

# HC-M-42-CT-M - Contact insert module



1450698

<https://www.phoenixcontact.com/gb/products/1450698>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Contact insert module, number of positions: 42, power contacts: 0, control contacts: 42, Pin, Crimp connection, 150 V, 10 A, 0.14 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, application: Signal

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1450698       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AF7ACE        |
| Product key                          | AF7ACE        |
| GTIN                                 | 4063151848972 |
| Weight per piece (including packing) | 18.4 g        |
| Weight per piece (excluding packing) | 18.4 g        |
| Country of origin                    | PL            |

# HC-M-42-CT-M - Contact insert module



1450698

<https://www.phoenixcontact.com/gb/products/1450698>

## Technical data

### Notes

|         |                                                                                                                                                                 |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General | For HEAVYCON housing type B6 to B48, HC-M-B...MF-... hinged module carrier frame required, CK1,6-ED... crimp contacts, crimp contacts not supplied as standard. |
| General | Connectors may be operated only when there is no load/voltage.                                                                                                  |
| General | The use of guide pins (HC-CST) and sockets (HC-CBU) is recommended to prevent tip collision due to misalignment.                                                |

### 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-42                |
| Application             | Signal                 |
| Number of positions     | 42                     |
| Connection profile      | 42                     |
| Contact numbering       | 1 - 42                 |
| Number of module slots  | 2                      |
| No. of power contacts   | 0                      |
| No. of control contacts | 42                     |
| Contact material type   | turned                 |

### Insulation characteristics

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

### Connection data

#### Connection technology

|                       |                  |
|-----------------------|------------------|
| Connection technology | Crimp connection |
|-----------------------|------------------|

#### Conductor connection

|                                         |                                              |
|-----------------------------------------|----------------------------------------------|
| Conductor cross section                 | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Connection cross section AWG            | 26 ... 14                                    |
| Stripping length of the individual wire | 8 mm (6 mm with 2.5 mm <sup>2</sup> )        |

### Dimensions

|                     |  |
|---------------------|--|
| Dimensional drawing |  |
|---------------------|--|

# HC-M-42-CT-M - Contact insert module



1450698

<https://www.phoenixcontact.com/gb/products/1450698>

|        |         |
|--------|---------|
| Width  | 33.9 mm |
| Height | 34 mm   |
| Length | 29.3 mm |

## Mechanical characteristics

|                  |        |
|------------------|--------|
| Contact diameter | 1.6 mm |
|------------------|--------|

## Electrical properties

|                       |        |
|-----------------------|--------|
| Rated voltage (III/3) | 150 V  |
| Rated surge voltage   | 2.5 kV |
| Rated current         | 10 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 (alternatively Au) |
| Contact carrier material               | PC                    |
| Standards/regulations                  | PC                    |

## Environmental and real-life conditions

### Ambient conditions

|                                 |                                                      |
|---------------------------------|------------------------------------------------------|
| Ambient temperature (operation) | -40 °C ... 125 °C (including heating up of contacts) |
|---------------------------------|------------------------------------------------------|

## Standards and regulations

### Testing

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

# HC-M-42-CT-M - Contact insert module

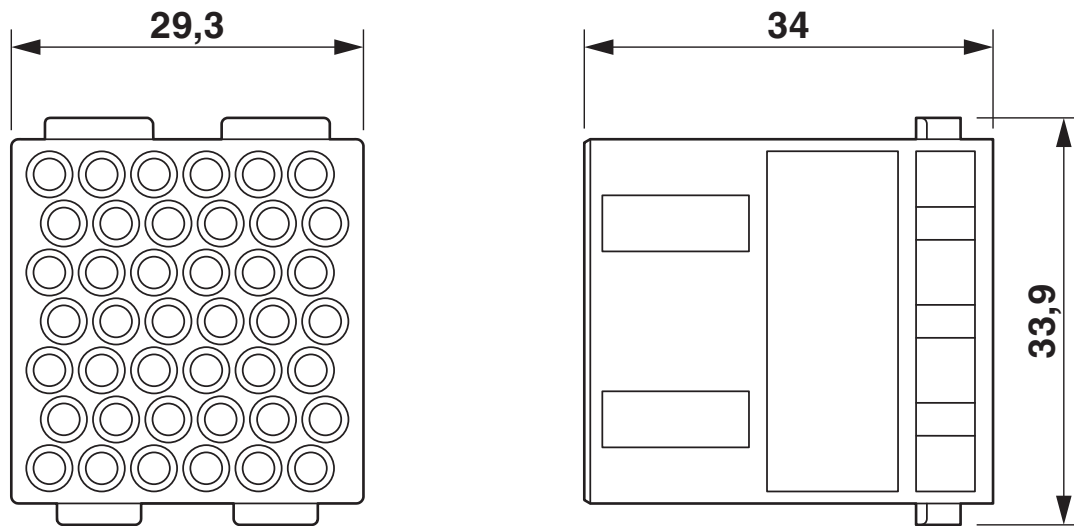


1450698

<https://www.phoenixcontact.com/gb/products/1450698>

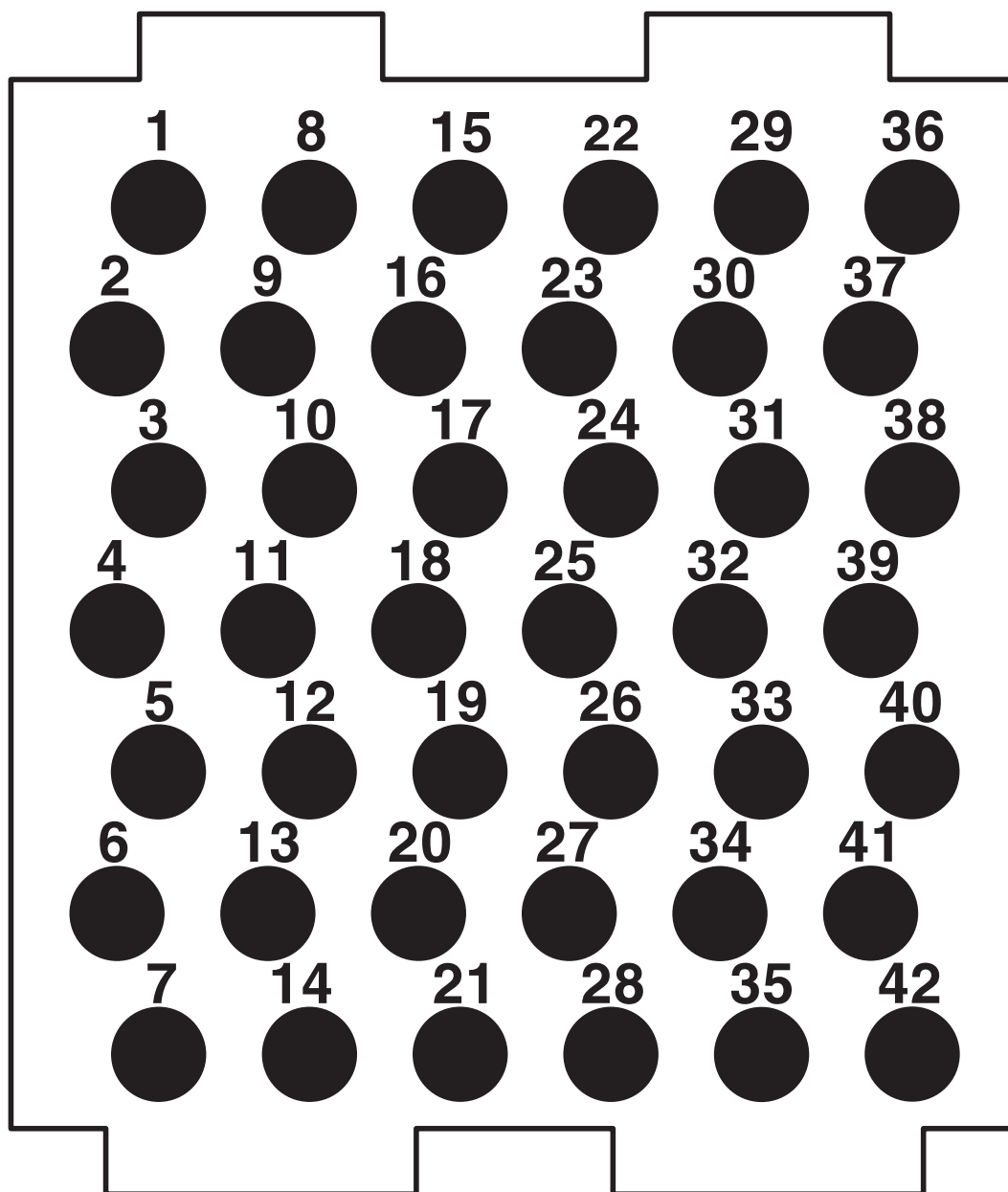
## Drawings

Dimensional drawing



Male insert

Schematic diagram

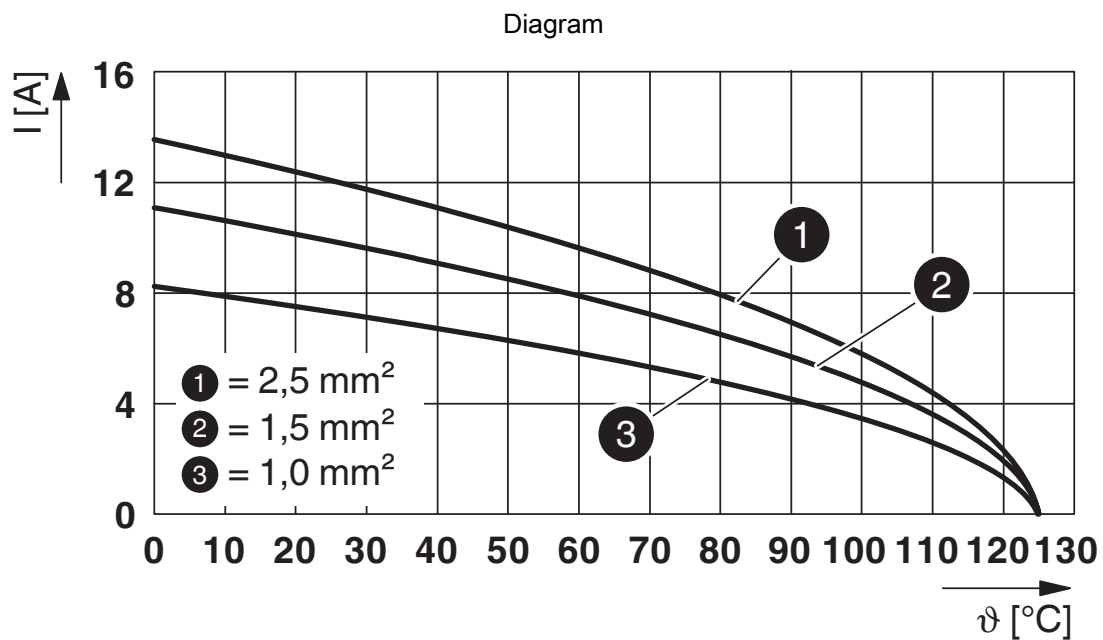


Connector pin assignment, connection side

# HC-M-42-CT-M - Contact insert module

1450698

<https://www.phoenixcontact.com/gb/products/1450698>



Derating diagram turned contacts

# HC-M-42-CT-M - Contact insert module



1450698

<https://www.phoenixcontact.com/gb/products/1450698>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1450698>

|                                                                                                                                   |                       |                       |                   |                             |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
|  <b>cULus Recognized</b><br>Approval ID: E468743 |                       |                       |                   |                             |
|                                                                                                                                   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|                                                                                                                                   | 150 V                 | 10 A                  | - 14              | -                           |

|                                       |  |  |  |  |
|---------------------------------------|--|--|--|--|
| <b>DNV</b><br>Approval ID: TAE000037S |  |  |  |  |
|---------------------------------------|--|--|--|--|

# HC-M-42-CT-M - Contact insert module



1450698

<https://www.phoenixcontact.com/gb/products/1450698>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27440217 |
|-------------|----------|

### ETIM

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

# HC-M-42-CT-M - Contact insert module



1450698

<https://www.phoenixcontact.com/gb/products/1450698>

## 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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd  
Halesfield 13, Telford  
Shropshire, TF7 4PG  
01952 681700  
[info@phoenixcontact.co.uk](mailto:info@phoenixcontact.co.uk)