



# Easy cable and conductor routing for the control cabinet door

CGS cable routing system

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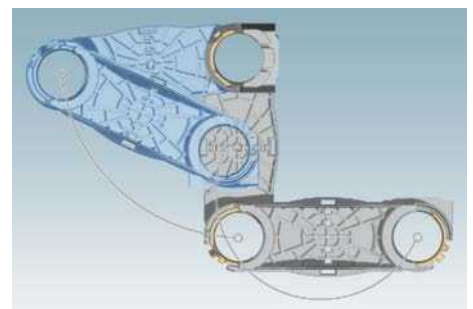
The swivel arm of the cable routing system makes it particularly easy and safe to install your conductors, cables, and cable harnesses for the control cabinet door or swivel mounting frame. This solution is time-saving, as the patent-pending swivel joints can be opened and pre-assembled cables can be fed through or pulled through without using any tools.



Web code: #1146

## Tool-free opening and closing of swivel joints

The orange swivel link allows you to open the swivel joints without using any tools. Installing and pulling through cables is quite simple.



## Defined installation space and 180° swivel range

This simplifies design and compared to cable conduits enables planning and mapping in the CAD system. Cable lengths are therefore predefined and can also be planned.

Large-surface marking options on the cable bridge



### Integrated flanges simplify mounting

Simple and time-saving mounting compared to mounting with cable conduits.



### Safe thanks to integrated strain relief

The strain relief is ensured using conventional cable binders. Additional strain relief is not required.



### Covers provide protection and conductor bundling

Mechanical cable protection and safe routing and bundling when closing and opening the control cabinet door.

## Easy cable routing of pre-assembled data cables

Energy chains and drag chains usually require compatible cables and lines. Standard cables are easily damaged due to the high strain resulting from the movement and bending of the chains. It is almost impossible to insert preassembled cables into cable conduits – an alternative to energy and drag chains – since both the cable or cable harness and the connector need to be pulled through. The cable routing system has been designed for use of standard cables with preassembled connectors. The cables including the connectors can be inserted by way of joints that can be opened. Large bending radii and defined movements protect the wires from being damaged. This was tested with  $100 \times 1.5 \text{ mm}^2$  cables (H05Z-K) as well as with data cables (Cat. 5 Ethernet cables). The CGS was opened and closed 2000 times for this test and no damage was found on the wires.



Optimum and safe cable routing of pre-assembled data cables and lines

## Safe cable routing to mounted FAME test terminal strips




For control and operating purposes, protective devices and control devices should be accessible from the outside and are therefore mounted in the door. This is why some devices, plus test terminal strips like FAME, are mounted in the control cabinet door in protection and control technology applications. This additionally saves space in the control cabinet. These components can now be wired in an even easier and more flexible way with the CGS cable routing system from Phoenix Contact.



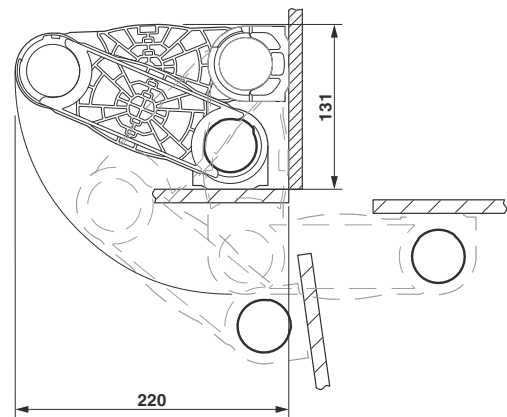
Safe conductor routing to the FAME test disconnect system in the control cabinet door



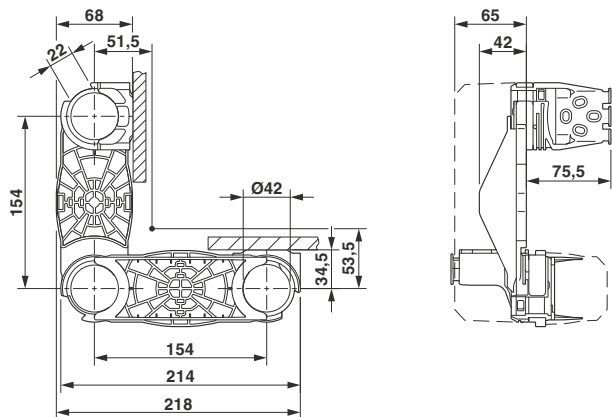
# Ordering data and technical data

					
		<b>Cable routing system Swivel link for opening</b>		<b>Cable routing system Swivel link closed</b>	<b>Protective cover</b>
<b>Type</b>	<b>Order No.</b>	<b>CGSA 50</b>	<b>3071401</b>	<b>CGS 50</b>	<b>3071400</b>
Cable entry opening	[mm]	42		42	
Maximum number of cables, e.g. 1.5 mm²		100		100	
Average cable length	[mm]	580		580	
Maximum apex angle control cabinet door	[°]	180		180	
Width of cable binder for strain relief	[mm]	4		4	
Insulation material		PC		PC	PC
Flammability rating UL 94		V0		V0	V0
Diameter fixing holes	[mm]	5.5		5.5	

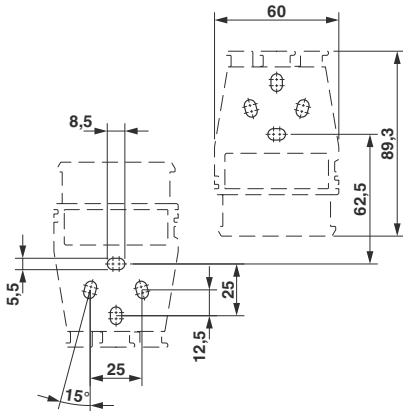
## Assembly instruction



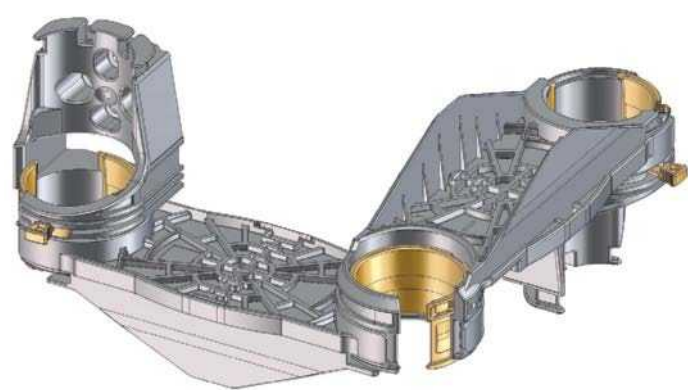
Installation space with closed control cabinet door



Installation space with open control cabinet door (180°)



Drilling diagram



CAD drawings can be downloaded directly from the website in the product area

# Cable management, installation and mounting material

Maximum quality and functionality down to the smallest details: Phoenix Contact offers an optimally coordinated range of accessories for junction box and control cabinet manufacturing. This way, you receive all components for your solution from a single source.

**i** Web code: #0005



## Modular cable entry system

Using the cable sleeves from CES modular, which can be combined in various ways, you can mount assembled as well as unassembled cables quickly and flexibly.

**i** Web code: #0570

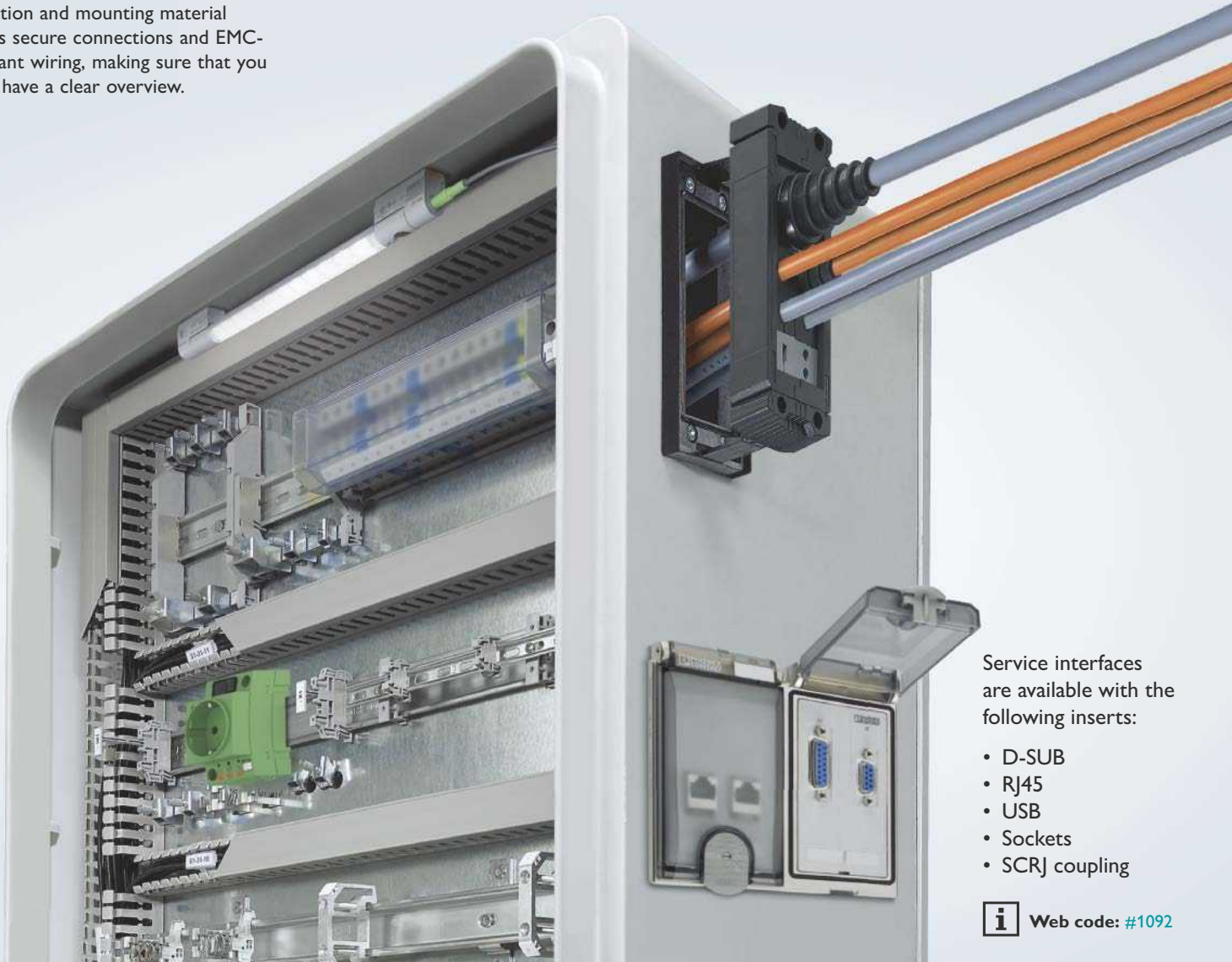


## Cable entry plates

CES Multigates are metal-reinforced cable entry plates. They provide you with numerous options for routing cables through a control cabinet panel with a tight seal.

**i** Web code: #0570

Installation and mounting material ensures secure connections and EMC-compliant wiring, making sure that you always have a clear overview.



Service interfaces are available with the following inserts:

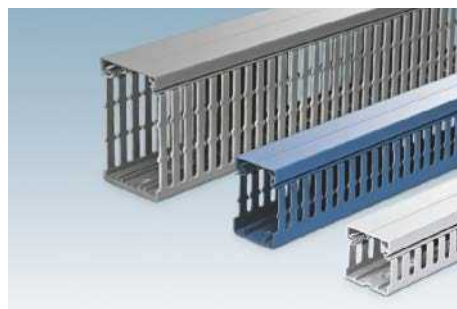
- D-SUB
- RJ45
- USB
- Sockets
- SCRJ coupling

**i** Web code: #1092



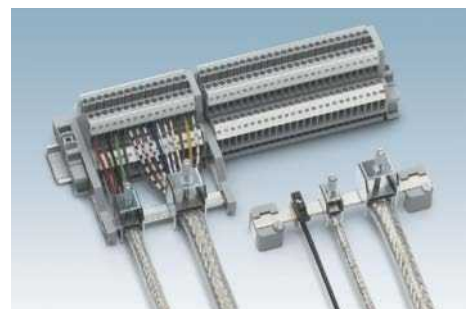
### Cable protection systems

The comprehensive range of plastic and metal protective hoses provides you with reliable solutions for a wide range of applications - up to a degree of protection of IP69K.



### Cable routing

Orderly cable routing is absolutely essential for clear arrangement in your control cabinet. This is ensured by cable ducts in various sizes and colors.



### Grounding and shielding

Phoenix Contact offers a comprehensive product range covering all aspects of grounding and shielding for your electronic components.

**i** Web code: #0572

**i** Web code: #0094

**i** Web code: #0845

## Open communication with customers and partners worldwide

Phoenix Contact is a global market leader based in Germany. We are known for producing forward-thinking products and solutions for the comprehensive electrification, networking, and automation of all sectors of the economy and infrastructure. With a global network, we maintain close relationships with our customers, something we believe is essential for our common success.

You can find your local partner at  
[phoenixcontact.com](http://phoenixcontact.com)

