

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image















Superior efficiency, flexibility and design - the "standard tailor-made fit"

When selecting a housing design, flexibility is a key factor. Other important criteria are: scalability, customised design, innovative functionality and cost efficiency. You need a choice which offers the maximum performance with the minimum overhead.

The CH20M17 modular electronics housing is the ideal housing solution for compact standard electronics applications.

The entire system is characterized by excellence: outstanding scalability and flexibility, a high security level, innovative application functionality and a variety of practical details.

- Quicker installation with features such as "Wire ready" the universal multi-tool screw head
- **User-friendly operations:** with clear and permanent labelling and extra marking possibilities, integrated release clip or transparent cover
- Maximum interference immunity with EMCcompliant construction featuring deeply overlapping module joint edges made from high-performance plastic
- High operational reliability with the unique Auto-Set coding system and featuring double-sided touch protection on the pin header and socket blocks

CH20M - a compact name for the most flexible system available on the market. It doesn't just stand for "Component Housing IP20 Modular".

CH20M also stands for efficiency and innovation throughout design, production and use.

General ordering data

| Version | Modular housing, OMNIMATE Housing - series CH20M Agate grey, Width: 17.5 mm |
|------------|---|
| Order No. | <u>2554640000</u> |
| Туре | CH20M17 B AGY/BK 3747 |
| GTIN (EAN) | 4050118565041 |
| Qty. | 12 pc(s). |



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Technical data

| Dim | ensions | and | weights |
|-----|-----------|-----|---------|
| | GIISIUIIS | anu | WEIGHLS |

| Height | 109.3 mm | Height (inches) | 4.303 inch |
|----------------|------------|-----------------|------------|
| Length | 107.4 mm | Length (inches) | 4.228 inch |
| Net weight | 29.858 g | Width | 17.5 mm |
| Width (inches) | 0.689 inch | | |

Temperatures

| Operating temperature range | -40 °C120 °C | Installation temperature | -25 °C85 °C |
|-----------------------------|-----------------------------|--------------------------|-------------|
| Humidity | 5 - 93% rel. humidity, Tu = | | |

Component Properties

Color of clip-on foot black

Thermal tests

| Thermal tests | Test conditions | three housings installed in a row - no spacing, three connection level - six connectors per housing |
|---------------|-------------------------|---|
| | Test axles | horizontal, More on request |
| | Ambient temperature | °C 08 |
| | Power dissapation, max. | 0.9 W |
| | Ambient temperature | 60 °C |
| | Power dissapation, max. | 1.7 W |
| | Ambient temperature | 40 °C |
| | Power dissapation, max. | 2.45 W |
| | Ambient temperature | 20 °C |
| | Power dissapation, max. | 3.2 W |

Assembly properties

| Number of PCBs, max. | 1 | Number of connection levels 3 max. |
|-----------------------------|--------------|---|
| Number of poles, max. | 18 | Height of components on the PCB, max. 11.1 mm |
| Type of assembly of the PCB | double-sided | |

Design - IN requirements

| PCB thickness | 1.6 mm | Tolerance for the PCB shape | ±0.1 mm | |
|--------------------------------------|----------|-----------------------------|---------|--|
| Tolerance of circuit board thickness | ±0.15 mm | | | |

Individualization options

| Customer specific labelling possible | | Customer specific order process | See guideline under |
|--------------------------------------|------------------|---------------------------------|---------------------|
| | Yes | | downloads |
| Processing possibilities | Laser processing | | |

General data

| Colour | Agate grey | Colour chart (similar) | RAL 7038 |
|----------------------|------------|------------------------|----------|
| Encapsulation option | No | Protection degree | IP20 |
| Rail | TS 35 | | |



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Material data

| Comparative Tracking Index (CTI) | ≤ 600 | Insulating material | PA 66 GF 30 | |
|----------------------------------|---|---------------------------|-------------|--|
| Insulating material group | I | UL 94 flammability rating | V-0 | |
| Classifications | | | | |
| ETIM 6.0 | EC001031 | ETIM 7.0 | EC001031 | |
| ECLASS 9.0 | 27-18-27-90 | ECLASS 10.0 | 27-18-27-92 | |
| ECLASS 11.0 | 27-18-27-92 | | | |
| Important note | | | | |
| Product information | Circuit board contour, restricted zones, and other information for the design in of the circuit board can be found in the category connection technology under the corresponding male headers in the downloads. | | | |
| Approvals | | | | |
| ROHS | Conform | | | |
| Downloads | | | | |
| | | | | |
| Engineering Data | STEP PCB_position_70149_LP-POSITION_17MM Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315 | | | |
| Engineering Data | <u>EPLAN</u> | | | |
| User Documentation | Guideline customerspecific housings Guideline kundenspezifische Gehäuse | | | |
| Brochure/Catalogue | Catalogues in PDF-format | | | |



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Drawings

Product image



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Base element without cut-out in snap-in foot area