

Electronics housings

Product overview 2019/2020



Electronics housings for DIN rail and field applications

A wide range of options for form, color, and function – this is the central idea behind electronics housing types from Phoenix Contact. Whether on a wall or on a DIN rail, from light gray to sky blue, narrow or wide – you will always find the right housing for your electronics here.

HMI components and accessories

Highly automated production processes require user-friendly interfaces between the operator and the machine. Displays, membrane keypads, and light guides turn electronics housings into functional display and operator interfaces.

Further information starting on page 40





DIN rail housings

Fully flexible in shape, color, and function: DIN rail housings are the ideal packaging for your electronics. They protect the installed PCBs, can be mounted easily on DIN rails, and offer perfectly integrated interfaces for transmitting signals, data, and power.

Further information starting on page 6



Field housings

66

Whether as stationary display units, mobile operator panels, or embedded systems - field housings from Phoenix Contact provide a high degree of protection ideal for countless building, industrial, and process automation applications.

Further information starting on page 28

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Find out more with the web code

For detailed information, use the web codes provided in this brochure. Simply enter # and the four-digit number in the search field on our website.



i Web code: #0317

Or use the direct link: phoenixcontact.net/webcode/#0317

Configure your electronics housing online in just four easy steps

Intelligent combinations, interactive component selection, and real-time visualization in 3D: put together your electronics housings or accessories such as light guides, membrane keypads, or displays in just a few steps with the new online configurator. Simply select the desired housing series and size, add the appropriate connection technology, and you are done.



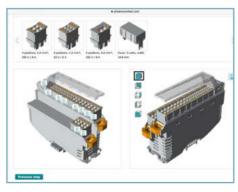


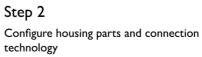
Your advantages

- Quick and easy configuration of all individual components
- Convenient operation using drag-and-drop, even on mobile end devices (iOS and Android)
- Export items as a bill of material or directly transfer them to your shopping cart and proceed to order
- Real-time visualization in 3D
- Download the PCB contours to fit the housing



Step 1 Select housing range







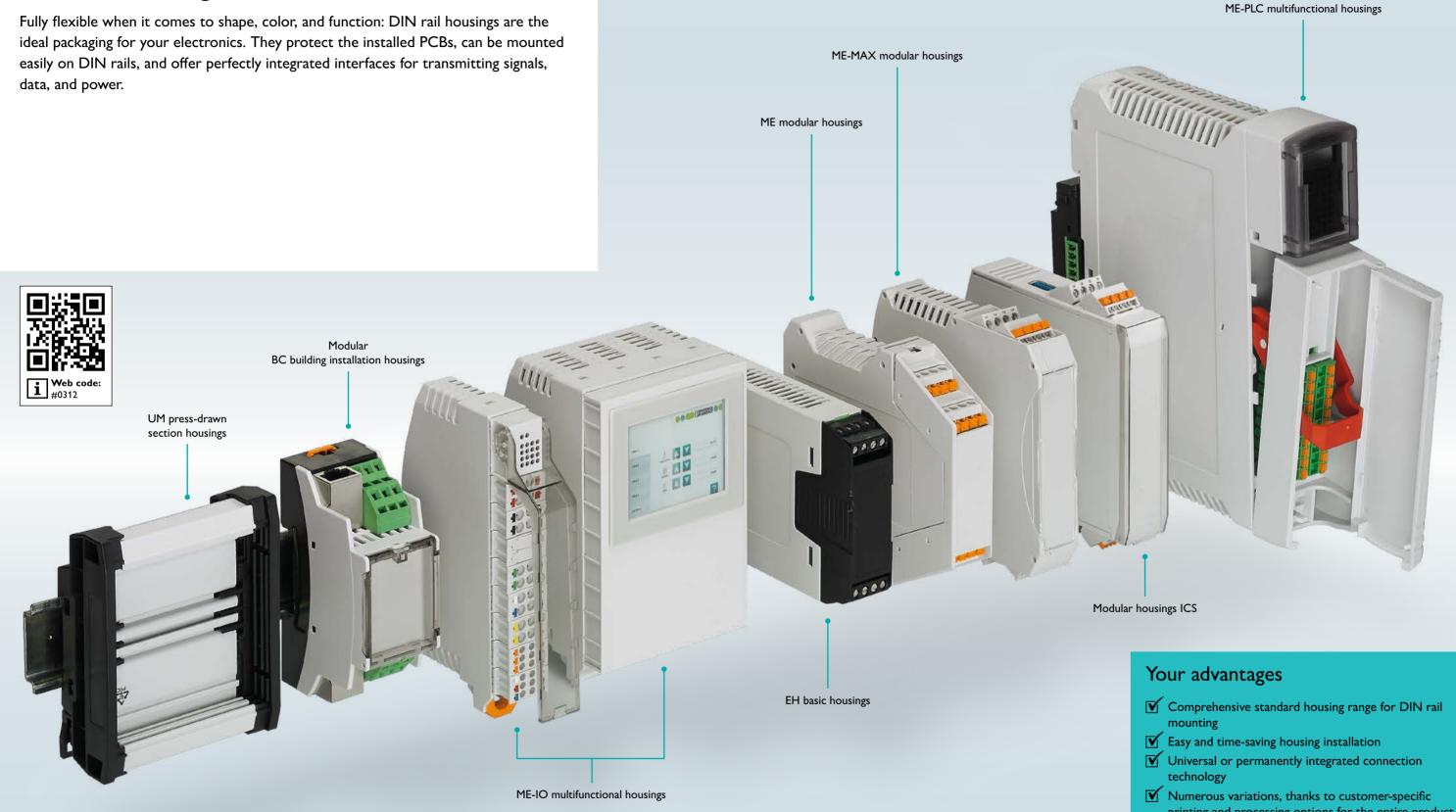
Step 3 Display or download complete module, including PCB shape



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1	2293932 - HC-0D JAJR &C BU P855 Component Nousing, Cover, solar: light gauge width: 2	20.54 mm, langels: 111.8 mm, height: 18.3 mm	Quetty (
U,	23912997 - HEC-LR 39 KET 2003 Component housing, Lock and Robuste system, other	syange, weldt: 36.2 mm, langet, 33 mm	Quantity:
2		ert (3x): 8 A, reentred voltage (5x): 125 V, number of posts pild-plated contacts, but connectors for connecting with ele	

Step 4 Display bill of material and order directly

DIN rail housings



- printing and processing options for the entire product range

EH basic housings for universal applications

The basic housings of the EH series make it as easy as possible to design universal device applications. A range of seven overall widths, two depths, and three cover versions provide over 100 possible combinations.

Your advantages





Complete flexibility, thanks to PCBs with horizontal, frontal, and orthogonal orientation to the front of the device

DIN rail or wall mounting for device fastening suited to the application

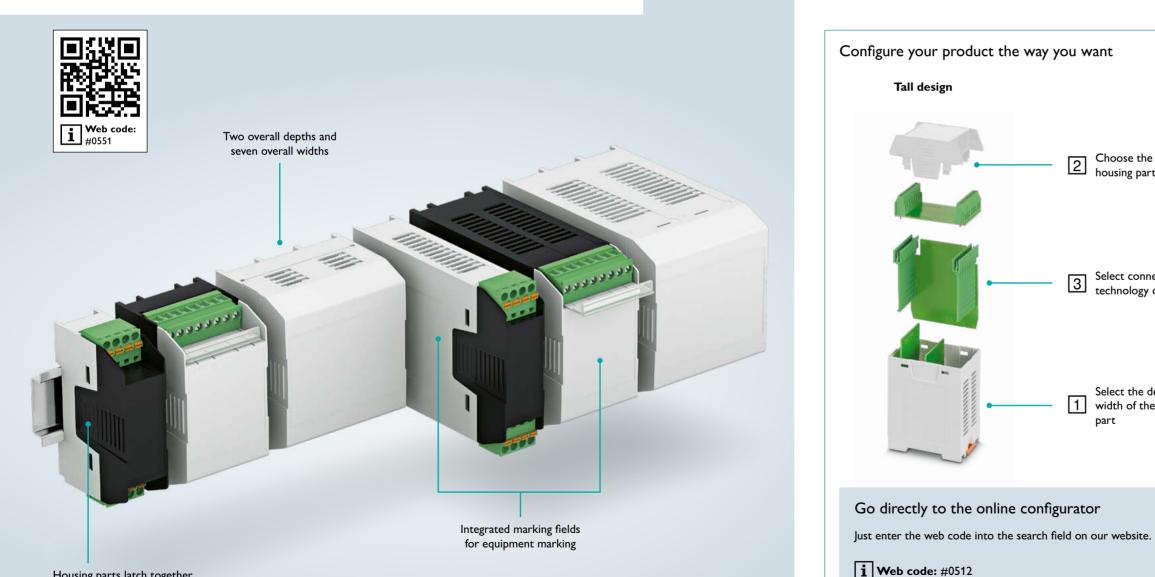
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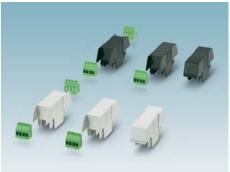
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part

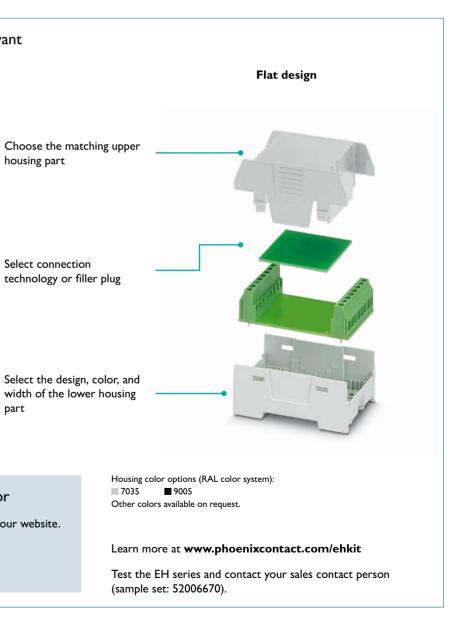
housing part



Housing parts latch together without the need for tools



Three cover versions for individual PCB connections



ICS modular housings with variable connection technology

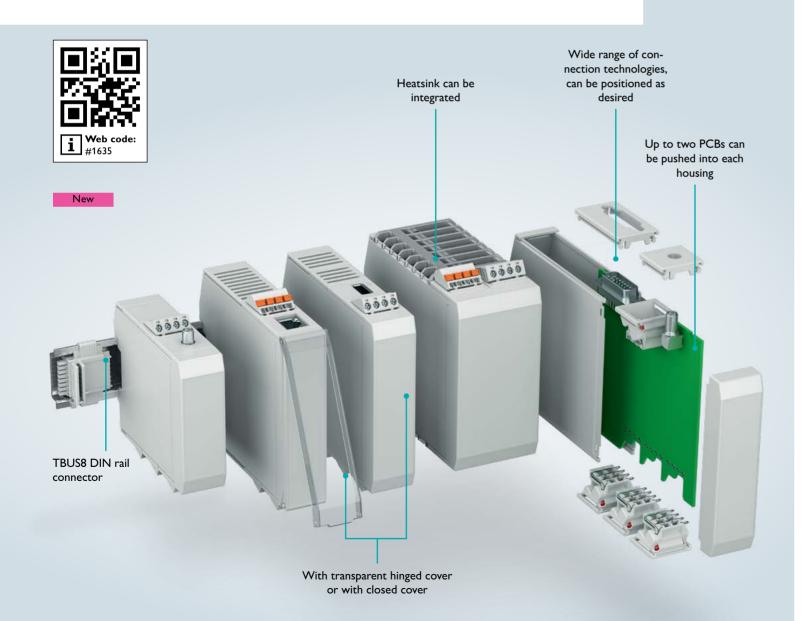
The solutions made possible by the modular ICS housing system are as varied as the requirements for future-oriented automation devices. Take advantage of a housing system with graduated sizes, variable connection technology, and optional eight-position DIN rail connectors.

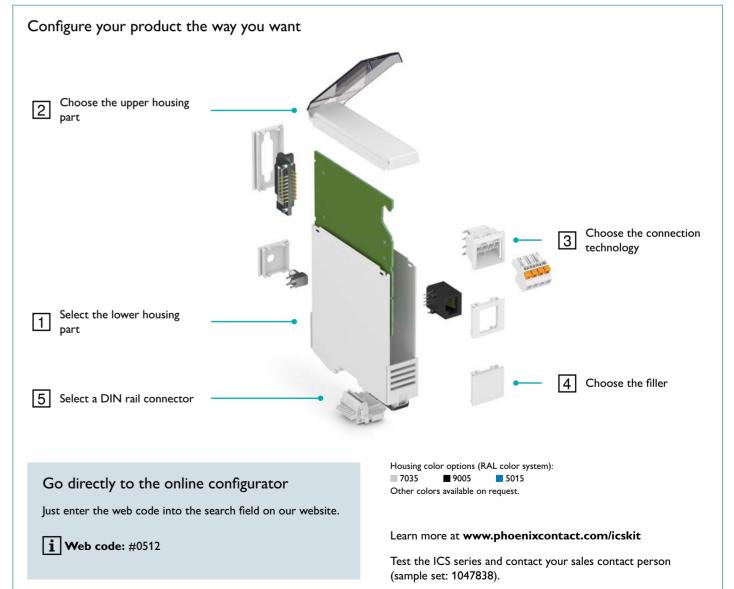
Your advantages



Standardized connections such as R|45, USB, D-SUB, and antenna sockets as built-in components and touch-proof male header

Optimum use of space by fitting up to two PCBs in the housing per basic housing width









8-position DIN rail connector with parallel and series contacts for easy module-to-module communication

ICS modular housings with individual cover designs

The ICS housing system can be configured quickly and easily with a comprehensive selection of different sizes, variable connection technology, and optional bus connectors. The ICS Cover Designer is available to you immediately and enables you to create an unmistakable cover design. In just a few steps, you can order your individual design as a 3D-print – followed by prototype deliveries and subsequent series production.

Your advantages



Comprehensive portfolio

A large selection of standard products is available for you to use and configure for your specific application in the configurator.



Quick and easy prototyping

You can make use of the additive production facilities available from PROTIQ, our marketplace for 3D printing, for the prototype.



Configure your product the way you want



Go directly to the online configurator

Simply enter the web code into the search field on our website.

i Web code: #0512

Professional series production



Once you have chosen the cover, series production can begin.

1 Configure ICS housings: Configure the ICS housing system in different sizes and with variable connection technology.

2 Design the housing cover: If you would like an individual cover, you will be directed automatically to the intuitive ICS Cover Designer where you can configure your own design. You can then order an additively-manufactured prototype individually from PROTIQ, our cooperation partner, and have it delivered to your door.

3 Authorize series production: Once you have decided on a design, an experienced team of specialists is available for all further steps.

Contact Service Center Tel.: (800) 808-7177 E-Mail: housing-modification@phoenixcontact.com

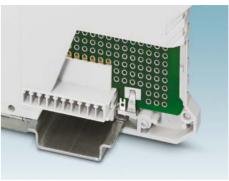
ICS Cover Designer If you would like to create an ICS housing cover, you can use the ICS Cover Designer by PROTIQ at https://www.protiq.com/en/ics-cover-configurator.

Modular ME housings in an easy-to-install cup shape

Modular electronics housings from the ME series transform assembled PCBs into easy-to-install electronics modules. Variable connection technology, bus connectors, and modularity ensure the right device design for every application. Diverse adaptation options expand the range of individual housing solutions.

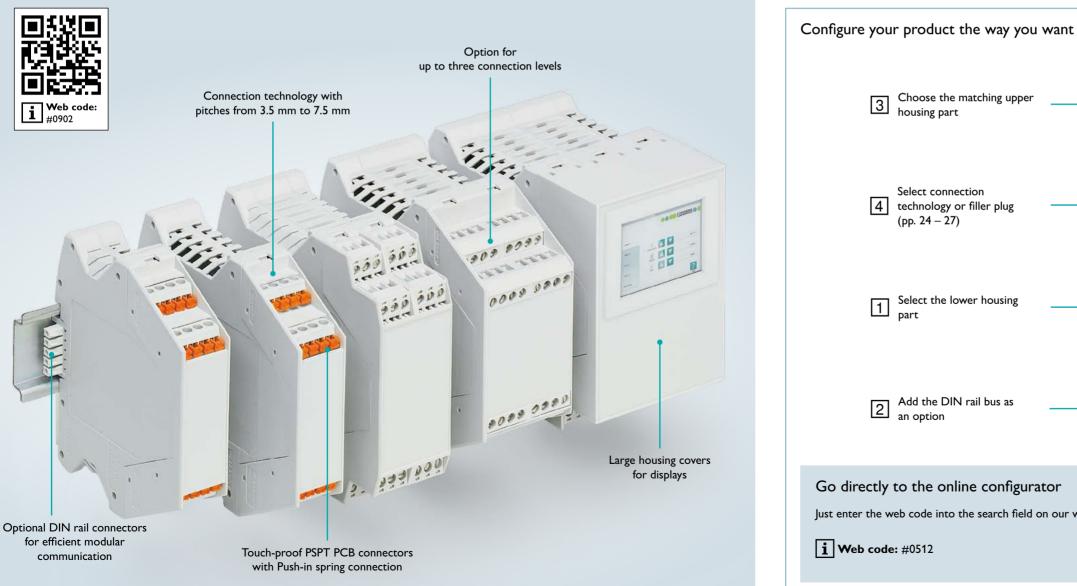
Your advantages



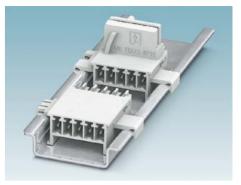


Cup principle for short installation times

Functional earth ground contact and bus connector integrated into the housing with up to 12 positions



3	Choose the matching upper housing part		
4	Select connection technology or filler plug (pp. 24 – 27)		
1	Select the lower housing part		
2	Add the DIN rail bus asan option	• 4	<u> Hicki</u>
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Optional DIN rail connectors with five parallel contacts or four parallel contacts and one series contact for efficient module-to-module communication



ME-MAX series housings in flexible modular design

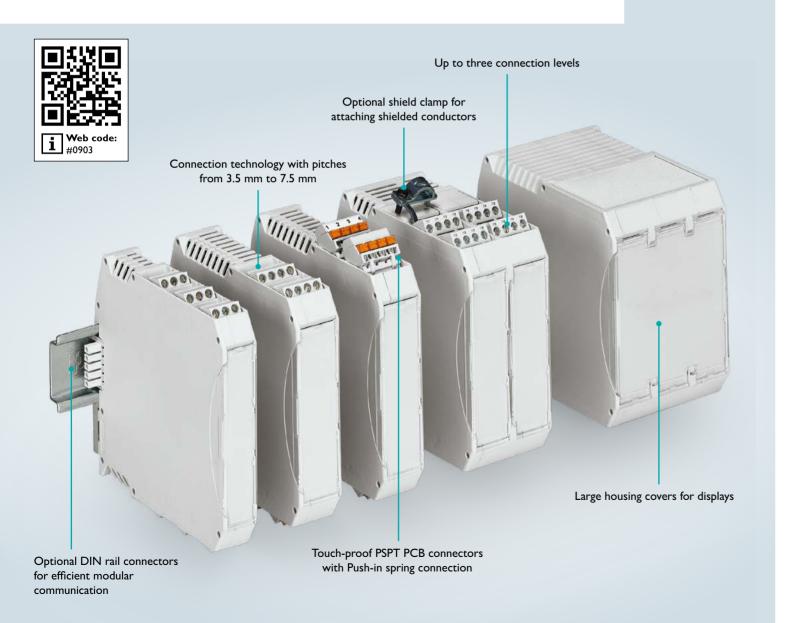
Modular, functional, and design-oriented ME-MAX electronics housings for modern industrial electronics: variable connection technology, bus connectors, and modularity ensure the right device design for every application.

Your advantages





Tailor-made connection technologies for signal, data, and power transmission with various pitches



Configure your product the way you want	
1 Select the housing	
3 Select connection technology or filler plug (pp. 32 – 35)	
Add DIN rail bus and power connectors as an option	
Go directly to the online configurator	
Just enter the web code into the search field on our website.	
i Web code: #0512	





TBUS DIN rail cross connectors and PCO power connectors for module-to-module communication



Test the ME-MAX series and contact your sales contact person (sample set: 52005224).

Multifunctional ME-IO housings with modular front connection technology

The ME-IO housing system is perfectly suited for applications with a limited amount of installation space and high function requirements. Tailor-made electronics modules, such as controllers and I/O modules, can be easily assembled thanks to their modular design. The Push-in front connection technology and compact design enable the implementation of individual devices with up to 54 positions per overall width of 18.8 mm.

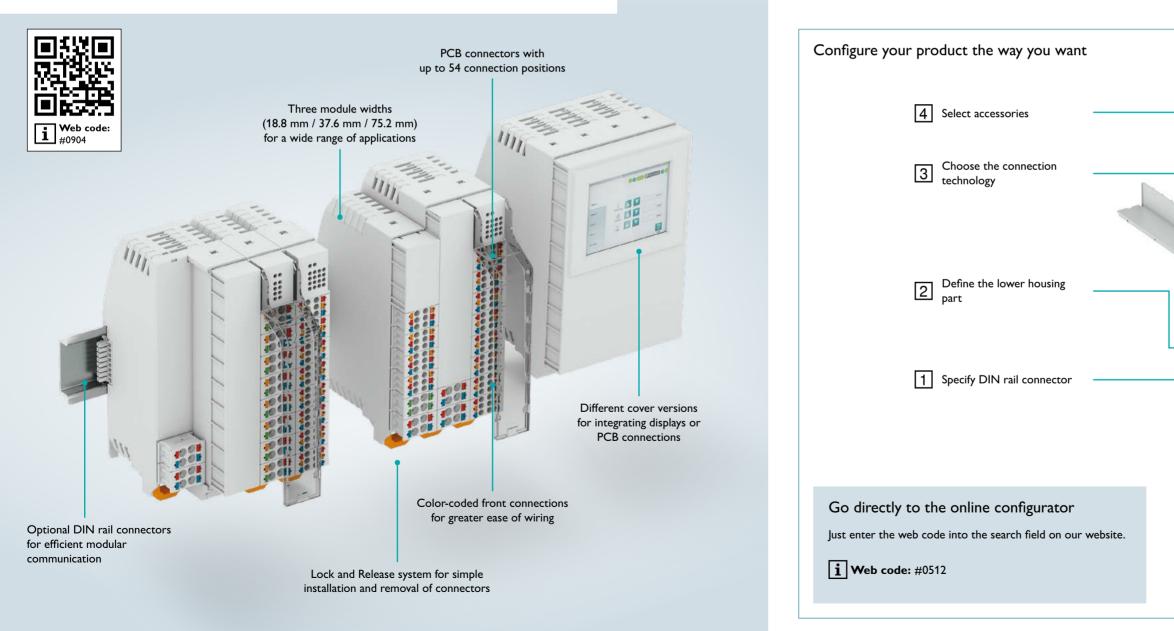
Your advantages





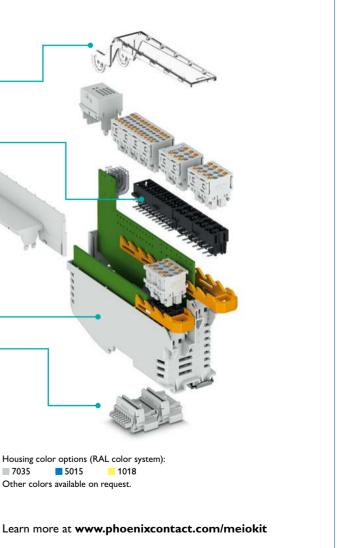
Convenient front connections for transmitting signals, data, and power

Block belts enable connector types to be grouped mechanically in any arrangement in a confined space





Additional marking options available by means of inserts in transparent marking lid



Test the ME-IO series and contact your sales contact person (sample set: 52005220).

ME-PLC multifunctional housings for complex controllers

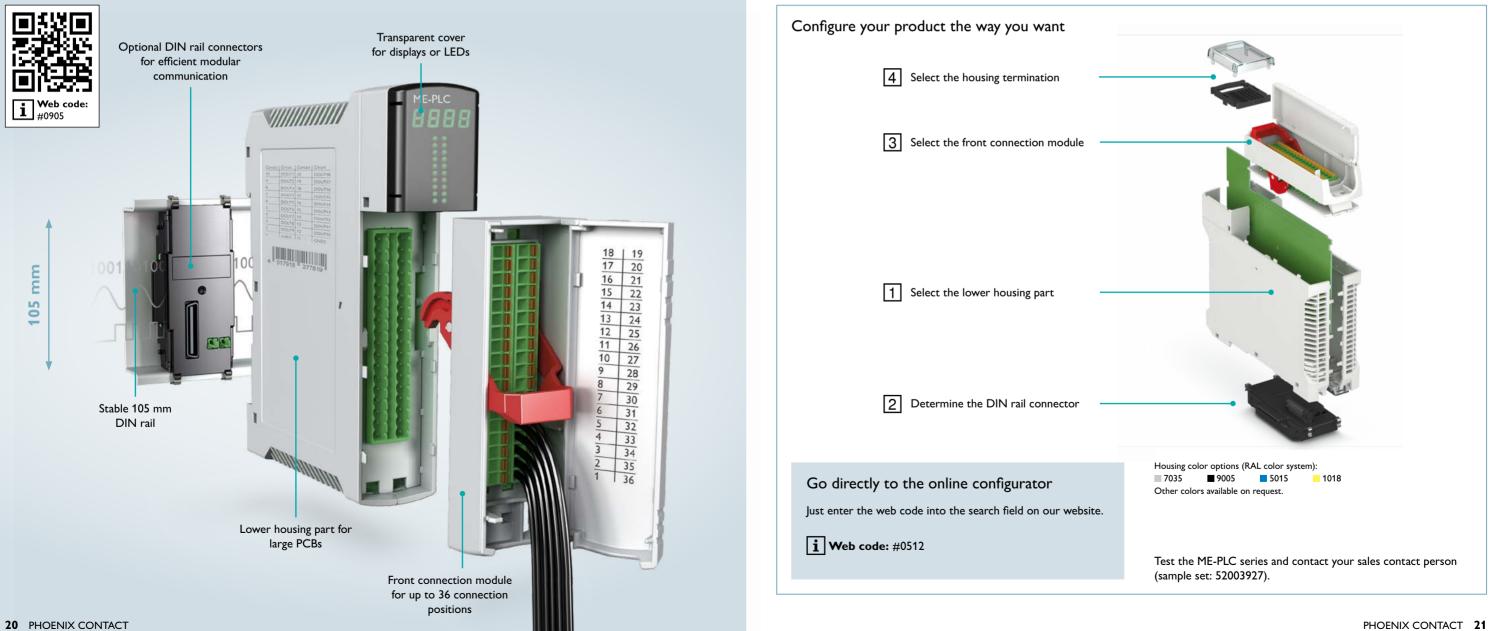
Multifunctional electronics housings from the ME-PLC series are ideal for applications that require a large installation space and connection technology on the front The housing system offers a large PCB mounting surface and efficient DIN rail connectors for a wide range of applications.

Your advantages





Front connection module with lever technology for high connection convenience Convenient transmission of data and power, thanks to DIN rail connectors with up to 50 positions





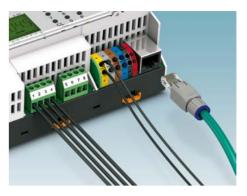
Universal cover design for freely selectable connection technology

Modular BC building installation housings

Modular electronics housings of the BC series represent future-oriented applications in building automation. The electronics housings feature modern design, multi-sided PCB connections, and an efficient DIN rail connector. The BC housings are suited for direct wall mounting or for use in installation distributors in accordance with DIN 43880.

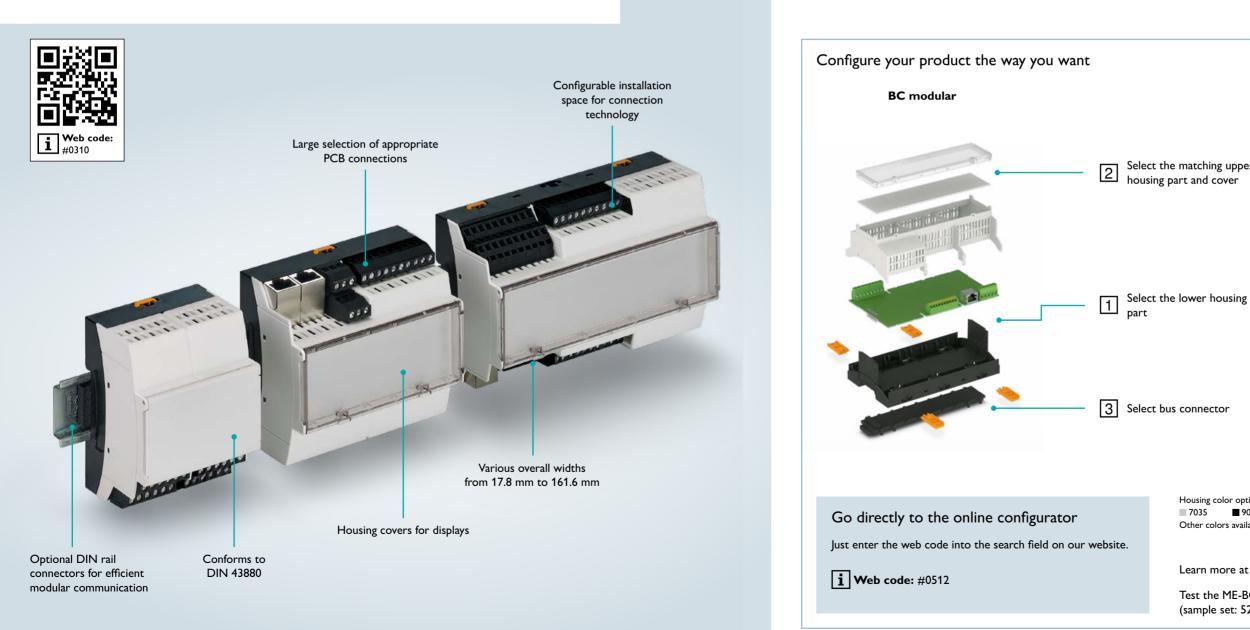
Your advantages

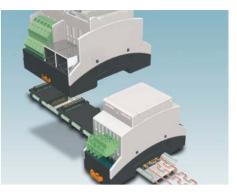




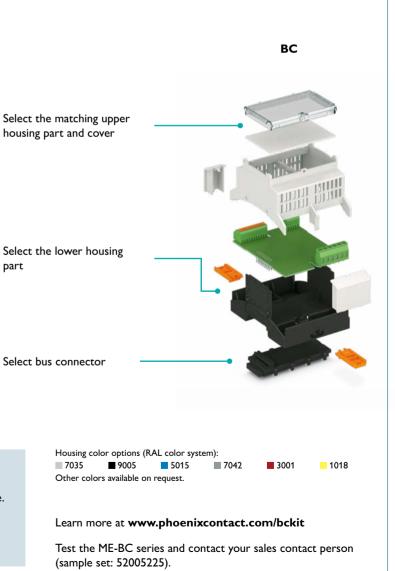
Standard-compliant housing and installation dimensions for use in installation distributors

Maximum flexibility, thanks to free choice of PCB connection technology and various overall widths





16-position DIN rail connector for series and parallel modular communication



Modular electronics housings for Raspberry Pi applications

Modular electronics housings of the RPI-BC and UCS-RPI series are specially designed for integration of Raspberry Pi minicomputers. The RPI-BC housings are designed in accordance with DIN 43880, are alignable, and can be mounted on DIN rails or directly on the wall. Thanks to the comprehensive range of accessories, such as stands, corner guards, and wall and desk adapters, the UCS-RPI can be used universally. Optional interfaces allow straightforward expansion of the functions of the integrated single-board computer.



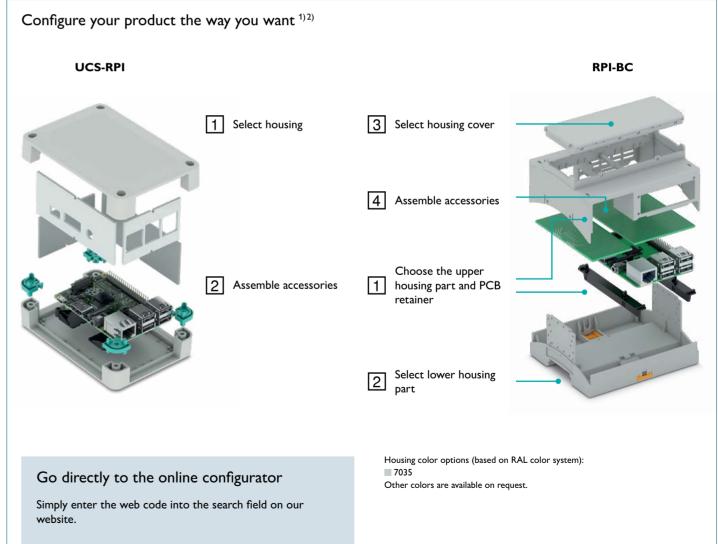
Your advantages





Individual function extensions due to optional interfaces and additional accessories

Easy integration of the Raspberry Pi touch display and more space is available for individual circuits in order to extend range of functions



i Web code: #0512



16-pos. DIN rail connector for series and parallel module communication

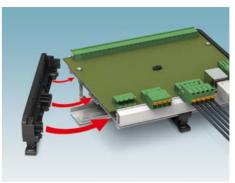
Test the RPI-BC series and get in touch with your sales contact person (sample set: 52007812).

UM press-drawn section housings for individual PCB sizes

Press-drawn section housings of the UM-BASIC and UM-PRO series allow for individualized installation dimensions and outstandingly simple assembly. The open design principle is ideally suited for flexible and large-scale device concepts.

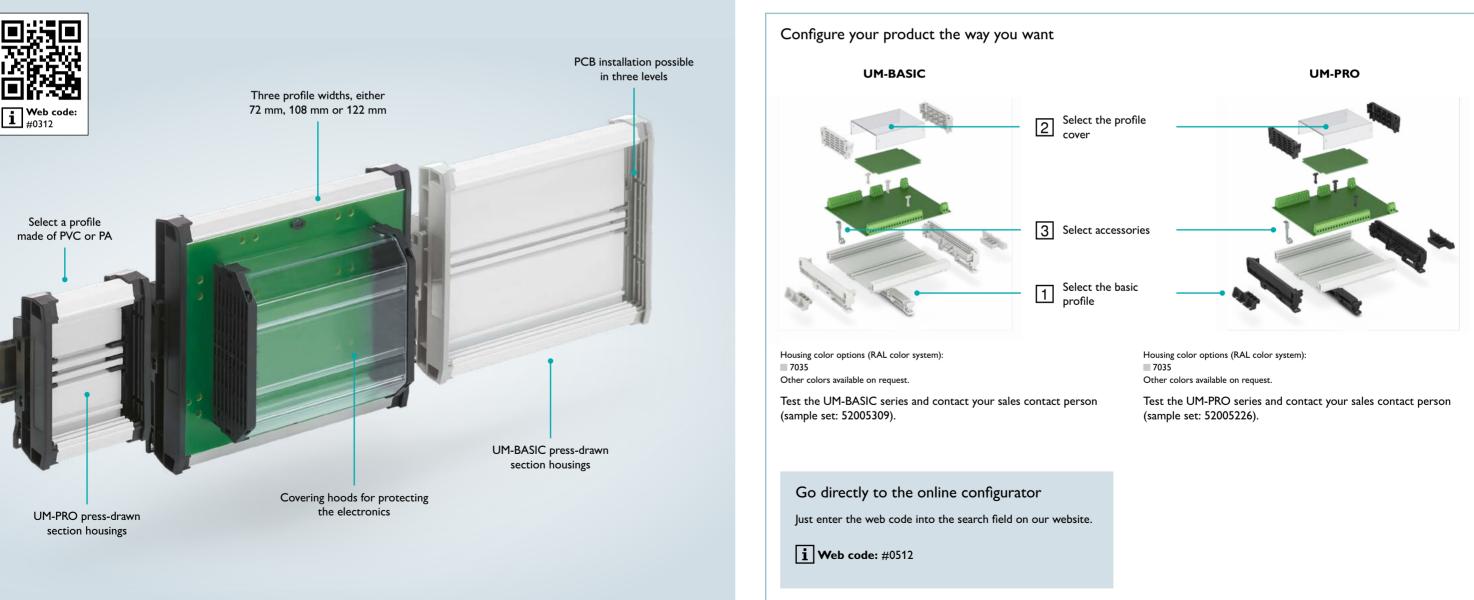
Your advantages





Housings made of PVC (UM-BASIC) or PA (UM-PRO) for application temperatures up to +50°C or up to +100°C

Easy device mounting method, thanks to snap-mount principle (the sides are fixed without the aid of tools)







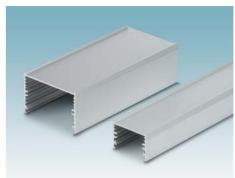
High degree of flexibility, thanks to freely positionable covering hoods

UM-ALU press-drawn section housings for EMC-sensitive electronics

Made entirely of aluminum, the UM-ALU housing system offers a high degree of electromagnetic compatibility (EMC) and ensures full flexibility in the assembly process. The housings are especially suited for industrial environments with high electromagnetic interference potential.

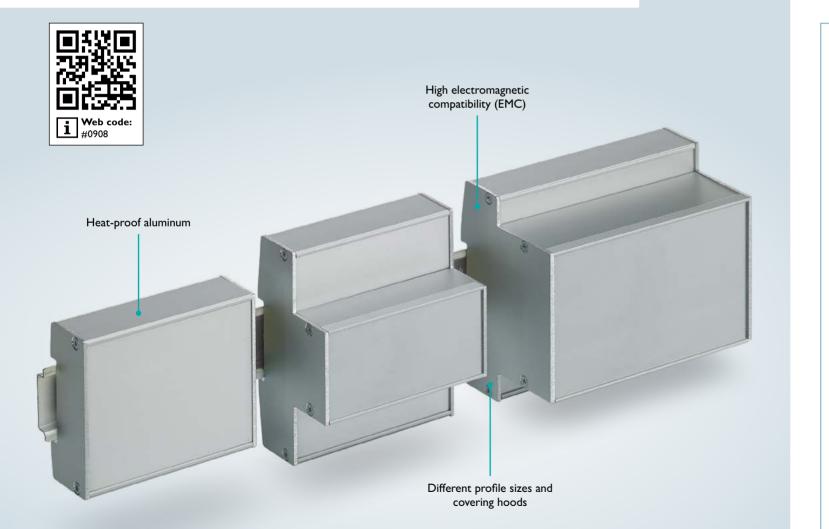
Your advantages

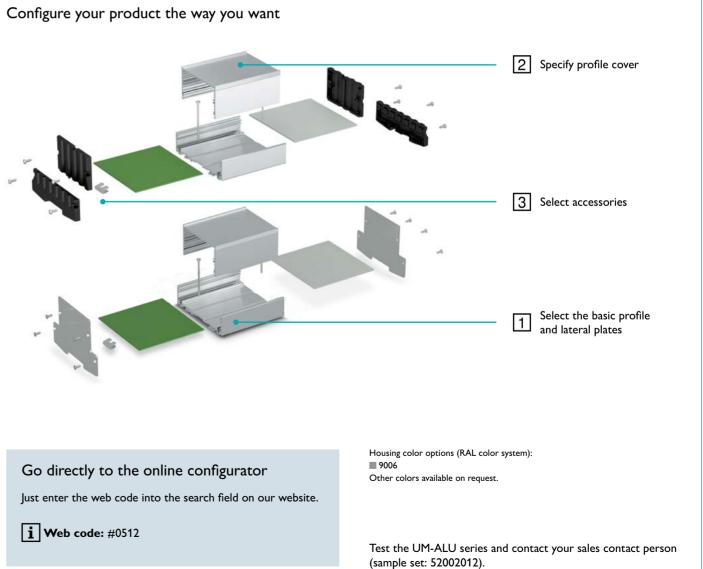


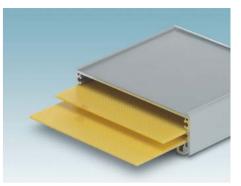


Heat-proof aluminum for optimal protection of sensitive electronics

Different profile sizes and covering hoods for electronics assemblies suited to the application







PCB installation on up to seven levels for flexible electronics solutions

Field housings

Whether as stationary display units, mobile operator panels, or embedded systems – field housings from Phoenix Contact provide a high degree of protection ideal for countless applications in building, industrial, or process automation.





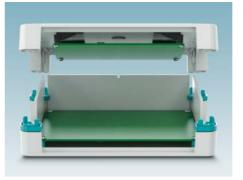
Your advantages

- Wide range of applications, thanks to modular housing systems
- High degree of protection, up to IP69K, for use in harsh ambient conditions
- Proven PCB connection technology permits practical customization
- Customer-specific versions for unique device designs

UCS universal housings for embedded systems

Universal housings from the UCS series are the ideal solution for embedded systems. The IP40 housings reliably protect printed-circuit boards in standard form factors from external influences. Removable side panels enable modular housing solutions in individual heights. The UCS series is characterized by flexible PCB mounting and a wide range of possible applications.

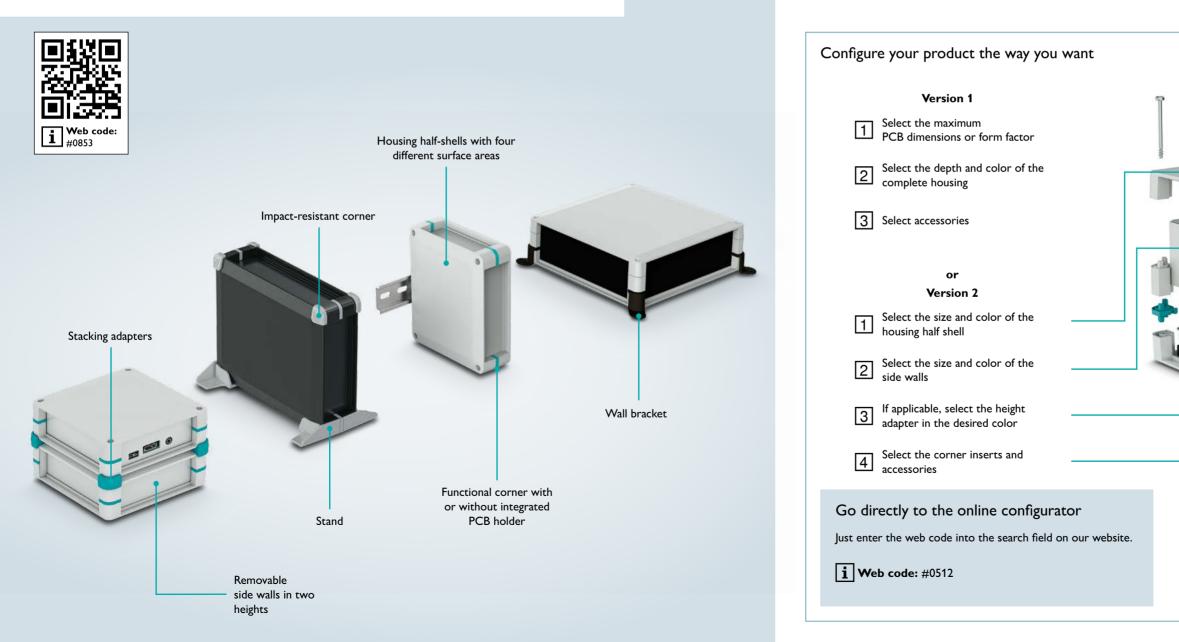
Your advantages

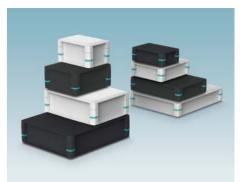




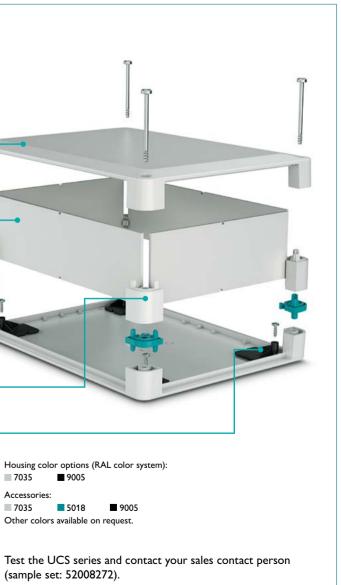
Integrated or flexible PCB mount for variable electronics solutions

Even more universal deployability, thanks to DIN rail adapter and other accessories





Modular system for highest adaptivity and simple storage



HCS handheld housings for portable devices

Ergonomic handheld housings from the HCS series are ideal for mobile operator panels for measuring and inspection technology and for scanners or identification devices. The housings are made from stable ABS plastic and can be used in logistics, distribution, and process technology.

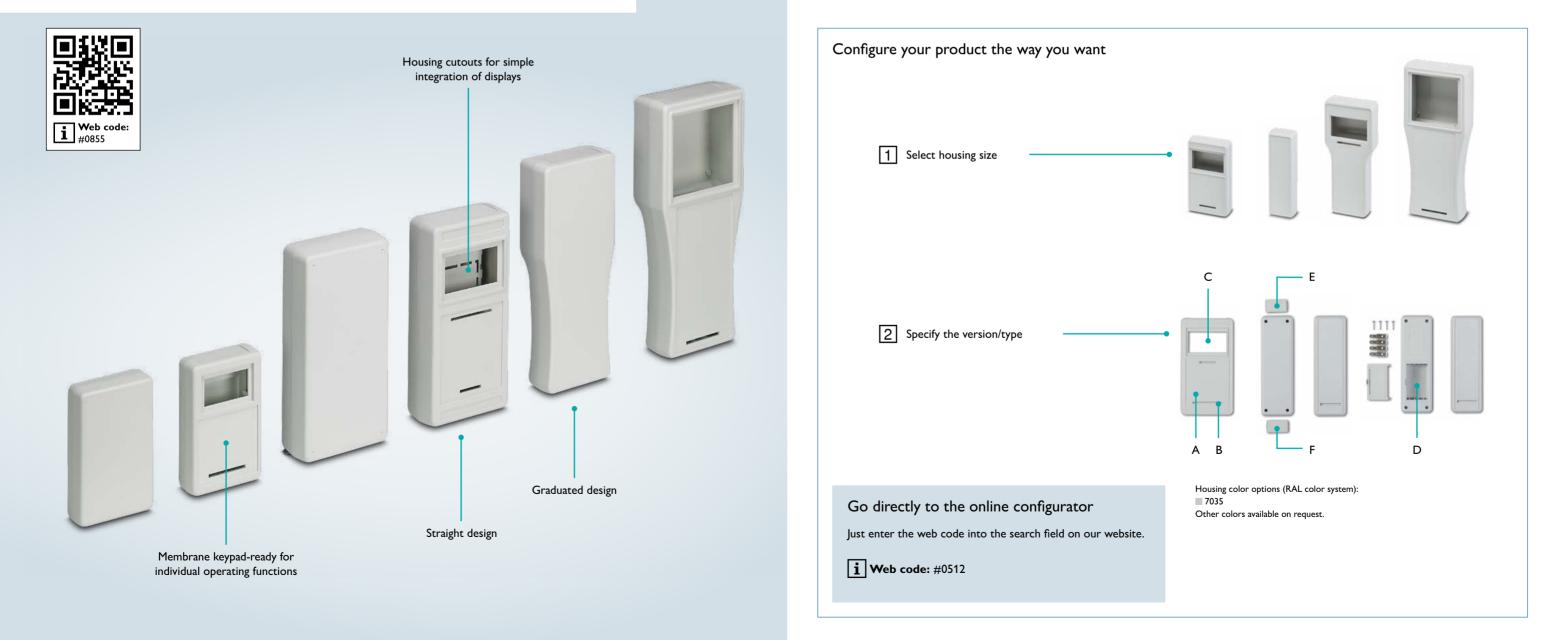
Your advantages





Simple integration with perfect-fit membrane keypads, available to fit custom specifications

Easy integration of displays





Standard versions for different device interfaces and for power supply

HC-ALU profile housings for mobile applications

Robust aluminum profile housings from the HC-ALU series protect electronics from splash water as well as thermal and mechanical influences in the field. These field housings are ideal for temperature ranges from -40°C to +70°C and provide IP65 dust and splash water protection in accordance with DIN EN 60529.

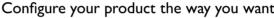
Your advantages

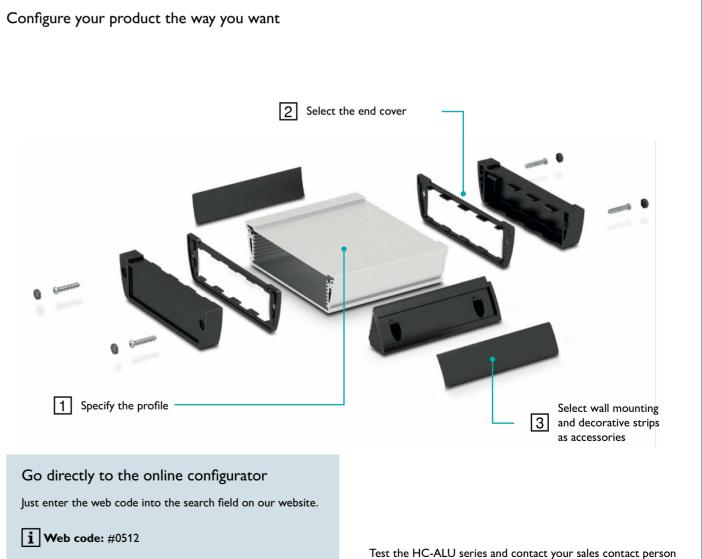




Robust, split-aluminum profile for lightweight modules ensures reliable use in demanding conditions

Simple integration of displays, custom membrane keypads and front plates allows versatile deployability











Dust and splash water protection in accordance with the IP65 degree of protection



Wall mounting for stationary applications

(sample set: 52002014).

ECS outdoor housings for harsh conditions

Robust outdoor housings from the ECS series are the ideal solution for protecting sensitive electronics used in indoor and outdoor applications from dust, dirt, and water. Thanks to the IP65 to IP69 degrees of protection and a wide temperature range of -40°C to +100°C, the housings are ideal for challenging ambient conditions.

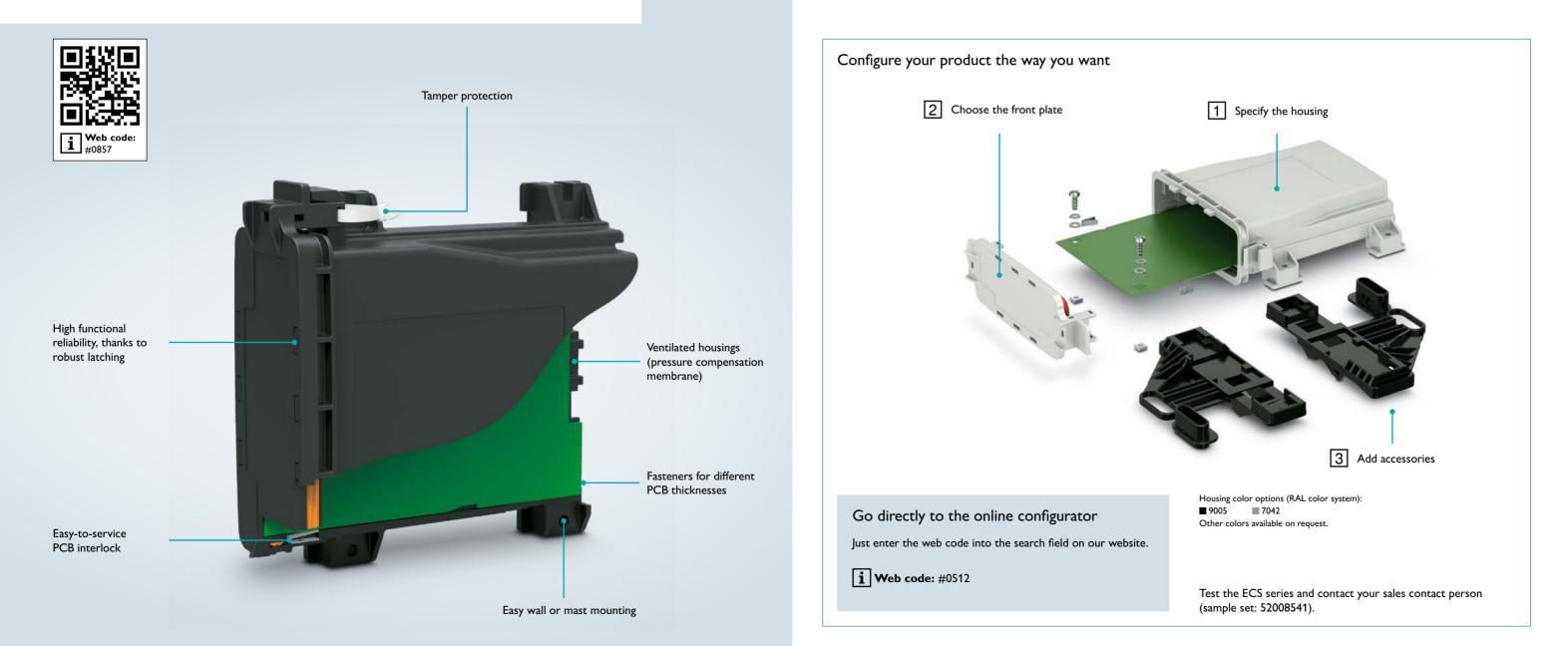
Your advantages





Integrated interlock to protect against unintentional release of the PCB

Optional pressure compensation membrane for vented housing designs







Protection against tampering, thanks to a simple lead seal

DCS display carrier system for industrial applications

Display carriers from the DCS series integrate TFT displays of different sizes. They reliably protect mobile and stationary electronics from mechanical effects as well as dust and splash water. Optional membrane keypads and displays help you implement human-machine interfaces for data input and display that are suited to your application.

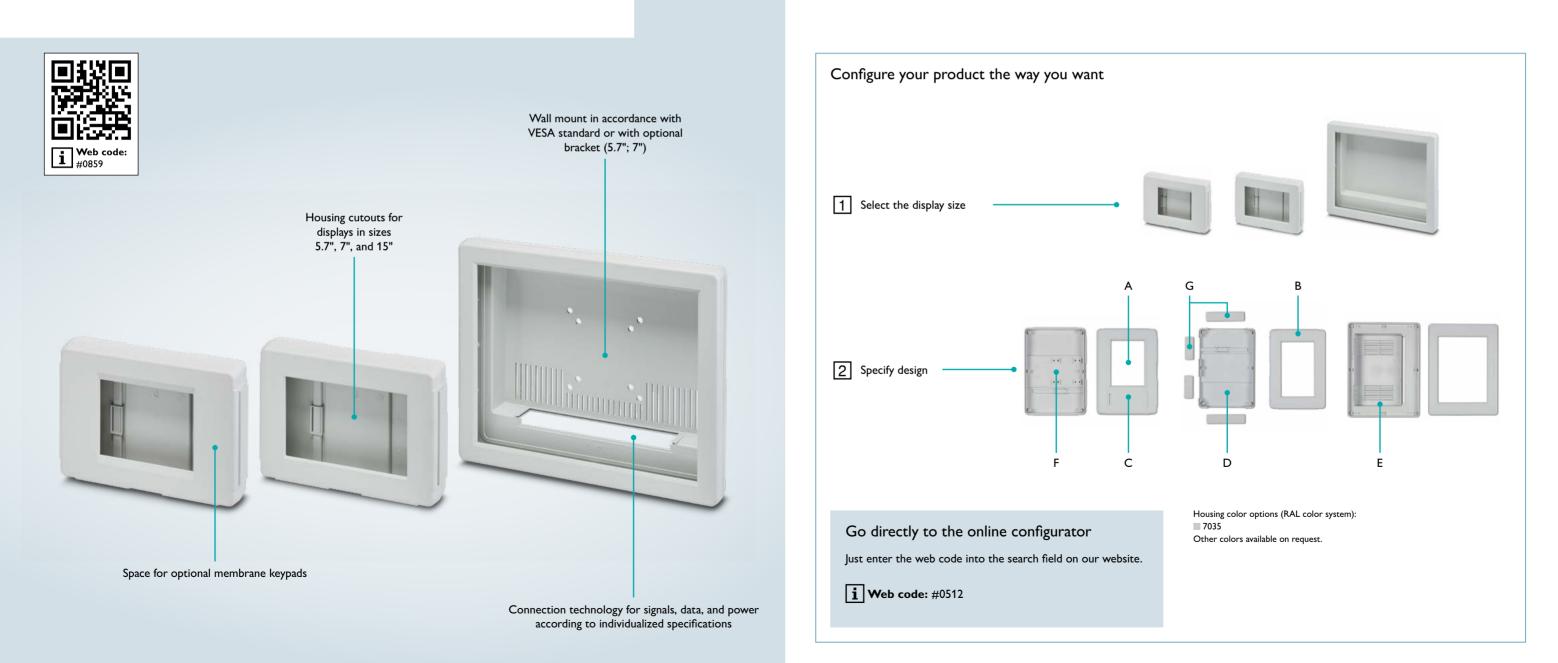
Your advantages





Membrane keypads fit perfectly, also available in custom specifications

Easy integration of displays with coordinated mounting kits





Standard versions for different device interfaces

HMI components and accessories

Highly automated production processes require user-friendly interfaces between the operator and the machine. Displays, membrane keypads, and light guides turn various electronics housings into functional display and operating elements.

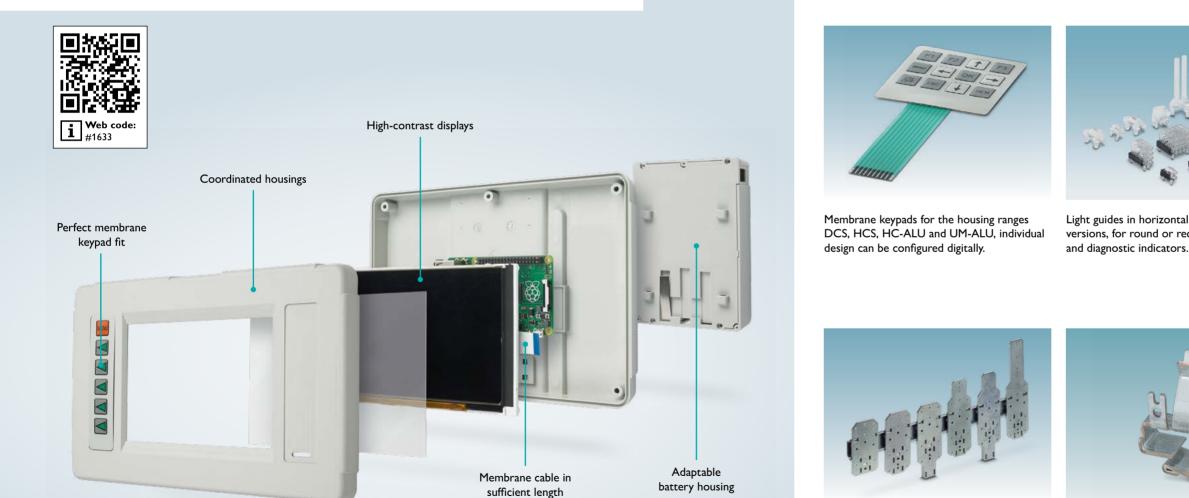
HMI components and accessories for electronics housings





High-contrast TFT displays with additional mounting material for installation in electronics housings

tool-free installation in the housing ranges ME, ME MAX and ME-IO



UTA DIN rail adapters for universal device mounting



Shield connection clamps for direct shield connection to conductive mounting plates



Display holders in different color versions for



Capacitive touch displays for installation in electronics housings



Light guides in horizontal and vertical versions, for round or rectangular status



Swivel wall and profile brackets for all monitors with standardized VESA interfaces



Metal and plastic base latches

Kits

_ BC 107,6 [Designer Kit		
	Description	Туре	Order No.
1	Contains BC 107,6 housing, PCB terminal blocks (MKDS), and breadboard/ prototype PCB For more information visit www.phoenixcontact.com/bckit	BC Designer Kit	1036755
ME MAX 2	22,5 Designer Kit		
and the second s	Contains ME MAX 22,5 housing, PCB plugs and headers (MSTB), and breadboard/prototype PCB For more information visit www.phoenixcontact.com/memaxkit	ME MAX Designer Kit	1037058
B ME 22,5 D	esigner Kit		
S.	Contains ME 22,5 housing, PCB plugs and headers (MSTB and PSPT), and breadboard/prototype PCB For more information visit www.phoenixcontact.com/mekit	ME Designer Kit	1037061
EH Design	er Kit		
	Contains EH 45 Flat housing, PCB terminal blocks (MKDS 3), and breadboard/prototype PCB For more information visit www.phoenixcontact.com/ehkit	EH Designer Kit	1036922
5 ME-IO De	signer Kit		
, MIN	Contains ME-IO 18,8 housing, PCB plugs and headers (HSC), and breadboard/prototype PCB For more information visit www.phoenixcontact.com/meiokit	ME-IO Designer Kit	2203063
6 UM-BASIC	C 108 Development Kit		
	Contains UM-BASIC 108 mm wide, 10 cm long profile and PCB terminal blocks (SMKDS)	UM-BASIC 108 100MM DEV-KIT KMGY	2202528
	Breadboard/prototype PCB	UM-BASIC 108/32 DEV-PCB	2202551

Development kits for prototype building and short-run production¹⁾





¹⁾ PCB with hole pattern

i Web code: #0686

Development kit contains housing and connection technology for an operational module Specific bus connectors available



3 ME 22,5

Services for customizing your housings

Phoenix Contact creates customized housings with matching connection technology for you, regardless of whether you use a screw or spring connection. We offer professional support, from the modification of a standard product all the way to developing a completely new product.

Color versions **i** Web code: #0685 -Customer-specific machined holes Pad printing for logos Laser marking with bar code and markings and serial number

Screen printing for multicolored surface printing

Your options for customization



Individual color versions To maximize the recognition factor, housings can also be produced in other colors.



Mechanical processing

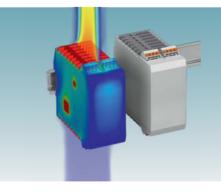
Customer-specific breakouts can be made in the housings with our state-of-the-art milling machines.





Pad printing Pad printing is ideal for cost-effective printing of logos, texts, and circuit diagrams.

Screen printing Screen printing is suitable for space-filling and multicolored printing with brilliant colors or color gradients.



Thermal management In thermally demanding applications, the generation of heat can be simulated in the development process.



Customized front design

With the ICS Cover Designer, you can create customized ICS series housing covers and have the production of prototypes carried out using 3D printing processes.



Tool modification

For large volumes, an injection molded version is often more cost-effective than mechanical post-processing.



Laser marking

The resilient laser marking is suitable for bar codes, data matrix codes, and QR codes in harsh environments.



Individual membrane keypads

Customer-specific keys or membranes can be designed digitally with pad or digital printing.

New customer-specific product developments

Do you have specific requirements for a unique new product? We can support you with our expertise in the development, production, and quality assurance of your customized solution. We rely on our product technology and development processes that have proven successful for many years.

The path to your new customer-specific development



Concept development



Design

We work together with you to determine the requirements for your product. We address challenges early on and guarantee an efficient development.

Preliminary clarification is followed by designing and implementing prototypes. What we learn from prototyping is then taken into consideration when we create the final product.

Your advantages

- Expert consultation on product requirements
- Detailed design of your preferred concept
- Development of the ideal production concept
- Product qualification at our in-house laboratory
- Certification of the solution for your application
- Targeted project management up to the start of series production

48 PHOENIX CONTACT



Quality assurance

We carefully test your product in all manufacturing phases. We ensure this with intensive testing before the series release and with production-related checks.



requirements and the latest quality standards. Series production is lucrative for you even for low quantities.



Production setup

We use our global network to find the ideal location for your requirements. You get the highest product quality, thanks to ideal manufacturing performance.

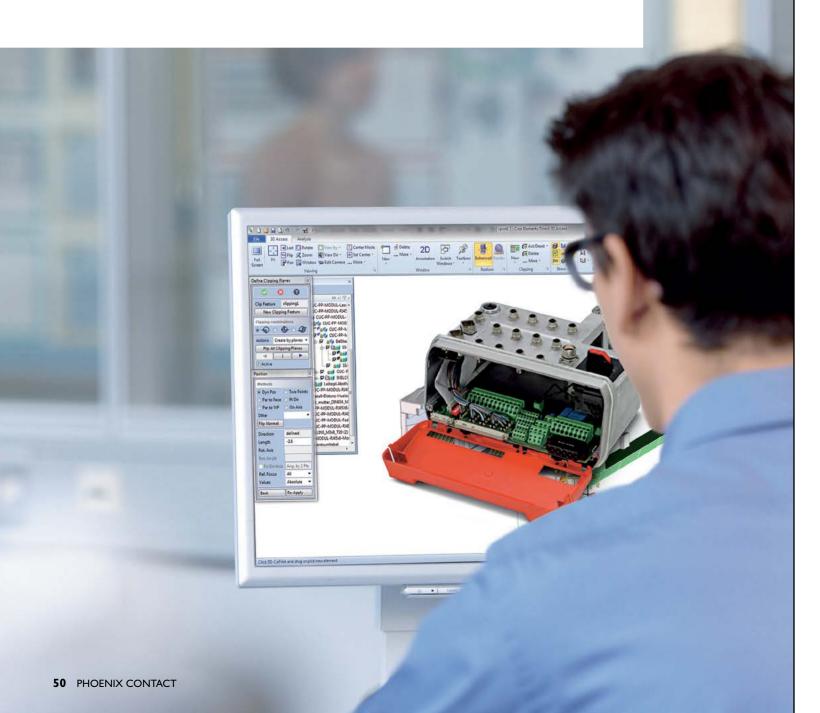


Logistics

Efficient logistics for your satisfaction: we deliver the finished product to you on schedule and according to your wishes.

In-depth expert knowledge in all project phases

Our philosophy is to master and advance all development, manufacturing, and assembly processes. This helps us to guarantee a consistently high quality and delivery reliability. Take advantage of our years of expertise. Whether it's power transmission, protected solutions for outdoor use, or industrial housings in your desired design - we offer you a product design developed specifically for your needs.



Our main areas of expertise at a glance



Connection technologies Rigid or flexible conductors, large or small cross sections, with or without a ferrule: we have the solution for every requirement.



Contact technology

Signals, data, high power, or use in harsh environments - whatever you need, we have the right contacts.



Plastics technology

selecting the plastic.

Choose from a large variety of plastic

materials and colors. We assist you with



Injection-molding production Our injection-molding technology offers you nearly limitless design options for surfaces. Even small quantities are lucrative for you.



Simulation

State-of-the-art simulation methods provide us with insight and understanding right down to the smallest detail. We test your product intensively, starting in the early stages of development.



Prototype construction

We deliver prototypes with up to 100% capability – including additive manufacturing with 3D printing from PROTIQ GmbH.

Metal housings, die-casting technology

Metal housings are ideal for industrial applications, due to their robustness and excellent shielding.



IP protection

Whether molded solutions or molds for outdoor applications: our seal systems also satisfy the requirements for high degrees of protection.



Certifications

International approvals and certificates, including the UL standard, attest to the suitability of our products.

Ongoing communication with customers and partners worldwide

Phoenix Contact is a global, market leader based in Germany. Our group is known for its future-oriented components, systems, and solutions in the fields of electrical engineering, electronics, and automation.

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With a global network reaching across more than 100 countries and 17,400 employees, we can stay in close contact with our customers, something we believe is essential to success. The wide variety of our innovative products makes it easy for our customers to find futureoriented solutions for multiple applications and industries. We especially focus on the fields of energy, infrastructure, process, and factory automation.

You will find our complete product range at: www.phoenixcontact.com

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