

# HC-M-05L-TPT-M - Contact insert module



1423961

<https://www.phoenixcontact.com/us/products/1423961>

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Contact insert module, number of positions: 5, power contacts: 5, control contacts: 0, number of connections per position: 2, Pin, Push-in connection, 230 V/400 V, 16 A, 0.25 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, application: Power

## Your advantages

- Easy installation without tools, even when mounted, with push-in connection technology
- Shortest installation time compared to other connection technologies
- Quick and effortless wiring, in particular when space is tight
- Automatic cabling with robots possible
- Safe wiring and operation with color-coded actuators
- Shock and vibration-resistant in accordance with DIN EN 61373
- Double conductor connection per pos.

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1423961             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF62                |
| Product key                          | BF7ACE              |
| Catalog page                         | Page 577 (C-2-2019) |
| GTIN                                 | 4055626365800       |
| Weight per piece (including packing) | 17.9 g              |
| Weight per piece (excluding packing) | 17 g                |
| Customs tariff number                | 85366990            |
| Country of origin                    | PL                  |

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## Technical data

### Notes

|         |                                                                                            |
|---------|--------------------------------------------------------------------------------------------|
| General | Use only flexible conductors with ferrule (in conjunction with CRIMPFOX 6 only)            |
| General | Connectors may be operated only when there is no load/voltage.                             |
| General | For HEAVYCON housing type B6 to B48, HC-M-B...MF-... hinged module carrier frame required. |

### Mounting

|               |                                                                                           |
|---------------|-------------------------------------------------------------------------------------------|
| Assembly note | To ensure correct use, installation in housing with IP54 protection or better is required |
|---------------|-------------------------------------------------------------------------------------------|

### Product properties

|                                    |                        |
|------------------------------------|------------------------|
| Product type                       | Modular contact insert |
| Series                             | HC-M-05-T              |
| Application                        | Power                  |
| Number of positions                | 5                      |
| Connection profile                 | 5                      |
| Contact numbering                  | 1 - 5                  |
| Number of connections per position | 2                      |
| Number of module slots             | 1                      |
| No. of power contacts              | 5                      |
| No. of control contacts            | 0                      |
| Contact material type              | rolled                 |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution  | 3   |

### Connection data

#### Connection technology

|                                    |                    |
|------------------------------------|--------------------|
| Connection technology              | Push-in connection |
| Number of connections per position | 2                  |

#### Conductor connection

|                                         |                                              |
|-----------------------------------------|----------------------------------------------|
| Conductor cross section                 | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Connection cross section AWG            | 24 ... 16                                    |
| Stripping length of the individual wire | 8 mm ±1 mm                                   |

### Dimensions

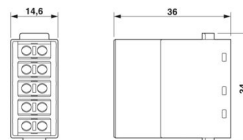
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## Dimensional drawing



|        |         |
|--------|---------|
| Width  | 34 mm   |
| Height | 36 mm   |
| Length | 14.6 mm |

## Mechanical characteristics

|                  |        |
|------------------|--------|
| Contact diameter | 2.5 mm |
|------------------|--------|

## Electrical properties

|                                  |                             |
|----------------------------------|-----------------------------|
| Rated voltage (III/3)            | 230 V (Conductor-PE)        |
|                                  | 400 V (Conductor-Conductor) |
| Rated voltage for power contacts | 230/400 V                   |
| Rated surge voltage              | 4 kV                        |
| Rated current                    | 16 A                        |

## Mechanical properties

### Mechanical data

|                             |       |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 500 |
|-----------------------------|-------|

## Material specifications

|                                        |                                                                                                                         |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Flammability rating according to UL 94 | V0                                                                                                                      |
| Contact material                       | Copper alloy                                                                                                            |
| Contact surface material               | Ag                                                                                                                      |
| Contact carrier material               | PA                                                                                                                      |
| Standards/regulations                  | PA: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |

## Environmental and real-life conditions

### Ambient conditions

|                                 |                   |
|---------------------------------|-------------------|
| Ambient temperature (operation) | -40 °C ... 125 °C |
|---------------------------------|-------------------|

## Standards and regulations

|                                        |              |
|----------------------------------------|--------------|
| Constructional and testing regulations | DIN EN 61984 |
|                                        | DIN EN 60664 |
| Tests                                  | DIN EN 61984 |
|                                        | DIN EN 60664 |

### Testing

|                       |                                                                                                                         |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------|
| Standards/regulations | PA: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------|

# HC-M-05L-TPT-M - Contact insert module

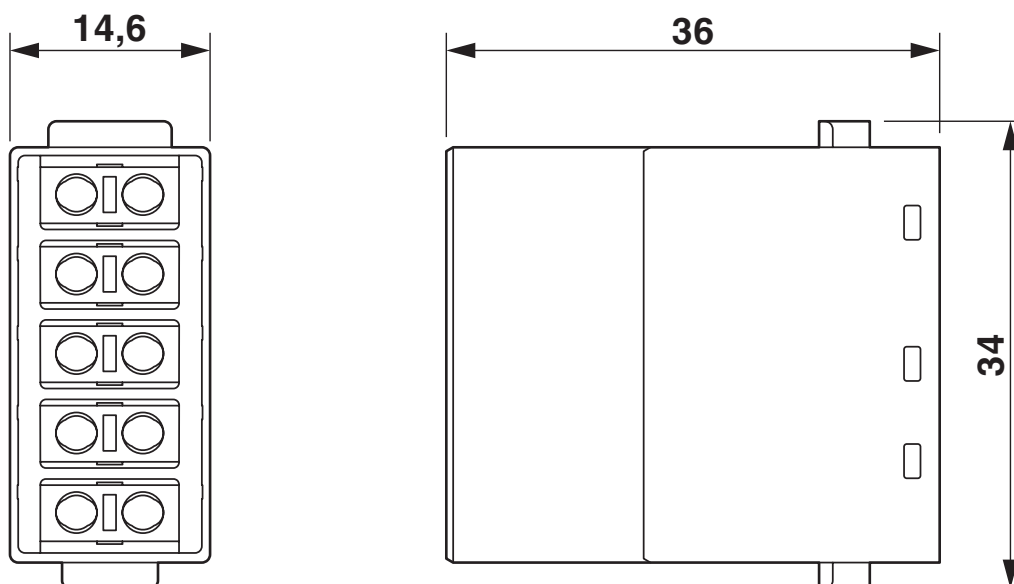


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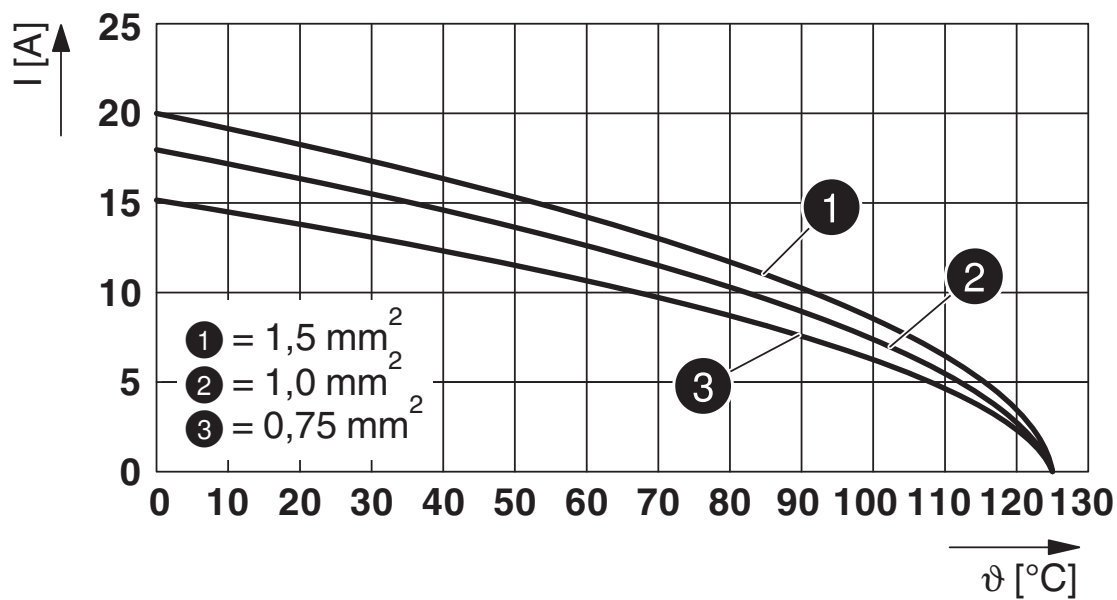
## Drawings

Dimensional drawing



Dimensional drawing

Diagram



Derating diagram

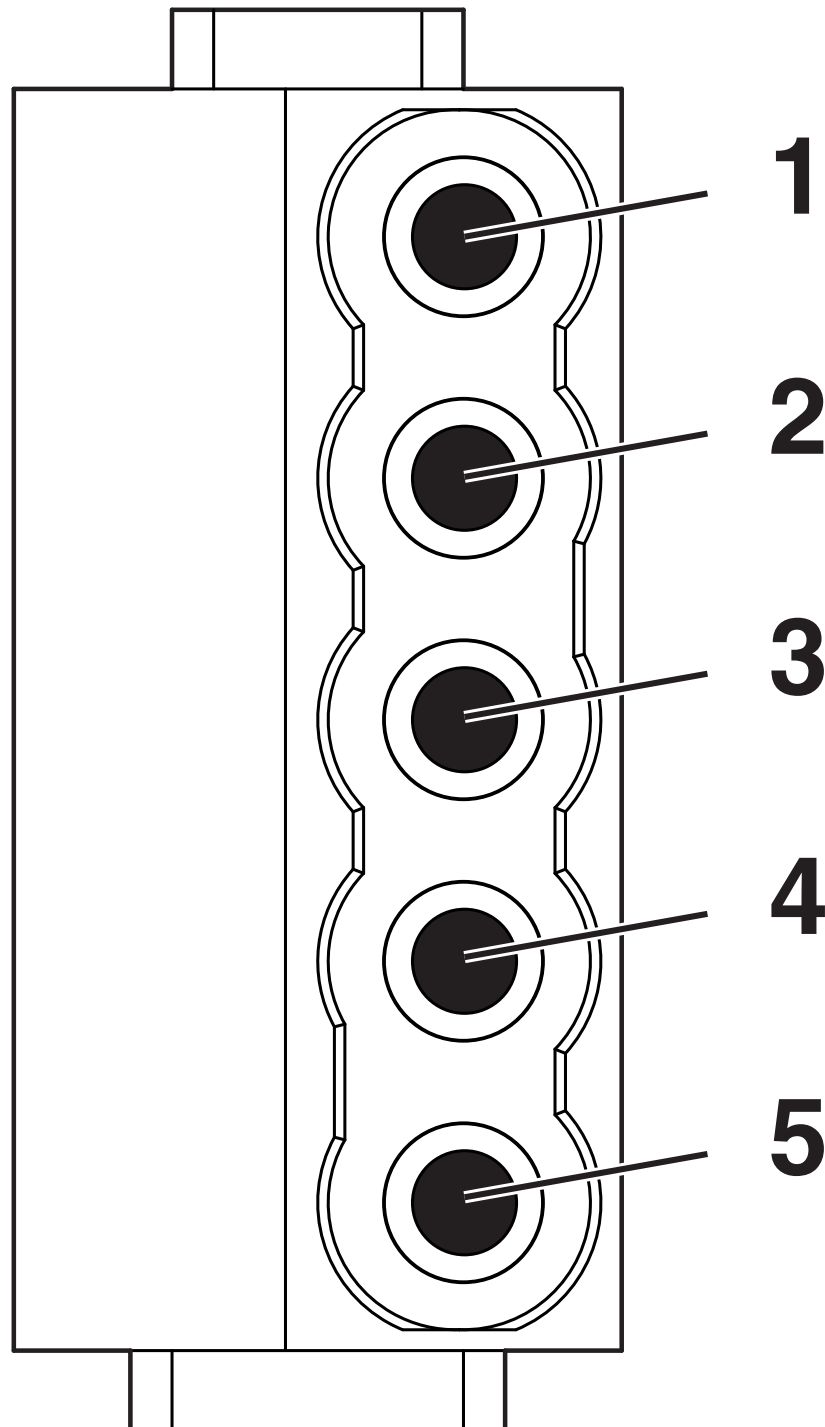
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Schematic diagram



Connector pin assignment, connection side

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1423961>

|  <b>UL Recognized</b><br>Approval ID: E468743 |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                                                                | 600 V                 | 16 A                  | -                 | -                           |

|  <b>CSA</b><br>Approval ID: 13631 |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                    | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                                                    | 600 V                 | 12 A                  | - 16              | -                           |

|  <b>UL Recognized</b><br>Approval ID: E118976 |                       |                       |                   |                             |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                 | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                                                                 | 600 V                 | 16 A                  | -                 | -                           |

|  <b>EAC</b><br>Approval ID: RU C-DE.BL08.B.00511 |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
|-------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

|  <b>VDE Zeichengenehmigung</b><br>Approval ID: 40050148 |                       |                       |                   |                             |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|                                                                                                                                            | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                                                                            | 400 V                 | 10 A                  | -                 | 0.25 - 2.5                  |

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27440217 |
| ECLASS-12.0 | 27440217 |
| ECLASS-13.0 | 27440217 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC000438 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

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## Environmental product compliance

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| EU RoHS                                 |                                          |
| Fulfills EU RoHS substance requirements | Yes, No exemptions                       |
| China RoHS                              |                                          |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|                                         | No hazardous substances above the limits |
| EU REACH SVHC                           |                                          |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |



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## Accessories

### HC-CBU-MOD - Coding element

1636130

<https://www.phoenixcontact.com/us/products/1636130>



Coding socket for coding up to 16 connectors, for HC Modular

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### HC-CST-MOD - Coding element

1636127

<https://www.phoenixcontact.com/us/products/1636127>



Coding peg for coding up to 16 connectors, for HC Modular

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## HC-M-B06-MFH-B - Module carrier frame

1182085

<https://www.phoenixcontact.com/us/products/1182085>



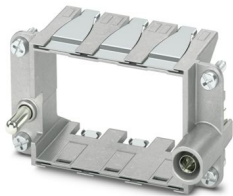
Module carrier frame, size: B6, type : for the panel mounting side (a, b, c, ...), 4 mm<sup>2</sup> ... 6 mm<sup>2</sup>, application: Module carrier frame

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## HC-M-B10-MFH-B - Module carrier frame

1182088

<https://www.phoenixcontact.com/us/products/1182088>



Module carrier frame, size: B10, type : for the panel mounting side (a, b, c, ...), 4 mm<sup>2</sup> ... 6 mm<sup>2</sup>, application: Module carrier frame

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## HC-M-B16-MFH-B - Module carrier frame

1182090

<https://www.phoenixcontact.com/us/products/1182090>

Module carrier frame, size: B16, type : for the panel mounting side (a, b, c, ...), 4 mm<sup>2</sup> ... 6 mm<sup>2</sup>, application: Module carrier frame



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## HC-M-B24-MFH-B - Module carrier frame

1182094

<https://www.phoenixcontact.com/us/products/1182094>

Module carrier frame, size: B24, type : for the panel mounting side (a, b, c, ...), 4 mm<sup>2</sup> ... 6 mm<sup>2</sup>, application: Module carrier frame



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## HC-M-B06-MFH-H - Module carrier frame

1182087

<https://www.phoenixcontact.com/us/products/1182087>



Module carrier frame, size: B6, type : for the sleeve side (A, B, C, ...), 4 mm<sup>2</sup> ... 6 mm<sup>2</sup>, application: Module carrier frame

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## HC-M-B10-MFH-H - Module carrier frame

1182089

<https://www.phoenixcontact.com/us/products/1182089>



Module carrier frame, size: B10, type : for the sleeve side (A, B, C, ...), 4 mm<sup>2</sup> ... 6 mm<sup>2</sup>, application: Module carrier frame

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## HC-M-B16-MFH-H - Module carrier frame

1182093

<https://www.phoenixcontact.com/us/products/1182093>

Module carrier frame, size: B16, type : for the sleeve side (A, B, C, ...), 4 mm<sup>2</sup> ...  
6 mm<sup>2</sup>, application: Module carrier frame



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## HC-M-B24-MFH-H - Module carrier frame

1182095

<https://www.phoenixcontact.com/us/products/1182095>

Module carrier frame, size: B24, type : for the sleeve side (A, B, C, ...), 4 mm<sup>2</sup> ...  
6 mm<sup>2</sup>, application: Module carrier frame



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## HC-M-05L-TPT-F - Contact insert module

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Contact insert module, number of positions: 5, power contacts: 5, control contacts: 0, number of connections per position: 2, Socket, Push-in connection, 230 V/400 V, 16 A, 0.25 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, application: Power

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## CRIMPFOX 6 - Crimping pliers

1212034

<https://www.phoenixcontact.com/us/products/1212034>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

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## CRIMPFOX CENTRUS 10S - Crimping pliers

1213154

<https://www.phoenixcontact.com/us/products/1213154>



Crimping pliers, for uninsulated and insulated ferrules, DIN 46228 Part 1 and 4, from 0.14 mm<sup>2</sup> ... 10 mm<sup>2</sup>, also for TWIN ferrules up to 2 x 4 mm<sup>2</sup>, automatic cross section adjustment, lateral insertion, equipped with fall protection

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## CRIMPFOX CENTRUS 6S - Crimping pliers

1213144

<https://www.phoenixcontact.com/us/products/1213144>



Crimping pliers, for uninsulated and insulated ferrules, DIN 46228 Part 1 and 4, from 0.14 mm<sup>2</sup> ... 6 mm<sup>2</sup>, also for TWIN ferrules up to 2 x 4 mm<sup>2</sup>, automatic cross section adjustment, lateral insertion, equipped with fall protection

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