

Flexibility and efficiency – your advantage



Your wish is our command

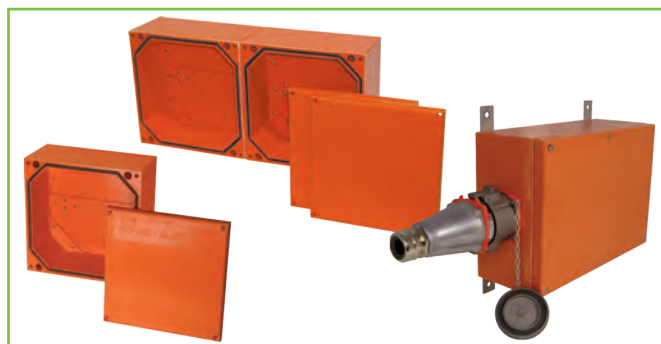
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High temperature resistant junction boxes Typ HT 3625

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Junction boxes – Safety has priority

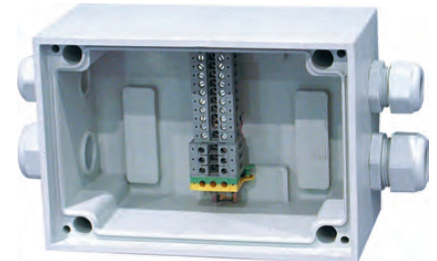
The junction boxes from GIFAS-ELECTRIC open up new options for you for all-round safe and problem-free electrical installations. Whether on uneven ground or where space is tight, whether in industry or in building construction, for interior or exterior applications - our boxes can be used anywhere where power flows. With our boxes your installations are flexible and efficient. As the only provider of junction boxes made from vulcanised butyl rubber, we offer you nothing but advantages with this material. The excellent material properties speak for themselves.

Security

- Safety insulated
- No corrosion
- No condensed water formation – even with significant temperature fluctuations
- Weather, UV and ozone resistant
- Strong seal (IP 65) against dust and spraywater
- Maintenance-free
- Largely resistant to chemicals, therefore also suitable for the chemical industry and sewage plants
- Break-proof and impact-proof
- Maximum safety in the case of fire: self-extinguishing, **halogen-free** (no corrosive gases)

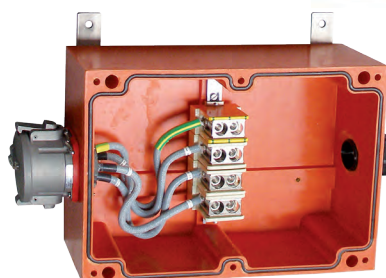
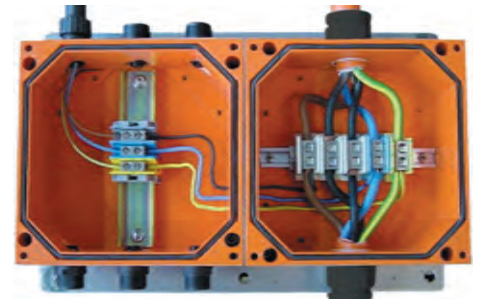
Solid rubber junction boxes

- Assembled according to your technical specifications
- Individual, flexible and fast



Fire-proof junction boxes

- With function maintained E30 conforming to DIN 4102, part 12
- With test certificate
- To protect life and property in the case of fire



Technical notes – perfect, systemised power branching



Casing

The casings have a technically matured design and offer maximum material quality. Ten casings are available in different sizes and shapes, and in the colours electric grey RAL 7035 and black.



Terminals

Only high quality connection and junction terminals are used for the installation.



Screwed cable glands

For installation there is a hand-picked range of equipment available with special material features. A strong impermeability (IP 68) and resistance to chemical influences are key features of these screwed cable glands.

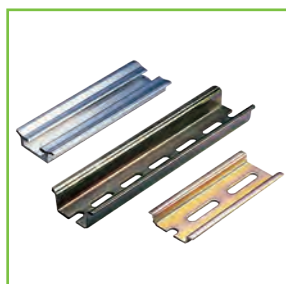


Accessories

The accessories available include mounting plates or brackets made from rust-free metal (V2A/V4A) for uneven bases or where space is at a premium.

Rails

Standardised DIN rails are ideal for the easy and rapid installation of terminals or command and messaging equipment. Retrofitting or add-on installations are possible.



Labelling

An engraved or inscription plate is possible for clear identification of technical operating notes on request.



The notes given on this page relate to the solid rubber junction boxes. This information applies to fire-proof junction boxes (from page 14) in a limited way only.

With our system you can stay flexible



Mounting plate or bracket made from stainless steel
for simple and fast fitting.

V2A/V4A

Sealing groove, sealing part and rubber seal
guarantee a high protection category (IP 65).



Fitting holes outside the terminal area
for complete safety insulation.



Wall thickness from 7 to 15 mm,
also for use in extreme conditions.

T

Casing: Special mixture of butyl rubber,
which makes it self-extinguishing and halogen-free.



Cover: made from polycarbonate,
self-extinguishing and halogen-free.



When using especially aggressive cleaning
and operating materials we recommend using
covers in V2A/V4A versions! (on request)



The notes given on this page relate to the solid rubber junction boxes. This information applies to fire-proof junction boxes (from page 14) in a limited way only.

Hard rubber junction boxes: Practical examples



Sewage plants

Simple – Fast – Durable

Connection of pumps, indicator and monitoring units: With our hard rubber junction boxes you are flexible in any installation! Rust-free, UV-resistant, and resistant to most chemical substances. For use in the toughest conditions !



Industry

Your control and distribution problem – our expertise

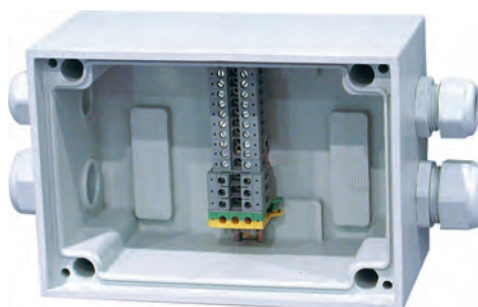
Various casing shapes and sizes give you the options you need. Sensitive controls or terminal strips for combining connection lines can be integrated into our junction boxes in a impact-proof and compact way.



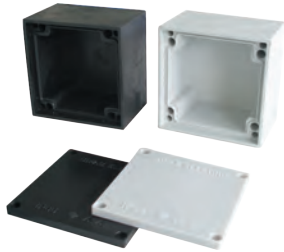
National highways / road maintenance

We'll keep you on the right track!

Connection and junction boxes for steering, control and maintenance. Individual component fitting conforming to the standards of the relevant road traffic office. Resistant to continually changing environmental and weather conditions.

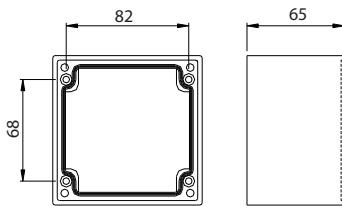


Hard rubber junction boxes: type 1010 / type 1212



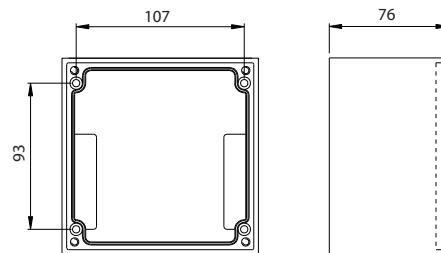
Type 1010

For cable-Ø up to max. 5 x 2,5 mm²
 External dimensions: 100 x 100 x 65 mm
 Internal dimensions: 83 x 83 x 52 mm
 Protection category: IP65



Type 1212

For cable-Ø up to 5 x 6 mm²
 External dimensions: 125 x 125 x 76 mm
 Internal dimensions: 108 x 108 x 64 mm
 Protection category: IP65



Item no	Cable glands		Terminal
	grey	black	
57997	58000	3 x M16x1,5	no
57998	58001	4 x M16x1,5	no
57999	58006	2 x M20x1,5	no
58007	58008	Empty casing	

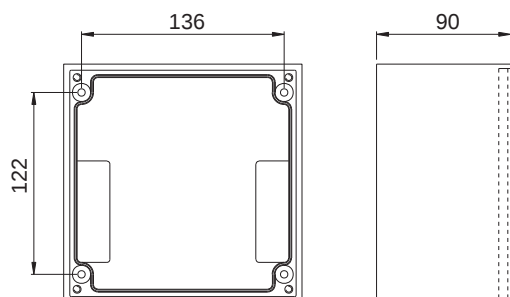
Item no	Cable glands		Terminal
	grey	black	
70201	70251	4 x M16x1,5	3 x 6 mm ²
70202	70252	2 x M20x1,5	5 x 2,5 mm ²
70203	70253	3 x M20x1,5	5 x 6 mm ²
70204	70254	4 x M20x1,5	5 x 6 mm ²
70205	70255	1 x M25x1,5 / 2 x M20x1,5	5 x 6 mm ²
70206	70256	1 x M25x1,5 / 3 x M20x1,5	5 x 6 mm ²
70207	70257	2 x M25x1,5	5 x 6 mm ²
56764	56765	Empty casing incl. DIN rail	

Hard rubber junction boxes: Type 1616 / type 1812



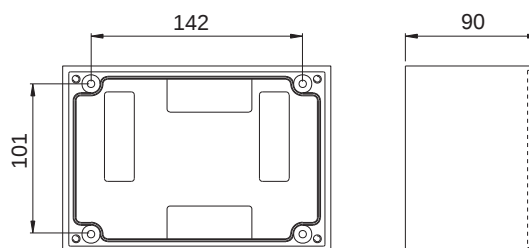
Type 1616

For cable-Ø up to 5 x 16 mm²
 External dimensions: 160 x 160 x 90 mm
 Internal dimensions: 142 x 142 x 74 mm
 Protection category: IP65



Type 1812

For cable-Ø up to 5 x 16 mm²
 External dimensions: 180 x 125 x 90 mm
 Internal dimensions: 157 x 107 x 74 mm
 Protection category: IP65



Item no	Cable glands		Terminal
	grey	black	
70211	70261	3 x M20x1,5	5 x 6 mm ²
70212	70262	4 x M20x1,5	5 x 6 mm ²
70213	70263	6 x M20x1,5	5 x 6 mm ²
70215	70265	3 x M25x1,5	5 x 6 mm ²
70216	70266	4 x M25x1,5	5 x 10 mm ²
70217	70267	2 x M32x1,5	5 x 10 mm ²
70218	70268	2 x M32x1,5 / 2 x M20x1,5	5 x 16 mm ²
70219	70269	2 x M32x1,5 / 2 x M25x1,5	5 x 16 mm ²
56766	56767	Empty casing incl. DIN rail	

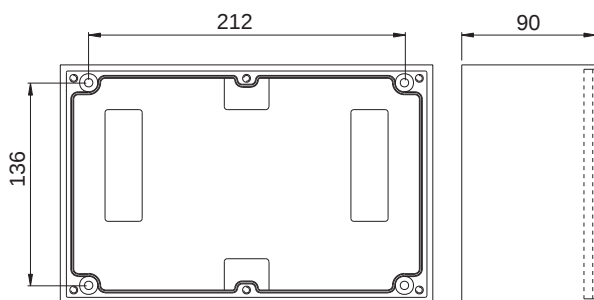
Item no	Cable glands		Terminal
	grey	black	
70221	70271	3 x M20x1,5	5 x 6 mm ²
70222	70272	4 x M20x1,5	5 x 6 mm ²
70223	70273	2 x M25x1,5	5 x 6 mm ²
70224	70274	3 x M25x1,5	5 x 6 mm ²
70225	70275	2 x M32x1,5	5 x 16 mm ²
70226	70276	2 x M25x1,5 / 2 x M20x1,5	5 x 10 mm ²
70227	70277	2 x M25x1,5 / 3 x M20x1,5	5 x 16 mm ²
56768	56769	Empty casing incl. DIN rail	

Hard rubber junction boxes: Type 2516 / type 3020



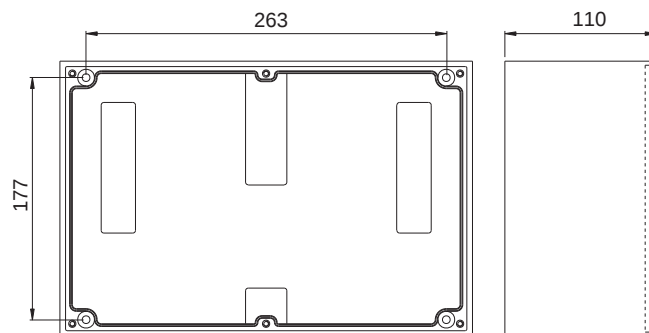
Type 2516

For cable-Ø up to 5 x 16 mm²
 External dimensions: 250 x 160 x 90 mm
 Internal dimensions: 229 x 141 x 74 mm
 Protection category: IP65



Type 3020

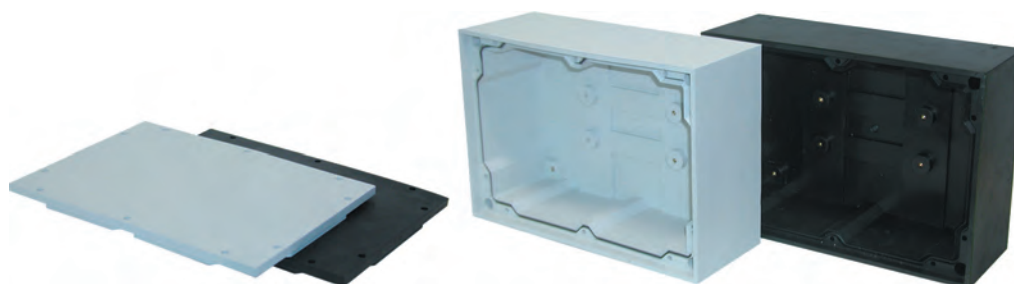
For cable-Ø up to 5 x 35 mm²
 External dimensions: 300 x 200 x 110 mm
 Internal dimensions: 281 x 182 x 94 mm
 Protection category: IP65



Item no	Cable glands		Terminal
	grey	black	
70231	70281	6 x M20x1,5	18 x 2,5 mm ²
70233	70283	3 x M25x1,5	5 x 10 mm ²
70234	70284	4 x M25x1,5	5 x 10 mm ²
70235	70285	5 x M25x1,5	5 x 16 mm ²
70237	70287	3 x M32x1,5	5 x 16 mm ²
70238	70288	4 x M32x1,5	5 x 35 mm ²
70239	70289	2 x M40x1,5	5 x 35 mm ²
70240	70290	3 x M40x1,5	5 x 35 mm ²
56770	56771	Empty casing incl. DIN rail	

Item no	Cable glands		Terminal
	grey	black	
51060	51063	3 x M32x1,5	5 x 35 mm ²
51061	51065	2 x M50x1,5	5 x 70 mm ²
51062	51066	10 x M20x1,5	10 x 6 mm ²
51072	51073	Empty casing incl. DIN rail	

Hard rubber junction boxes: Type 3800 / type 3900

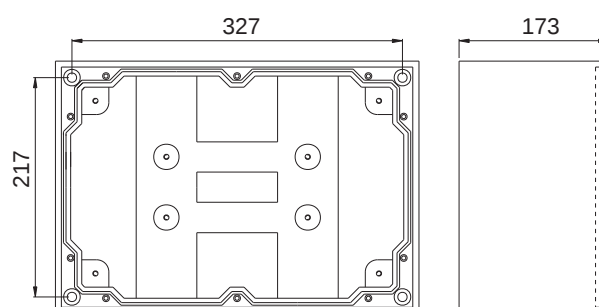
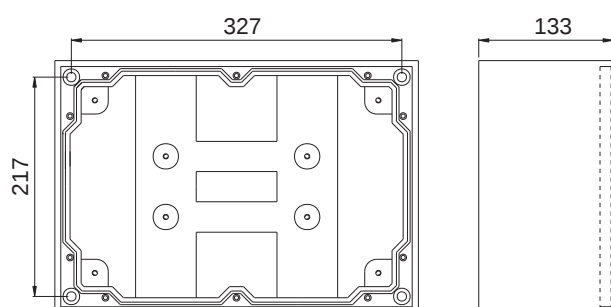


Type 3800

For cable-Ø up to 5 x 50 mm²
 External dimensions: 360 x 250 x 133 mm
 Internal dimensions: 327 x 220 x 106 mm
 Protection category: IP54

Type 3900

For cable-Ø up to 5 x 50 mm²
 External dimensions: 360 x 250 x 173 mm
 Internal dimensions: 327 x 220 x 144 mm
 Protection category: IP54

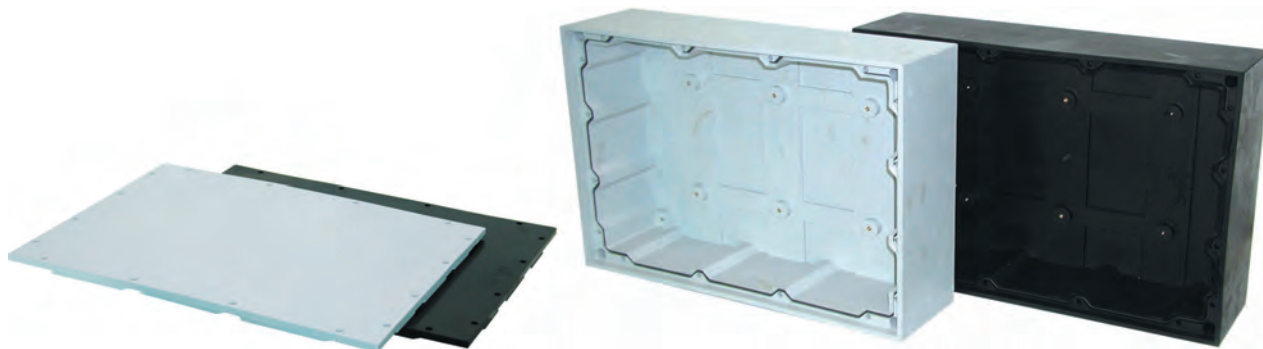


Item no	Cable glands		Terminal
	grey	black	
51067	51070	4 x M40x1,5	5 x 70 mm ²
51069	51071	2 x M63x1,5	5 x 120 mm ²
51074	51077	Empty casing incl. DIN rail	

The casing type 3900 has a greater installation depth than type 3800 (+ 40 mm). It is used for special requirements such as all cable glands in the same side wall, terminals installed at different heights, etc.

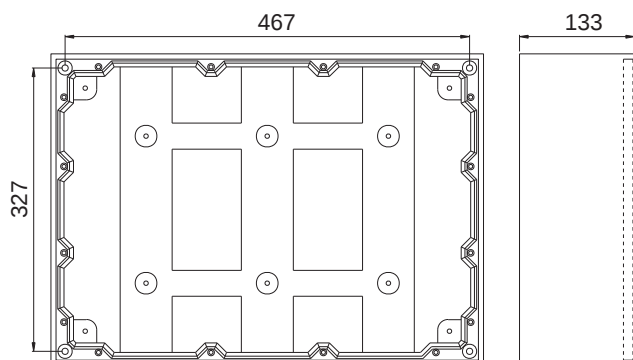
For special applications we recommend using a mounting plate to fit series type 3800 and type 3900 (see page 12).

Hard rubber junction boxes: Type 7800 / type 7900



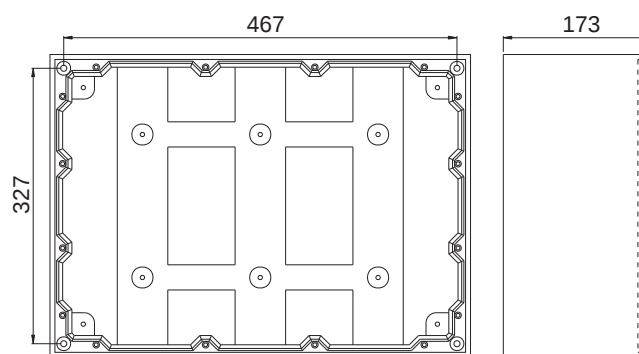
Type 7800

For cable-Ø up to 5 x 95 mm²
 External dimensions: 500 x 360 x 133 mm
 Internal dimensions: 447 x 327 x 106 mm
 Protection category: IP54



Type 7900

For cable-Ø up to 5 x 95 mm²
 External dimensions: 500 x 360 x 173 mm
 Internal dimensions: 447 x 327 x 144 mm
 Protection category: IP54

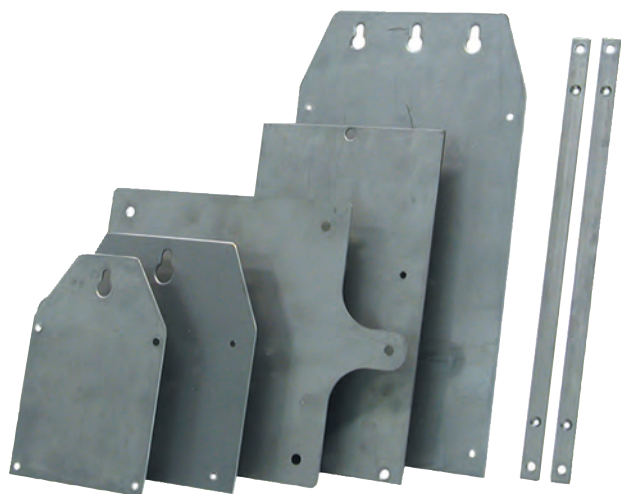


Item no	Cable glands		Terminal
	grey	black	
51079	51082	4 x M50x1,5	5 x 120 mm ²
51080	51083	1 x Cable glands special (cable Ø46-60 cm)/ 4 x M50x1,5	5 x 120 mm ²
51081	51085	10 x M32x1,5	5 x 240 mm ²
51086	51088	Empty casing incl. DIN rail	

The casing type 7900 has a larger installation depth than type 7800 (+ 40 mm). It is used for special requirements such as all cable glands in the same side wall, terminals installed at different heights, etc.

For special applications we recommend using a mounting plate to fit series type 7800 and type 7900 (see page 12). Versions with door and lock are available on request

Hard rubber junction boxes: Accessories



Mounting, adapter and fitting plates in different versions: A2, A4 rust-free, zinc-plated or painted (powder-coated) or with integrated cable catch rails.

Make use of our specialists' experience!

Mounting plates

Solid steel plates which can be mounted all-over onto the rear socket wall. The top of the mounting plate is protruding and is provided with one, two or three fixing holes (large „key“ holes).

⇒ For complex mounting conditions such as shafts, tight spaces, etc.

Mounting brackets

Mounting brackets which can be mounted on the left and right side across the casing rear wall. The top and the bottom of the fitting brackets are protruding and are provided with generous mounting holes.

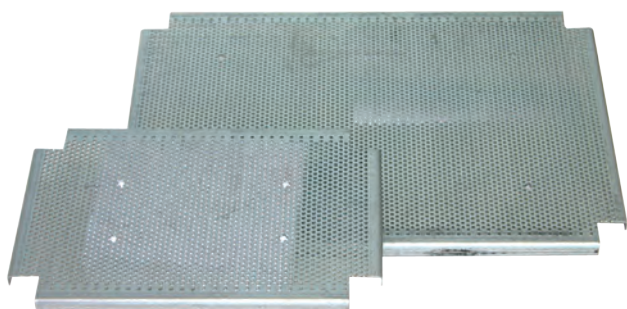
⇒ For a correct and permanent installation with 4 mounting holes

Mounting plates, rust-free, A2

Item no.	for type	Version
58205	1010	square
52787	1212	square
52788	1616	square
52789	1812	diagonal
52785	1812	vertical
52790	2516	diagonal
52792	2516	vertical
49943	3020	diagonal
50917	3020	vertical
40119	3800/3900	diagonal

Mounting brackets, rust-free, A2

Item no.	for type	Version
11399	diverse	kurz
58206	1010	long/diagonal
56089	1212/1812	long/diagonal
56090	1616/2516	long/diagonal
56091	1812	long/vertical
56092	2516	long/vertical
49691	3020	long/diagonal
49689	3020	long/vertical
56628	3800/3900	long/diagonal
51860	7800/7900	long/diagonal



Mounting plate, punched, zinc coated

Item no.	for type
11411	3800/3900
19877	7800/7900

Synthetic material junction boxes



There are some situations in which the client or the circumstances requires the usage of synthetic material boxes. Naturally, we react flexible to such situations by procuring and finishing all customary synthetic material boxes - as is usual: quickly, individually, solution-orientated and in accustomed GIFAS quality!

Special junction boxes for innovative tunnel solutions



Polycarbonate junction box with a Maréchal-plug and socket device, used for traffic signs in tunnels



Polycarbonate junction box on a V4A mounting plate



Polycarbonate junction boxes in different sizes used for traffic guidance systems

Fire-proof junction boxes



Fire-proof junction boxes to protect life and property in the case of fire!

Following some disastrous fire catastrophes (Düsseldorf airport, tunnel fires in France, Austria and Switzerland), the interest in fire-proof electrical installations has increased greatly.

GIFAS-Electric GmbH has tried to give the final word on the topic of „distribution“ with the development of a fire-proof junction box. We are able to offer a tested product.

The preservation of insulation (FE) and of functionality (E) are not identical!!

Preservation of insulation (FE)

The test to determine the insulation preservation (FE) is carried out using a single cable only. In the case of fire, however, the power supply can only be ensured using an intact cable system, in other words using:

- **Safety cable** in combination with
- **the relevant fixing elements!!**

Preservation of functionality (E)

- **Low voltage cable up to 1 kV**
- **Installation and telecommunication cable**
- **Including the relevant fixing elements,**
Cable channels, cable conductors, clips, sockets, etc.

The preservation of functionality is divided into the following classes according to the duration measured:

- **E30 > 30 minutes**
- **E60 > 60 minutes**
- **E90 > 90 minutes**

Applications

- **30 minutes (E30) to evacuation**
Fire notification systems, Alarm devices, Safety lighting, Passenger lifts with evacuation switch
- **90 minutes (E90) to fire-fighting**
Water pressure intensifier systems, Smoke and heat extraction flaps, Fire service and lifts for injured persons

General applications

- Establishments with high personnel requirements and limited escape options, e.g. high-rise buildings, offices, hospitals, tunnels (railway, road), airports, etc.
- Establishments with high levels of material assets, e.g. IT and computer centres, museums, etc.
- Establishments with maximum safety requirements, e.g. Offshore industry, chemicals, petrochemicals, etc.

As a variety of electrical installations consist not only of the cable fitting, but of the assembly of an entire system (cable, straps, boxes, etc.), the preservation of functionality (E) is the decisive factor for us!

Safety considerations	Required properties
No risk to health or intrinsic values from corrosive gases	Halogen-free, non corrosive gases
Use of barely flammable materials	Flame resistance
No fire conduction via beyond the local ignition source	Low fire conductance
No impairment of the escape routes and rescue measures	minimum smoke development

	Preservation of insulation (FE)	Preservation of functionality (E)
Test standard	IEC 60331 / BS 6387	DIN 4102 Teil 12 (CWZ)
Test specimen	single cable	entire cable system
Test length	= 0,6 m	2 x 4 m / installation type
Fixing system	not relevant	various configurations
Test parameters	180 min. at 750° C	30 / 90 min. / 950° to ISO 834
Note	static test	realistic conditions

Technical specifications / Accessories

Technical specifications

Material features:	Halogen-free, flame-resistant, special compound
System test:	– referring to DIN 4102 part 12 E30 – functional endurance from min. 30 minutes at temperatures up to 900° C – Test report DMT VG / No 845
Internal wiring:	individual to customer requirements
Cable entries:	depending on project different sized cable couplings are available
Wall mounting:	mounting plate V2A/V4A or suspension lug V2A/V4A

Fire-proof junction boxes E30 are available with decentral or central fuses in various component fittings and dimensions.

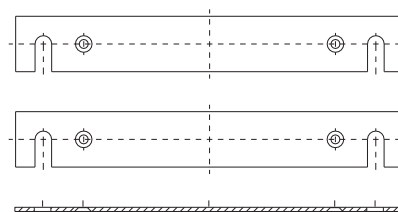
Important: The manufacture and supply of fire-proof junction boxes is limited by specific technical conditions to ensure the preservation of functionality! (System test required!)

Accessories for fire-proof junction boxes

Fitting accessories:

For fire-proof junction boxes E30 we develop for you a special mounting system coordinated with your needs, e.g. for bomb-shaped tunnel walls, spaced for the lead-through of cables, flat or folded mounting plates in V2A or V4A rust-free design.

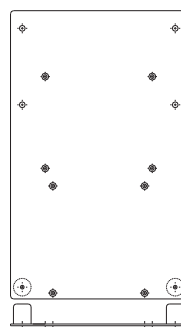
⇒ Coordinated and tested for the project



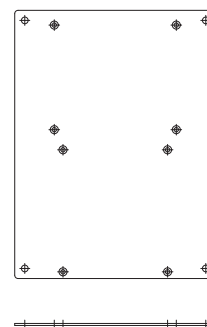
Item no 56600

Item no description

56600	suspension lugs V2A rust-free for BFA 2020, can be suspended, simple assembly
58477	mountin plate V4A rust-free for BFA 2020/2, double socket, bomb-shaped for fitting onto tunnel walls (with rubber plug)
57136	mountin plate V4A rust-free for BFA 2020, flat design
57299	mountin plate V4A rust-free for BFA 2020/2, double socket, spaced design, for cable lead-through
57031	mountin plate V4A rust-free for BFA 2020/2, double socket, flat design



Item no 58477

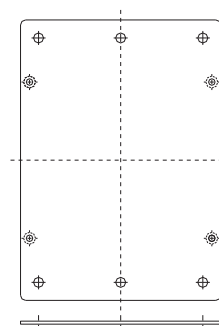


Item no 57299

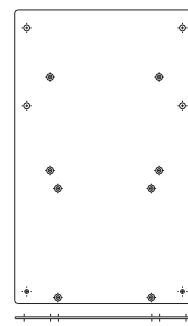
Fitting of plugs, cables or sockets:

Our optimally equipped fitting department is able to pre-fit any plug-in system for you. The processing of cables FE5 to FE180 for connection or extension cables, the connection of E30 junction boxes and the connection between individual junction boxes also forms part of our offering.

⇒ We place great importance on only using tested, high quality material. The cable must also fulfil the system requirements for E30.



Item no 57136



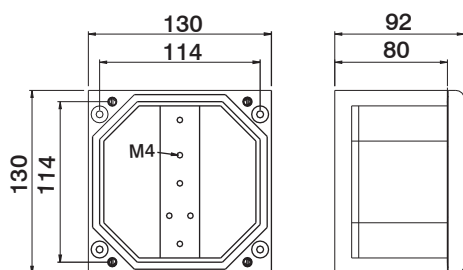
Item no 57031

Fire-proof junction boxes: BFA 1313 / BFA 1616



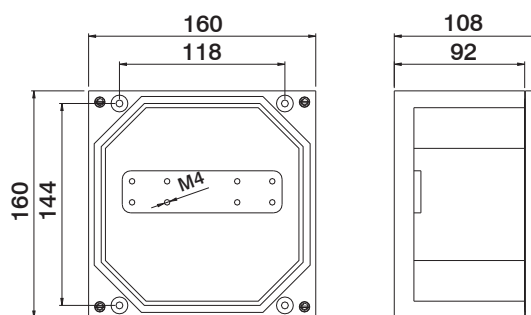
Type 1313

External dimensions: 130 x 130 x 92 mm
 Internal dimensions: 106 x 106 x 63 mm
 Protection category: IP65



Type 1616

External dimensions: 160 x 160 x 108 mm
 Internal dimensions: 138 x 138 x 79 mm
 Protection category: IP65



Item no.	Component fitting	Terminals
11155	3 x M20x1,5 1 x safety terminal 1A-T	3 x 2,5 mm ² steatite

Item no.	Component fitting	Terminals
11158	2 x M25x1,5 1 x M20x1,5 1 x safety terminal 1A-T	5 x 6 mm ² steatite

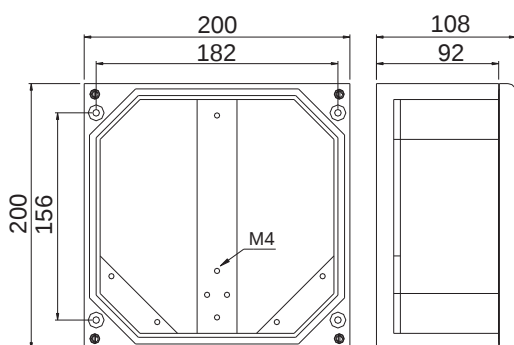


Fire-proof junction boxes: BFA 2020 / BFA 2020/2



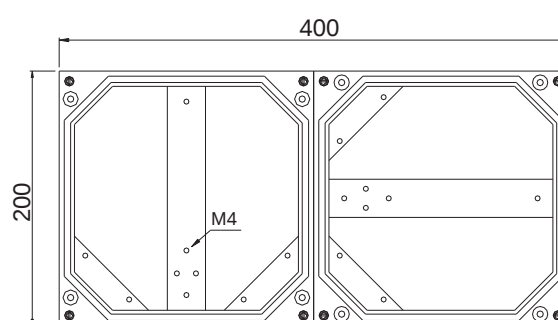
Type 2020

External dimensions: 200 x 200 x 108 mm
 Internal dimensions: 176 x 176 x 79 mm
 Protection category: IP65



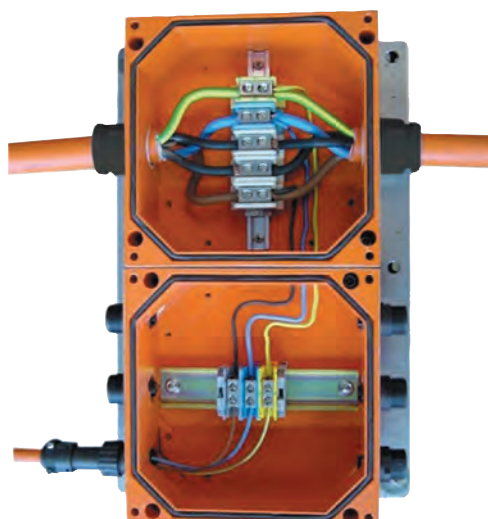
Type 2020/2

External dimensions: 200 x 400 x 108 mm
 Internal dimensions: (2x) 176 x 176 x 79 mm
 Protection category: IP65

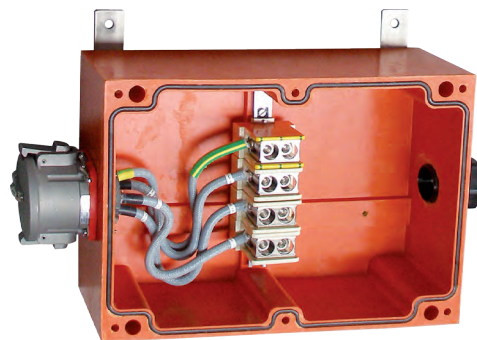


Item no.	Component fitting	Terminals
11163	2 x M32x1,5 1 x M20x1,5 1 x safety terminal 1A-T	5 x 10 mm ² steatite

Item no.	Component fitting	Terminals
61155	2 x M32x1,5 6 x EBM jack 2P+E / 16A mounting plate V4A	5 x 16 mm ² steatite 3 x 10 mm ² steatite



High temperature resistant junction box type HT 3625

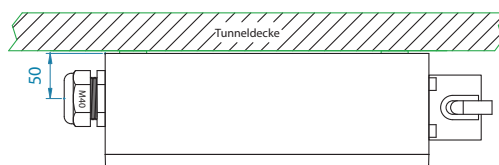
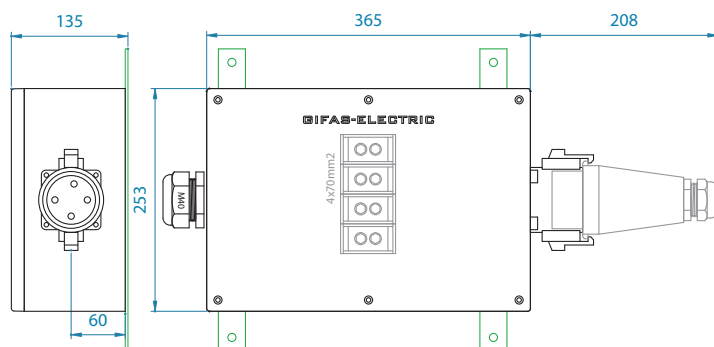


Type 3625

External dimensions: 365 x 253 x 135 mm

Internal dimensions: 336 x 224 x 104 mm

Protection category: IP65



Item no	Equipping	Klemmen
92498	Maréchal-socket DS 63A/690V/3P+E IP65	4 x 35 mm ² steatite
19758	Maréchal-socket DS 63A/690V/3P+E IP65	4 x 70 mm ² steatite
26198	Maréchal-plug DS 63A/690V/3P+E IP65	

Technical property:

- **specifically designed for motor-driven smoke- and heat-suction ventilator**
- temperature increase up to 400°C within 2 minutes
- maintenance at 400°C during 2 hours without loss of the power supply
- is up to par all **ASTRA-guidelines** completely
- proofed and certified **special plug and socket device**
- pluggable tunnel ventilation = facilitate the maintenance and the repair work
- rust-free mountin adapter V4A
- casing made of vertical heat resistant, with mineral filler enriched polyester resin
- flame-resistant, not flammable, unbreakable
- silicone- und halogen-free synthetic material

Flexibility in usage

Flexibility

The cleverly developed design and the perfect processing of the GIFAS junction boxes guarantee maximum flexibility in usage. Whether on uneven surfaces or where space is tight, whether in industry, chemistry or in tunnels: with our boxes your installations are flexible and efficient.

All boxes are fitted precisely according to your needs and specifications. Profit from the tried and trusted GIFAS quality and our experience.



A full spectrum of expertise

- Standard components for individual expansion
- Wall assembly via internal fixing holes separated from the wiring space
- Subsequent modification possible on-site
- Easy installation of command and messaging devices
- All leadthroughs on the casing with thread
- Wall thickness of 7–15 mm, reinforced corner design
- Cover screws, rust-free A4, cannot be lost
- Sealing groove, sealing part and rubber seal ensure a high protection category
- Junction boxes can be combined with one another

Applications

We can offer you solutions for terminals and distributors. Use the advantages offered by our innovative quality products, and profit from our experienced advice. GIFAS-ELECTRIC has made its name thanks to expert services.

Our solid rubber junction boxes can be fitted according to your technical specifications – individual, flexible and fast. In the area of E30 installations we develop tailor-made solutions in collaboration with our partners: from the junction box to many different types of cable fittings – tested and ready for connection!

Varied applications

- Sewage plants
- Chemical industry
- Tunnel construction
- Finishing industry
- Tunnels / caverns
- Road and garden construction
- Food and luxury food industry
- Mines
- Transport systems
- Electroplating works
- Technical fire safety systems in tunnel construction (railway, national highways) and much more

Tested quality

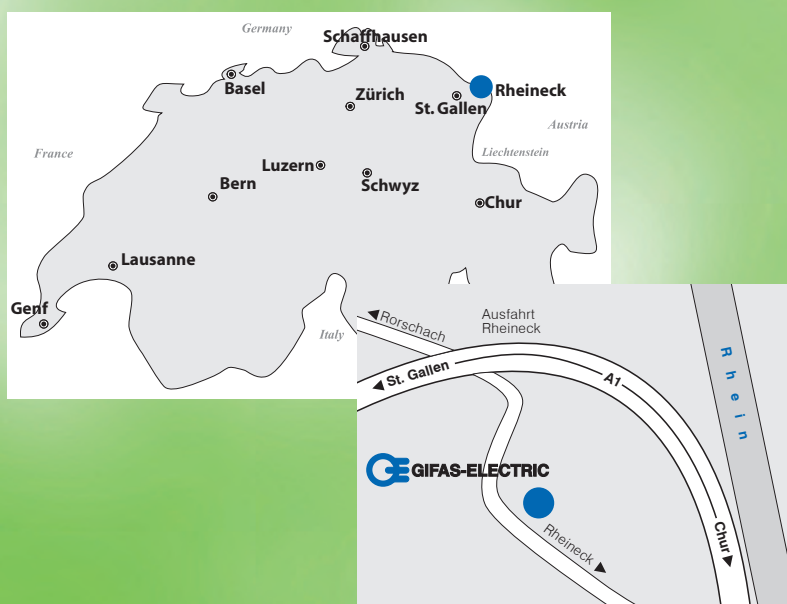
-  CE compliant

Colours

- Light grey RAL7035
- Black
- Orange (junction boxes E30)
- Other colours on request

Contact us

We are looking forward to become acquainted with you personally!



News about the
assortment and
specific solutions
you can find
on our website:

www.gifas.ch

Energy in the right dimension

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