

# EV-GBM3SE12-1AC32A-2,0M6,0E10 - Infrastructure charging socket



1624387

<https://www.phoenixcontact.com/pc/products/1624387>

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CHARX connect, GB/T, Infrastructure charging socket, 32 A , 250 V AC, length: 2 m, locking actuator: 12 V, 4-pos., Rear panel mounting, for charging electric vehicles with alternating current (AC), GB/T 20234.2-2015

## Product description

Infrastructure charging socket for charging electric vehicles (EV) with alternating current (AC), compatible with GB/T Infrastructure Plugs, for installation at charging stations for E-Mobility (EVSE)

## Your advantages

- Uniform, space-saving installation space of all Phoenix Contact Infrastructure Socket Outlets
- Silver-plated surface of the power and signal contacts
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Manual emergency release of the locking actuator
- Material data available in the IMDS (International Material Data System of the automotive industry)
- Integrated interlock during charging

## Commercial data

|                                      |   |
|--------------------------------------|---|
| Item number                          | 1624387   |
| Packing unit                         | 1 pc  |
| Minimum order quantity               | 1 pc  |
| Product key                          | XWBADF  |
| GTIN                                 | 4055626275253   |
| Weight per piece (including packing) | 720 g   |
| Weight per piece (excluding packing) | 620 g   |
| Country of origin                    | Information on the country of origin is provided with the delivery. |

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## Technical data

### Product properties

|                     |                                |
|---------------------|--------------------------------|
| Product type        | Infrastructure charging socket |
| Product family      | CHARX connect                  |
| Charging standard   | GB/T                           |
| Charging mode       | Mode 3, Case B                 |
| Customer variations | On request                     |

### Electrical properties

|                               |  |
|-------------------------------|--|
| Type of signal transmission   | Pulse width modulation                   |
| Note on the connection method | Crimp connection, cannot be disconnected |

### Charging power and current (AC charging, 1-phase)

|                          |                   |
|--------------------------|-------------------|
| Type of charging current | AC single-phase   |
| Charging current         | 32 A AC (1-phase) |
| Charging power           | 8 kW              |
| Charging power rating    | 7.4 kW            |

### Pin assignment (Power contacts)

|               |               |
|---------------|---------------|
| Number        | 3 (L1, N, PE) |
| Rated voltage | 250 V AC      |
| Rated current | 32 A          |

### Pin assignment (Signal contacts)

|               |            |
|---------------|------------|
| Number        | 2 (CP, CC) |
| Rated voltage | 30 V AC    |
| Rated current | 2 A        |

### Locking actuator

|  |                     |
|--|---------------------|
| Locking actuator                         | 12 V, 4-pos.        |
|  | Top center position |
| Possible power supply range at the motor | 9 V ... 16 V        |
| Maximum voltage for locking detection    | 30 V                |
| Typical motor current for locking        | 0.2 A               |
| Reverse current of the motor             | max. 1 A            |
| Max. dwell time with reverse current     | 1000 ms             |
| Recommended adaptation time              | 600 ms              |
| Pause time after entry or exit path      | 3 s                 |
| Service life insertion cycles            | > 10000 load cycles |
| Lock recognition                         | available           |
| Mechanical emergency release             | available           |
| Ambient temperature (operation)          | -30 °C ... 50 °C    |
| Cable length                             | 0.5 m               |

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|                 |                         |
|-----------------|-------------------------|
| Cable structure | 4 x 0.5 mm <sup>2</sup> |
|-----------------|-------------------------|

## Cable/line

|                 |   |
|-----------------|---|
| Cable length    | 2 m (AC cables)                                   |
|                 | 0.5 m (Locking actuator cables)                   |
| Cable structure | 3 x 6.0 mm <sup>2</sup> + 2 x 0.5 mm <sup>2</sup> |

## Mechanical properties

### Mechanical data

|                             |         |
|-----------------------------|---------|
| Insertion/withdrawal cycles | > 10000 |
| Insertion force             | < 100 N |
| Withdrawal force            | < 100 N |

## Environmental and real-life conditions

### Ambient conditions

|   |                          |
|---|--------------------------|
| Ambient temperature (operation)         | -30 °C ... 50 °C         |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C         |
| Altitude                                | 5000 m (above sea level) |

## Standards and regulations

### Standards

|                       |                   |
|-----------------------|-------------------|
| Standards/regulations | GB/T 20234.2-2015 |
|-----------------------|-------------------|

## Mounting

|  |   |
|--|---|
| Mounting type Infrastructure charging socket | Rear panel mounting (0 to 90 degree frontal inclination possible) |
| Mounting type Protective cover               | rear (available separately)                                       |
| Mounting hole diameter                       | 7.00 mm (ø)   |

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## Drawings

Dimensional drawing



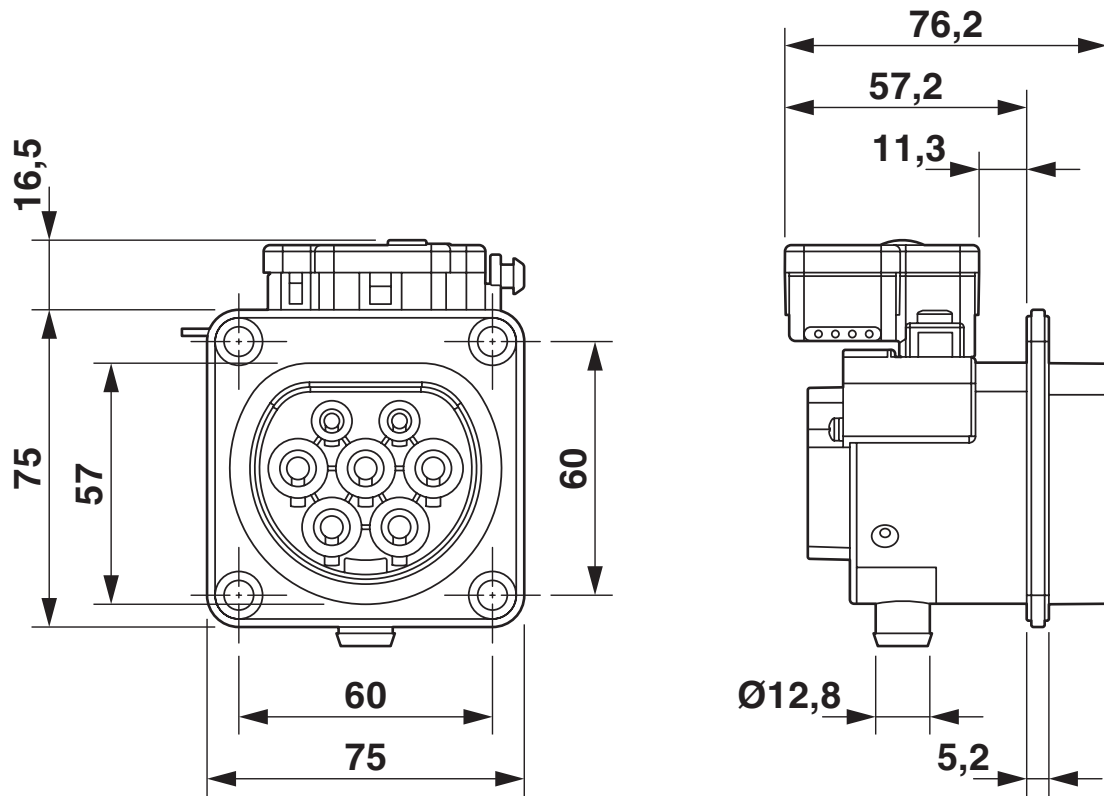
Hole image

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Dimensional drawing



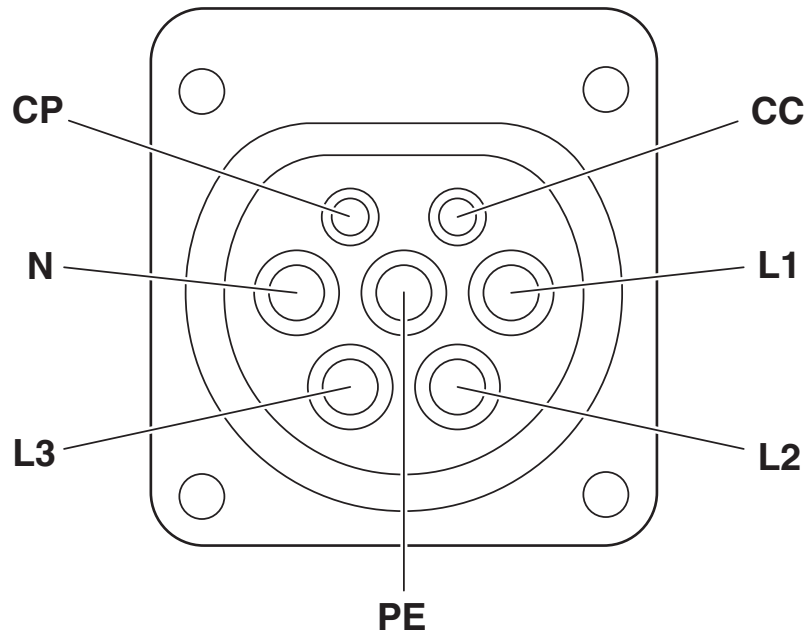
Dimensional drawing

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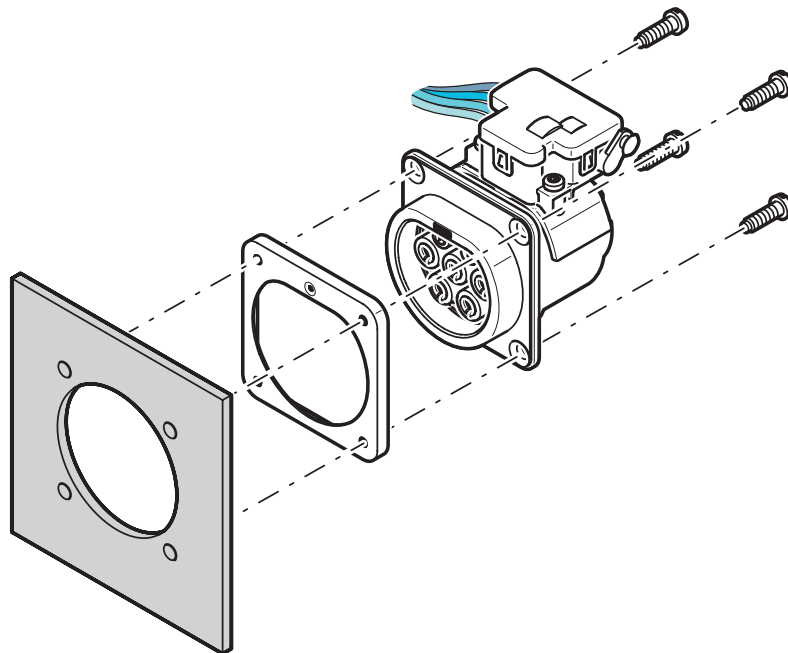
<https://www.phoenixcontact.com/pc/products/1624387>

Connection diagram



Pin assignment of infrastructure charging socket

Schematic diagram



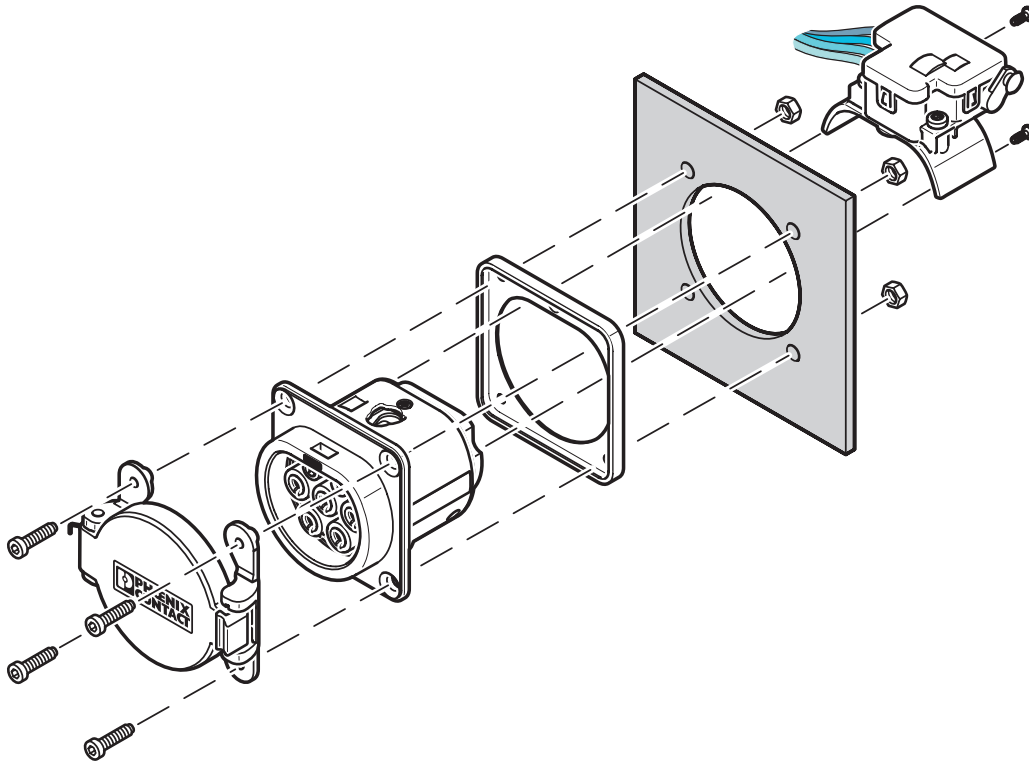
Rear mounting with locking actuator

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Schematic diagram



Front mounting with rear protective cover screw connection

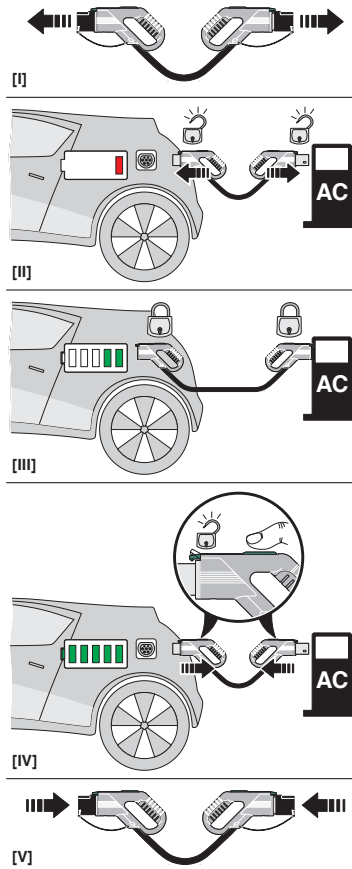
Front mounting is only possible when the locking actuator is removed. The screw connection for a protective cover from the accessories range (EV-GBSC...) only supports rear mounting.

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## Schematic diagram

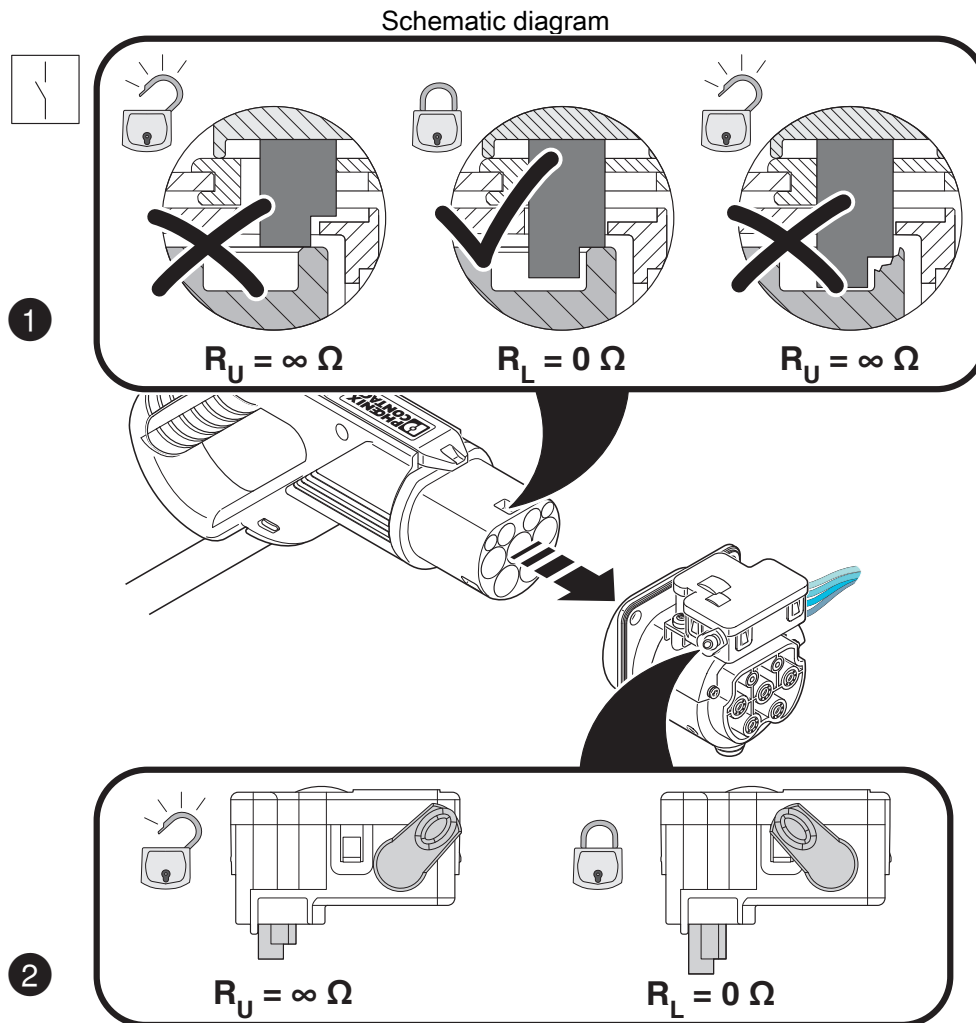


Operating instructions

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Detection of the Infrastructure Plug

Schematic diagram

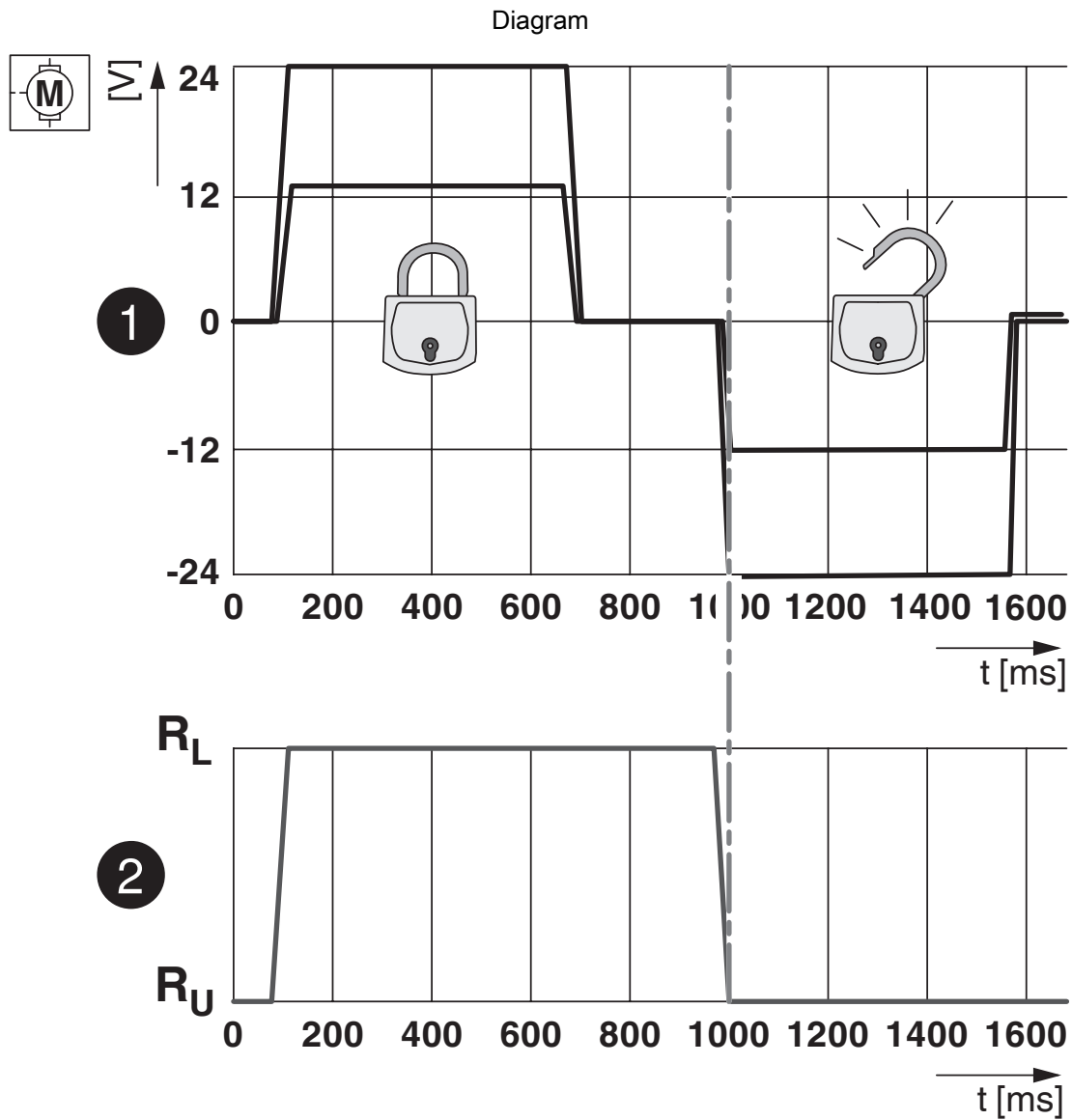


Installation positions

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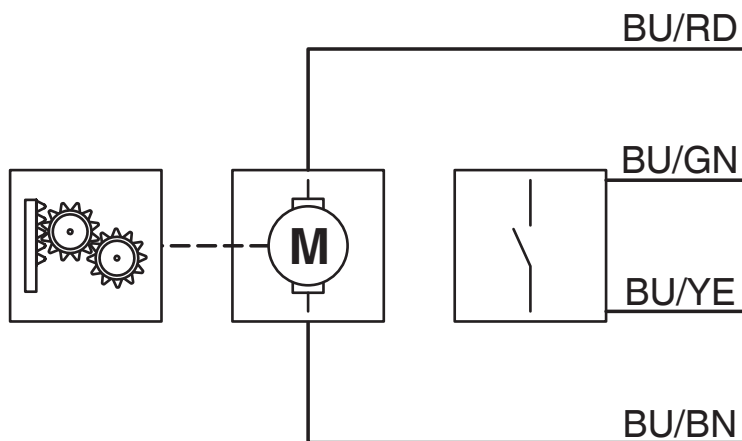
Locking states of the locking actuator

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Block diagram



Block diagram of the locking actuator

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## Environmental product compliance

### China RoHS

|  |   |
|--|---|
| Environment friendly use period (EFUP) | EFUP-10   |
|  | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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