

ENYSTAR – DISTRIBUTION BOARDS UP TO 250 A WITH DOOR

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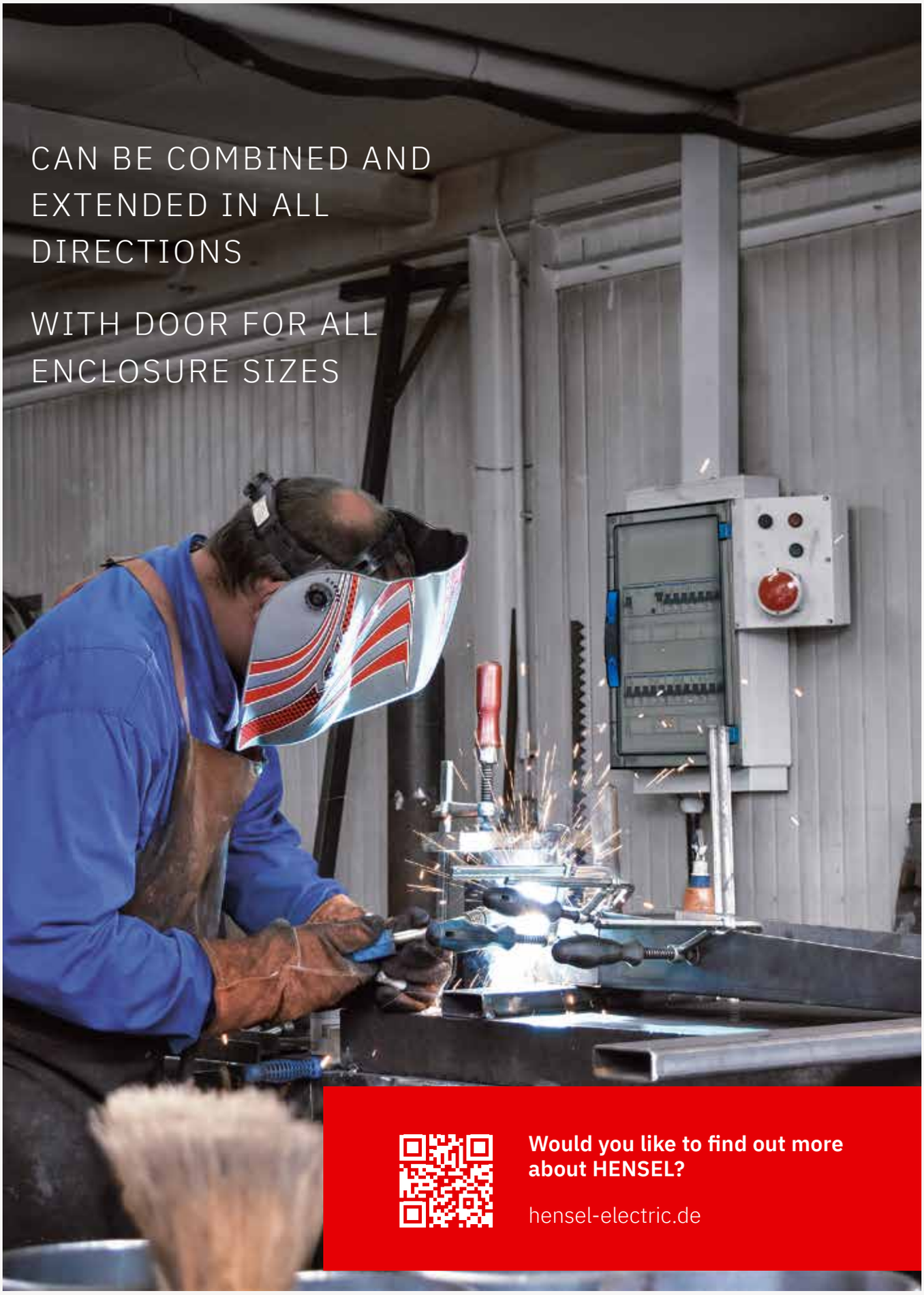
HENSEL


CAN BE COMBINED AND
EXTENDED IN ALL
DIRECTIONS
WITH DOOR FOR ALL
ENCLOSURE SIZES
Would you like to find out more about HENSEL?
hensel-electric.de

DISTRIBUTION BOARDS UP TO 250 A

Combinable enclosure system, Degree of protection: IP 65,
made from polycarbonate, Protection class II ⧈,
for the construction of distribution boards (DBO) up to 250 A
in accordance with IEC 61439-3

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ACCESSORIES AND TECHNICAL DETAILS

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Further technical information
can be foand on the Internet
www.hensel-electric.de -> Products

COMBINABLE ENCLOSURE SYSTEM

For the construction of distribution boards up to 250 A

IP 65

IN ACCORDANCE WITH IEC 61439-3







For protected outdoor installation, here e.g. with a protective roof.

Suitable for interiors in industry and commerce.





- Expandable in all directions
- In accordance with IEC 61439-3
- Distribution boards up to 250 A for operation by unskilled persons (DBO)
- Degree of protection IP 65
- Protection Class II, ⧈
- Suitable for indoor and protected outdoor installation
- Functional boxes with standardised assemblies up to 250 A
- For rail-mounted devices up to 100 A and terminals, switchgear and fuses up to 250 A
- Plan distribution boards easily, quickly and securely with our ENYGUIDE4 configurator!

Start now:
enyguide.de

PRE-ASSEMBLED FUNCTIONAL BOXES

Quick, easy and safe.



The Hensel advantages

Material:

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



Doors:

+ All box sizes with door
+ Transparent or opaque doors
+ Door hinge changeable
+ Sealable
+ Locking options with tool or key
+ Operation of the units behind the door with contact protection
+ No protruding drives



Enclosure system

+ Open box walls that can be closed quickly, easily and individually with closing plates and mounting flanges
+ Integrated seals
+ Secure plugged-in box connections
+ Functional boxes with cover as contact protection

Accessories

+ Connection box for the installation of units that must be operated from the outside, such as plugs, push-buttons and switches.
+ Cable entry via mounting flanges up to 72 mm cable diameter
+ Contactable safety devices

MODULAR ENCLOSURE SYSTEM

For the construction of distribution boards up to 250 A

in accordance with IEC 61439-3

+ Modular
+ High degree of protection
+ Combinable in all directions (vertical and horizontal)
+ Extension frames allow the installation of devices with different installation heights.

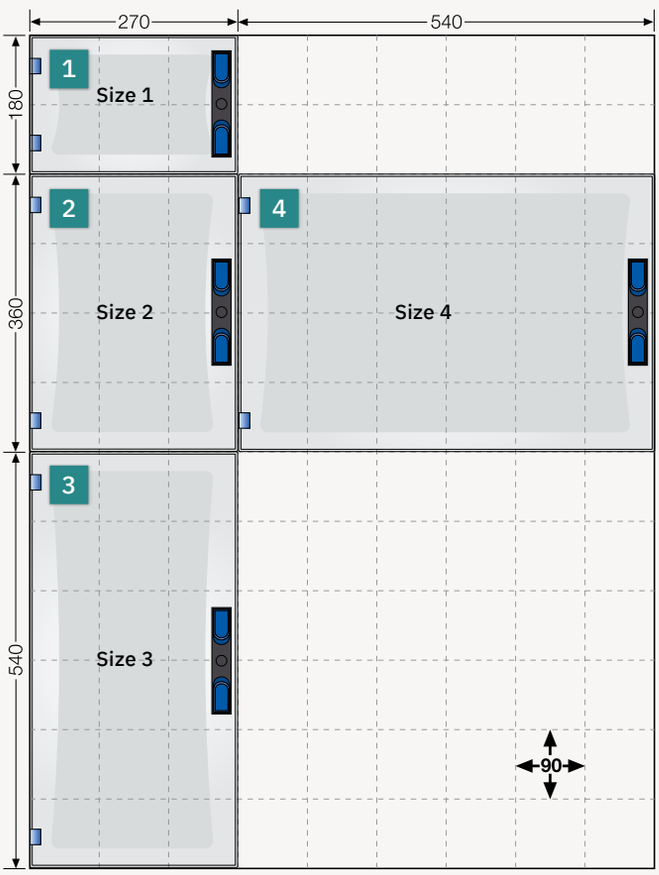
4 BOX SIZES
FREELY COMBINABLE!



Can be combined in all directions

+ Four box sizes can be freely combined in all directions and can also be used as individual boxes.
+ The innovative enclosure system is ideally suited for the quick and easy construction of distribution boards up to 250 A.
+ Open side panels, integrated seals and secure plug connections ensure quick electrical installation.
+ The modular structure in a basic 90 mm pattern allows free design of the outer shape. Obstacles on the building structure can be easily built around.
+ With an intermediate frame, the enclosure depth of box sizes 2, 3 and 4 can be increased in 50 mm steps.
+ Combinable
+ Modular box system in a 90 mm pattern
+ **4 box sizes:**
  1_ 270 x 180 mm
  2_ 270 x 360 mm
  3_ 270 x 540 mm
  4_ 540 x 360 mm

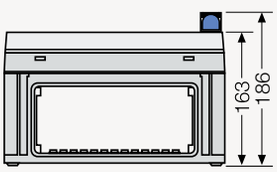




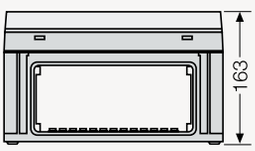
Distribution board with door

Enclosure depths

with hand operation

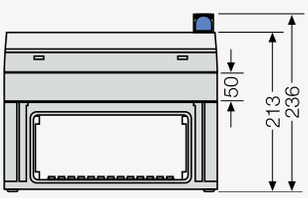


with tool operation

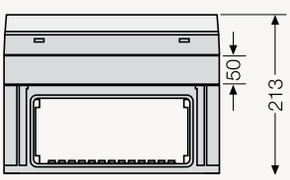


Extension frame

for extending installation depths by 50 mm with hand operation



with tool operation



Please scan the QR code or see our website hensel-electric.de to get detailed information.

HIGH-QUALITY MATERIAL

For demanding applications

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







TIGHT & SAFE

In demanding environmental conditions



Safe, even in protected outdoor installations, e.g. with protective roof.

Ventilation option to reduce the formation of condensation



ALWAYS THE RIGHT LOCKING SYSTEM

For clear separation of access and operating areas



Operating areas for unskilled persons can be reached quickly and easily via door locking with hand operation



Devices which must only be operated by skilled persons, must be installed in a separate area which can only be opened using a tool

Hand operated doors in areas where unskilled persons
have to operate devices



Locking option with key prevents unauthorized access



Multikey for door locking systems: standard locking system for tool-operation with slot srewdriver (optional triangle, square and double-bit)



SAFETY

For persons

Complete protection against accidental contact for devices that can be operated and devices that are contacted on busbars





cover strips cover unused equipment openings from accidental touch



COMBINABLE SOLUTIONS

For the self-assembly of distribution boards up to 250 A

Boxes can be assembled by an electrician to form a distribution system.



Individual boxes with electrical functions.

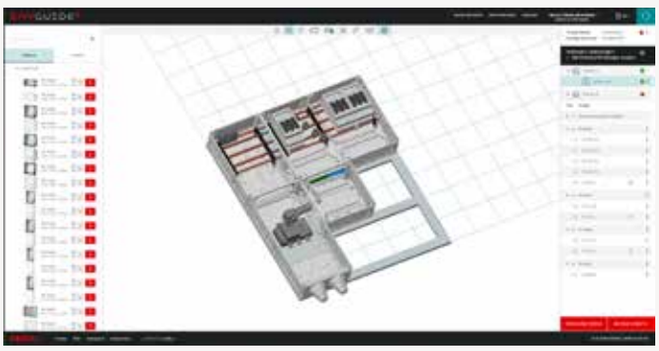


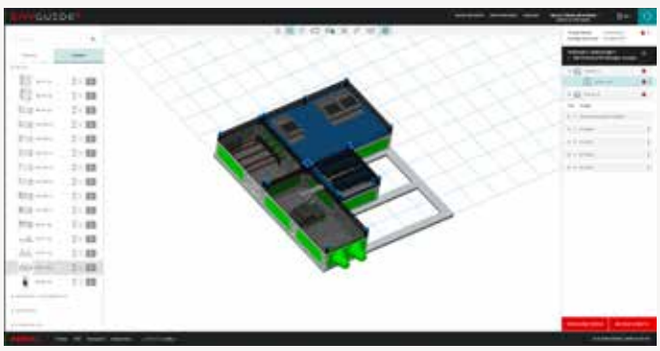
ENYGUIDE 4 – THE NEW GENERATION OF THE 3D CONFIGURATOR FOR SIMPLE, FAST AND SECURE CONFIGURATION.

Plan, check and order Mi- and ENYSTAR enclosures quickly and easily.

Optimised user guidance and interface

+ Large icons and the new drag & drop function make it easier to select and place enclosures and accessories.
+ Tools and accessories are clearly organised to speed up your planning.
+ Higher resolution and detailed 3D visualisation for a precise preview of your configuration.



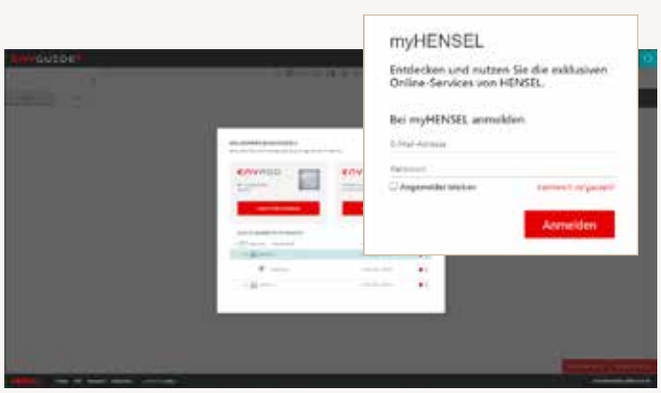


Advanced functions for precise planning

+ Automatic power loss calculation and generation of the design verification of the permissible heating.
+ Intelligent suggestions for accessory positions and simple adaptation or replacement of enclosures.
+ Information on enclosures and accessories, including data sheets and digital product data, can be accessed simply by clicking on the link to the HENSEL website.

Access and security

+ Easy access via myHENSEL or limited access without login.
+ Securely stored projects in the password-protected area for access at any time.
+ Personalised documents and layout drawings for a professional appearance.



Seamless integration

+ Automatic generation of assembly drawings, parts lists and order lists.





Compatibility and future-ready

+ Projects from the previous ENYGUIDE version can be easily imported into ENYGUIDE 4.
  Regular updates guarantee that the software, product range and prices are always up to date.

FOR SIMPLE, FAST AND SAFE CONFIGURATION OF DISTRIBUTION BOARDS



You can also find all the advantages in this video

Start now:
enyguide.de

SYSTEM

Electrical parameters



Electrical Rated values

Rated current: up to 250 A
Rated insulation voltage: 690 V a.c., 1000 V d.c.
Rated short-time withstand current: max. 13 kA / 1 s

System properties



Environmental conditions

Ambient temperature

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



Impact strength

Degree of protection against mechanical load
IK 08 (5 Joules) according to IEC 50102



Application area

The enclosures are suitable for outdoor installation, protected against weather infl uences.
However, pay attentionto the climatic effects on the installed equipment, rsee operating and ambient conditions in index technical data.



Protection against foreign solid objects and direct contact

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



Insulation

Insulated enclosures
(Protection Class II)



Protection against ingress of water with harmful effects

Protected against water jets
Degree of protection IP 6**5**

MATERIAL

Material properties: Polycarbonate



Burning behaviour

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



Chemical resistance

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



UV resistance

UV-resistant in accordance with IEC 61439-1 para. 10.2.4: the material is examined for UV resistance



Toxic behaviour

Silicone- and halogen-free

COMBINABLE ENCLOSURES WITH DOOR

ENYSTAR with different functional

boxes for your different areas of application



Combinable enclosures with door



Empty boxes



Circuit-breaker boxes

Combinable enclosures with door and closing plates

Empty and circuit-breaker boxes with closing plates







Box walls closed
with closing plates

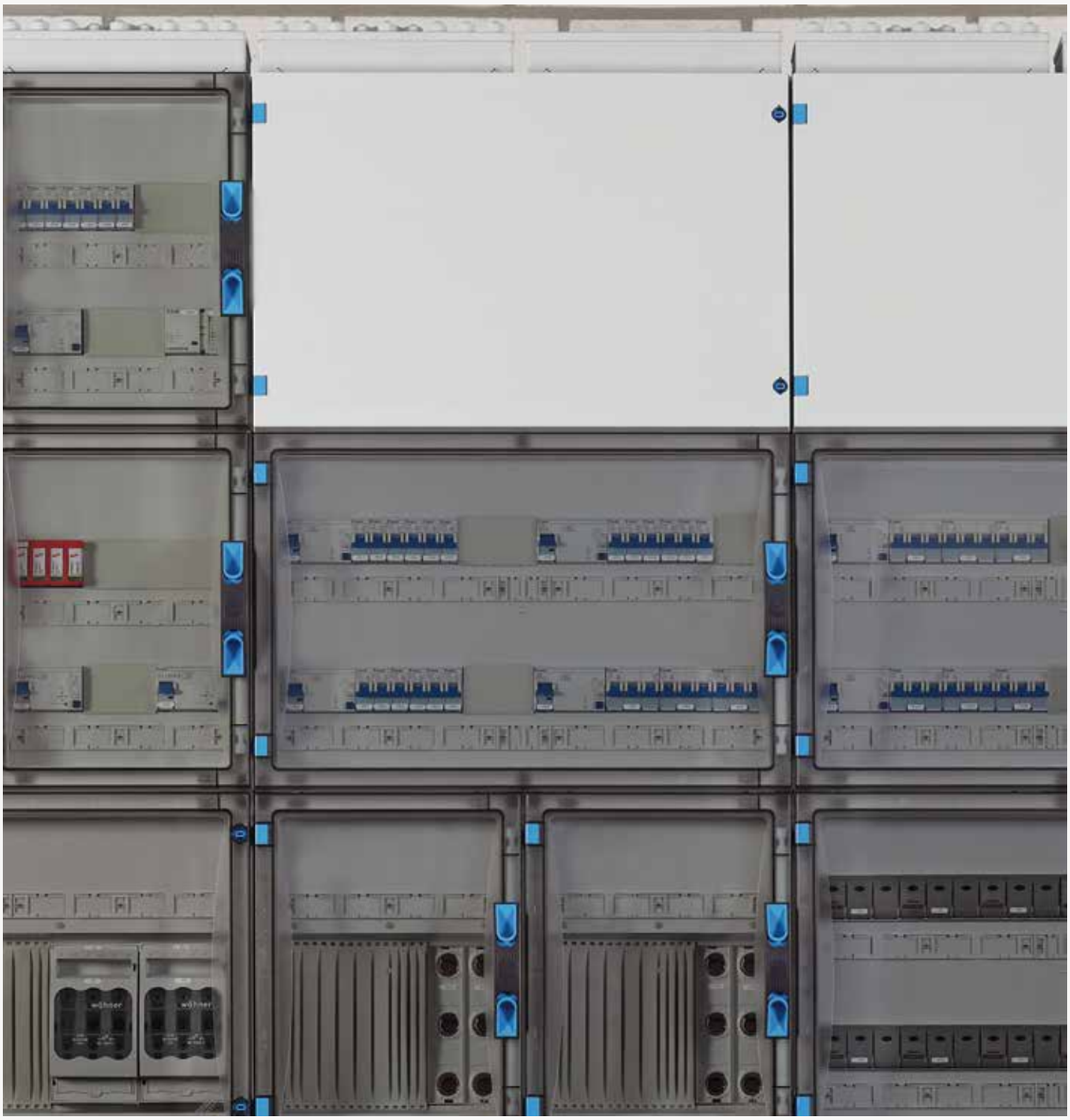




Order mounting
flanges separately

EMPTY BOXES

for the assembly of distribution boards up to 250 A intended to be operated by unskilled persons in accordance with IEC 61439-3









Product benefits

+ All enclosure sizes with door
+ Transparent or opaque doors
+ Device installation either on mounting plates or DIN rails
+ Installation depths extendable by using extension frames
+ Enclosures can also be used as single boxes when enclosure walls are covered with closing plates
+ Door lockings with hand or tool operation
+ Protection class II, ⧈
+ Degree of protection: IP 65
+ Material: PC (polycarbonate)
+ Colour: grey, RAL 7035

More information on these products: hensel-electric.de

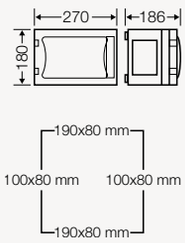


FP 0140

Built-in dimensions H x W x D:
126 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



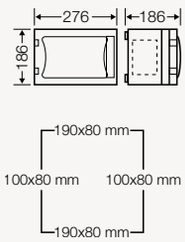


FP 0141

Built-in dimensions H x W x D:
126 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



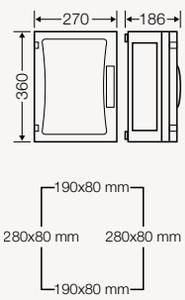


FP 0240

Built-in dimensions H x W x D:
306 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K



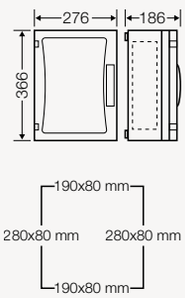


FP 0241

Built-in dimensions H x W x D:
306 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K



MORE INFORMATION ON HENSEL-ELECTRIC.DE

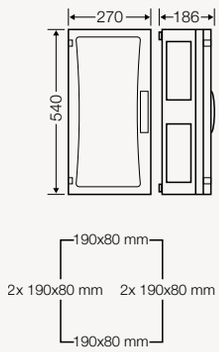


FP 0340

Built-in dimensions H x W x D:
486 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



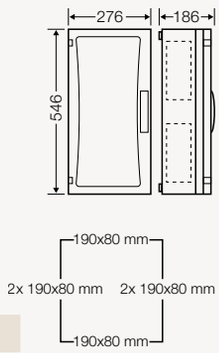


FP 0341

Built-in dimensions H x W x D:
486 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



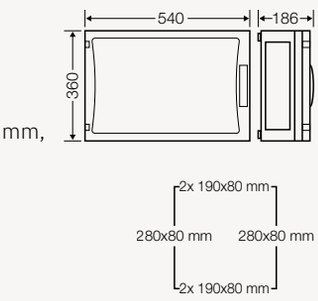


FP 0440

Built-in dimensions H x W x D:
306 x 486 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K



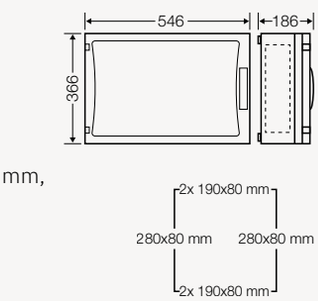


FP 0441

Built-in dimensions H x W x D:
306 x 486 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K



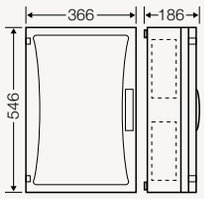


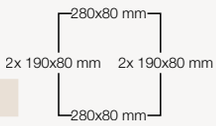
FP 0461

Built-in dimensions H x W x D:
486 x 306 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K







MORE INFORMATION ON HENSEL-ELECTRIC.DE

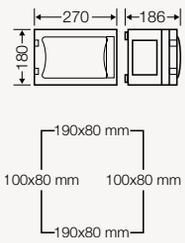


FP 0150

Built-in dimensions H x W x D:
126 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



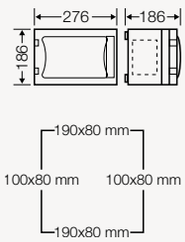


FP 0151

Built-in dimensions H x W x D:
126 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



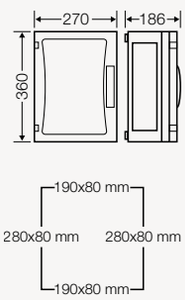


FP 0250

Built-in dimensions H x W x D:
306 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K



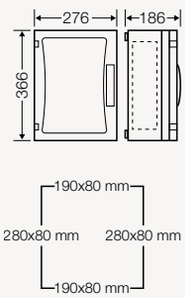


FP 0251

Built-in dimensions H x W x D:
306 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K



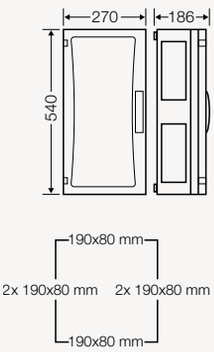


FP 0350

Built-in dimensions H x W x D:
486 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



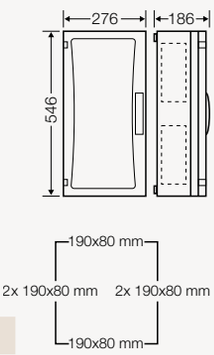


FP 0351

Built-in dimensions H x W x D:
486 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



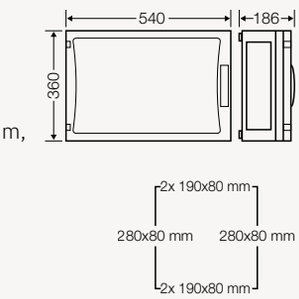


FP 0450

Built-in dimensions H x W x D:
306 x 486 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K



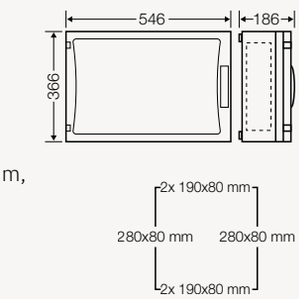


FP 0451

Built-in dimensions H x W x D:
306 x 486 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

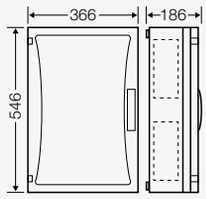
Power dissipation capability	P_{de} = 1.2 W, 1 K

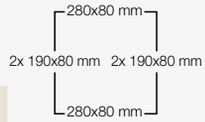




FP 0471

Built-in dimensions H x W x D:
486 x 306 x 140 mm
With closing plates for all box walls





+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

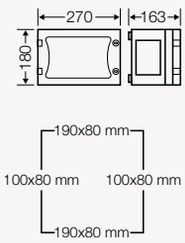
Power dissipation capability	P_{de} = 1.2 W, 1 K





FP 0100

Built-in dimensions H x W x D:
126 x 216 x 140 mm



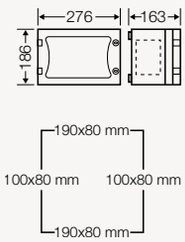
+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



FP 0101

Built-in dimensions H x W x D:
126 x 216 x 140 mm
With closing plates for all box walls



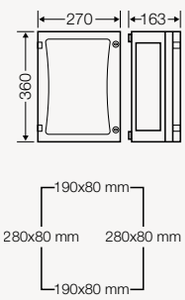
+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



FP 0210

Built-in dimensions H x W x D:
306 x 216 x 140 mm



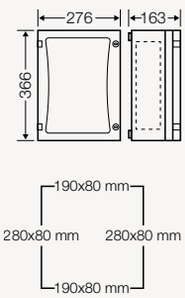
+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K



FP 0211

Built-in dimensions H x W x D:
306 x 216 x 140 mm
With closing plates for all box walls



+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K

MORE INFORMATION ON HENSEL-ELECTRIC.DE

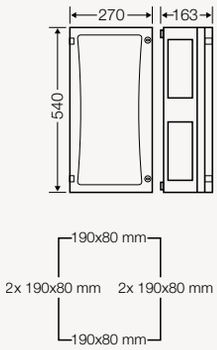


FP 0310

Built-in dimensions H x W x D:
486 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



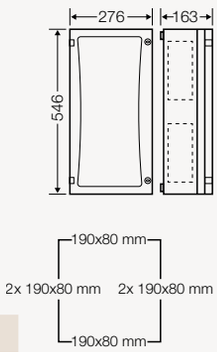


FP 0311

Built-in dimensions H x W x D:
486 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



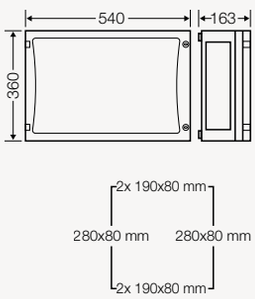


FP 0400

Built-in dimensions H x W x D:
306 x 486 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K



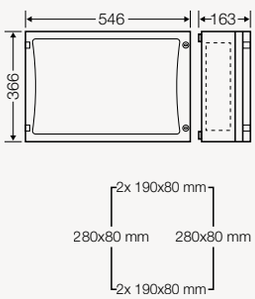


FP 0401

Built-in dimensions H x W x D:
306 x 486 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

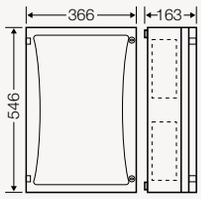
Power dissipation capability	P_{de} = 1.2 W, 1 K

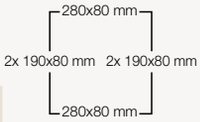




FP 0411

Built-in dimensions H x W x D:
486 x 306 x 140 mm
With closing plates for all box walls





+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K

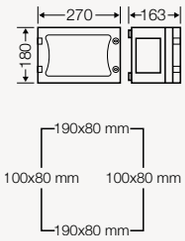


MORE INFORMATION ON HENSEL-ELECTRIC.DE



FP 0120

Built-in dimensions H x W x D:
126 x 216 x 140 mm



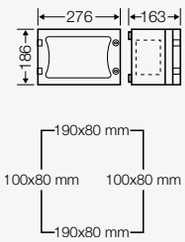
+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



FP 0121

Built-in dimensions H x W x D:
126 x 216 x 140 mm
With closing plates for all box walls



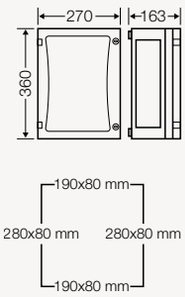
+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 1
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.3 W, 1 K



FP 0230

Built-in dimensions H x W x D:
306 x 216 x 140 mm



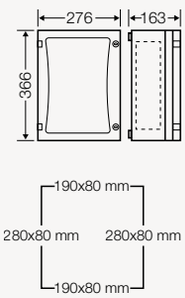
+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K



FP 0231

Built-in dimensions H x W x D:
306 x 216 x 140 mm
With closing plates for all box walls



+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 2
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.6 W, 1 K

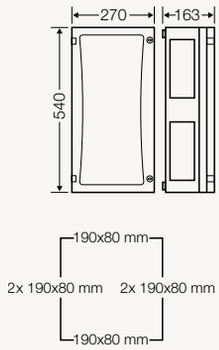


FP 0330

Built-in dimensions H x W x D:
486 x 216 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



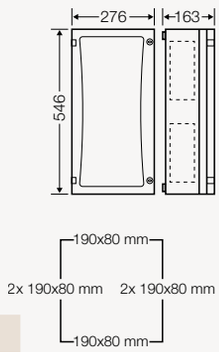


FP 0331

Built-in dimensions H x W x D:
486 x 216 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 3
+ Included accessories: connectors

Power dissipation capability	P_{de} = 0.8 W, 1 K



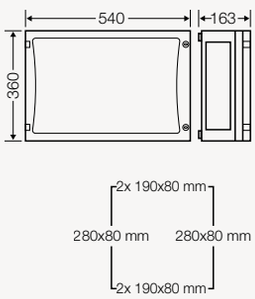


FP 0420

Built-in dimensions H x W x D:
306 x 486 x 140 mm

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K



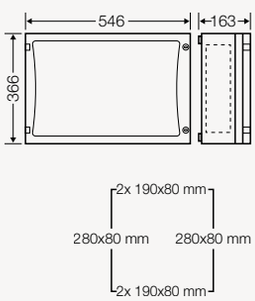


FP 0421

Built-in dimensions H x W x D:
306 x 486 x 140 mm
With closing plates for all box walls

+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

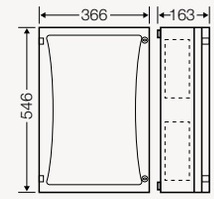
Power dissipation capability	P_{de} = 1.2 W, 1 K

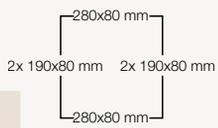




FP 0431

Built-in dimensions H x W x D:
486 x 306 x 140 mm
With closing plates for all box walls





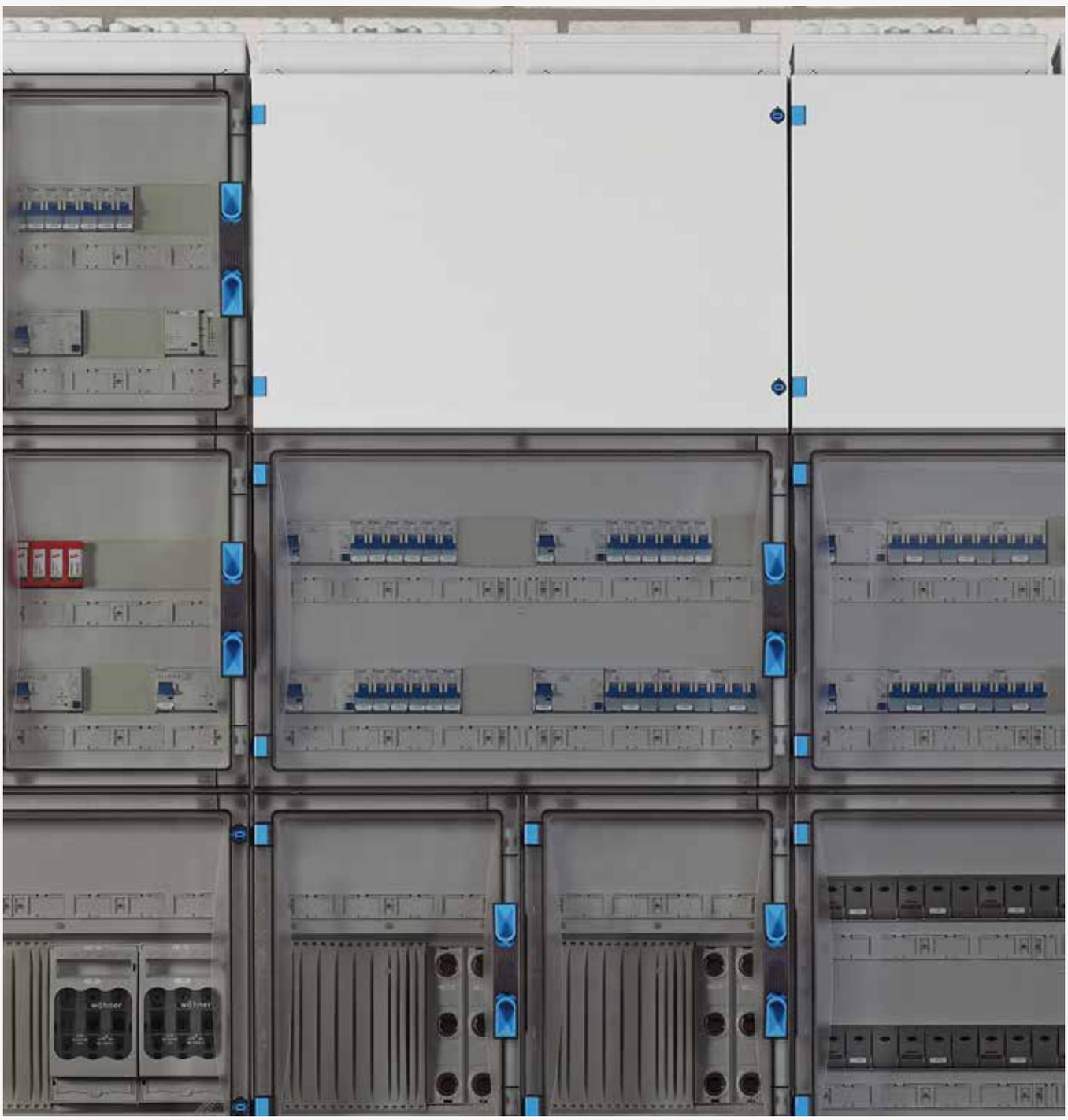
+ Max. installation depth with built-in mounting plate 136 mm, with built-in DIN rail 125 mm
+ Box size: 4
+ Included accessories: connectors

Power dissipation capability	P_{de} = 1.2 W, 1 K



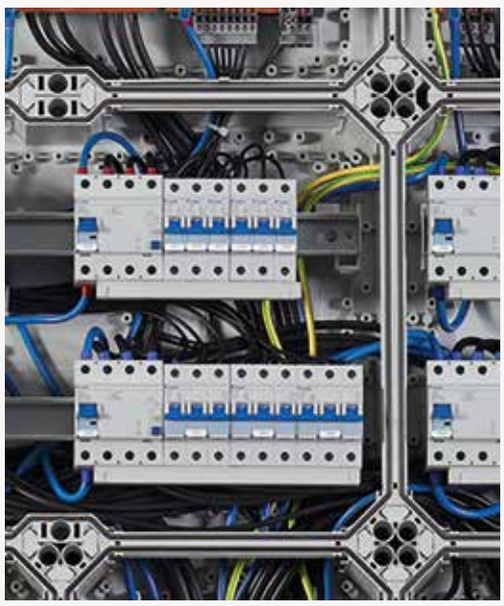
CIRCUIT BREAKER BOXES
WITH OR WITHOUT PE AND N TERMINALS

for the assembly of distribution boards up to 250 A intended to be operated by unskilled persons in accordance with IEC 61439-3









Product benefits

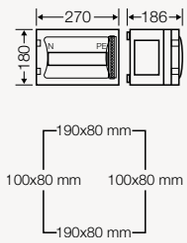
+ Transparent doors
+ Door lock with manual operation, can be locked with key
+ Protection against direct contact with hazardous live parts for operable installation devices
+ Blanking strips for unused DIN rail openings
+ Attached labelling strips for circuit identification
+ Enclosures can also be used as single boxes when enclosure walls are covered with closing plates
+ Protection class II, ⧈
+ Degree of protection: IP 65
+ Material: PC (polycarbonate)
+ Colour: grey, RAL 7035

More information on these products: hensel-electric.de

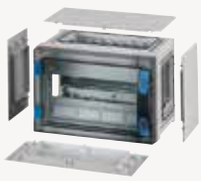


FP 1109

With 1x 9 modules (18 mm)

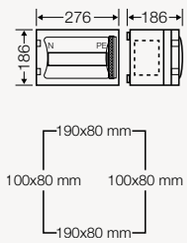


+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 8,
  plug-in terminals
  Number of clamping units per pole: 2, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 1
+ In order to achieve protection class II and
  protection class IP 65: please order closing plate set,
  single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips



FP 1108

With 1x 9 modules (18 mm)
With closing plates for all box walls



+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 8,
  plug-in terminals
  Number of clamping units per pole: 2, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 1
+ With cover
+ Included accessories: blanking strips, labelling strips

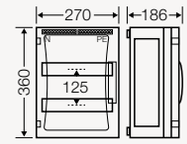


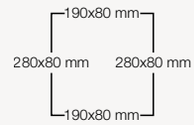
MORE INFORMATION ON HENSEL-ELECTRIC.DE



FP 1219

With 2x 12 modules (18 mm)



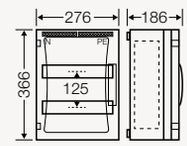


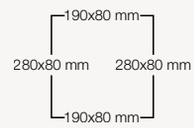
+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 12,
  plug-in terminals
  Number of clamping units per pole: 3, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 2
+ In order to achieve protection class II and
  protection class IP 65: please order closing plate set,
  single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips



FP 1218

With 2x 12 modules (18 mm)
With closing plates for all box walls





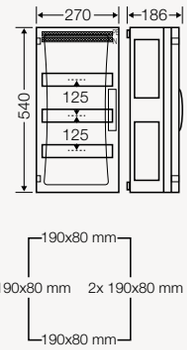
+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 12,
  plug-in terminals
  Number of clamping units per pole: 3, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 2
+ With cover
+ Included accessories: blanking strips, labelling strips





FP 1319

With 3x 12 modules (18 mm)

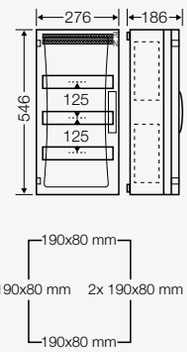


+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 24,
  plug-in terminals
  Number of clamping units per pole: 6, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 3
+ In order to achieve protection class II and
  protection class IP 65: please order closing plate set,
  single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips



FP 1318

With 3x 12 modules (18 mm)
With closing plates for all box walls



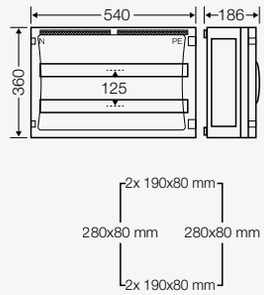
+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 24,
  plug-in terminals
  Number of clamping units per pole: 6, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 3
+ With cover
+ Included accessories: blanking strips, labelling strips

MORE INFORMATION ON HENSEL-ELECTRIC.DE



FP 1409

With 2x 27 modules (18 mm)

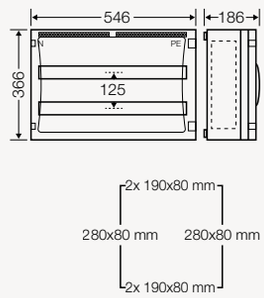


+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 24,
  plug-in terminals
  Number of clamping units per pole: 6, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 4
+ In order to achieve protection class II and
  protection class IP 65: please order closing plate set,
  single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips



FP 1408

With 2x 27 modules (18 mm)
With closing plates for all box walls

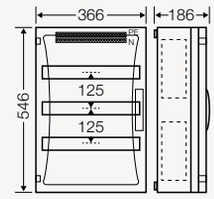


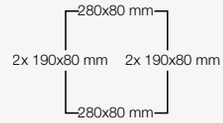
+ With FIXCONNECT® N- and PE terminal
+ Number of clamping units per pole: 24,
  plug-in terminals
  Number of clamping units per pole: 6, screw terminals
+ Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Box size: 4
+ With cover
+ Included accessories: blanking strips, labelling strips



FP 1418

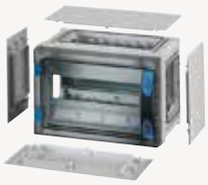
With 3x 17 modules (18 mm)





- With FIXCONNECT® N- and PE terminal
- Number of clamping units per pole: 32,
  plug-in terminals
  Number of clamping units per pole: 8, screw terminals
- Terminal cross-section incoming per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
- Terminal cross-section (outgoing cable) per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
- Box size: 4
- With cover
- Included accessories: blanking strips, labelling strips

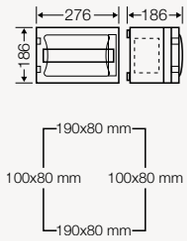




FP 1105

With 1x 12 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ Box size: 1
+ With cover
+ Included accessories: blanking strips, labelling strips

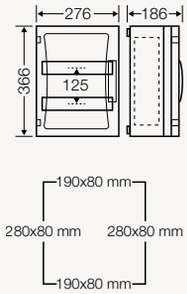




FP 1215

With 2x 12 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ Box size: 2
+ With cover
+ Included accessories: blanking strips, labelling strips

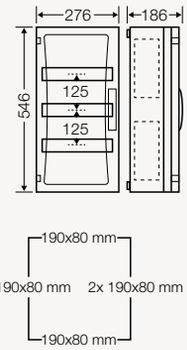




FP 1315

With 3x 12 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ Box size: 3
+ With cover
+ Included accessories: blanking strips, labelling strips

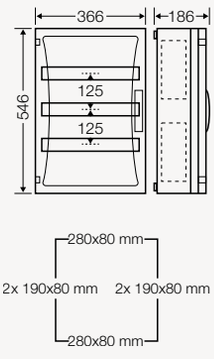




FP 1415

with 3x 17 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ Box size: 4
+ With cover
+ Included accessories: blanking strips, labelling strips

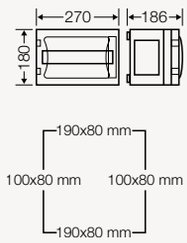


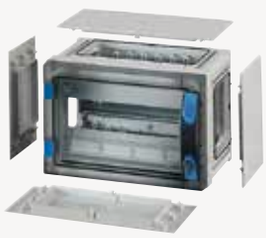


FP 1106

With 1x 12 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 1
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips

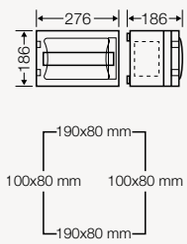




FP 1107

With 1x 12 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ Box size: 1
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips

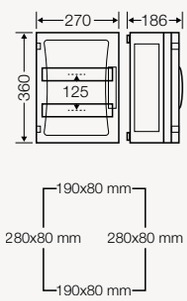




FP 1216

With 2x 12 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 2
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips

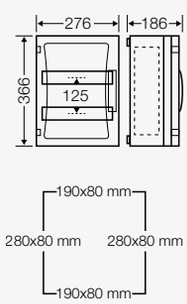




FP 1217

With 2x 12 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ Box size: 2
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips



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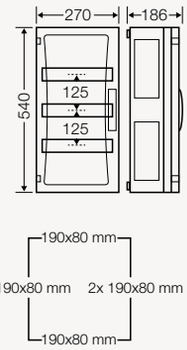
FP 1316

With 3x 12 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 3
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips

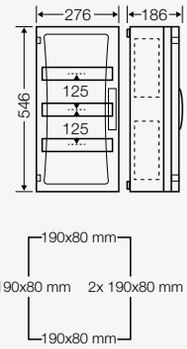




FP 1317

With 3x 12 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ Box size: 3
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips

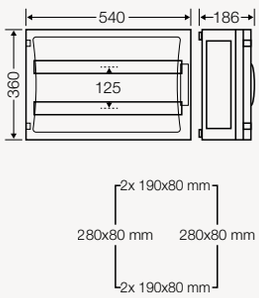




FP 1406

With 2x 27 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 4
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips

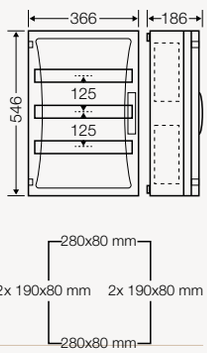




FP 1417

with 3x 17 modules (18 mm)
Without PE and N terminal
With closing plates for all box walls

+ Use box FP 1100 for N/PE terminals
+ With removable DIN rail rack for earth connection
+ With cover
+ Included accessories: blanking strips, labelling strips

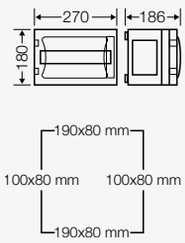




FP 1101

With 1x 12 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 1
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips

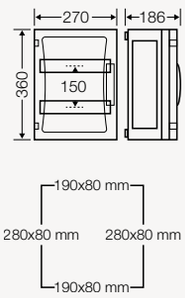




FP 1249

With 2x 12 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 2
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips

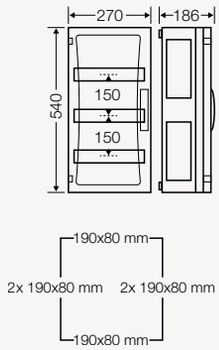




FP 1349

With 3x 12 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 3
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips

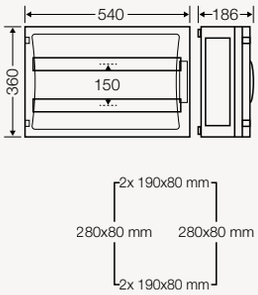




FP 1439

With 2x 27 modules (18 mm)
Without PE and N terminal

+ Use box FP 1100 for N/PE terminals
+ Box size: 4
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ With cover
+ Included accessories: blanking strips, labelling strips



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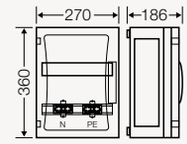
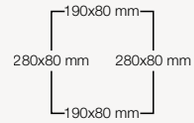
FP 1211

With 1x 12 modules (18 mm) for miniature circuit breakers (MCB)





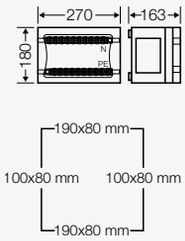
- For installation of DIN rail equipment up to 100 A in accordance with DIN 43 880
- With 1 DIN rail 216 mm wide (for installation depth of 72 mm)
- Terminal cross-section incoming per clamping units:
  1 x 10 mm² - 25 mm², solid, stranded, roand, Cu
  1 x 6 mm² - 16 mm², flexible, roand, Cu
- Terminal cross-section (outgoing cable) per clamping units:
  1 x 6 mm² - 16 mm², solid, stranded, roand, Cu
  1 x 4 mm² - 10 mm², flexible, roand, Cu
- Cover can be sealed
- With lockable blanking strips
- Box size: 2
- In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
- With cover
- Included accessories: blanking strips, labelling strips





FP 1100

Terminal box



+ Number of clamping units per pole (N, PE): 11
  Number of clamping units per pole (N, PE): 10
+ Terminal cross-section per clamping units:
  1 x 2.5 mm² - 16 mm², solid, flexible
  1 x 16 mm² - 25 mm², stranded
  1 x 16 mm², solid
  1 x 16 mm² - 35 mm², flexible
  1 x 1.5 mm² - 10 mm², solid, flexible
+ Box size: 1
+ In order to achieve protection class II and protection class IP 65: please order closing plate set, single closing plate sets and flanges separately.
+ Included accessories: blanking strips, labelling strips

Rated current	I_n = 100 A

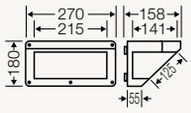
ACCESSORIES





FP CB 210

Connection Box



- Suitable for box wall: 270 mm
- Hinged mounting area
- For the installation of devices that must be operated externally, such as plug devices, push buttons and switches
- Position of the attachment: bottom, lateral
- Included accessories: fastening material

IP 65

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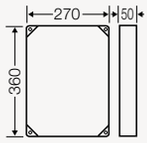
FP ZR 20

Extension frame

+ Suitable for box sizes: 2
+ Suitable for the installation of covers in different installation depths
+ To increase the mounting depths by 50 mm
+ Included accessories: fastening material

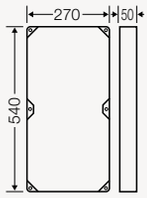


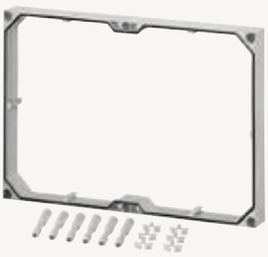


FP ZR 30

Extension frame

+ Suitable for box sizes: 3
+ Suitable for the installation of covers in different installation depths
+ To increase the mounting depths by 50 mm
+ Included accessories: fastening material

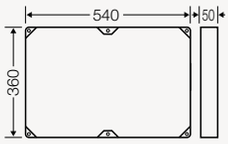




FP ZR 40

Extension frame

+ Suitable for box sizes: 4
+ Suitable for the installation of covers in different installation depths
+ To increase the mounting depths by 50 mm
+ Included accessories: fastening material

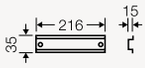




FP TS 27

DIN rail

Length: 216 mm



+ In accordance with DIN EN 60715
+ Suitable for empty boxes size: 1, 2, 3
+ For equipment or terminals with clip-on mounting
+ Included accessories: fastening material

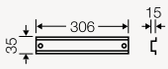
Material	steal, sendzimir galvanised



FP TS 36

DIN rail

Length: 306 mm



+ In accordance with DIN EN 60715
+ Suitable for empty boxes size: 2, 4
+ For equipment or terminals with clip-on mounting
+ Included accessories: fastening material

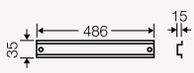
Material	steal, sendzimir galvanised



FP TS 54

DIN rail

Length: 486 mm



+ In accordance with DIN EN 60715
+ Suitable for empty boxes size: 3, 4
+ For equipment or terminals with clip-on mounting
+ Included accessories: fastening material

Material	steal, sendzimir galvanised



FP DS 02

Spacer

+ Suitable for: Empty boxes
+ Set with 2 pieces
+ For installation on DIN rails
+ Height: 29.5 mm or 53.3 mm
+ To change height turn spacer by 90°.
+ Included accessories: fastening material

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FP MP 10

Mounting plate



+ Suitable for box sizes: 1, 2, 3
+ Included accessories: fastening material

Material	laminated paper, coated
Material thickness	4 mm



FP MP 20

Mounting plate



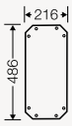
+ Suitable for box sizes: 2, 3, 4
+ Included accessories: fastening material

Material	laminated paper, coated
Material thickness	4 mm



FP MP 30

Mounting plate



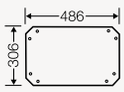
+ Suitable for box sizes: 3, 4
+ Included accessories: fastening material

Material	laminated paper, coated
Material thickness	4 mm



FP MP 40

Mounting plate



+ Suitable for box sizes: 4
+ Included accessories: fastening material

Material	laminated paper, coated
Material thickness	4 mm



FP BZ 13

Fixing screw

+ Length: 13 mm
+ For assembling DIN rails or mounting plates at the base of the box
+ Suitable for material thickness: 2.5 mm - 4 mm
+ Self-tapping



FP AP 10

Cover without cut-outs



+ Suitable for empty boxes size: 1
+ Dimensions H x W: 130 x 220 mm
+ For retrofitting
+ As protection cover or for installation of equipment



FP AP 20

Cover without cut-outs

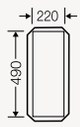


+ Suitable for empty boxes size: 2
+ Dimensions H x W: 310 x 220 mm
+ For retrofitting
+ As protection cover or for installation of equipment



FP AP 30

Cover without cut-outs

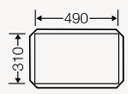


+ Suitable for empty boxes size: 3
+ Dimensions H x W: 490 x 220 mm
+ For retrofitting
+ As protection cover or for installation of equipment



FP AP 40

Cover without cut-outs



+ Suitable for empty boxes size: 4
+ Dimensions H x W: 310 x 490 mm
+ For retrofitting
+ As protection cover or for installation of equipment



AS 12

Blanking strip

+ 12 modules x 18 mm, divisible every 9 mm
+ For the covering of spare equipment openings, for material thickness up to 3 mm
+ Suitable for 12 Modules



AS 18

Blanking strip

+ 18 modules x 18 mm, divisible every 9 mm
+ For the covering of spare equipment openings, for material thickness up to 3 mm
+ Suitable for 18 Modules

MORE INFORMATION ON HENSEL-ELECTRIC.DE



FP TW 18

Partition

+ Suitable for box wall: 180 mm
+ For insertion between boxes



FP TW 27

Partition

+ Suitable for box wall: 270 mm
+ For insertion between boxes



FP TW 36

Partition

+ Suitable for box wall: 360 mm
+ Cannot be used betwenn two busbar boxes
+ For insertion between boxes



FP PL 2

Sealing device

+ For retrofitting, without sealing wire and without seal
+ Set with 2 pieces
+ Suitable for Sealing of the cover
  (not for circuit breaker box)
+ Included accessories: fastening material



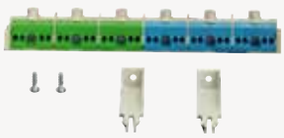
FC PN 20

PE terminal, N terminal

+ FIXCONNECT® terminal
+ For boxes with 1 x 12 modules (through terminal reduction to 9 modules)
+ 8 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Included accessories: fastening material

Rated current	I_n = 75 A

MORE INFORMATION ON HENSEL-ELECTRIC.DE

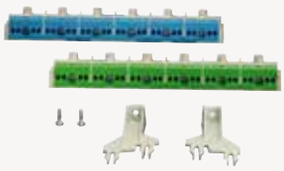


FP FC 24

PE terminal, N terminal

+ FIXCONNECT® terminal
+ For enclosure with 2 x 12 modules,
+ 12 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ N separable, for up to 2 different N circuits
+ Included accessories: fastening material

Rated current	I_n = 75 A

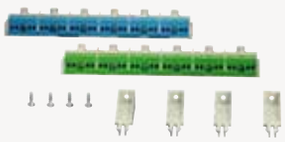


FP FC 36

PE terminal, N terminal

+ FIXCONNECT® terminal
+ For enclosure with 3 x 12 modules,
+ 24 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ N separable, for up to 4 different N circuits
+ Included accessories: fastening material

Rated current	I_n = 75 A

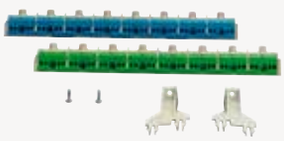


FP FC 54

PE terminal, N terminal

+ FIXCONNECT® terminal
+ For enclosure with 2 x 27 modules,
+ 24 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ N separable, for up to 4 different N circuits
+ Included accessories: fastening material

Rated current	I_n = 75 A



FP FC 51

PE terminal, N terminal

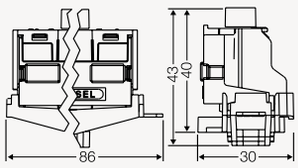
+ FIXCONNECT® terminal
+ For enclosure with 3 x 17 modules,
+ 32 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ N separable, for up to 4 different N circuits
+ Included accessories: fastening material

Rated current	I_n = 75 A



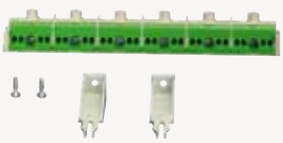
FC PE 10

PE terminal



+ FIXCONNECT® terminal
+ For boxes with 1 x 12 modules (through terminal reduction to 9 modules)
+ 8 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ For installation on DIN rails in accordance with IEC 60715, top hat
+ profile 35 mm

Rated current	I_n = 101 A

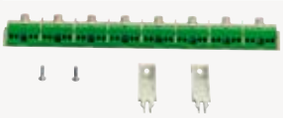


FP FC 054

PE terminal

+ FIXCONNECT® terminal
+ For enclosure with 2 x 12 modules, 3 x 12 modules, 2 x 27 modules,
+ 24 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Included accessories: fastening material

Rated current	I_n = 101 A



FP FC 051

PE terminal

+ FIXCONNECT® terminal
+ For enclosure with 3 x 17 modules,
+ 32 clamping units per pole, (plug-in terminal connection)
  2 clamping units per pole, (Screw connection)
+ Connection cross-section plug-in terminals per clamping units:
  1 x 1.5 mm² - 4 mm², solid, flexible, roand, Cu
+ Connection cross-section screw terminals per clamping units:
  4 x 1.5 mm² - 2.5 mm², solid, roand, Cu
  1 x 1.5 mm² - 25 mm², flexible, roand, Cu
  3 x 4 mm² - 6 mm², solid, roand, Cu
  1 x 10 mm², solid, roand, Cu
  1 x 16 mm² - 25 mm², stranded, roand, Cu
+ Included accessories: fastening material

Rated current	I_n = 101 A



FC BS 5

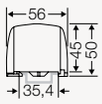
FIXCONNECT®-Labelling system for circuit description

+ For attaching of labelling strips or marking with felt tip pen
+ Set with 5 pieces
+ Not for terminals 2x25 / 4x4 mm²



KKL 34

Main line branch terminal



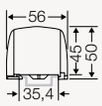
+ Number of clamping units per pole (L1-L3): 4, screw terminals
+ Terminal cross-section per clamping units:
  1 x 1.5 mm² - 16 mm², flexible with end ferrule, roand, Cu
  1 x 2.5 mm² - 25 mm², solid, stranded, roand, Cu
+ As a connecting terminal
+ For installation on DIN rails in accordance with IEC 60715, top hat
+ profile 35 mm
+ Width: 63 mm

Rated insulation voltage	U_i = 690 V
Rated current	I_n = 80 A



KKL 48

Main line branch terminal



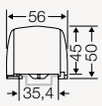
+ Number of clamping units per pole (L1-L3): 4, screw terminals
  Number of clamping units per pole (N): 8, screw terminals
+ Terminal cross-section per clamping units:
  1 x 1.5 mm² - 16 mm², flexible with end ferrule, roand, Cu
  1 x 2.5 mm² - 25 mm², solid, stranded, roand, Cu
+ As a connecting terminal
+ For installation on DIN rails in accordance with IEC 60715, top hat
+ profile 35 mm
+ Width: 89 mm

Rated insulation voltage	U_i = 690 V
Rated current	I_n = 80 A



KKL 54

Main line branch terminal



+ Number of clamping units per pole (L1-L3, N, PE): 4, screw terminals
+ Terminal cross-section per clamping units:
  1 x 1.5 mm² - 16 mm², flexible with end ferrule, roand, Cu
  1 x 2.5 mm² - 25 mm², solid, stranded, roand, Cu
+ As a connecting terminal
+ For installation on DIN rails in accordance with IEC 60715, top hat
+ profile 35 mm
+ Width: 89 mm

Rated insulation voltage	U_i = 690 V
Rated current	I_n = 80 A

MORE INFORMATION ON HENSEL-ELECTRIC.DE



FP VP 18

Closing plate



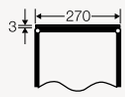
+ Suitable for box wall: 180 mm
+ Without knockouts
+ Included accessories: fastening material

IP 65



FP VP 27

Closing plate



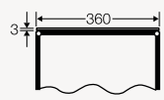
+ Suitable for box wall: 270 mm
+ Without knockouts
+ Included accessories: fastening material

IP 65



FP VP 36

Closing plate



+ Suitable for box wall: 360 mm
+ Without knockouts
+ Included accessories: fastening material

IP 65



FP VS 10

Closing plates

+ Suitable for box sizes: 1
+ Set with 4 pieces
+ Without knockouts
+ Included accessories: fastening material

IP 65

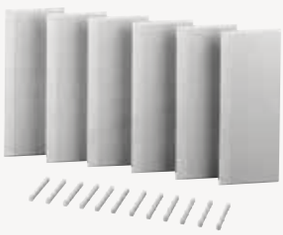


FP VS 20

Closing plates

+ Suitable for box sizes: 2
+ Set with 4 pieces
+ Without knockouts
+ Included accessories: fastening material

IP 65



FP VS 30

Closing plates

+ Suitable for box sizes: 3
+ Set with 6 pieces
+ Without knockouts
+ Included accessories: fastening material

IP 65



FP VS 40

Closing plates

+ Suitable for box sizes: 4
+ Set with 6 pieces
+ Without knockouts
+ Included accessories: fastening material

IP 65

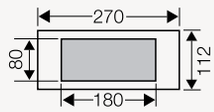
MORE INFORMATION ON HENSEL-ELECTRIC.DE

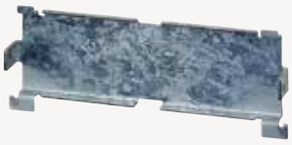


FP VM 27

Metal insert

+ Suitable for box wall: 270 mm
+ Suitable for Closing plate
+ For earthing of metal armoured cables
+ Without knockouts

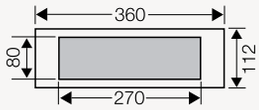




FP VM 36

Metal insert

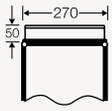
+ Suitable for box wall: 360 mm
+ Suitable for Closing plate
+ For earthing of metal armoured cables
+ Without knockouts





FP FG 200

Flange
Without knockouts



+ Suitable for box wall: 270 mm
+ Included accessories: fastening material

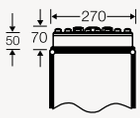
Mounting width	240 mm
Mounting height	92 mm
Maximum wall thickness	3 mm

IP 65



FP FG 222

Flange
Sealing range:
17 x 6 mm - 13 mm
1 x 11 mm - 30 mm
2 x 9 mm - 17 mm
2 x 8 mm - 23 mm



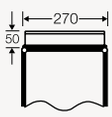
+ With integrated grommets (for cable entry)
+ Suitable for box wall: 270 mm
+ Included accessories: fastening material

IP 65



FP FM 225

Flange
Knockouts: 13 x M20, M25
7 x M16, M25



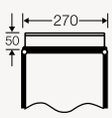
+ Suitable for box wall: 270 mm
+ Included accessories: fastening material

IP 65



FP FM 232

Flange
Knockouts: 2 x M25, M32, M40
8 x M25, M32



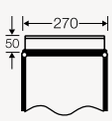
+ Suitable for box wall: 270 mm
+ Included accessories: fastening material

IP 65



FP FM 240

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



+ Suitable for box wall: 270 mm
+ Included accessories: fastening material

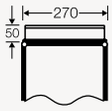
IP 65

MORE INFORMATION ON HENSEL-ELECTRIC.DE



FP FM 263

Flange
Knockouts: 2 x M20
2 x M25, M32
2 x M32, M40, M50
1 x M40, M50, M63



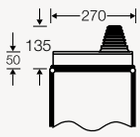
IP 65

+ Suitable for box wall: 270 mm
+ Included accessories: fastening material



FP FG 272

Flange
Sealing range:
1 x 30 mm - 72 mm



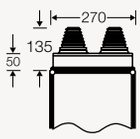
IP 65

+ with integrated grommets (for cable entry)
+ Suitable for box wall: 270 mm
+ Included accessories: fastening material



FP FG 273

Flange
Sealing range:
2 x 30 mm - 72 mm



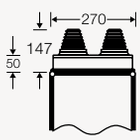
IP 65

+ with integrated grommets (for cable entry)
+ Suitable for box wall: 270 mm
+ Included accessories: fastening material



FP FG 282

Flange
Sealing range:
2 x 30 mm - 72 mm



IP 65

+ Suitable for box wall: 270 mm
+ Degree of protection IP 65 only with additional strain and pressure prelief (e.g. FP ZE 272)
+ Included accessories: fastening material



FP ZE 272

Strain relief

+ Suitable for box wall: 270 mm
+ For 2 cables with max. 60 mm external diameter
+ Included accessories: fastening material



FP GS 27

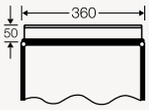
Box fin

+ Suitable for box wall: 270 mm
+ For inserting cables across 2 boxes
+ Can be retrofitted



FP FG 300

Flange
Without knockouts



+ Suitable for box wall: 360 mm
+ Included accessories: fastening material

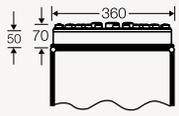
Mounting width	330 mm
Mounting height	92 mm
Maximum wall thickness	3 mm

IP 65



FP FG 331

Flange
Sealing range:
22 x 6 mm - 13 mm,
6 x 9 mm - 17 mm,
2 x 8 mm - 23 mm,
1 x 11 mm - 30 mm



+ with integrated grommets (for cable entry)
+ Suitable for box wall: 360 mm
+ Included accessories: fastening material

IP 65



FP BF 18

Ventilation flange



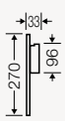
+ Suitable for box wall: 180 mm
+ For ventilation of ENYSTAR Distribution boards in the event of extremely high internal temperatures or a risk of water condensation
+ For vertical installation on box walls
+ Included accessories: fastening material

IP 44



FP BF 27

Ventilation flange



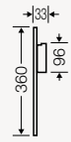
+ Suitable for box wall: 270 mm
+ For ventilation of ENYSTAR Distribution boards in the event of extremely high internal temperatures or a risk of water condensation
+ For vertical installation on box walls
+ Included accessories: fastening material

IP 44



FP BF 36

Ventilation flange



+ Suitable for box wall: 360 mm
+ For ventilation of ENYSTAR Distribution boards in the event of extremely high internal temperatures or a risk of water condensation
+ For vertical installation on box walls
+ Included accessories: fastening material

IP 44



BE 44

Ventilation insert

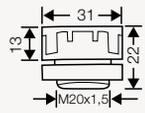


IP 44



BM 20G

Pressure compensation element for knockouts M20



+ Diameter: Ø 20.3 mm
+ For the reduction of condensation by pressure compensation in power distribution systems
+ Maximum enclosure volume per pressure compensation element: 28 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
+ Suitable for wall thickness: up to 8 mm
+ Ambient temperature: - 40 °C up to + 100 °C
+ Maximum ambient temperature 24 h: 55 °C

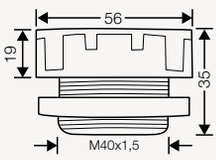
Application area	Outdoor installation

IP 54



BM 40G

Pressure compensation element for knockouts M40



+ Diameter: Ø 40.3 mm
+ For the reduction of condensation by pressure compensation in power distribution systems
+ Maximum enclosure volume per pressure compensation element: 122 l, In order not to exceed leakage limit of 0.07 bar with pressure compensation
+ Suitable for wall thickness: up to 8 mm
+ Ambient temperature: - 40 °C up to + 100 °C
+ Maximum ambient temperature 24 h: 55 °C

Application area	Outdoor installation

IP 54

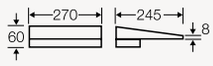


IP 65

FP DB 27

Canopy

Suitable for box wall: 270 mm



+ Included accessories: fastening material

Surface treatment	powder-coated

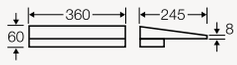


IP 65

FP DB 36

Canopy

Suitable for box wall: 360 mm



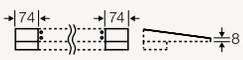
+ Included accessories: fastening material

Surface treatment	powder-coated



Mi DB 01

Canopy end plate



+ Set with 2 pieces
+ Für Canopy FP DB xx and Mi DB xx
+ Included accessories: fastening material

Surface treatment	powder-coated



FP BZ 13

Fixing screw

+ Length: 13 mm
+ For assembling DIN rails or mounting plates at the base of the box
+ Suitable for material thickness: 2.5 mm - 4 mm
+ Self-tapping



FP WT 1

Wall separator

+ For connecting different box walls
+ For insertion in bases of enclosures
+ Included accessories: fastening material



FP GV 10

Connector

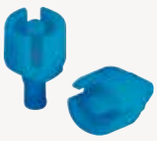
+ Set with 10 pieces
+ Can be used for conversion of existing installations
+ For connection of enclosures or fixation of flanges



FP TW 1

Tool operation
conversion kit from hand to tool operation

+ Can be retrofitted



FP TW 2

Tool key for double-bit
conversion kit to tool operation

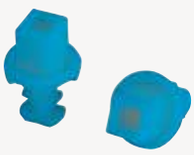
+ Set with 2 pieces
+ Can be retrofitted



FP TW 3

Tool key for triangular lock, 8 mm
conversion kit to tool operation

+ Set with 2 pieces
+ Can be retrofitted



FP TW 4

Tool key for sqare lock, 8 mm
conversion kit to tool operation

+ Set with 2 pieces
+ Can be retrofitted



FP TS 1

Door lock
conversion kit to key operation

+ For retrofitting bei Türverschluss mit Handbetätigung



FP TS 2

Spare key

+ Set with 2 pieces
+ For door lock FP TS 1



FP TA 1

Dust protection cover

+ Set with 10 pieces

MORE INFORMATION ON HENSEL-ELECTRIC.DE



FP PL 3

Sealing device

+ For retrofitting, without sealing wire and without seal
+ Set with 2 pieces
+ Suitable for Door sealing
+ Included accessories: fastening material



US 1

Spare key

+ Triangular 8 mm, square 8 mm, double-bit and slot

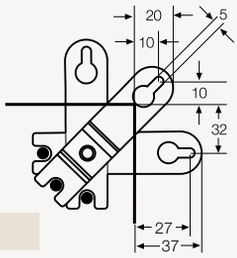


FP AL 40

External brackets

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

Material	Stainless steel V2A



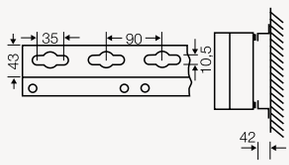


FP MS 1

Profile for wall mounting

+ For ENYSTAR distribution board assemblies up to 810 x 1260 mm
+ Included accessories: fastening material

Height	1980 mm
Surface treatment	powder-coated, sendzimir galvanised





Lackstift RAL 7016

12 ml

MORE INFORMATION ON HENSEL-ELECTRIC.DE

NOTES

ENYSTAR
TECHNICAL DETAILS



	Boxes with door and closing plates Empty boxes FP 0...	Circuit breaker boxes FP 1...
Application area	**Suitable for indoor installation and outdoor installation, protected against weather infl uences** However, pay attention to the climatic effects on the installed equipment, for example, high or low ambient temperatures or formation of condensed water see technical information	
Ambient temperature + Average value over 24 hours + Maximum value + Minimum value	 – + 70 °C – 25 °C	 + 35 °C + 40 °C – 5 °C The ambient temperature for Boxes with electrcal funtions (distribution boards) is reduced by the installed equipment technology!
Relative humidity + short-time	Adhere to the assembly instructions issued by the manufacturer.	50% at 40 °C 100% at 25 °C
Fire protection in the event of internal faults	Demands placed on electrical devices from standards and laws: Minimum requirements - Glow wire test in accordance with IEC 60695-2-11: - 650 °C for boxes and cable glands - 850 °C for conducting components	
Burning behaviour + Glow wire test IEC 60695-2-11 + UL Subject 94	 960 °C V-2 flame-retardant self-extinguishing	 960 °C V-2 flame-retardant self-extinguishing
Degree of protection against mechanical load	IK 08 (5 Joule)	IK 08 (5 Joule)
Toxic behaviour	halogen-free [1)] silicone-free	halogen-free [1)] silicone-free
	[1)] “Halogen-free” in accordance with IEC 60754-2 “Common test methods for cables - Determination of the amount of halogen acid gas”. For material properties see technical data.	

ENYSTAR distribution boards comply with the requirements of the IEC 61439-3

Distribution boards assembled and wired according to manufacturer data without essential deviations from the original type or system.
To meet these requirements for Hensel ENYSTAR Distribution boards, the following must be noted:

1. The distribution boards must consist of the verifi ed Boxes documented in this list.
2. The wiring of the equipment must be carried out with the cross-sections and conductor types indicated in Table “Rating of insulated conductors in switchgear assemblies”, Index Technics.
3. Once the distribution board is completed, a routine test must be carried out in accordance with this standard.
4. The test must be certifi ed with a test report.
5. The assembly must be provided with a manufacturer’s identifi cation mark.
   Compliance with important data such as
   + limit of temperature rise
   + insulation resistance
   + rated short-time withstand current
   + rated short-time withstand current of the protective earth conductor
   + IP degrees of protection
   + creepage distances and clearances etc.

is verified for this system.

Standards and regulations

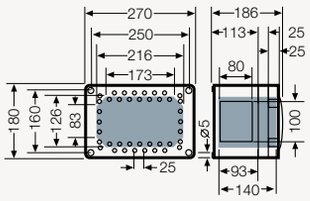
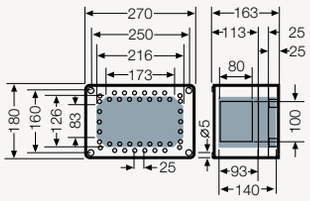
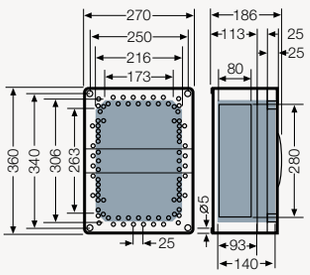
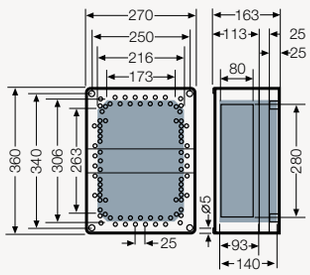
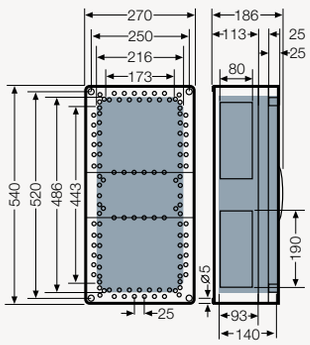
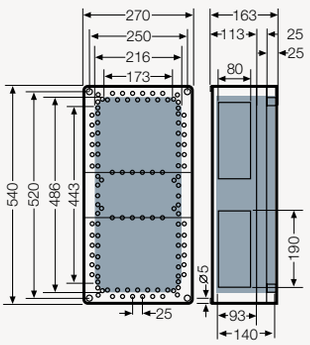
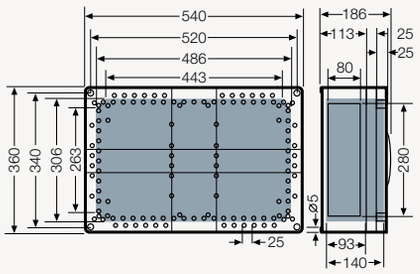
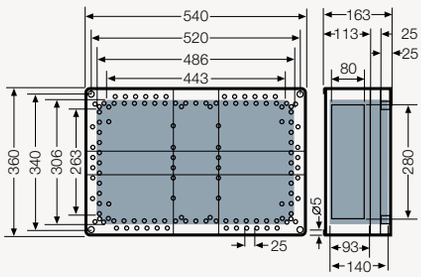
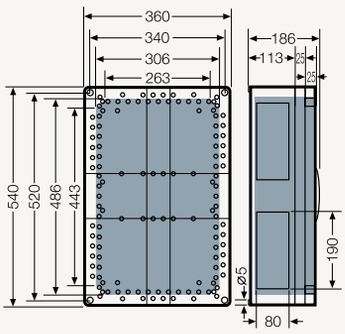
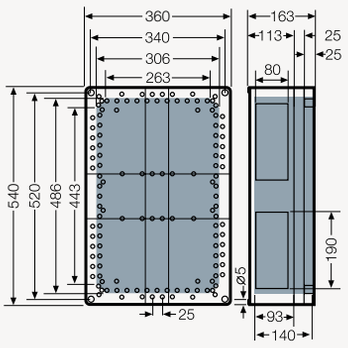
+ IEC 61439-3
  Low-voltage switchgear and controlgear assemblies intended to be in places where unskilled persons have access to their use - distribution boards
+ IEC 60999
  Safety requirements for screw-type and screwless-type clamping units for electrical copper conductors
+ DIN EN 62444
  Cable glands for electrical installations
+ DIN 43880
  Built-in equipment for electrical installations; overall dimensions and related mounting dimensions
+ IEC 60529
  Degrees of protection provided by Boxes (IP-Code)

HENSEL

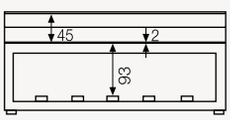
ENYSTAR distribution boards with door lockings

The box width and height of the ENYSTAR distribution boards with cover plates increases by 6 mm for the cover plates supplied, see also product pages.

= usable installation space with mounted cable glands

for hand operation		for tool operation	
	with closing plates FP 0141 FP 0151 without closing plates FP 0140 FP 0150		with closing plates FP 0101 FP 0121 without closing plates FP 0100 FP 0120
	with closing plates FP 0241 FP 0251 without closing plates FP 0240 FP 0250		with closing plates FP 0211 FP 0231 without closing plates FP 0210 FP 0230
	with closing plates FP 0341 FP 0351 without closing plates FP 0340 FP 0350		with closing plates FP 0311 FP 0331 without closing plates FP 0310 FP 0330
	mit closing plates FP 0441 FP 0451 without closing plates FP 0440 FP 0450		mit closing plates FP 0401 FP 0421 without closing plates FP 0400 FP 0420
	with closing plates FP 0461 FP 0471		with closing plates FP 0411 FP 0431

Mounting depth for device installation in covers



FIXCONNECT®-plug-in terminal

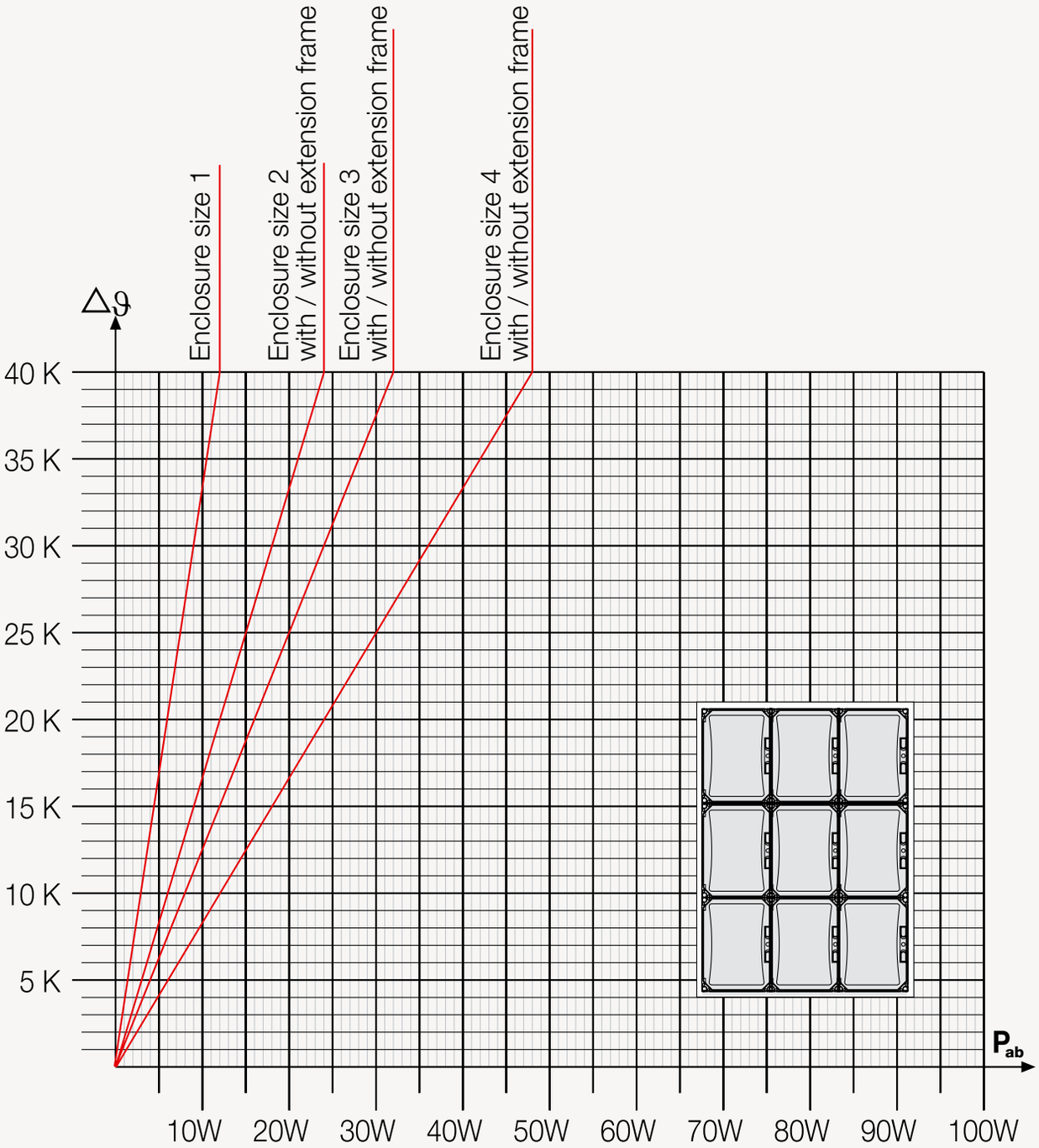
Rated connecting capacity of PE and N terminals for copper conductors

Current carrying capacity of the N rail: 75 A



Clamping unit	Corresponding cross-sections / copper			
	max. number	number from - to max.	max. number	number from - to max.
Screw-type terminal 25 mm² Tightening torque 2 Nm 	1 1 1 3 3 4 4	25 mm², s 16 mm², s 10 mm², sol 6 mm², sol 4 mm², sol 2.5 mm², sol 1.5 mm², sol Tested as connecting terminal for several conductors of the same cross-sections for using in **one circuit**	1 1 1 1 1 1 1	25 mm², f 16 mm², f 10 mm², f 6 mm², f 4 mm², f 2.5 mm², f 1.5 mm², f
Plug-in terminal 4 mm² 	1	1.5 - 4 mm², sol	1	1.5 - 4 mm², f Without end ferrule; clamping unit has to be opened with a tool when conductor is inserted.

Temperature rise (ΔJ) with ENYSTAR Boxes by power dissipation of electrical devices



ENYSTAR distribution boards Box size	Dimensions (WxHxD) in mm	Rated power dissipation P_v in watts per Kelvin assembled Boxes
Box size 1	270 x 180	0.3
Box size 2 with / without extension frame	270 x 360	0.6
Box size 3 mit / ohne extension frame	270 x 540	0.8
Box size 4 mit / ohne extension frame	540 x 360	1.2

Note!

The maximally permissible operating temperature inside the Boxes (ϑ_{imax}) is determined by:

1. Maximally permissible ambient temperature of the installed electrical devices (please consider data of the equipment manufacturers)
2. Category temperature of the internal wiring and the inserted cables
3. Temperature resistance of the box materials and the cable entries etc.

Example: calculation of the maximum rated power dissipation (P_v)	
Maximally permissible operating temperature inside the box(es) (ϑ_{imax}):	e.g. 55° C
Ambient temperature of the box(es):	25° C
Maximally permissible heating up inside the box:	$\Delta\vartheta = \vartheta_{imax} - \vartheta_U$ = 55° C - 25° C = 30 K
Maximum permissible power dissipation of the installed equipment inclusive wiring in accordance with diagram:	Box size 3 (540 x 270 x 163 mm): P_v = 24 W

Example: calculation of the operating temperature inside the box (ϑ_i)	
Ambient temperature of the box(es):	25° C
Rated power dissipation of the installed electrical equipment (P_V):	24 W
Heating up inside the Boxes in accordance with diagram over:	$\Delta\vartheta$
Box size 3 (540 x 270 x 163 mm):	$\Delta\vartheta$ = 30 K; $\vartheta_i = \vartheta_U + \Delta\vartheta$ = 25° C + 30 K = 55° C

NOTES