CHARX T1HCI12-1AC80-5,0M1 - Vehicle charging inlet

1379294

https://www.phoenixcontact.com/us/products/1379294

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The figure shows a version of the product

CHARX connect universal, AC type 1, Vehicle charging inlet, 80 A , 250 V AC, Gen 4, Single-core wires connected at one end, length: 5 m, locking actuator: 12 V, 4-pos., Front and rear mounting, M6, housing: black, for charging electric vehicles with alternating current (AC), IEC 62196-2, SAE J1772, A protective cap is supplied as standard for the AC contacts.

Product description

Vehicle charging inlet for charging with alternating current (AC), compatible with type 1 AC vehicle charging connectors (EVSE), for installation in electric vehicles (EV).

Your advantages

- Complete product range
- Uniform, space-saving dimensions for the installation space and the screw connection points of all Phoenix Contact vehicle charging inlets
- Developed and produced in accordance with the IATF 16949 automotive standard and ISO 9001
- Integrated interlock during charging
- Manual emergency release of the locking actuator
- Protected and sealed against dirt and water with a high degree of protection

Commercial data

Item number	1379294
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	EM01
Product key	XWCAIA
GTIN	4063151747770
Weight per piece (including packing)	2,379 g
Weight per piece (excluding packing)	2,379 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Notes

General	A protective cap is supplied as standard for the AC contacts.

Product properties

Product type	Vehicle charging inlet
Product family	CHARX connect universal
Type	Gen 4
Charging standard	AC type 1
Charging mode	Mode 2, 3
Customer variations	On request

Electrical properties

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

Type of charging current	AC single-phase
Charging current	80 A AC (1-phase)
Charging power	20 kW (AC)
Rated voltage	250 V

Pin assignment (Power contacts)

Note on the connection method	Crimp connection, cannot be disconnected
Number	3 (L1, N, PE)
Rated voltage	250 V AC
Rated current	80 A AC

Pin assignment (Signal contacts)

Note on the connection method	Crimp connection, cannot be disconnected
Type of signal transmission	Pulse width modulation with modulated Powerline communication in accordance with ISO/IEC 15118 / DIN SPEC 70121
Number	2 (CP, CS)
Rated voltage	30 V AC
Rated current	2 A
Coding	2.7 kΩ (between PE and CS)
Insulation resistance	> 200 MΩ

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	12 V
Typical motor current for locking	0.25 A
Reverse current of the motor	max. 1.5 A
Max. dwell time with reverse current	1 s

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)	-40 °C ... 80 °C

Temperature sensors (PTC chain)

Sensor type	PTC chain
Standards/regulations	DIN EN 60738-1
Attachment point	Sensor for the AC contacts
Measuring range_resistance	790 Ω ... 1420 Ω
Resistance	max. 1200 Ω ±5 K
Recommended measured current	≤ 1 mA (U_{max}= 16 V DC)
Ambient temperature	-40 °C ... 130 °C (Operation)

Dimensions

Vehicle charging inlet

Width	90 mm
Height	90 mm
Depth	112.2 mm

Bore dimensions

Width	73 mm
Height	73 mm
Depth	73 mm

Material specifications

Color (Housing)	black (9005)
Color (Mating face)	black (9005)
Material (Housing)	Plastic
Material (Contact surface)	Silver

Cable/line

Cable length	5 m
Cable type	Single-core wires connected at one end

Single-core wires for AC

Cable length	5 m
Cable structure	2 x 16 mm²
Single wire, material	Silicone
Single wire, color	OG
External cable diameter	9.90 mm ±0.3 mm
Cable resistance	≤ 1.16 Ω/km

Single-core wire for PE

Cable length	5 m
Cable structure	1 x 16 mm²
Single wire, material	Silicone
Single wire, color	GN/YE
External cable diameter	7.00 mm ±0.2 mm
Cable resistance	≤ 1.16 Ω/km

Single-core wires for locking actuator

Cable length	1.5 m
Cable structure	4 x 0.5 mm²
Single wire, material	PVC
Single wire, color	BU/RD, BU/GN, BU/YE, BU/BN
External cable diameter	1.60 mm ±0.20 mm
Cable resistance	≤ 37.1 Ω/m

Single-core wires for temperature sensors

Cable length	1 m
Cable structure	5 x 0,5 mm²
Single wire, color	BN/GY
	BN/YE/GN
External cable diameter	1.60 mm ±0.20 mm
Cable resistance	≤ 37.1 Ω/m

Single-core wires for communication

Cable length	1 m
Cable structure	2 x 0.5 mm²
Single wire, material	PVC
Single wire, color	BK
	WH
External cable diameter	1.60 mm ±0.20 mm
Cable resistance	≤ 37.1 Ω/m

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 10000
Insertion force	< 75 N
Withdrawal force	< 75 N

Environmental and real-life conditions

Ambient conditions

Degree of protection (Vehicle charging inlet)	IP55 (plugged in; when plugged in and ready to operate, the degree of protection is only ensued if both plug-in components are original products from Phoenix Contact or suitable standard-compliant products)
	IP67 (Inner area of vehicle charging inlet)

Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	4000 m (above sea level)

Standards and regulations

Standards

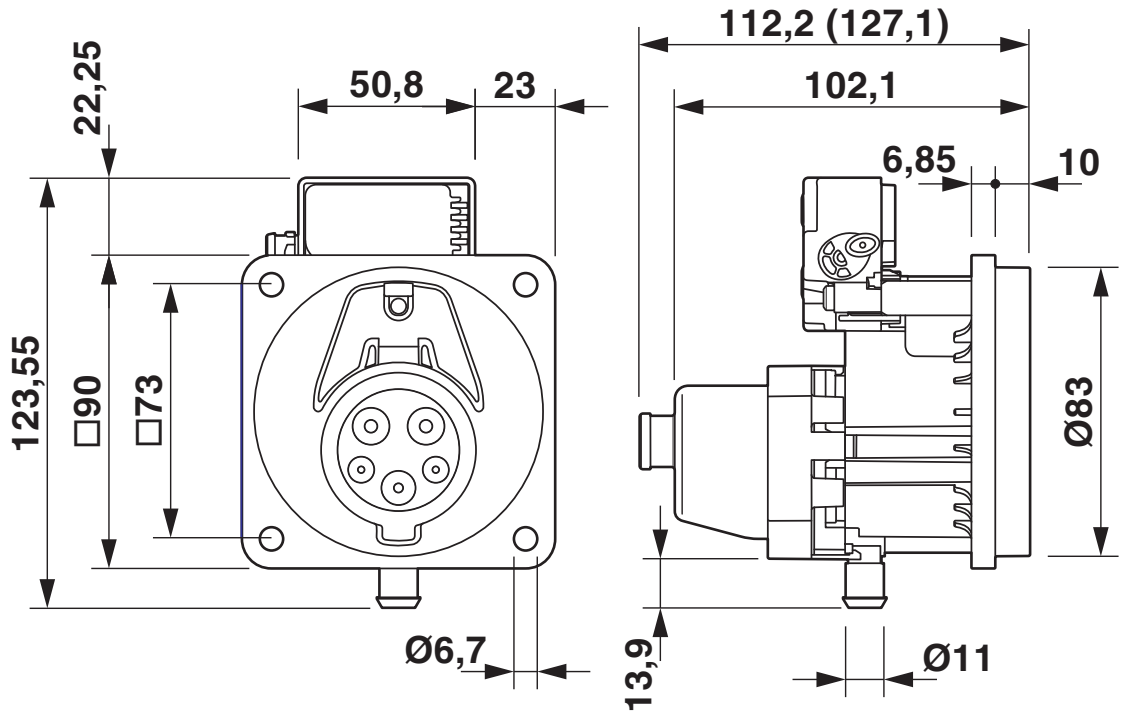
Standards/regulations	IEC 62196-2
	SAE J1772

Mounting

Mounting type	Front and rear mounting (0 to 90 degree frontal inclination possible)
Mounting hole diameter	6.70 mm (ø)
Fixing screws	M6
Screws included in the scope of delivery	none

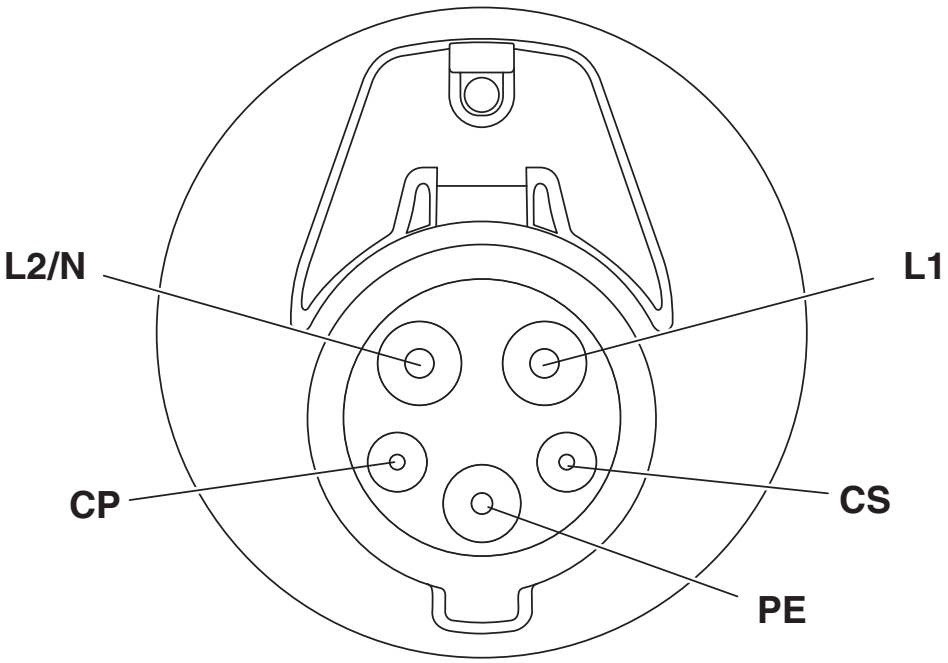
Drawings

Dimensional drawing



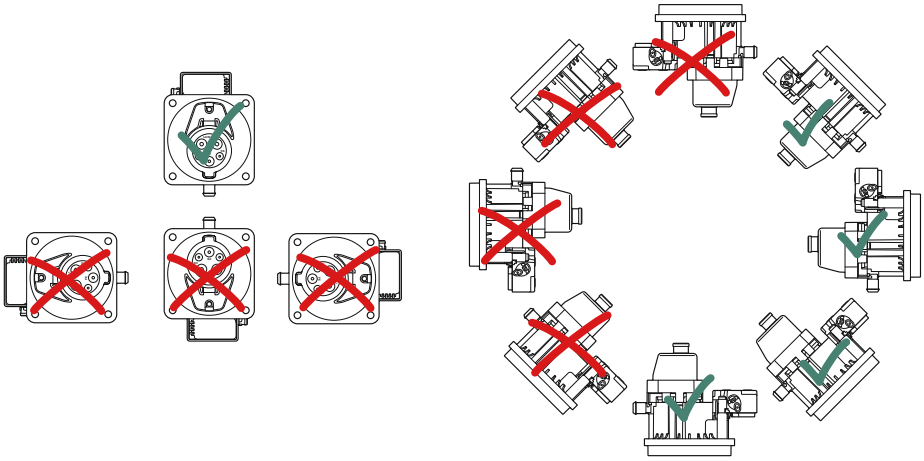
Dimensional drawing

Connection diagram



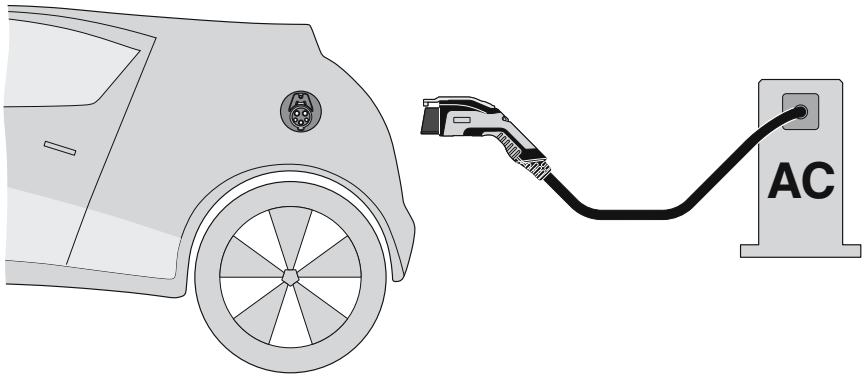
Pin assignment of vehicle charging inlets

Connection diagram



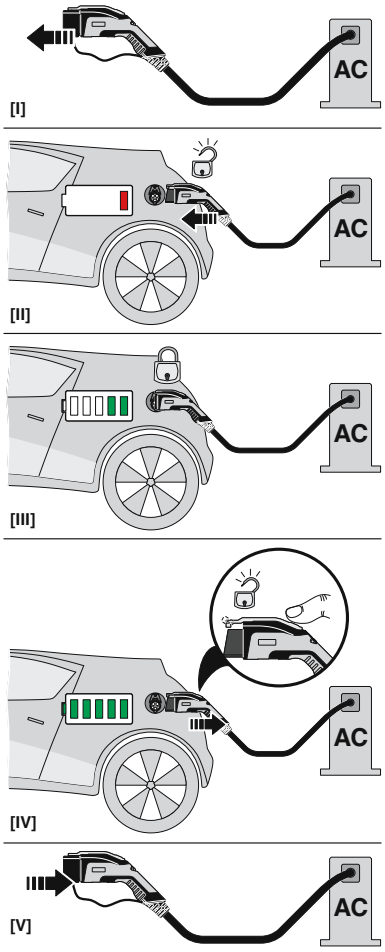
Installation positions

Connection diagram



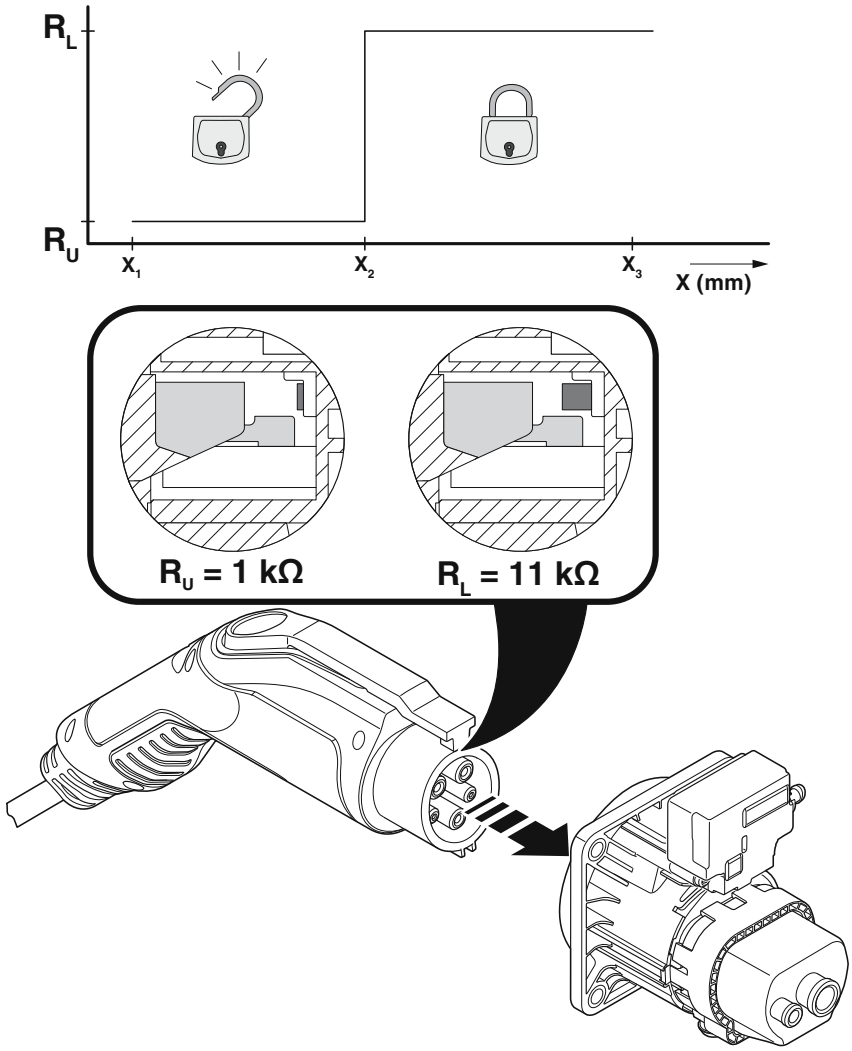
Terminology definition

Functional drawing



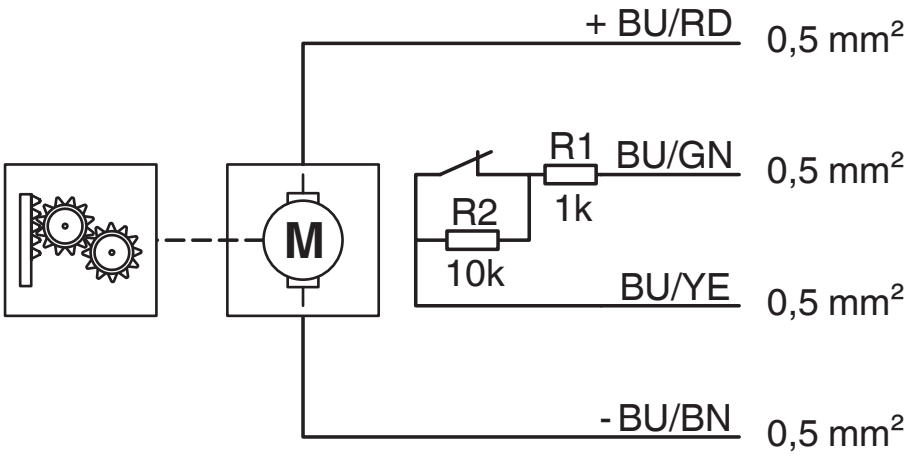
Operating instructions

Schematic diagram



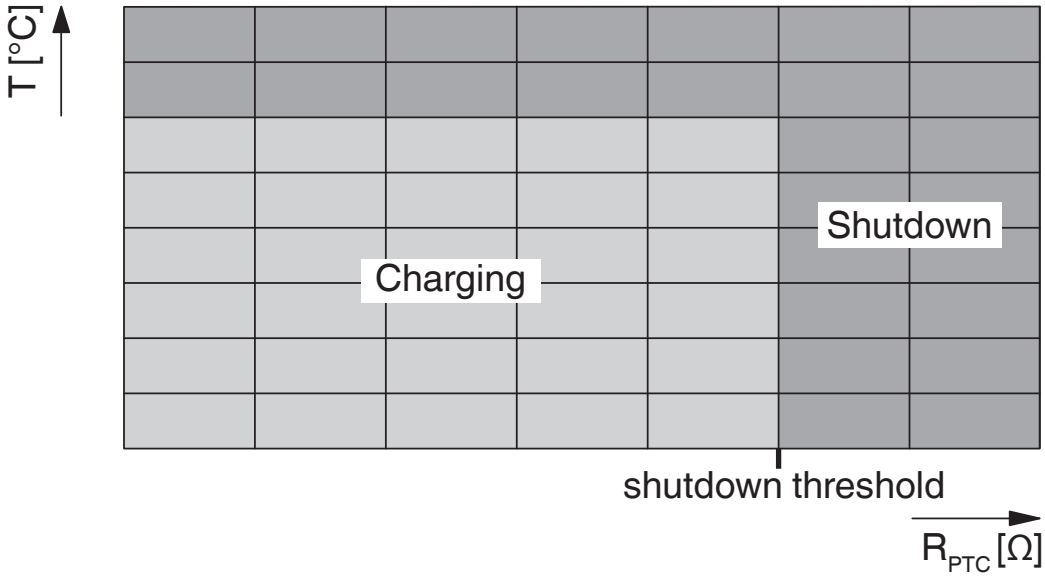
Detection for Vehicle Connector

Schematic diagram



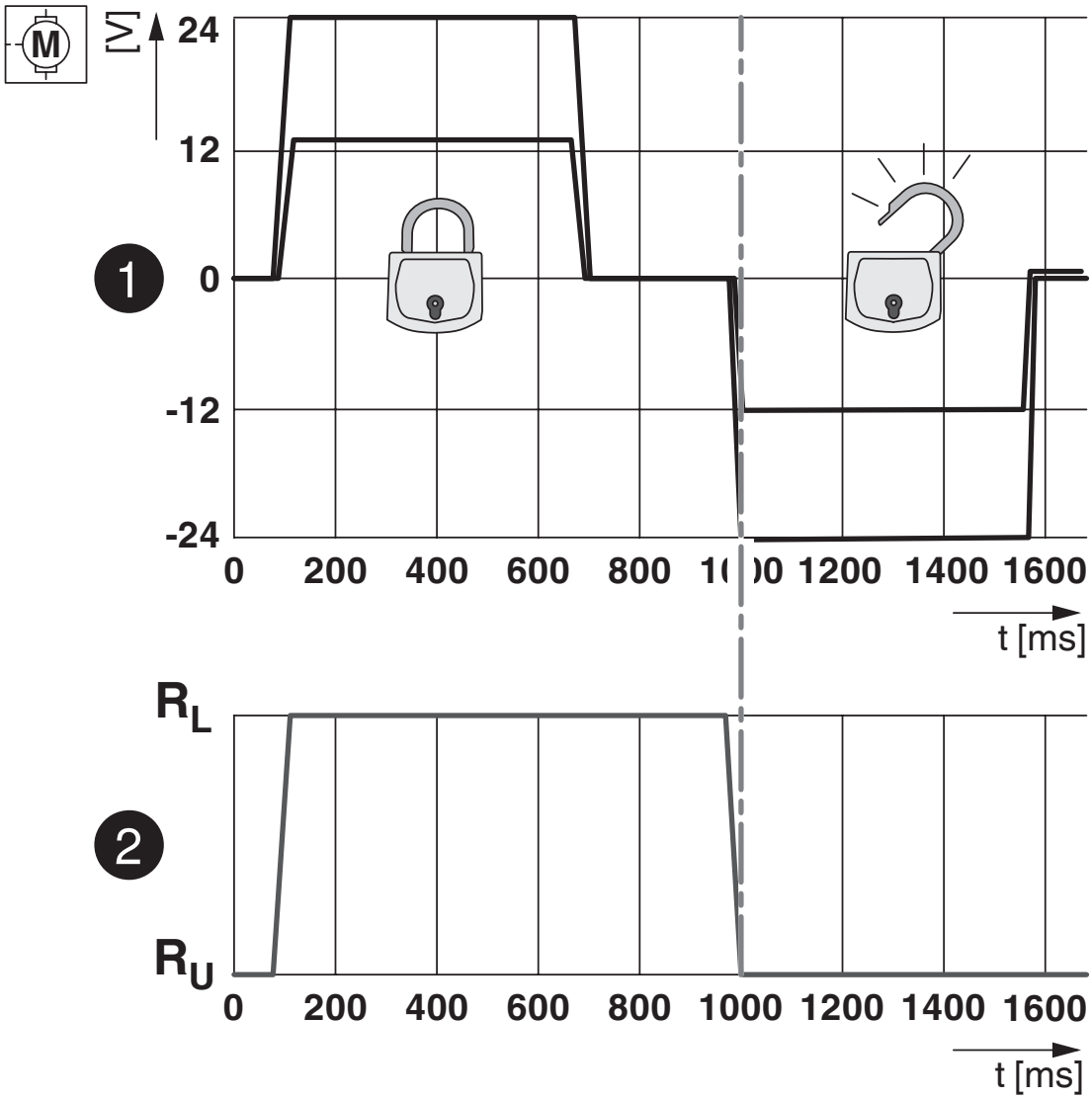
Block diagram of the locking actuator

Schematic diagram



Temperature sensor technology resistance range at AC contacts

Diagram



Locking states of the locking actuator

Classifications

ECLASS

ECLASS-13.0	27144706
ECLASS-15.0	27144706

ETIM

ETIM 10.0	EC002898

UNSPSC

UNSPSC 21.0	39121800

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	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.)	Lead(CAS: 7439-92-1)
	Bis(2-(2-methoxyethoxy)ethyl)ether(CAS: 143-24-8)
	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1)
SCIP	58ca9b1d-ee5f-4426-9dc5-503c1bbd7a5f

EF3.1 Climate Change

CO2e kg	55.59 kg CO2e

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