

CH20M67 B 2FE BK/OR

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 CH20M67 modular electronics housings come in XXL size and are an integrated range. It is suited for those electronics applications that require lots of space, such as compact controllers and power supplies.

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 EMC-compliant 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 | Mounting rail housing, OMNIMATE Housing - series CH20M black, Base element, Recess in the dent foot area for FE contact, Width: 67.5 mm |
| Order No. | 2745200000 |
| Type | CH20M67 B 2FE BK/OR |
| GTIN (EAN) | 4064675267881 |
| Qty. | 4 pc(s). |

CH20M67 B 2FE BK/OR**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Technical data****Dimensions and weights**

| | | | |
|------------|----------|-----------------|------------|
| Depth | 107.4 mm | Depth (inches) | 4.228 inch |
| Height | 109.3 mm | Height (inches) | 4.303 inch |
| Width | 67.5 mm | Width (inches) | 2.657 inch |
| Net weight | 61.25 g | | |

Temperatures

| | | | |
|-----------------------------|-----------------|----------|---|
| Operating temperature range | -40 °C...120 °C | Humidity | 5 - 93% rel. humidity, Tu = 40°C, no condensation |
|-----------------------------|-----------------|----------|---|

Material data

| | | | |
|----------------------------------|-----------|---------------------------|-------------|
| Comparative Tracking Index (CTI) | 600 ≤ CTI | Insulating material | PA 66 GF 30 |
| Insulating material group | I | UL 94 flammability rating | V-0 |

General data

| | | | |
|----------------------|-------|------------------------|-------------------------|
| Colour | black | Colour chart (similar) | RAL 9011 |
| Encapsulation option | No | Protection degree | IP20 in installed state |
| Rail | TS 35 | | |

Assembly properties

| | | | |
|---|---------|--|--------------|
| Number of slots for female connectors of the mounted assembly, max. | 18 | Number of PCBs, max. | 3 |
| Number of connection levels, max. | 3 | Number of poles, max. | 72 |
| Height of components on the PCB (usage of 1 PCB), max. | 61.1 mm | Height of components on the PCB (usage of 2 PCB), max. | 57.2 mm |
| Height of components on the PCB (usage of 3 PCB), max. | 34.7 mm | Type of assembly of the PCB | double-sided |

Mechanical tests

| | | | |
|-----------------------|--|--|--|
| According to Standard | DIN EN 61373:1999 (shock and vibration) | | |
| Test conditions | three housings installed in a row, 200g additional weight per PCB, three PCB mounted | | |
| Proved axes | X, Y, Z | | |
| Shock test | General test advices | All mechanical tests were tested on exemplary setup, or in view of depending regulation. The specified results do not replace approval relevant tests. They are just orientation values. | |
| | Test category | 1 | |
| | Number of shocks per axle | 3 in positive and negative direction | |
| | Shock duration | 30 ms | |
| | Acceleration horizontal | 30 m/s ² | |
| | Acceleration vertical | 30 m/s ² | |
| | Acceleration longitudinal | 50 m/s ² | |
| Vibration test | Test category | 1B | |
| | Effective acceleration | 7.9 m/s ² | |
| | Test duration | 5 hours per axle | |

CH20M67 B 2FE BK/OR

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Thermal tests

| | | |
|---------------|-------------------------|--|
| Thermal tests | General test advices | All thermal tests were tested on exemplary set-up, or in view of depending regulation. The specified results do not replace approval relevant tests. They are just orientation values. |
| | Test conditions | seven housings installed in a row - no spacing |
| | Test axles | horizontal |
| | Ambient temperature | 80 °C |
| | Power dissipation, max. | 5.7 W |
| | Ambient temperature | 60 °C |
| | Power dissipation, max. | 8.1 W |
| | Ambient temperature | 40 °C |
| | Power dissipation, max. | 10.8 W |
| | Ambient temperature | 20 °C |
| | Power dissipation, max. | 13.6 W |

Component properties

| | | | |
|-----------------------------------|--------|---|--------------------------------------|
| Color of clip-on foot | orange | Cut out in clip-on foot area as preparation for | 2x FE contact, contact not included! |
| Number of connection levels, max. | 3 | | |

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

| | | | |
|---------------------------------|-------------------------------|--------------------------------------|------------------|
| Alternative colours | More on request | Customer specific labelling possible | Yes |
| Customer specific order process | See guideline under downloads | Processing possibilities | Laser processing |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC001031 | ETIM 9.0 | EC001031 |
| ECLASS 11.0 | 27-18-27-92 | ECLASS 12.0 | 27-18-27-92 |
| ECLASS 13.0 | 27-19-06-01 | | |

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | / |
|------------|---|

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 |
|------|---------|

CH20M67 B 2FE BK/OR

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

Downloads

| | |
|--------------------|---|
| Engineering Data | CAD data – PCB_position_70144_LP-POSITION_67MM |
| | CAD data – Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315 |
| | CAD data – STEP |
| User Documentation | Guideline customerspecific housings |
| | Guideline kundenspezifische Gehäuse |
| Catalogues | Catalogues in PDF-format |

CH20M67 B 2FE BK/OR

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

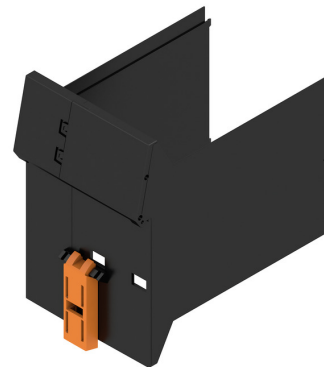
www.weidmueller.com

Drawings

Product image

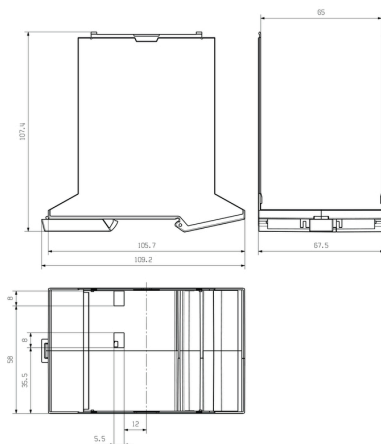


Product benefits



Base element including two FE cut-out

Dimensioned drawing



CH20M67 B 2FE BK/OR

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

FE Contact - CH20M



FE contact

Functional reliability - either fully integrated or simply mounted

The optional "CH20M FE" connection optimally protects your system with a mounting rail contact for the functional earth.

- The functional earth contact pre-assembled in the 6 mm housing enables permanent and reliable connection of electronic shields for the electronic circuit to the mounting rail (e.g. "CH20M6 BP 4P-4P FE BK", 1164650000)
- A functional earth contact, which can be processed fully automatically using the reflow method together with the male connectors and an optional bus contact, is available for housings from 12.5 to 67.5 mm. The position of the PCB in the housing specifies the pin length of 1.5 mm / 3.2 mm

General ordering data

| Type | CH20M FE 12-67 3.2SN RL | Version | Product data | Packaging |
|------------|----------------------------|---|--------------|-----------|
| Order No. | 1264240000 | Electronics housings, Accessories, THT/THR solder connection, 5.00 | UL: | Tape |
| GTIN (EAN) | 4050118073997 | mm, Number of poles: 1, Solder pin length (l): 3.2 mm, tinned, Silver | | |
| Qty. | 750 pc(s). | grey, Tape | | |
| Type | CH20M FE 12-67 1.5SN RL | Version | Product data | Packaging |
| Order No. | 1189370000 | Electronics housings, Accessories, THT/THR solder connection, 5.00 | UL: | Tape |
| GTIN (EAN) | 4032248972715 | mm, Number of poles: 1, Solder pin length (l): 1.5 mm, tinned, Silver | | |
| Qty. | 750 pc(s). | grey, Tape | | |