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DIN rail housing, Complete housing with metal foot catch, tall design, without vents, width: 90 mm, height: 99 mm, depth: 114.5 mm, color: light gray (7035)

### Your advantages

- Available in overall widths from 6.2 mm to 90 mm, modular extension is possible
- ☑ Inflammability class V0 according to UL 94
- ✓ Variety of connection technologies
- Can be mounted on the DIN rail
- Optional with bus connector for DIN rail mounting as well as power connection system



## **Key Commercial Data**

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	4 0 4 6 3 5 6 0 6 0 6 0 5 9
GTIN	4046356606059

### Technical data

### Item properties

·	
Brief article description	Electronic housing
Туре	ME MAX 90 G U-U1 KMGY
Order No.	2200533
Housing type	DIN rail housing
Housing series	ME-MAX
Туре	Complete housing with metal foot catch, tall design
Max. IP code to attain	IP20
Mounting type	DIN rail mounting



## Technical data

### Item properties

Number of levels	1
Connection levels	0 (Top) / 1 (Bottom)
Ventilation openings present	no
Max. number of positions	20 (pitch: 3.5 mm)
	16 (pitch: 5 mm)
	12 (pitch: 7.25 mm/7.5 mm)

#### **Dimensions**

Width [w]	90 mm
Height [ h ]	99 mm
Depth [ d ]	114.5 mm
Depth from top edge of DIN rail [ d ]	107 mm

### Material data

Housing material	Polyamide
Color (RAL)	light gray (7035)
Flammability rating according to UL 94	V0

#### Ambient conditions

Ambient temperature (storage/transport)	-40 °C 55 °C
Ambient temperature (assembly)	-5 °C 100 °C
Ambient temperature (operation)	-40 °C 105 °C (depending on power dissipation)
Relative humidity (storage/transport)	80 %

### PCB data

Number of PCB holders	4
PCB thickness	1.4 mm 1.8 mm
Mounting position	Vertical (horizontal DIN rail)
Type of PCB mount	Latching

## Power dissipation, single housing at 20 °C

Ambient temperature	20 °C
Reduction factor	1
Mounting position	vertical
Power dissipation	9.7 W

## Power dissipation, single housing at 30 °C

Ambient temperature	30 °C
Reduction factor	0.91
Mounting position	vertical
Power dissipation	8.8 W

## Power dissipation, single housing at 40 °C

Ambient temperature	40 °C
Reduction factor	0.81



## Technical data

## Power dissipation, single housing at 40 °C

Mounting position	vertical
Power dissipation	7.9 W

## Power dissipation, single housing at 50 °C

Ambient temperature	50 °C
Reduction factor	0.7
Mounting position	vertical
Power dissipation	6.8 W

## Power dissipation, single housing at 60 °C

Ambient temperature	60 °C
Reduction factor	0.57
Mounting position	vertical
Power dissipation	5.5 W

## Mechanical strength/tumbling barrel

Specification	IEC 60998-1:2002-12
Height of fall	50 cm
Number of drop cycles	10

### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.15 mm (10 - 58.1 Hz)
Acceleration	2g (58.1 - 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

### Shock

Specification	IEC 60068-2-27:2008-02
Pulse shape	Half-sine
Acceleration	15g
Shock duration	11 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

## Degrees of protection provided by housings (IP code)

Specification	IEC 60529:1989-11 + AMD 1:1999-11 + AMD 2:2013-08
Result, degree of protection, IP code	IP20

### General information

Type of note	Assembly instruction:
Note	Refer to the data sheet for the range in the download area.
Type of note	Recommendation



## Technical data

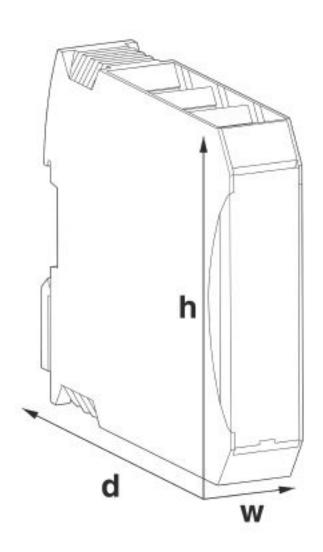
## General information

Note	Material of contact pads for bus connector, galvanic gold (hard gold)
Packaging information	
Type of packaging	packed in cardboard
Pieces per package	10
Denomination packing units	Pcs.
Outer packaging type	Carton
Standards and regulations	
Flammability rating according to UL 94	V0
Environmental Product Compliance	
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings



## Dimensional drawing



## Classifications

## eCl@ss

eCl@ss 10.0.1	27182702
eCl@ss 4.0	27180400
eCl@ss 4.1	27180400
eCl@ss 5.0	27180500
eCl@ss 5.1	27180500
eCl@ss 6.0	27180800
eCl@ss 7.0	27182702
eCl@ss 8.0	27182702
eCl@ss 9.0	27182702



## Classifications

### **ETIM**

ETIM 3.0	EC001031
ETIM 4.0	EC001031
ETIM 5.0	EC001031
ETIM 6.0	EC001031
ETIM 7.0	EC001031

## **UNSPSC**

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31261501
UNSPSC 18.0	31261501
UNSPSC 19.0	31261501
UNSPSC 20.0	31261501
UNSPSC 21.0	31261501

### Accessories

Accessories

Display

Display - DFC T 2,4 QVGA S 7035 - 2203537



TFT module 2.4", 320 x 240 pixels, transmissive, LED backlight, interface: SPI, operating temperature: -20°C ...  $70^{\circ}$ C; frame color (RAL): light gray (7035)

Display - DFC T 2,4 QVGA S 1018 - 2203538

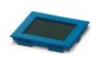


TFT module 2.4",  $320 \times 240$  pixels, transmissive, LED backlight, interface: SPI, operating temperature:  $-20^{\circ}$ C ...  $70^{\circ}$ C; frame color (RAL): yellow (1018)



### Accessories

Display - DFC T 2,4 QVGA S 5015 - 2203539



TFT module 2.4",  $320 \times 240$  pixels, transmissive, LED backlight, interface: SPI, operating temperature:  $-20^{\circ}$ C ...  $70^{\circ}$ C; frame color (RAL): blue (5015)

#### Fiber optic

Fiber optic - HS LC-H-D3/R1XC1 - 2202313



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-5X2/ R1XC1 - 2202314



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D3/ R2XC1-5,08 - 2202315



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2/ R2XC1-2,54 - 2202316



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)



### Accessories

Fiber optic - HS LC-H-D2/ R2XC2-2,54 - 2202317



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2/ R2XC5-2,54 - 2202318



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2/ R2XC10-2,54 - 2202319



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2/ R4XC2-2,54 - 2202320



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2/ R4XC5-2,54 - 2202321



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)



### Accessories

Fiber optic - HS LC-H-D2/ R4XC9-2,54 - 2202322



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2/ R4XC10-2,54 - 2202323



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2C/ R2XC1-2,54 - 1036658



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2C/ R2XC2-2,54 - 1043044



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2C/ R2XC5-2,54 - 1071310

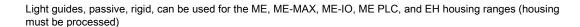


Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)



### Accessories

Fiber optic - HS LC-H-D2C/ R2XC10-2,54 - 1071314





Fiber optic - HS LC-H-D2C/ R4XC2-2,54 - 1071316



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2C/ R4XC5-2,54 - 1071318

Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2C/ R4XC9-2,54 - 1071321



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

Fiber optic - HS LC-H-D2C/ R4XC10-2,54 - 1071329



Light guides, passive, rigid, can be used for the ME, ME-MAX, ME-IO, ME PLC, and EH housing ranges (housing must be processed)

### Filler plug

Filler plugs - ME MAX B-22,5 KMGY - 2707929



DIN rail housing, Filler plug for unoccupied terminal points, width: 20 mm, height: 21.6 mm, color: light gray (7035)



### Accessories

#### Ground contact

Functional ground contact - ME FE-CONTACT - 2908294



DIN rail housing, FE contact with soldering lug, width: 5 mm, height: 15.25 mm, depth: 9.5 mm, color: silver

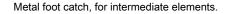
### Functional ground contact - ME BUS FE CONTACT - 2278076



DIN rail housing, FE contact, width: 5 mm, height: 15.25 mm, depth: 9.5 mm, color: silver

#### Mounting material

Base latch - ME MF 17,5 - 2908281





### Necessary add-on products

Feed-through header - MCO 1,5/5-G1L-3,5 KMGY - 2278380



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 5, pitch: 3.5 mm, color: light gray, contact surface: Tin, mounting: Soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Article with lateral pin exit

### Feed-through header - MCO 1,5/ 5-G1R-3,5 KMGY - 2278351



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 5, pitch: 3.5 mm, color: light gray, contact surface: Tin, mounting: Soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Article with lateral pin exit



### Accessories

Feed-through header - MSTBO 2,5/ 4-G1PL GY7035 - 2200325



PCB headers, number of positions: 4, pitch: 5 mm, color: light gray, contact surface: Tin, pin layout: Linear pinning, Article with lateral pin exit

Feed-through header - MSTBO 2,5/ 4-G1PR GY7035 - 2200326



PCB headers, number of positions: 4, pitch: 5 mm, color: light gray, contact surface: Tin, pin layout: Linear pinning, Article with lateral pin exit

Feed-through header - GMSTBO 2,5 HV/ 3-GL-7,25 THR - 2199663



PCB headers, nominal current: 16 A, rated voltage (III/2): 630 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 7.25 mm, color: black, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm, Product with pin output on left side

Feed-through header - GMSTBO 2,5 HV/ 3-GR-7,25 THR - 2199566



PCB headers, nominal current: 16 A, rated voltage (III/2): 630 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 7.25 mm, color: black, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.1 mm, Product with pin output on right side

Feed-through header - MSTBO 2,5/4-G1L THRR44 BK - 2697194



PCB headers, number of positions: 4, pitch: 5 mm, color: black, contact surface: Tin, pin layout: Linear pinning, solder pin [P]: 2.5 mm



### Accessories

Feed-through header - MSTBO 2,5/ 4-G1R THRR44 BK - 2697204



PCB headers, number of positions: 4, pitch: 5 mm, color: black, contact surface: Tin, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Article with lateral pin exit

Feed-through header - MSTBO 2,5/4-G1L KMGY - 2907774



PCB headers, number of positions: 4, pitch: 5 mm, color: light gray, contact surface: Tin, pin layout: Linear pinning, solder pin [P]: 3.5 mm

Feed-through header - MSTBO 2,5/ 4-G1R KMGY - 2907787



PCB headers, number of positions: 4, pitch: 5 mm, color: light gray, contact surface: Tin, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Article with lateral pin exit

PCB terminal block - MKDSO 1,5/5-L-3,5 KMGY - 2278393



PCB terminal block, pitch: 3.5 mm, number of positions: 5, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3 mm. Article with lateral pin exit

PCB terminal block - MKDSO 1,5/ 5-R-3,5 KMGY - 2278416



PCB terminal block, pitch: 3.5 mm, number of positions: 5, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3 mm. Article with lateral pin exit



### Accessories

PCB terminal block - MKDSO 2.5/ 4-L KMGY - 2908485



PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², pitch: 5 mm, number of positions: 4, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

#### PCB terminal block - MKDSO 2,5/4-R KMGY - 2908472



PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², pitch: 5 mm, number of positions: 4, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

#### PCB terminal block - MKDSO 2,5 HV/ 3L-7,5 KMGY - 2890946



PCB terminal block, pitch: 7.5 mm, number of positions: 3, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

#### PCB terminal block - MKDSO 2,5 HV/ 3R-7,5 KMGY - 2890959



PCB terminal block, pitch: 7.5 mm, number of positions: 3, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

### PCB terminal block - FKDSO 2,5/ 4-L KMGY - 2200319



PCB terminal block, nominal current: 22 A, rated voltage (III/2): 250 V, nominal cross section: 2.5 mm², pitch: 5 mm, number of positions: 4, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit



### Accessories

PCB terminal block - FKDSO 2,5/4-R KMGY - 2200320



PCB terminal block, nominal current: 22 A, rated voltage (III/2): 250 V, nominal cross section: 2.5 mm², pitch: 5 mm, number of positions: 4, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

PCB terminal block - FKDSO 2,5 HV/3-L 7,5 GY7035 - 2201128



PCB terminal block, nominal current: 22 A, nominal cross section: 2.5 mm², pitch: 7.5 mm, number of positions: 3, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

PCB terminal block - FKDSO 2,5 HV/3-R 7,5 GY7035 - 2201129



PCB terminal block, pitch: 7.5 mm, number of positions: 3, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

Printed-circuit board connector - MC 1,5/5-ST-3,5 GY7035 - 1769087



PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 5, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, color: light gray, contact surface: Tin

Printed-circuit board connector - FMC 1,5/ 5-ST-3,5 GY7035 - 1773581



PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 5, pitch: 3.5 mm, connection method: Push-in spring connection, color: light gray, contact surface: Tin



### Accessories

Printed-circuit board connector - FK-MCP 1,5/5-ST-3,5 GY7035 - 1773604



PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 5, pitch: 3.5 mm, connection method: Push-in spring connection, color: light gray, contact surface: Tin

Printed-circuit board connector - PSPT 2,5/ 4-ST KMGY - 2202344



PCB connector, nominal current: 16 A, rated voltage (III/2): 300 V, nominal cross section: 2.5 mm², number of positions: 4, pitch: 5 mm, connection method: Push-in spring connection, color: light gray, contact surface: Tin, Color of the spring lever: orange

Printed-circuit board connector - MSTBT 2,5 HC/ 4-STP GY7035 - 2200332



PCB connector, nominal current: 16 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 4, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: light gray, contact surface: Tin

Printed-circuit board connector - GMSTBT 2,5 HV/3-ST-7,25 GY7035 - 2199553



PCB connector, number of positions: 3, pitch: 7.25 mm, color: light gray, contact surface: Tin

Feed-through header - MSTBO 2,5/ 4-G1L KMGY AU - 1077607



PCB headers, number of positions: 4, pitch: 5 mm, color: light gray, contact surface: Gold, pin layout: Linear pinning



### Accessories

Feed-through header - MSTBO 2,5/ 4-G1R KMGY AU - 1077608



PCB headers, number of positions: 4, pitch: 5 mm, color: light gray, contact surface: Gold, pin layout: Linear pinning, Article with lateral pin exit

Feed-through header - MSTBO 2,5/ 4-G1L THRR44 BK AU - 1077613



PCB headers, number of positions: 4, pitch: 5 mm, color: black, contact surface: Gold, pin layout: Linear pinning, solder pin [P]: 2.5 mm, Article with lateral pin exit

Feed-through header - MSTBO 2,5/ 4-G1R THRR44 BK AU - 1077614



PCB headers, number of positions: 4, pitch: 5 mm, color: black, contact surface: Gold, pin layout: Linear pinning, solder pin [P]: 2.5 mm, Article with lateral pin exit

### Additional products

DIN rail bus connectors - ME 22,5 TBUS 1,5/4P1S KMGY - 2201732



DIN rail connector, nominal current: 8 A, rated voltage (III/2): 50 V, number of positions: 5, pitch: 3.81 mm, color: light gray, mounting: DIN rail, Item with gold-plated contacts, bus connectors for connecting with electronics housings, 4 parallel contacts/1 serial contact

DIN rail bus connectors - ME 22,5 TBUS 1,5/ 5-ST-3,81 KMGY - 2713722



DIN rail connector, nominal current: 8 A, rated voltage (III/2): 125 V, number of positions: 5, pitch: 3.81 mm, color: light gray, contact surface: Gold, mounting: DIN rail, Item with gold-plated contacts, bus connectors for connecting with electronics housings, 5 parallel contacts



### Accessories

DIN rail bus connectors - ME 22,5 TBUS ADAPTER KMGY - 2201756



DIN rail bus adapter for ME and ME-MAX, design width: 22.5 mm, 5 parallel positions, color: light gray (similar to RAL 7035)

Power connector - PCO 22,5-L KMGY - 2201685



Power connector for ME-MAX housing, design width: 22.5 mm, 2-pos., used to transmit a total current of up to 42 A at 60 V DC

Filler plugs - ME MAX TBUS BS KMGY - 2199650





End clamp - E/ME TBUS NS35 GY - 2713780



End clamp, stable construction for DIN rail bus connector

Plug - MC 1,5/ 5-ST-3,81 AU - 1860883



PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 5, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Gold, pin layout: Linear three-way pinning



### Accessories

Printed-circuit board connector - IMC 1,5/5-ST-3,81 - 1857919



PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 5, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

Cross connection - PBR 42A BU - 2201916



Jumper for PCO power connector in ME-MAX housing, color: blue (similar to RAL 5015)

Cross connection - PBR 42A GY - 2201917



Jumper for PCO power connector in ME-MAX housing, color: gray (similar to RAL 7042)

Cross connection - PBR 42A RD - 2201915



Jumper for PCO power connector in ME-MAX housing, color: red (similar to RAL 3000)

Shield connection clamp - ME-SAS - 2853899



Shield connection clamp for printed circuit terminal block



## Accessories

Coding section - CR MSTBO-G1 - 2199618



Coding section, inserted into the recess in the header or the inverted plug, red insulating material

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