHS 50 40 20   | 500             | 400  | 200 | 1    | 1    | 2     | 4            | •           | •            | •           | 29                    | 11.6        |
| MHS 60 40 20   | 600             | 400  | 200 | 1    | 2    | 2     | 4            | •           | •            | •           | 38                    | 13.5        |
| MHS 60 40 30   | 600             | 400  | 300 | 1    | 2    | 2     | 4            | •           | •            | •           | 41                    | 15.6        |
| MHS 60 50 20   | 600             | 500  | 200 | 1    | 2    | 2     | 4            | •           | •            | •           | 41                    | 16.2        |
| MHS 60 60 20   | 600             | 600  | 200 | 1    | 2    | 2     | 4            | •           | •            | •           | 49                    | 20.6        |
| MHS 60 60 30   | 600             | 600  | 300 | 1    | 2    | 2     | 4            | •           | •            | •           | 55                    | 23.2        |
| MHS 60 80 30   | 600             | 800  | 300 | 2    | 1    | 4     | 6            | •           | —            | •           | 65                    | 28.3        |
| MHS 70 50 20   | 700             | 500  | 200 | 1    | 2    | 3     | 4            | •           | •            | •           | 46                    | 18.5        |
| MHS 70 50 30   | 700             | 500  | 300 | 1    | 2    | 3     | 4            | •           | •            | •           | 53                    | 21.2        |
| MHS 80 60 20   | 800             | 600  | 200 | 1    | 2    | 3     | 6            | •           | •            | •           | 56                    | 26.2        |
| MHS 80 60 30   | 800             | 600  | 300 | 1    | 2    | 3     | 6            | •           | •            | •           | 63                    | 29.0        |
| MHS 100 60 30  | 1000            | 600  | 300 | 1    | 2    | 3     | 6            | •           | •            | •           | 69                    | 35.2        |
| MHS 100 80 30  | 1000            | 800  | 300 | 1    | 2    | 4     | 6            | •           | —            | •           | 96                    | 45.3        |
| MHS 100 100 30 | 1000            | 1000 | 300 | 2    | 1    | 4+4   | 6            | —           | —            | •           | 117                   | 60.0        |
| MHS 120 60 30  | 1200            | 600  | 300 | 1    | 2    | 4     | 6            | •           | •            | •           | 77                    | 39.7        |
| MHS 120 80 30  | 1200            | 600  | 300 | 1    | 2    | 4     | 6            | •           | —            | •           | 105                   | 59.0        |
| MHS 120 100 30 | 1200            | 1000 | 300 | 2    | 1    | 4+4   | 6            | —           | —            | •           | 140                   | 70.0        |

\* Total height of cover plates must be at least 20 mm less than height of enclosure

# Technical Data BBU, BBP and BBUE

## Busbars BBU, BBP and BBUE

### General parameters

1, 2, 3 and 4-phase busbars

Length 1 meter (can be shortened) or shortened versions (2, 6, 9, 12, 18 modules)

Special type busbars are designed for connecting devices from the bottom or top side, the order of the devices is quoted from left

### Electrical parameters

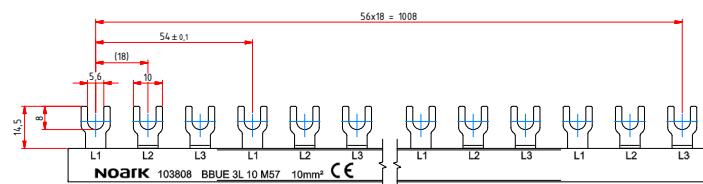
|                                           |                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------|
| Tested according to                       | EN 60439-1                                                                             |
| Rated operation voltage $U_e$             | 230 / 400 V AC                                                                         |
| Rated current $I_e$                       | 63 A (10 mm <sup>2</sup> ), 80 A (16 mm <sup>2</sup> ), 125 A (30/35 mm <sup>2</sup> ) |
| Rated frequency f                         | 50 Hz                                                                                  |
| Rated impulse withstand voltage $U_{imp}$ | 4 kV (BBU, BBP)<br>8 kV (BBUE 35), 6 kV (BBUE)                                         |

### Mechanical parameters

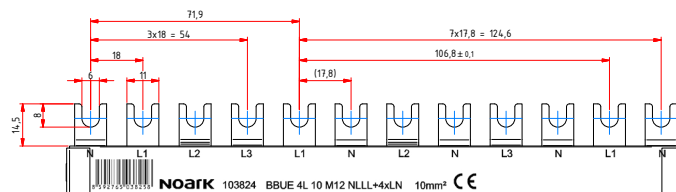
|                       |                                   |
|-----------------------|-----------------------------------|
| Busbar cross section  | 10 / 16 / 30 / 35 mm <sup>2</sup> |
| Connection point type | Fork or Pin                       |
| Connection point step | 8.7 mm / 13.5 mm / 18 mm / 27 mm  |

### Dimensions

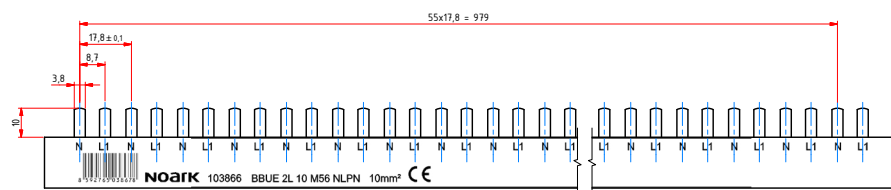
#### Fork types



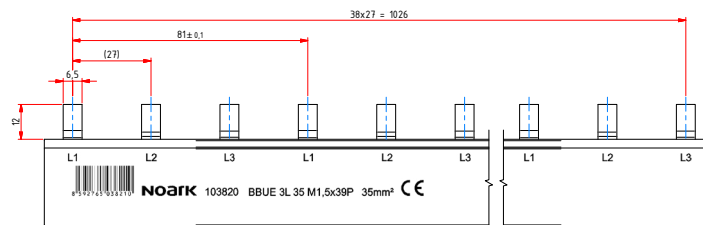
#### 4LN fork types



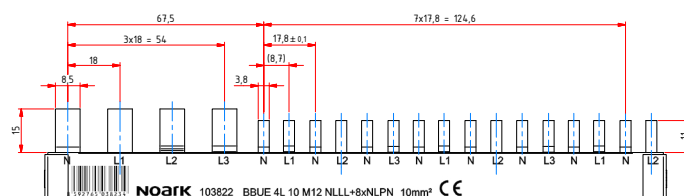
#### Pin types



#### 35 mm<sup>2</sup> pin types



#### Device combination types



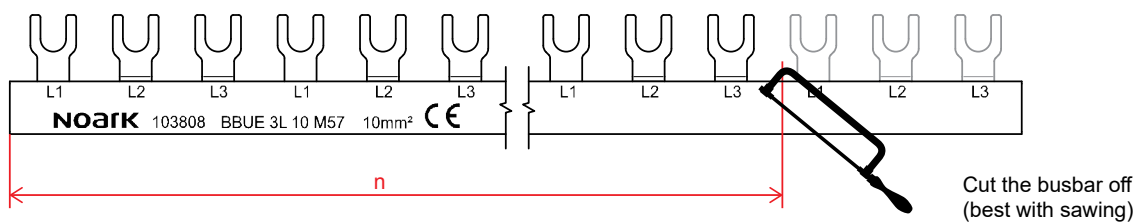


# Technical Data BBU, BBP and BBUE

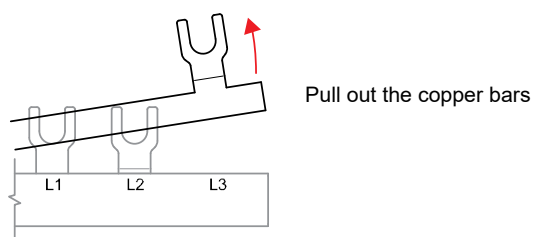
## Busbars BBU, BBP and BBUE

### Shortening

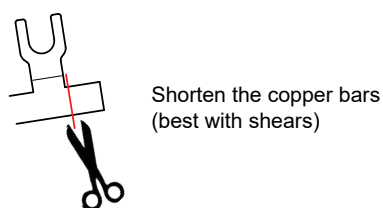
1)



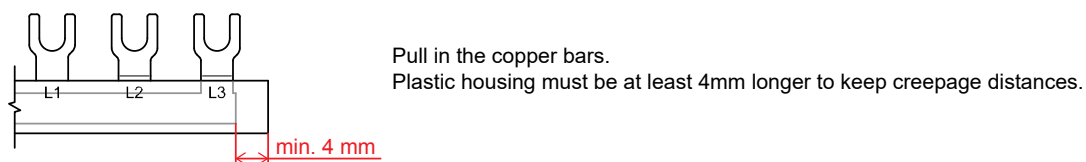
2)



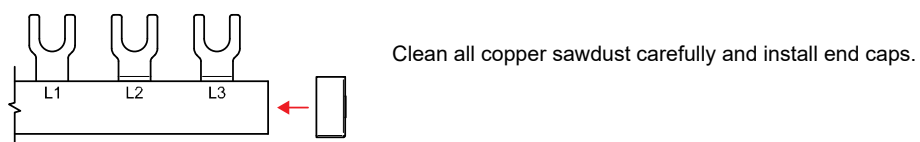
3)



4)



5)



# Technical Data BBUM

## Busbars BBUM

### General parameters

|                                                                  |
|------------------------------------------------------------------|
| Busbars BBUM for connection of Motor Protective Circuit Breakers |
| For up to 5 motor protective circuit breakers                    |
| 45, 54 or 63 mm pitch                                            |

### Electrical parameters

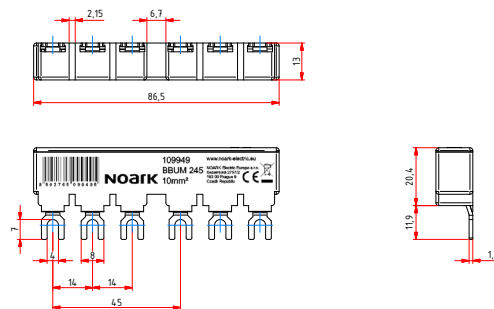
|                                           |            |
|-------------------------------------------|------------|
| Tested according to                       | EN 60947-1 |
| Rated operation voltage $U_e$             | 690 V AC   |
| Rated current $I_e$                       | 63 A       |
| Rated frequency $f$                       | 50 Hz      |
| Rated impulse withstand voltage $U_{imp}$ | 9,5 kV     |

### Mechanical parameters

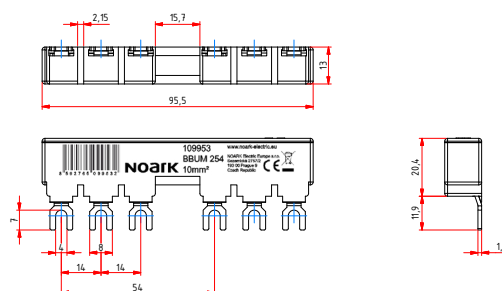
|                             |                       |
|-----------------------------|-----------------------|
| Busbar cross section        | 10 mm <sup>2</sup>    |
| Connection point type       | Fork                  |
| Connection point step       | 45 mm / 54 mm / 63 mm |
| Number of connected devices | 2 / 3 / 4 / 5         |

### Dimensions

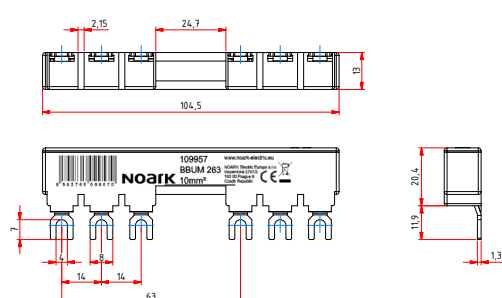
Pitch 45 mm



Pitch 54 mm



Pitch 63 mm

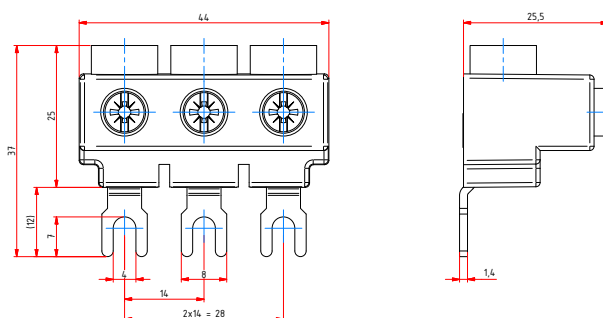


# Technical Data BBUM

## Busbars BBUM

### Dimensions

Feeder terminal



### Shortening



DO NOT CUT THE BUSBARS

# Technical Data IT

## Insulated terminals IT

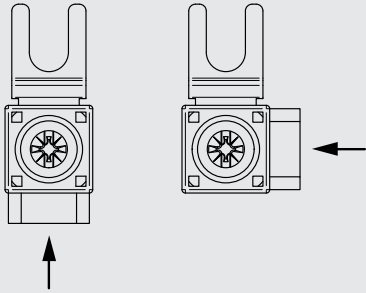
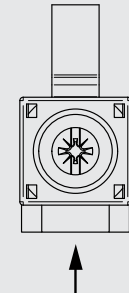
### General parameters

|                                       |
|---------------------------------------|
| Fork or pin connection point type     |
| Connection lengthwise or across       |
| Gray or blue terminal colour versions |

### Electrical parameters

|                                      | IT.. F 63A . | IT.. P 63A . | IT. P 100A . |
|--------------------------------------|--------------|--------------|--------------|
| Tested according to                  | EN 60439-1   |              |              |
| Nominal rated current $I_n$          | 63 A         | 63 A         | 125 A        |
| Maximum current $I_{max}$            | 80 A         | 80 A         | 125 A        |
| Max. rated operational voltage $U_n$ | 690 V AC     |              |              |
| Rated frequency $f$                  | 50 Hz        |              |              |

### Mechanical parameters

|                                                                  | IT.. F 63A .                                                                                                     | IT.. P 63A .                                     | IT. P 100A .                                                                                            |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Connection poing type                                            | fork                                                                                                             | pin                                              | pin                                                                                                     |
| Terminal                                                         | tunnel                                                                                                           |                                                  |                                                                                                         |
| Terminal capacity<br>single/multi wire<br>fine wired with sleeve | 6 - 25 mm <sup>2</sup><br>4 - 16 mm <sup>2</sup>                                                                 | 6 - 25 mm <sup>2</sup><br>4 - 16 mm <sup>2</sup> | 6 - 50 mm <sup>2</sup><br>4 - 35 mm <sup>2</sup>                                                        |
| Connection direction                                             |  <p>lengthwise or across</p> |                                                  |  <p>lengthwise</p> |
| Suitable for conductors type                                     | Al / Cu                                                                                                          |                                                  |                                                                                                         |
| Terminal colour                                                  | gray / blue                                                                                                      |                                                  |                                                                                                         |

# Technical Data PDB

## Power distribution blocks PDB - 1-pole versions

### General parameters

Versions suitable for Cu conductors

Mounting possible onto DIN rail or onto panel

### Electrical parameters

| Type suitable for<br>Cu conductors<br>Cu/Al conductors                  | 103778<br>-               | 103780<br>-              | 103782<br>-              | 103784<br>-    | 103786<br>-    |
|-------------------------------------------------------------------------|---------------------------|--------------------------|--------------------------|----------------|----------------|
| Tested according to                                                     | EN 60947-7-1              |                          |                          |                |                |
| Maximum current $I_{max}$ with rigid cable<br>of maximum cross section  | 80 A                      | 125 A                    | 160 A                    | 250 A          | 400 A          |
| Conventional thermal current $I_{th}$                                   | 80 A                      | 125 A                    | 160 A                    | 250 A          | 400 A          |
| Maximum operating voltage $U_{max}$                                     | 1000 V AC / 1500 V DC     |                          |                          |                |                |
| Short circuit withstand<br>peak current $I_{pk}$<br>1s current $I_{cw}$ | 2.7 kA<br>1.9 kA          | 30 kA<br>4.2 kA          | 30 kA<br>11 kA           | 51 kA<br>21 kA | 51 kA<br>21 kA |
| Comparative tracking index                                              | 600 V                     |                          |                          |                |                |
| Interconnection                                                         | -                         | possible with<br>Cu 15x5 | possible with<br>Cu 15x5 | -              | -              |
| Pollution degree                                                        | 2                         |                          |                          |                |                |
| Rated impulse withstand voltage $U_{imp}$                               | 4 kV                      |                          |                          |                |                |
| Other parameters                                                        | according to EN 60947-7-1 |                          |                          |                |                |

### Mechanical parameters

|                                                                 |                                                         |                                                         |                           |                                                                                       |                                                                                       |
|-----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Height                                                          | 66 mm                                                   | 74 mm                                                   | 92 mm                     | 95.5 mm                                                                               | 95.5 mm                                                                               |
| Width                                                           | 27 mm                                                   | 27 mm                                                   | 35 mm                     | 44.5 mm                                                                               | 44.5 mm                                                                               |
| Depth                                                           | 47 mm                                                   | 47 mm                                                   | 49 mm                     | 49 mm                                                                                 | 49 mm                                                                                 |
| Mounting                                                        | Onto 35 mm device DIN rail or onto panel                |                                                         |                           |                                                                                       |                                                                                       |
| Rated cross section of input terminal<br>connection conductors  | 16 mm <sup>2</sup>                                      | 35 mm <sup>2</sup><br>+ 16 mm <sup>2</sup>              | 50 mm <sup>2</sup>        | 95 mm <sup>2</sup>                                                                    | 150 mm <sup>2</sup>                                                                   |
| Input terminals capacity for $I_n$<br>(rigid cable)             | 1x 2.5-16 mm <sup>2</sup>                               | 1x 10-35 mm <sup>2</sup><br>+ 1x 2.5-16 mm <sup>2</sup> | 1x 10-70 mm <sup>2</sup>  | 1x 35-120 mm <sup>2</sup>                                                             | 1x 95-185 mm <sup>2</sup>                                                             |
| Fastening torque of input terminals                             | 1.5-3 Nm                                                | 3.5-5 Nm<br>1.5-3 Nm                                    | 5-6 Nm                    | 19-21 Nm                                                                              | 25 Nm                                                                                 |
| Rated cross section of output terminal<br>connection conductors | 16 mm <sup>2</sup><br>+ 6 mm <sup>2</sup>               | 16 mm <sup>2</sup>                                      | 16 mm <sup>2</sup>        | 25 mm <sup>2</sup><br>+ 16 mm <sup>2</sup><br>+ 10 mm <sup>2</sup>                    | 25 mm <sup>2</sup><br>+ 16 mm <sup>2</sup><br>+ 10 mm <sup>2</sup>                    |
| Output terminals capacity for $I_n$<br>(rigid cables)           | 2x 2.5-16 mm <sup>2</sup><br>+ 4x 2.5-6 mm <sup>2</sup> | 6x 2.5-16 mm <sup>2</sup>                               | 6x 2.5-16 mm <sup>2</sup> | 2x 6-35 mm <sup>2</sup><br>+ 5x 1.5-16 mm <sup>2</sup><br>+ 4x 1.5-10 mm <sup>2</sup> | 2x 6-35 mm <sup>2</sup><br>+ 5x 1.5-16 mm <sup>2</sup><br>+ 4x 1.5-10 mm <sup>2</sup> |
| Fastening torque of output terminals                            | 2x 1.5-3 Nm<br>4x 0.8-1.5 Nm                            | 2-3 Nm                                                  | 1.5-3 Nm                  | 2x 3.5-7 Nm<br>5x 2-3 Nm<br>4x 2-3 Nm                                                 | 2x 3.5-7 Nm<br>5x 2-3 Nm<br>4x 2-3 Nm                                                 |
| Heat deflection temperature                                     | 100°C (UL94-V0)                                         |                                                         |                           |                                                                                       |                                                                                       |
| Degree of protection                                            | IP20                                                    |                                                         |                           |                                                                                       |                                                                                       |
| Weight                                                          | 0.062 kg                                                | 0.136 kg                                                | 0.246 kg                  | 0.434 kg                                                                              | 0.410 kg                                                                              |

# Technical Data PDB

## Power distribution blocks PDB - 1-pole versions

### General parameters

Versions suitable for Cu or Cu/Al conductors - Al connections are not maintenance free

Mounting possible onto DIN rail or onto panel

### Electrical parameters

| Type suitable for<br>Cu conductors<br>Cu/Al conductors                         | -<br><b>103779</b>        | -<br><b>103781</b>       | -<br><b>103783</b>       | -<br><b>103785</b> | -<br><b>103787</b> |
|--------------------------------------------------------------------------------|---------------------------|--------------------------|--------------------------|--------------------|--------------------|
| Tested according to                                                            | EN 60947-7-1              |                          |                          |                    |                    |
| Maximum current $I_{max}$ (Cu/Al) with<br>rigid cable of maximum cross section | 80 / 63 A                 | 125 / 100 A              | 160 / 125 A              | 250 / 200 A        | 400 / 300 A        |
| Conventional thermal current $I_{th}$ (Cu/Al)                                  | 80 / 63 A                 | 125 / 100 A              | 160 / 125 A              | 250 / 200 A        | 400 / 300 A        |
| Maximum operating voltage $U_{max}$                                            | 1000 V AC / 1500 V DC     |                          |                          |                    |                    |
| Short circuit withstand<br>peak current $I_{pk}$<br>1s current $I_{cw}$        | 2.7 kA<br>1.9 kA          | 30 kA<br>4.2 kA          | 30 kA<br>11 kA           | 51 kA<br>21 kA     | 51 kA<br>21 kA     |
| Comparative tracking index                                                     | 600 V                     |                          |                          |                    |                    |
| Interconnection                                                                | -                         | possible with<br>Cu 15x5 | possible with<br>Cu 15x5 | -                  | -                  |
| Pollution degree                                                               | 2                         |                          |                          |                    |                    |
| Rated impulse withstand voltage $U_{imp}$                                      | 4 kV                      |                          |                          |                    |                    |
| Other parameters                                                               | according to EN 60947-7-1 |                          |                          |                    |                    |

### Mechanical parameters

|                                                                 |                                                         |                                                         |                           |                                                                                       |                                                                                       |
|-----------------------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Height                                                          | 66 mm                                                   | 74 mm                                                   | 92 mm                     | 95.5 mm                                                                               | 95.5 mm                                                                               |
| Width                                                           | 27 mm                                                   | 27 mm                                                   | 35 mm                     | 44.5 mm                                                                               | 44.5 mm                                                                               |
| Depth                                                           | 47 mm                                                   | 47 mm                                                   | 49 mm                     | 49 mm                                                                                 | 49 mm                                                                                 |
| Mounting                                                        | Onto 35 mm device DIN rail or onto panel                |                                                         |                           |                                                                                       |                                                                                       |
| Rated cross section of input terminal<br>connection conductors  | 16 mm <sup>2</sup>                                      | 35 mm <sup>2</sup><br>+ 16 mm <sup>2</sup>              | 50 mm <sup>2</sup>        | 95 mm <sup>2</sup>                                                                    | 150 mm <sup>2</sup>                                                                   |
| Input terminals capacity for $I_n$<br>(rigid cable)             | 1x 2.5-16 mm <sup>2</sup>                               | 1x 10-35 mm <sup>2</sup><br>+ 1x 2.5-16 mm <sup>2</sup> | 1x 10-70 mm <sup>2</sup>  | 1x 35-120 mm <sup>2</sup>                                                             | 1x 95-185 mm <sup>2</sup>                                                             |
| Fastening torque of input terminals                             | 1.5-3 Nm                                                | 3.5-5 Nm<br>1.5-3 Nm                                    | 5-6 Nm                    | 19-21 Nm                                                                              | 25 Nm                                                                                 |
| Rated cross section of output terminal<br>connection conductors | 16 mm <sup>2</sup><br>+ 6 mm <sup>2</sup>               | 16 mm <sup>2</sup>                                      | 16 mm <sup>2</sup>        | 25 mm <sup>2</sup><br>+ 16 mm <sup>2</sup><br>+ 10 mm <sup>2</sup>                    | 25 mm <sup>2</sup><br>+ 16 mm <sup>2</sup><br>+ 10 mm <sup>2</sup>                    |
| Output terminals capacity for $I_n$<br>(rigid cables)           | 2x 2.5-16 mm <sup>2</sup><br>+ 4x 2.5-6 mm <sup>2</sup> | 6x 2.5-16 mm <sup>2</sup>                               | 6x 2.5-16 mm <sup>2</sup> | 2x 6-35 mm <sup>2</sup><br>+ 5x 1.5-16 mm <sup>2</sup><br>+ 4x 1.5-10 mm <sup>2</sup> | 2x 6-35 mm <sup>2</sup><br>+ 5x 1.5-16 mm <sup>2</sup><br>+ 4x 1.5-10 mm <sup>2</sup> |
| Fastening torque of output terminals                            | 2x 1.5-3 Nm<br>4x 0.8-1.5 Nm                            | 2-3 Nm                                                  | 1.5-3 Nm                  | 2x 3.5-7 Nm<br>5x 2-3 Nm<br>4x 2-3 Nm                                                 | 2x 3.5-7 Nm<br>5x 2-3 Nm<br>4x 2-3 Nm                                                 |
| Heat deflection temperature                                     | 100°C (UL94-V0)                                         |                                                         |                           |                                                                                       |                                                                                       |
| Degree of protection                                            | IP20                                                    |                                                         |                           |                                                                                       |                                                                                       |
| Weight                                                          | 0.062 kg                                                | 0.136 kg                                                | 0.246 kg                  | 0.434 kg                                                                              | 0.410 kg                                                                              |

# Technical Data PDB

## Power distribution blocks PDB - 1-pole versions

### General parameters

|                                                                                        |
|----------------------------------------------------------------------------------------|
| Versions suitable for Cu or Cu/Al conductors - Al connections are not maintenance free |
| Mounting possible onto DIN rail or onto panel                                          |

### Electrical parameters

| Type suitable for<br>Cu conductors<br>Cu/Al conductors                           | 105509<br>-               | 105510<br>-    | -<br>103795    | -<br>103796    |
|----------------------------------------------------------------------------------|---------------------------|----------------|----------------|----------------|
| Tested according to                                                              | EN 60947-7-1              |                |                |                |
| Maximum current $I_{\max}$ (Cu/Al) with<br>rigid cable/bar of max. cross section | 400 A / -                 | 400 A / -      | 400 / 350 A    | 400 / 350 A    |
| Conventional thermal current $I_{th}$ (Cu/Al)                                    | 400 A / -                 | 400 A / -      | 400 / 350 A    | 400 / 350 A    |
| Maximum operating voltage $U_{\max}$                                             | 1000 V AC / 1500 V DC     |                |                |                |
| Short circuit withstand<br>peak current $I_{pk}$<br>1s current $I_{cw}$          | 50 kA<br>21 kA            | 50 kA<br>21 kA | 50 kA<br>21 kA | 50 kA<br>21 kA |
| Comparative tracking index                                                       | 600 V                     |                |                |                |
| Interconnection                                                                  | -                         | -              | -              | -              |
| Pollution degree                                                                 | 2                         |                |                |                |
| Rated impulse withstand voltage $U_{imp}$                                        | 4 kV                      |                |                |                |
| Other parameters                                                                 | according to EN 60947-7-1 |                |                |                |

### Mechanical parameters

|                                                                                                             |                                                     |                                                     |                                                     |                                                     |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
| Height                                                                                                      | 103 mm                                              | 103 mm                                              | 103 mm                                              | 103 mm                                              |
| Width                                                                                                       | 45 mm                                               | 45 mm                                               | 45 mm                                               | 45 mm                                               |
| Depth                                                                                                       | 50.2 mm                                             | 50.2 mm                                             | 50.2 mm                                             | 50.2 mm                                             |
| Mounting                                                                                                    | Onto 35 mm device DIN rail or onto panel            |                                                     |                                                     |                                                     |
| Rated cross section of input terminal<br>connection conductors                                              | 185 mm <sup>2</sup>                                 | 185 mm <sup>2</sup>                                 | 185 mm <sup>2</sup>                                 | 185 mm <sup>2</sup>                                 |
| Input terminals capacity for $I_n$<br>(rigid cable)                                                         | 1x single/multi wire<br>95 - 240 mm <sup>2</sup>    | 1x single/multi wire<br>95 - 240 mm <sup>2</sup>    | 1x single/multi wire<br>95 - 240 mm <sup>2</sup>    | 1x single/multi wire<br>95 - 240 mm <sup>2</sup>    |
| Other input connection possibilities<br>with reduced current with respect to<br>actual cable cross section  | fine wire (with sleeve)<br>70 - 185 mm <sup>2</sup> | fine wire (with sleeve)<br>70 - 185 mm <sup>2</sup> | fine wire (with sleeve)<br>70 - 185 mm <sup>2</sup> | fine wire (with sleeve)<br>70 - 185 mm <sup>2</sup> |
| Fastening torque of input terminals                                                                         | 25 Nm                                               | 25 Nm                                               | 25 Nm                                               | 25 Nm                                               |
| Rated cross section of output terminal<br>connection conductors                                             | 35 mm <sup>2</sup>                                  | 95 mm <sup>2</sup>                                  | 35 mm <sup>2</sup>                                  | 95 mm <sup>2</sup>                                  |
| Output terminals capacity for $I_n$<br>(rigid cables)                                                       | 6x single/multi wire<br>10-50 mm <sup>2</sup>       | 2x single/multi wire<br>50-120 mm <sup>2</sup>      | 6x single/multi wire<br>10-50 mm <sup>2</sup>       | 2x single/multi wire<br>50-120 mm <sup>2</sup>      |
| Other output connection possibilities<br>with reduced current with respect to<br>actual cable cross section | fine wire (with sleeve)<br>6-35 mm <sup>2</sup>     | fine wire (with sleeve)<br>35-95 mm <sup>2</sup>    | fine wire (with sleeve)<br>6-35 mm <sup>2</sup>     | fine wire (with sleeve)<br>35-95 mm <sup>2</sup>    |
| Fastening torque of output terminals                                                                        | 3.5-7 Nm                                            | 19 Nm                                               | 3.5-7 Nm                                            | 19 Nm                                               |
| Heat deflection temperature                                                                                 | 100°C (UL94-V0)                                     |                                                     |                                                     |                                                     |
| Degree of protection                                                                                        | IP20                                                |                                                     |                                                     |                                                     |
| Weight                                                                                                      | 0.516 kg                                            | 0.581 kg                                            | 0.516 kg                                            | 0.581 kg                                            |

# Technical Data PDB

## Power distribution blocks PDB - 3-pole versions

### General parameters

Versions suitable for Cu or Cu/Al conductors - Al connections are not maintenance free

Mounting possible onto DIN rail or onto panel

### Electrical parameters

|                                                                                |                           |                    |
|--------------------------------------------------------------------------------|---------------------------|--------------------|
| Type suitable for<br>Cu conductors<br>Cu/Al conductors                         | <b>103788</b><br>-        | -<br><b>103789</b> |
| Tested according to                                                            | EN 60947-7-1              |                    |
| Maximum current $I_{max}$ (Cu/Al) with<br>rigid cable of maximum cross section | 175 A / -                 | 175 / 125 A        |
| Conventional thermal current $I_{th}$ (Cu/Al)                                  | 175 A / -                 | 175 / 125 A        |
| Maximum operating voltage $U_{max}$                                            | 1000 V AC / 1500 V DC     |                    |
| Short circuit withstand<br>peak current $I_{pk}$<br>1s current $I_{cw}$        | 30 kA<br>11 kA            | 30 kA<br>11 kA     |
| Comparative tracking index                                                     | 600 V                     |                    |
| Poles                                                                          | 3                         | 3                  |
| Interconnection                                                                | -                         | -                  |
| Pollution degree                                                               | 2                         |                    |
| Rated impulse withstand voltage $U_{imp}$                                      | 4 kV                      |                    |
| Other parameters                                                               | according to EN 60947-7-1 |                    |

### Mechanical parameters

|                                                                 |                                          |                           |
|-----------------------------------------------------------------|------------------------------------------|---------------------------|
| Height                                                          | 80 mm                                    | 80 mm                     |
| Width                                                           | 71.5 mm                                  | 71.5 mm                   |
| Depth                                                           | 42.5 mm                                  | 42.5 mm                   |
| Mounting                                                        | Onto 35 mm device DIN rail or onto panel |                           |
| Rated cross section of input terminal<br>connection conductors  | 50 mm <sup>2</sup>                       | 50 mm <sup>2</sup>        |
| Input terminals capacity for $I_n$<br>per pole (rigid cable)    | 1x 16-70 mm <sup>2</sup>                 | 1x 16-70 mm <sup>2</sup>  |
| Fastening torque of input terminals                             | 6-10 Nm                                  | 6-10 Nm                   |
| Rated cross section of output terminal<br>connection conductors | 16 mm <sup>2</sup>                       | 16 mm <sup>2</sup>        |
| Output terminals capacity for $I_n$<br>per pole (rigid cables)  | 6x 2.5-16 mm <sup>2</sup>                | 6x 2.5-16 mm <sup>2</sup> |
| Fastening torque of output terminals                            | 3-4 Nm                                   | 3-4 Nm                    |
| Heat deflection temperature                                     | 100°C (UL94-V0)                          |                           |
| Degree of protection                                            | IP20                                     |                           |
| Weight                                                          | 0.385 kg                                 | 0.375 kg                  |

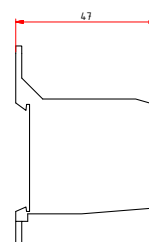
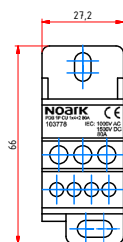


# Technical Data PDB

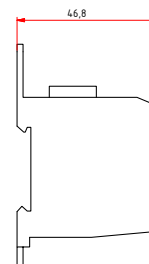
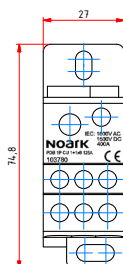
## Power distribution blocks PDB

### Dimensional drawings

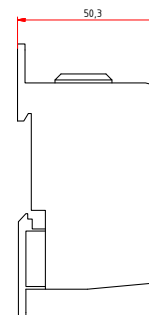
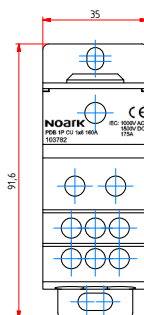
103778 - PDB 1P CU 1x4+2 80A  
103779 - PDB 1P CU/AL 1x4+2 80/63A



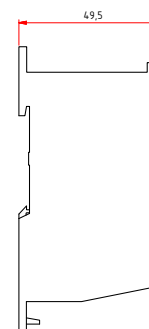
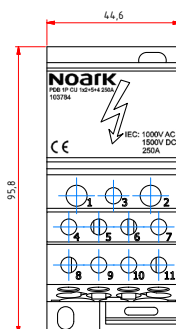
103780 - PDB 1P CU 1+1x6 125A  
103781 - PDB 1P CU/AL 1+1x6 125/100A



103782 - PDB 1P CU 1x6 160A  
103783 - PDB 1P CU/AL 1x6 160/125A



103784 - PDB 1P CU 1x2+5+4 250A  
103786 - PDB 1P CU 1x2+5+4 400A  
103785 - PDB 1P CU/AL 1x2+5+4 250/200A  
103787 - PDB 1P CU/AL 1x2+5+4 400/300A

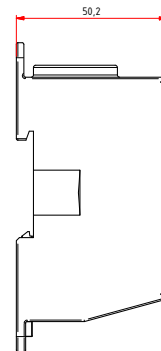
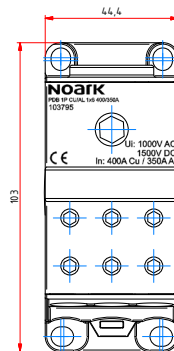


# Technical Data PDB

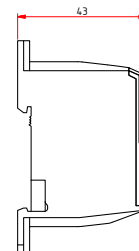
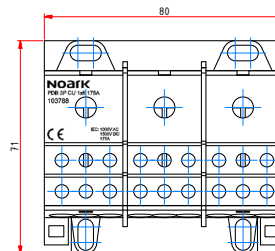
## Power distribution blocks PDB

### Dimensions

105509 - PDB 1P CU 1x6 400A  
 105510 - PDB 1P CU 1x2 400A  
 103795 - PDB 1P CU/AL 1x6 400/350A  
 103796 - PDB 1P CU/AL 1x2 400/350A



103788 - PDB 3P CU 1x6 175A  
 103789 - PDB 3P CU/AL 1x6 175/125A



# Technical Data TB

## Neutral and earthing terminal bars

### General parameters

Neutral and grounding terminal bars for distribution enclosures

7, 12 and 15 terminal versions

DIN-rail mounting

### Electrical parameters

|                               | TBB / TBG $\times 16$      | TBB / TBG $\times 10$ | TB $\times 10$ |
|-------------------------------|----------------------------|-----------------------|----------------|
| Tested according to           | EN 60998-1<br>EN 60998-2-1 |                       |                |
| Rated current $I_e$           | 63 A                       |                       |                |
| Rated isolation voltage $U_i$ | 690 V AC                   |                       |                |
| Rated frequency $f$           | 50 Hz                      |                       |                |

### Mechanical parameters

|                        | TBB / TBG $\times 16$    | TBB / TBG $\times 10$    | TB $\times 10$           |
|------------------------|--------------------------|--------------------------|--------------------------|
| Terminal capacity      | up to 16 mm <sup>2</sup> | up to 10 mm <sup>2</sup> | up to 10 mm <sup>2</sup> |
| Min. terminal capacity | 1.5 mm <sup>2</sup>      | 1.5 mm <sup>2</sup>      | 1.5 mm <sup>2</sup>      |
| Terminal cover colour  | blue / green             | blue / green             | -                        |

# Technical Data Ex9DS

## DIN rail service socket

### General parameters

|                               |
|-------------------------------|
| Earth pin and Schuko standard |
| DIN-rail mounting             |

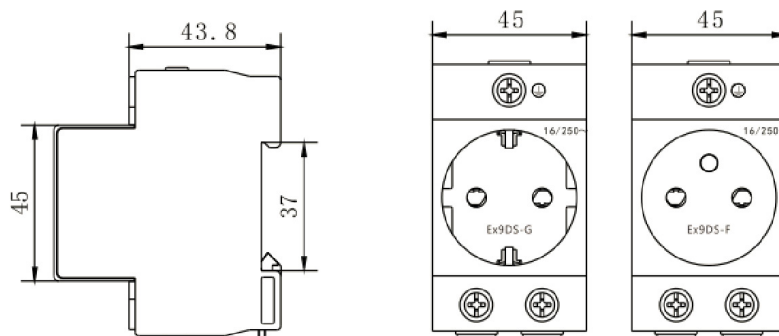
### Electrical parameters

|                                |             |
|--------------------------------|-------------|
| Tested according to            | IEC 60884-1 |
| Rated current $I_e$            | 16 A        |
| Rated operating voltage $U_e$  | 250 V AC    |
| Rated insulation voltage $U_i$ | 1000 V AC   |
| Rated frequency $f$            | 50/60 Hz    |

### Mechanical parameters

|                               |                                             |
|-------------------------------|---------------------------------------------|
| Device width                  | 45 mm                                       |
| Device height                 | 65 mm                                       |
| Frame size                    | 45 mm                                       |
| Mounting                      | easy fastening onto 35 mm device rail (DIN) |
| Degree of protection          | IP20                                        |
| Terminals                     | lift                                        |
| Terminal capacity             | 1 — 6 mm <sup>2</sup>                       |
| Fastening torque of terminals | 0.8 — 2 Nm                                  |
| Ambient temperature           | -25 — +40 °C                                |
| Weight                        | 0.11 kg                                     |

### Dimensions



# Index

| Type      | Ordering info | Technical data | Type      | Ordering info | Technical data |
|-----------|---------------|----------------|-----------|---------------|----------------|
| B CC45    | 8             |                | LK MHS    | 70            |                |
| BBP       | 75            |                | LK PH M   | 47            |                |
| BBU       | 74            | 125            | LK PM M   | 11            |                |
| BBUE      | 76            | 123            | LK PN M   | 7             |                |
| BBUM      | 82            |                | MF PDP    | 61            |                |
| CB MHS    | 70            |                | MF PNF    | 16            |                |
| CGQS      | 47            |                | MF PNF12  | 39            |                |
| CP MHS    | 69            |                | MF PXF    | 26            |                |
| DR PHS    | 46            |                | MF TL     | 62            |                |
| DR PMF    | 30            |                | MHS       | 66            | 122            |
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| DR PNS    | 7             |                | MP PM     | 35            |                |
| DR PNS-SD | 10            |                | PDB       | 86            | 128            |
| DR PXF    | 25            |                | PHS       | 46            | 114            |
| DTH       | 8             |                | PM MHS    | 69            |                |
| EC MHS    | 67            |                | PMF       | 30            | 107            |
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| ECUE      | 80            | 124            | PMF-MM    | 34            | 109            |
| EFMS SMM  | 58            |                | PNF       | 14            | 99             |
| EMF       | 54            | 116            | PNF-HW    | 18            | 101            |
| EMF CFR   | 57            |                | PNS       | 6             | 95             |
| EMF DR    | 55            |                | PNS-SD    | 10            | 97             |
| EMF FP    | 56            |                | PWS PMF-C | 40            |                |
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| EMF SDH   | 55            |                | SD MHS    | 67            |                |
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| FBUM      | 82            |                | TBB       | 60            |                |
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| IT        | 84            | 127            | TH CUB P  | 8             |                |
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| ITAW      | 84            |                | VCB PM    | 35            |                |
| ITL       | 84            |                | WB MHS    | 69            |                |
| ITL P     | 84            |                |           |               |                |
| ITLW      | 84            |                |           |               |                |

# Notes

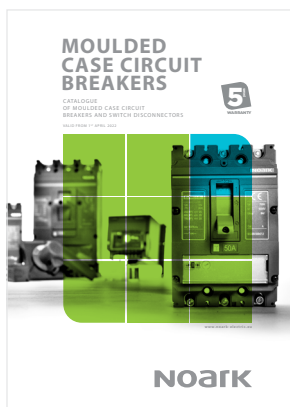


# Catalogues and assortment overview



## INSTALLATION DEVICES

- Miniature Circuit Breakers
- Fuse Holders and Disconnectors
- Isolators
- Residual Current Devices
- Energy Meters
- Motor Protective Circuit Breakers
- Accessories for Installation Devices
- Surge Protection Device
- Installation Relays and Contactors
- Switches and Signal Lamps
- Timers and Light Intensity Switches
- Other Installation Devices



## MOULDED CASE CIRCUIT BREAKERS

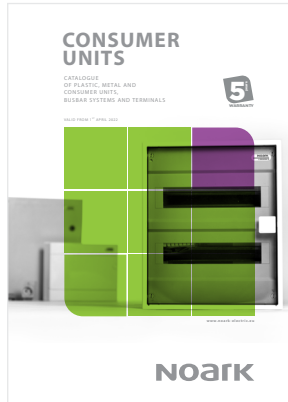
- AC Thermomagnetic Moulded Case Circuit Breakers Ex9M
- AC Electronic Moulded Case Circuit Breakers Ex9M SU20L (DIP switches version)
- AC Electronic Moulded Case Circuit Breakers Ex9M SU20S (LCD version)
- AC MCCB Switch Disconnectors Ex9MSD
- DC Thermomagnetic Moulded Case Circuit Breakers Ex9M
- DC MCCB Switch Disconnectors Ex9MSD
- Accessories for MCCBs



## INDUSTRIAL DEVICES

- Contactors and Relays
- Motor Protective Circuit Breakers
- Overload Relays
- Accessories
- Panel Mounted Devices

# Catalogues and assortment overview



## CONSUMER UNITS

- Plastic Consumer Units
- Plastic Consumer Units with Sheet Steel Door
- Plastic Consumer Units for Outdoor Use
- Metal Flat Enclosures
- Metal Enclosures with Mounting Plates
- Interconnection Systems



## PHOTOVOLTAIC COMPONENTS AND SOLUTIONS

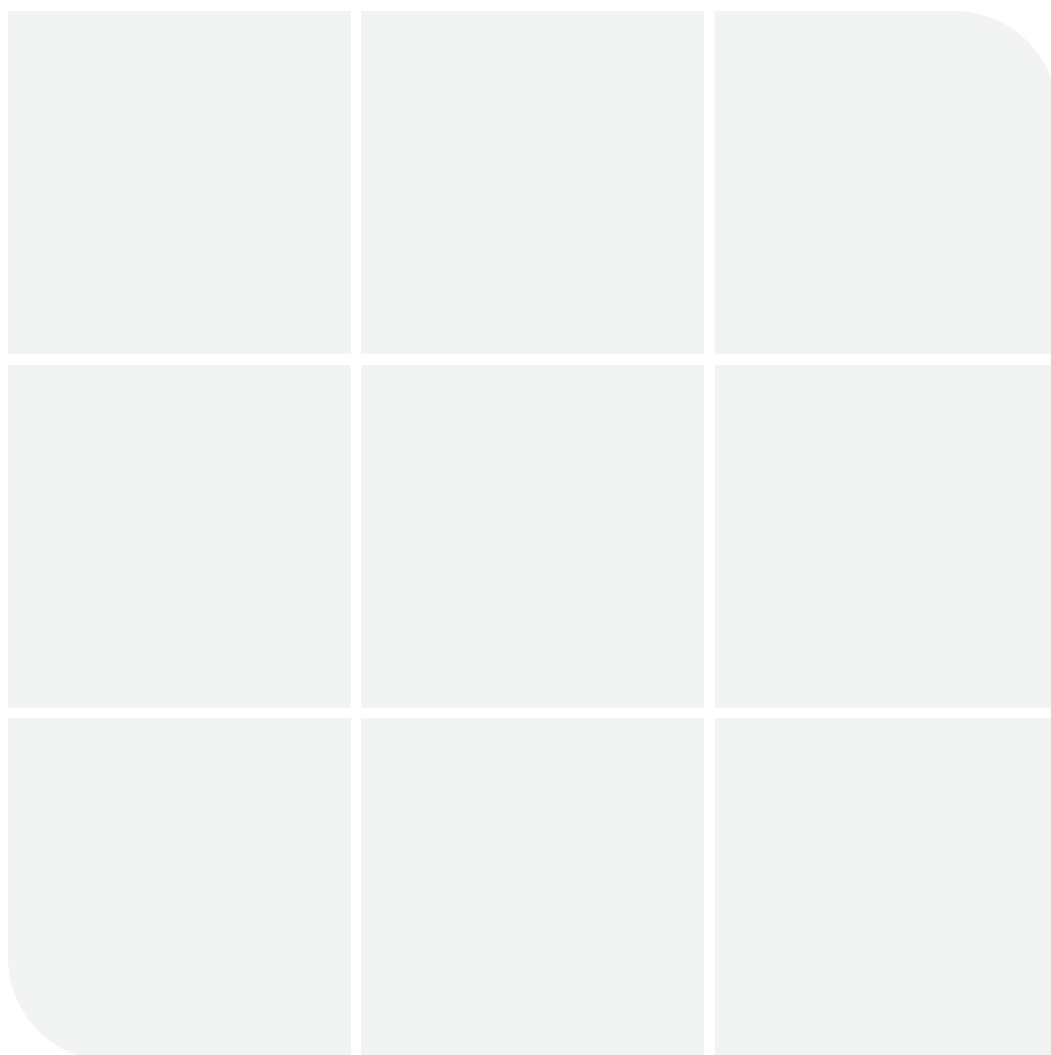
- Miniature Circuit Breakers
- Fuse Disconnectors
- Isolators
- Surge Protection Devices
- Moulded Case Circuit Breakers and Switch Disconnectors
- EV chargers



## AIR CIRCUIT BREAKERS

- Digital Tripping Units
- Air Circuit Breakers
- Air Switch Disconnectors
- Accessories





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