

Marken

Prüfbericht-Nr.: Auftrags-Nr.: Seite 1 von 29 CN216GRS 001 168336085 Test report no.: Order no .: Page 1 of 29

Kunden-Referenz-Nr.: N/A Auftragsdatum: 2021-09-18

Client reference no.: Order date:

RENHAO WEIYE TECHNOLOGY (WUHAN) CO.,LTD Auftraggeber:

NO.78, Luoyu Road, Hongshan District Wuhan City, 430070 Hubei P.R.China Client:

Prüfgegenstand: Connector for Conductive Charging of Electric Vehicles

Test item:

Bezeichnung / Typ-Nr.: See page 6

Identification / Type no.:

Auftrags-Inhalt: Type test

Order content:

Prüfgrundlage: EN 62196-1:2014 Test specification: EN 62196-2:2017

Wareneingangsdatum: 2021-09-15

Date of sample receipt:

Prüfmuster-Nr.: A003129612-010-018

Test sample no:

2021-09-20- 2022-01-05 Prüfzeitraum:

Testing period:

geprüft von:

Ort der Prüfung: TÜV Rheinland (Shanghai)

Place of testing: Co., Ltd.

Prüflaboratorium: TÜV Rheinland (Shenzhen)

Testing laboratory: Co., Ltd.

Prüfergebnis*: **Pass**

Test result*:

tested by: x Deh Zhou

Datum:

Ausstellungsdatum: Issue date: 2022-01-21 Date: 2022-01-21

Stellung / Position: Debbie Zhou /PE Stellung / Position: Allen Chen / TC

Sonstiges / Supervised by Leo Yang 146

Other: This report was issued for type tests of Connector for Conductive Charging of Electric Vehicles.

genehmigt von:

authorized by:

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt Condition of the test item at delivery: Test item complete and undamaged

P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) * Legend: N/A = not applicable N/T = not tested

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TEST REPORT IEC 62196-2

Plugs, socket-outlets, vehicle connectors and vehicle inlets – Conductive charging of electric vehicles

Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories

 Report Number......:
 CN216GRS 001

 Date of issue.....:
 See cover page

 Total number of pages
 See cover page

Name of Testing Laboratory

preparing the Report TÜV Rheinland (Shenzhen) Co., Ltd.

Applicant's name: RENHAO WEIYE TECHNOLOGY (WUHAN) CO.,LTD

Hubei P.R.China

Test specification:

Standard: IEC 62196-2:2016 for use in conjunction with

IEC 62196-1:2014

Test procedure: Type test

Non-standard test method: N/A

Test Report Form No.: IEC62196_2B

Test Report Form(s) Originator....: VDE Testing and Certification Institute

Master TRF: Dated 2016-11

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Manufacturer
Model/Type reference: See page 6 Ratings: See page 6 Responsible Testing Laboratory (as applicable), testing procedure and testing location(s): Testing Laboratory: See page 4 Tested by (name, function, signature): See cover page Approved by (name, function, signature): See cover page Testing location/ address: Tested by (name, function, signature): See cover page Testing location/ address: Tested by (name, function, signature): See cover page Testing location/ address: Tested by (name, function, signature): See cover page Testing location/ address: Testing location/ address: Tested by (name, function, signature): See cover page
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Approved by (name, function, signature): See cover page Testing procedure: CTF Stage 1: Tested by (name, function, signature): Approved by (name, function, signature): Testing procedure: CTF Stage 2: Testing location/ address
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Testing procedure: CTF Stage 4:
Testing location/ address:
Tested by (name, function, signature):
Witnessed by (name, function, signature) .:
Approved by (name, function, signature):
Supervised by (name, function, signature) :

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List of Attachments (including a total number of pages in each attachment):

Attachment 1: Additional requirements according to EN 17186:2019 (4 pages);

Attachment 2: Photo documentation (7 pages).

Summary of testing:

Tests performed (name of test and test clause):

- 1. All tests were performed on EVT-32X;
- 2. Additional tests of clause 22, 23, 24, 25.3, 26.4 were performed on EVT-20X, clause 25.3, 26,4 were performed on EVS-32X, EVS-20X;

Appendix 1: Common modification according to EN 62196-1:2014 (1 page);

The product fulfils the requirements of EN 62196-1:2014; EN 62196-2:2017.

Testing location:

TÜV Rheinland (Shanghai) Co., Ltd.

No.177, 178, Lane 777 West Guangzhong Road, Jing'an District, Shanghai, China

Summary of compliance with National Differences (List of countries addressed):

N/A

Copy of marking plate:

On product body







Renhao Weiye Technology (Wuhan) Co., Ltd

Name: vehicle connector Number: EVT-32X Specification: 32A 480V AC IP class: IP54

Standard: IEC62196. 2-2016

Renhao Weiye Technology (Wuhan) Co., Ltd

Name: vehicle connector Number: EVT-20X Specification: 20A 480V AC IP class: IP54

Standard: IEC62196. 2-2016

Renhao Weiye Technology (Wuhan) Co., Ltd

Name: vehicle connector Number: EVS-20X Specification: 20A 250V AC IP class: IP54 Standard: IEC62196.2-2016

Renhao Weiye Technology (Wuhan) Co., Ltd

Name: vehicle connector Number: EVS-32X Specification: 32A 250V AC

IP class: IP54

Standard: IEC62196. 2-2016

In user manual:



Dongguan Dosin Hardware Electronics Co.,Ltd.

Yongfu Kechuang Central Industrial Park, Nanzha District 5, Humen Town, Dongguan, China

Remark:

1. Markings of all models are identical except model numbers, ratings and pin configurations.



is identifier according to EN 17186:2019.



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Test item particulars Type of accessory	Connector for Conductive Charging of Electric Vehicles
Socket-outlets:	yes. / no
Vehicle inlets:	yes / no
Plugs:	yes. / no
Vehicle connectors:	yes /-no
- Number of poles:	See page 6
- Rated current	See page 6
- Rated operating voltage:	See page 6
- Degree of protection	IP54
- Interlocking facilities (with/without interlock):	with interlock / without interlock
- Type of interlock (electrical/mechanical)	electrical / mechanical
- Standard sheet	2-lle
- Type of terminal	N/A
Possible test case verdicts:	
- test case does not apply to the test object:	N/A
- test object does meet the requirement:	P (Pass)
- test object does not meet the requirement:	F (Fail)
Testing:	
Date of receipt of test item:	See cover page
Date (s) of performance of tests:	See cover page
General remarks:	
"(See Enclosure #)" refers to additional information ap	ananded to the report
"(See appended table)" refers to a table appended to the	
Throughout this report a ⊠ comma / ☐ point is u	sed as the decimal separator.
Manufacturer's Declaration per sub-clause 4.2.5 of	IECEE 02:
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	☐ Yes ☐ Not applicable
When differences exist; they shall be identified in t	he General product information section.
Name and address of factory (ies):	Dongguan Dosin Hardware Electronics Co.,Ltd. Yongfu Kechuang Central Industrial Park, Nanzha District 5, Humen Town, Dongguan, China



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General product information:

Connector for Conductive Charging of Electric Vehicles, IP54, non-rewirable; without breaking capacity, comply with standard sheet 2-IIe. These plugs are to be used at an ambient temperature between -35 $^{\circ}$ C and +50 $^{\circ}$ C.

All models are identical except model numbers, ratings, pin configurations and cable length.

Model difference:

louei uniterence.					
Type No.	No. Rated current Rated voltage Cables		Phase details	Coding resistor	
EVT-20X	20A	480V~ (three-phase)	5×2,5mm ² +1×0,5mm ²	L1, L2, L3, N, PE	680Ω
EVS-20X	1 /114		3×2,5mm ² +1×0,5mm ²	L1, N, PE	680Ω
EVT-32X	1 30Δ	480V~ (three-phase)	5×6,0mm ² +1×0,5mm ²	L1, L2, L3, N, PE	220Ω
EVS-32X	32A	250V~ (single-phase)	3×6,0mm ² +1×0,5mm ²	L1, N, PE	220Ω

Remark

1. Declared by the applicant, the interlock and retaining device associated with the connector shall be provided during the final installation and the related safety requirement and function shall be evaluated accordingly.



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8	MARKING		Р
8.1	All accessories marked with the following:		Р
	Rated current (A):	See page 4	Р
	Rated operating voltage (V):	See page 4	Р
	Name or trademark of responsible vendor:	See page 4	Р
	Degree of protection:	See page 4	Р
	Type reference:	See page 4	Р
8.2	Symbols comply with the examples		Р
8.3	For plugs and connectors, responsible vendor name or trademark and the type reference are visible to the user		Р
8.4	For all accessories, rated voltage and rated current markings visible prior to installation		Р
	For inlets and socket outlets, responsible vendor name or trademark and type reference visible before installation.		N/A
8.5	Contacts of rewireable accessories marked properly		N/A
8.6	Wiring instructions provided for rewireable accessories		N/A
8.7	Non-rewireable accessories not required to be marked in accordance with 8.5 and 8.6		Р
8.8	Marking is indelible and easily legible after the humidity treatment of 20.3, the marking is rubbed vigorously by hand for 15 s with a piece of cloth soaked in water and again for 15 s with a piece of cloth soaked with petroleum spirit.		Р
8.9	Cable assemblies with one accessory have all wires identified and are provided with wiring instructions	Wiring instruction is in user manual	Р

9	DIMENSIONS		Р
9.1	Accessories comply with the relevant standard sheets as specified (IEC 62196-2)		Р
	Applicable standard sheet: (IEC 62196-2)	2-lle	Р
9.2	Accessories are compatible only with other standardized accessories of the same type.		Р
9.3	It is not possible to make single-pole connections between plugs and socket-outlets or vehicle connectors, and between vehicle inlets and vehicle connectors.		Р
9.4	It is not possible to engage plugs or vehicle connectors with socket-outlets or vehicle inlets having different ratings, or having different contact combinations unless safe operation is ensured.		Р



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Improper connections between different electric	Р
vehicle accessories are not possible	

10	PROTECTION AGAINST ELECTRIC SHOCK	Р
10.1	Live parts are not accessible to the user when the accessories are in partial or complete engagement	Р
	Contact between a live part of a plug or vehicle inlet and a live part of a socket-outlet or vehicle connector is not possible while any live part is accessible.	Р
10.2	Accessories with shutters do not allow access	N/A
	Live contacts automatically screened	N/A
	Operation only by complementary accessories	N/A
	Parts liable fixed against loosing	N/A
	Compliance after tests of cl. 23	N/A
10.3	Design of accessories	Р
	a) When inserting the plug or vehicle connector	Р
	The earth connection is made before the phase connections	Р
	2) The control pilot connection is made after phase and neutral connection	Р
	The proximity contact or connection switch contact is made after the earth contact, and before or simultaneously with the control pilot contact.	Р
	b) When withdrawing the plug or vehicle connector	Р
	The phase and neutral connections are broken before the earth connection is broken	Р
	2) The control pilot connection is broken before the phase connection are broken	Р
	The proximity contact or connection switch contact is broken before the earth contact, and after or simultaneously with the control pilot contact.	Р
10.4	It is not possible to inadvertently assemble the contacts of one device into the enclosure of the mating device.	Р



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11	Size of earthing conductors or neutral conductors	
	Size of earthing conductors or neutral conductors are at least the same size as the phase conductors. (IEC 62196-2)	Р
	The earth conductor is green/yellow (IEC 62196-2)	Р

12	PROVISION FOR EARTHING	Р
12.1	Accessories are provided with a protective earthing contact and a protective earthing terminal.	Р
	Protective earthing contacts are directly and reliably connected to the protective earthing terminals.	Р
12.2	All accessible dead metal parts are reliably connected to the earthing terminal by construction.	N/A
	Impedance of earthing path does not exceed 0,05 Ω:	N/A
12.3	Earthing contact comply with the test of 12.3 (a) or 12.3 (b) to 12.3 (d)	Р
	Earthing contacts do not overheat when conducting a current equal to that specified for the phase contacts in accordance with 12.3 (a)	Р
	The earthing contact conducted the short time test currents without cracking, breaking or melting in accordance with 12.3 (b) to (d).	N/A
12.4	Earthing contacts are shrouded or guarded against mechanical damage	Р
12.5	Data or signal earth contacts can carry 2 A without overheating	Р

13	TERMINALS		Р
13.1	Common requirements		Р
13.1.1	Rewireable accessories are provided with terminals that accept flexible conductors		N/A
13.1.2	Non-rewireable accessories are provided with soldered, welded, crimped or other effective terminations	Crimped	Р
	Crimping of soldered conductors is not used unless soldering is outside of crimp area		Р
13.1.3	Terminals do not require special preparation		N/A
13.1.4	Terminal materials adequate		N/A
13.1.5	Earthing terminal bodies that are not part of the accessory housing or frame have a body made of materials in accordance with 13.1.4		N/A



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	· · · · · · · · · · · · · · · · · · ·	•	
	Earthing terminal bodies that are part of the accessory housing or frame have clamping means that are made of materials in accordance with 13.1.4		N/A
	If the housing or frame are fabricated of aluminium or it is alloys, combinations of copper and aluminium are avoided or protection is provided		N/A
13.1.6	Terminals are properly fixed and clamping means do not fix any other component		N/A
13.1.7	Terminals are located within proximity of other terminals		N/A
13.1.8	Terminals are located or shielded to avoid contact with screws or conductors		N/A
13.1.9	No risk of accidental contact between live parts between live parts and enclosure parts when conductors fitted as intended		N/A
	No risk of a stranded wire contacting live parts or enclosure parts		N/A
13.2	Screw type terminals		N/A
13.2.1	Screw type terminals allow proper connection of a copper or copper alloy conductor with the proper cross sectional area		N/A
	Depth of pillar terminal hole sufficient		N/A
13.2.2	Screw type terminals have appropriate mechanical strength		N/A
	Screws and nuts for clamping have an ISO thread or a thread comparable in pitch and mechanical strength		N/A
13.2.3	Screw type terminals clamp conductors between metal surfaces and do not damage the conductor		N/A
13.2.4	Lug terminals used with accessories rated at least 60 A and are fitted with spring washers or other means to lock the terminal		N/A
13.2.5	Clamping screws or nuts of earthing terminals are locked against accidental loosening and cannot be loosened without a tool		N/A
13.3	Mechanical tests on terminals		N/A
13.3.1	Terminals comply with the test of 13.3.1		N/A
	Flexing under mechanical load test:		N/A
	Smallest cross-sectional area (mm²); height H (mm); mass (kg)		N/A
	Largest cross-sectional area (mm²); height H (mm); mass (kg)		N/A
	during the test: the conductor does not slip out, no break near clamping unit and no damage		N/A



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	Pull test:	N/A
	- min. cross-sectional area (mm²); pull (N):	N/A
	- max. cross-sectional area (mm²); pull (N):	N/A
	during the test the conductor does not come out	N/A
13.201	Wire connection of components is rewirable or non-rewirable. (IEC 62196-2)	N/A

14	INTERLOCKS	N/A
14.1	Accessories with interlock	N/A
14.1.1	Accessories classified in "not suitable for making and breaking an electrical circuit under load" shall be checked after installation be provided with an interlock.	final N/A
14.1.2	Plugs and socket-outlets with interlocks shall be so constructed that:	N/A
	- A plug cannot be completely withdrawn from the socket-outlet while the contacts of that socket-outlet are live	N/A
	- the contacts of the socket-outlet cannot be made live until a plug is in proper engagement	N/A
	Vehicle couplers with interlocks shall be so constructed that:	N/A
	- a vehicle connector cannot be completely withdrawn from the vehicle inlet while the contacts of that vehicle connector are live	N/A
	the contacts of the vehicle connector cannot be made live until the vehicle connector is in proper engagement	N/A
	The power contacts shall not make or break under load	N/A
14.1.3	Accessories with interlock but without latching function (electrical interlock) sh so constructed that:	nall be N/A
	a) the time interval between the opening of the contacts of the control switching device and the opening of the line contacts and neutral contact of the accessory shall be sufficient to ensure that the mechanical switching device interrupts the current before the contacts of the plug are disconnected from the contacts of the socket-outlet	N/A
	b) during the closing operation, the contacts of the control switching device shall close after or simultaneously with the contacts of the main poles.	N/A
14.1.4	Switched socket-outlets with interlock and latching device holding the plug int socket-outlet (mechanical interlock) shall be so constructed that:	to the N/A
	- the interlock is linked with the operation of a switch so that the plug can neither be inserted nor withdrawn from the socket-outlet while the contacts of the socket-outlet are live	N/A



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	3	
	- the contacts of the socket-outlet cannot be made live until a plug is almost completely in engagement	N/A
	Switched vehicle connectors with interlock and latching device holding the vehicle connector onto the vehicle inlet (mechanical interlock) shall be so constructed that:	N/A
	- the interlock is linked with the operation of a switch so that the vehicle connector can neither be inserted nor withdrawn from the vehicle inlet while the contacts of the vehicle connector are live	N/A
	- the contacts of the vehicle connector cannot be made live until it is almost completely in engagement with a vehicle inlet	N/A
	Accessories with interlock and latching device which hold the plug into the socket-outlet or connector are subjected to the test of 14.1.5 and 14.1.6.	N/A
14.1.5	The switched socket-outlet or connector with interlock is fixed to the support so that the axis of separation is vertical and the movement of the plug is downwards.	N/A
	After this test, the total weight shall be maintained for 60 s.	N/A
14.1.6	The switched socket-outlet or connector with interlock is fixed to support so that the axis of separation is horizontal	N/A
	After this test, the total weight shall be maintained for 60 s.	N/A
	The test is repeated three times, rotating the socket- outlet of 90° on the vertical plane each time	N/A
	After the test, the switched socket-outlet or vehicle connector with interlock shall show no damage or deformation which may impair the function of the product	N/A
14.2	Accessories with integral switching device	N/A
	Integral switching devices shall comply with IEC 60947-3 as far as it is applicable:	N/A
	- for a.c. application, shall have a rated current, at a utilization category of at least AC-22A	N/A
	- for d.c. application, shall have a rated current, at a utilization category of at least DC-21A	N/A
14.3	Control circuit devices and switching elements	N/A
	Control circuit devices and switching elements, if any, used in the control circuit of an electrically interlocked socket-outlet or connector shall comply with:	N/A
	- IEC 60947-5-1 or	N/A
	- IEC 61058-1	N/A
	Ratings suitable for the load to be controlled	N/A



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	Control switching devices according to IEC 61058-1 shall be classified with at least 10 000 cycles	N/A
14.4	Pilot contacts and auxiliary circuits	N/A
	Pilot contacts and auxiliary circuits used for interlocks shall make after the neutral and phase(s) are made	N/A
	Pilot contacts and auxiliary circuits used for interlocks shall break before the phase(s) and neutral are broken	N/A

15	RESISTANCE TO AGEING OF RUBBER AND THE	RMOPLASTIC MATERIAL	Р
	Rubber or thermoplastic enclosures, or elastomeric sealing rings and gaskets are resistant to aging		Р
	Material complies with the accelerated ageing test		Р
	Test temperature (°C)	70 for waterproof cover /strain relief / seal ring/ o-ring/ cap of pin; 80 for other parts	Р
	Test duration (hours)	240 for waterproof cover /strain relief / seal ring/ o-ring/ cap of pin; 168 for other parts	Р
	No cracks in the material are visible		Р
	Material is not sticky or greasy		Р



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16	GENERAL CONSTRUCTION		Р
16.1	Accessible surfaces are free from sharp edges		Р
16.2	Screws or other fastening means for fixing the part carrying the contacts to the mounting surfaces are accessible		Р
	This fastening means does not perform any other function		Р
16.3	Earthing contact unable to be altered by the user		Р
16.4	Socket outlet and vehicle connectors when mounted as in normal use and without a plug and vehicle inlet respectively in position, shall ensure the degree of protection specified on its marked	IP54	Р
	When a plug or vehicle inlet is fully engaged with the socket-outlet or vehicle connector, the lower degree of protection of the two accessories shall be ensured	IP54	Р
16.5	Maximum temperatures on accessible parts are not exceeded	See clause 24	Р
16.6	Adequate contact pressure is maintained when vehicle connectors and inlets are mated		Р
16.7	Retaining device that prevents the plug or connector from working out of this mated part is provided		N/A
16.8	Latching device complies with pull test	Shall be checked after final installation	N/A
	Type of device		N/A
	Cable length		N/A
	Weight of device (kg)		N/A
	Weight of cable (kg)		N/A
	Pull force (kg)		N/A
16.9	Locking feature is provided (optional)		N/A
16.10	Conductors can be easily inserted into terminals and secured in rewireable devices		N/A
	Conductors can be positioned so as not to allow contact with uninsulated live parts or reducing spacing in rewireable devices		N/A
	Cover or enclosures of rewireable devices are easily removable and easily fixed after connection of conductors		N/A
16.11	Field serviceable accessories are designed to discourage user servicing		N/A
16.12	Enclosures have adequate mechanical strength and do not work loose during normal use		Р
	Enclosures parts cannot be removed without a tool		Р



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16.13	Cable entries allow introduction of the cable to afford mechanical protection		N/A
16.14	Insulating barriers and the like have adequate mechanical strength, and are secured to the body of the device		N/A
	Insulating barriers and the like are designed such that they cannot be incorrectly replaced		N/A
16.15	The force to insert and withdraw a connector from an inlet is not greater than 100 N		Р
	Force measured (N)	Max.42 insertion; Max.58 withdrawal	Р
16.16	Gripping surface is provided		Р

17	CONSTRUCTION OF SOCKET-OUTLETS	N/A
17.1	General	N/A
	Socket outlets are enclosed and meet the marked degree of protection when a plug is engaged or not	N/A
	A lid provided to meet the marked degree of protection is provided with springs fabricated of corrosion resistant material	N/A
	Socket outlets designated IP44 are provided with a drain opening meeting the dimensional limits	N/A
	Total enclosure and the marked degree of protection are achieved by means of a lid.	N/A
17.2	Contact tubes	N/A
17.2.1	Total enclosure and the marked degree of protection are achieved by means of a lid.	N/A
	Contact tubes, other than earth contact tubes, are floating	N/A
	Force to withdraw the steel gauge (N):	N/A
17.2.2	The pressure exerted by contact tubes does not affect insertion or withdrawal	N/A
	Maximum withdrawal force (N):	N/A

18	CONSTRUCTION OF PLUG AND VEHICLE CONNI	ECTORS	Р
18.1	Enclosures of plugs and connectors completely cover the terminals and cable ends		Р
	Rewireable device connections can be made without removing the core		N/A
	Plugs and connectors can only be assembled or reassembled so as to ensure proper configurations		Р
18.2	Parts of a plug or connector do not work loose during normal use		Р



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	Plugs and connectors cannot be dismantled without a tool	Р
18.3	Plugs meet the marked degree of protection when in complete engagement with the socket outlet	N/A
	Attached devices used to assist in meeting the degree of protection are not removable without a tool	N/A
18.4	Vehicle connectors are enclosed when not in engagement with the vehicle inlet	Р
	Vehicle connectors incorporate means to meet the marked degree of protection when engaged with the vehicle inlet	Р
	Means provided to meet the marked degree of protection are securely fixed to the connector	Р
	Lid springs are fabricated of corrosion resistant material	N/A

19	CONSTRUCTION OF VEHICLE INLETS	N/A
19.1	Vehicle inlet incorporate means to ensure the marked degree of protection when mated with a vehicle connector	N/A
	Attached caps provided on inlets meet marked degree or protection when fitted correctly	N/A
	It is not possible to dismantle the inlet or the attached cap without a tool	N/A
19.2	Vehicle Inlet is provided with an earthing contact	N/A
19.3	Vehicle Inlets designated IP44 are provided with a drain opening meeting the dimensional limits	N/A

20	DEGREE OF PROTECTION		Р
20.1	Accessories have the required minimum ingress protection rating		Р
	Plugs and vehicle connectors when mated are IP 44	IP54	Р
	Vehicle inlets mated are IP 44		N/A
	Plugs, vehicle connectors, and socket outlets when not mated are IP 24	IP54 (with cover closed)	Р
	Vehicle Inlets when not mated are IP 55		N/A
20.2	Enclosures comply with the relevant test of IEC 60529 for the IP rating marked on the device		Р
20.3	No damage occurs to devices subjected to the humidity conditioning		Р
	Humidity (%)	93	Р
	Temperature (°C)	23	Р



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Duration (hours)	: 168	Р
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21	INSULATION RESISTANCE AND DIELECTRIC STRENGTH		Р
21.1	Accessories comply with the insulation resistance and dielectric strength tests		Р
21.2	The measured insulation resistance is not less 5 $M\Omega$	See appended table 21.2	Р
21.3	The accessory complies with the dielectric strength test	See appended table 21.1	Р
21.4	The means for non-interchangeability were not impaired		Р

22	BREAKING CAPACITY		
22.1	Accessories intended to interrupt current have sufficient breaking capacity	Without breaking capacity	N/A
22.2	Mating accessories comply with the breaking capacity test		N/A
	Test current: 1,25 rated current (A: power factor):		N/A
	Test voltage: 1,1 rated operating voltage (V):		N/A
	Number of cycles:		N/A
	No sustained arcing occurs. No damage		N/A
22.3	Mating accessories not suitable for current interruption comply with the fault current breaking capacity test		Р
	Test current: 1,25 rated current (A: power factor):	Power factor: 0,8 Test current: 40 for EVT-32X; 25 for EVT-20X	Р
	Test voltage: 1,1 rated operating voltage (V):	AC 528	Р
	Number of cycles:	3	Р
	No sustained arcing occurs. No damage		Р

23	NORMAL OPERATION		Р
23.1	Accessories withstand the mechanical, electrical and thermal stresses of normal use		Р
23.2	Test performed with both a.c. and d.c. voltages		Р
23.3	The accessories comply with the test		Р
	Rated operating voltage (V):	AC 480, 3 phase	Р
	Rated current (A; power factor):	32 for EVT-32X; 20 for EVT- 20X; 0,6	Р
	Number of cycles: with load:	50	Р
	without load:	10000	Р
	No sustained arcing occur		Р



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	After test, no damage and electric test (§ 21.3) (V)	Р
23.4	Lids or other moveable parts that are not operated automatically are also caused to move the required number of cycles	Р

24	TEMPERATURE RISE		Р
24.1	Temperature rise of terminals and surfaces do not exceed the required limits 50 K	See appended table 24.1	Р
	For accessories with coding resistors, each resistor value was tested at the current corresponding to that resistor (IEC 62196-2)		Р
24.2	Accessories shall be so constructed that the surface temperatures in normal use are not excessive, as indicated in 16.5		Р

25	FLEXIBLE CABLES AND THEIR CONNECTION			Р
25.1	Conductors are relieved from stain at the terminals and are protected against abrasion			Р
	Cable cannot contact unearthed metal parts			Р
25.2	Requirements for plugs and vehicle connectors			Р
25.2.1	Suitable flexible cable is provided with non-rewireable devices			Р
25.2.2	Rewireable accessory provided with strain relief that prevents twisting of cable	t		N/A
	Instructions provided to identify parts not provided and explain assembly			N/A
	Cable anchorages do not have any sharp edges			N/A
	Insulating materials are smooth and free from burrs			N/A
25.3	Accessories comply with the cable pull test			Р
	Rated current (A)	20	32	Р
	Pulling force (N)	160	200	Р
	Torque (Nm)	0,6	0,7	Р
	Maximum displacement (mm):	Max.0	Max.0	Р
	During the test, the cable shall not be damaged			Р
	After the test, the cable shall not have been displaced by more than the values indicated in table 17.			Р

26	MECHANICAL STRENGTH	
26.1	Accessories have adequate mechanical strength	Р
26.2	Accessories maintain their degree or protection after impact testing	N/A



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	. ago 10 0. 20		Ropolition Office	
	Ball impact test on enclosure for Socket-outlets and appliance inlets			N/A
	Impact test: 5 blows (fig. 5); energy:	[]1J	[]2J	N/A
	- After test, no damage			N/A
	- Accessories higher than IP 44: withstand § 20			N/A
	- Enclosures of thermoplastic mat.: withstand § 21.4			N/A
26.3	Rewirable plugs and connectors, and non-rewirable p	lugs and co	onnectors:	Р
	For rewirable plugs and connectors: Type of cable (IEC 60245-4; mm²):			N/A
	8 drops – 1 m, total length of 2,25 m			Р
	- After test, no damage			Р
	- Accessories higher than IP 44: withstand § 20			Р
	- Enclosures of thermoplastic mat.: withstand § 21.4			Р
26.4	Non-rewireable accessories comply with the flexing test			Р
	Current (A); Force (N):	20; 20	32; 25	Р
	Number of flexing: 20 000			Р
	After the test, no damage			Р
26.5	Accessories with screwed cable glands comply with the deformation test	[] metal	[] moulded mater	N/A
	Diameter of test rod (mm):			N/A
	Force (N):			N/A
	After the test, no damage			N/A
26.6	Shutters, if provided, comply with the pin force test			N/A
26.7	Isolating caps fixed sufficiently			N/A
	Test of 26.8 and 26.9 comply with stated criteria			N/A
	After each of the following tests, the samples shall s	ow no dama	age as follows:	N/A
	- no part shall become detached			N/A
	- no part shall have moved, loosened or deformed to the extent that the samples no longer function or operate as intended			N/A
	- no uninsulated live part shall become accessible with the probe (Figure 3)			N/A
	- no reduction shall occur of creepage and clearance between uninsulated live parts of			N/A
	- no other evidence of damage shall result, that could increase the risk of fire or electric			N/A
26.8	Temperature test of IEC 60068-2-14, test procedure Nb			N/A



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26.9	Force test on isolating caps at 20 N or 40 N for	N/A
	1 minute	

27	SCREWS, CURRENT CARRYING PARTS AND CONNECTIONS		Р
27.1	Connections withstand the mechanical stresses occurring in normal use		Р
	Screws transmitting contact pressure having a diameter of 3,5 mm, screw into a metal nut or metal insert		N/A
	Screws comply with the engagement test	See appended table 27.1	N/A
	The screws or nuts are tightened and loosened:		N/A
	- ten times for screws in engagement with a thread of insulating material		N/A
	- five times for nuts and other screws		N/A
	Torque applied (Nm):		N/A
	After the test, the clamping unit shall not have undergone changes that adversely affect its further use		N/A
27.2	Screws engaging threads in insulating material have a suitable length and correct introduction is ensured		Р
27.3	Contact pressure of electrical connections is not transmitted through insulating material unless insulating material is suitable for this use		Р
27.4	Screws and rivets are locked against loosening		Р
27.5	Current carrying parts are fabricated of suitable materials		Р
27.6	Moving parts of contacts are suitably protected against corrosion		Р

28	CREEPAGE DISTANCES, CLEARANCES AND DISTANCE			
28.1	Creepage distances and clearance comply with IEC 60664-1 and 60664-3, when evaluated in accordance with 28.4	See appended table 28.1	Р	
28.2	Sealing compounds do not extend outside the cavity in which they are contained		N/A	
28.3	Pollution degree is 4 for outdoor use equipment unless protection is afforded by another means		N/A	
	Pollution degree applied:	Considered as pollution degree 3	Р	
28.4	Overvoltage category II applies		Р	
	Pollution degree 2 on printed wiring boards applies due to the use of protective coatings		N/A	



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Pollution degree 1 on printed wiring boards applies due to the use of silicone rubber or potting compounds	N/A
Clearances were evaluated based on test and measurement in IEC 60664-1	Р
Evaluation of clearance and creepage distances are in accordance with IEC 60664-1, Section 3	Р
Protective coatings were evaluated to IEC 60664-3	N/A
Primary circuit voltages are evaluated using the next highest value in the table. Interpolation is only allowed for secondary circuits	N/A
Determination of the dimensions of clearance and creepage distances shall be conducted in accordance with IEC 60664-1:2007, Subclause 6.2	Р

29	RESISTANCE TO HEAT, TO FIRE AND TO TRACK	ING	Р
29.1	Accessories are resistant to heat		Р
29.2	Devices are heated in cabinet for 1 hour at a temperature of 110 + 5°C and comply with all criteria at the end of the exposure		Р
	Marking still be easily legible		Р
29.3	Insulating materials comply with the ball pressure test	See appended table 29.3	Р
	Temperature (°C)	See appended table 29.3	Р
	Maximum deformation diameter (mm):	See appended table 29.3	Р
	For materials which deformation, this diameter not exceed 2 mm		Р
29.4	External parts of insulating material and insulating material supporting live parts are resistant to abnormal heat and fire in accordance with IEC 60695-2-10	See appended table 29.4	Р
	Temperature of glow wire tip (°C):	See appended table 29.4	Р
	No visible flame and no sustained glowing, or		Р
	Flame or glowing of the specimen or of the surroundings extinguish within 30 s after the removal of the glow-wire		N/A
	Surrounding parts have not burned away completely		Р
	No permanent ignition of the tissue paper		Р
29.5	Insulating parts supporting live parts are resistant to tracking in accordance with IEC 60112 PTI test, solution a, 175 V, 50 drops	See appended table 29.5	Р
	No flashover or breakdown between electrodes		Р

30	CORROSION AND RESISTANCE TO RUSTING	Р
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	Ferrous parts are protected against rusting		Р
31	CONDITIONAL SHORT-CIRCUIT CURRENT WITH	STAND TEST	N/A
	New socket-outlet and mating plug:		N/A
	Minimum prospective short-circuit current: 10 kA		N/A
	or higher if specified by manufacturer		N/A
	During test:		N/A
	- no risk for operator		N/A
	- no damage for adjacent equipment;		N/A
	- no arcing and no flashover between poles;		N/A
	- no melting of fault detection fuse		N/A
	After test:		N/A
	- accessories mechanically operable		N/A
	- no contact welding preventing normal opening		N/A
	- dielectric test as § 21.3 (21.2.1 b or 21.2.2 b)		N/A
32	ELECTROMAGNETC COMPATIBILITY		N/A
32.1			N/A
32.1	Immunity Emission		N/A
32.2	ETHISSION		IN/A
33	VEHICLE DRIVEOVER		Р
33.1	A plug or vehicle connector shall have adequate resistance to damage from being driven over by a vehicle		Р
33.2	Accessories wired with the min. size cable of a type recommended by the manufacturer shall be placed on a concrete floor in any normal position of rest	See appended table 33.2	Р
33.3	This sub clause of part 1 is not applicable		N/A
33.4	This sub clause of part 1 is not applicable		N/A
201	Components (IEC 62196-2)		Р
201.1	Ratings (IEC 62196-2)		Р
	A component is used in accordance with its rating established for the intended conditions of use. (IEC 62196-2)		Р

Mechanical assembly (IEC 62196-2)

Current-carrying parts of incorporated components (IEC 62196-2)

(IEC 62196-2)

Loosening of parts in an accessory does not result in a risk of fire, electric shock, injury to persons.

201.2

201.3



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	Any component uninsulated live part does not turn or shift in position resulting in a reduction of creepage distances, clearances and distances below the minimum required values of IEC 62196-1:2014, Clause 28. (IEC 62196-2)	Р
201.4	Electrical connections (IEC 62196-2)	Р
201.4.1	Requirements described in 201.4.2 to 201.4.4 apply to connections of internal wiring that are factory installed in the accessory. (IEC 62196-2)	Р
201.4.2	A splice or connection is mechanically secure and make electrical contact (IEC 62196-2)	Р
201.4.3	A soldered connection is mechanically secure (IEC 62196-2)	N/A
201.4.4	Insulation over a splice is equivalent to the insulation on the wires involved (IEC 62196-2)	N/A

202	Resistor coding (IEC 62196-2)	
	Configurations type 2 and type 3b and 3c are provided with coding resistors (IEC 62196-2)	Р
	Resistor values and tolerances are in accordance with IEC 61851-1:2010 (IEC 62196-2)	Р



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Table 12.3 TABLE: Short Time Test Currents						N/A
Earthing Contact Designation	Device Rating (A)	Test Current (A)	Time (seconds)	Continuity exists (Yes/No)	Re	sults
Supplementary information:						

Table 21.1 TABLE: Dielectric Strength		Р
Test voltage applied between:	Test potential applied B (V)	Breakdown / flashover (Yes/No)
between all poles connected together and the bomeasurement being made with and also without or vehicle inlet engaged		No
between each pole in turn and all others, these b connected to the body, with a plug or vehicle inle engaged		No
Supplementary information:	· ·	

Table 21.2 TABLE: Insulation Resistance		Р
Test voltage applied between:	Test potential applied (V)	Insulation Resistance (MΩ)
between all poles connected together and the body, the measurement being made with and also without a plug or vehicle inlet engaged		>1000 (required ≥5)
between each pole in turn and all others, these being connected to the body, with a plug or vehicle inlet engaged	500	>1000 (required ≥5)
Supplementary information:		

Table 24.1	TABLE: Heating Test		
	Test current (A):	2 for signal; 22 for power (tested on EVT-20X)	_
	Ambient (°C)	See table below	_
Thermocoup e Locations	•	max. temperature limit (°C)	
	L1 – L2 – L3		
L1 Terminal	Max.56,4	Max.56,4 77,7	
L2 Terminal	Max.58,7	77,7	
L3 Terminal	Max.48,6	77,7	
CP Terminal	Max.40,3	77,7	
Handle	Max.42,6 (corrected to 40 ambient temp.)	60,0	
Enclosure	Max.44,7 (corrected to 40 ambient temp.)	85,0	



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Ambient	27,7	
	L1 – PE	
L1 Terminal	Max.55,0	73,6
PE Terminal	Max.56,1	73,6
CP Terminal	Max.42,0	73,6
Handle	Max.45,2 (corrected to 40 ambient temp.)	60,0
Enclosure	Max.47,0 (corrected to 40 ambient temp.)	85,0
Ambient	23,6	_
	L3 – N	
L3 Terminal	Max.45,3	73,7
N Terminal	Max.54,3	73,7
CP Terminal	Max.40,2	73,7
Handle	Max.44,8 (corrected to 40 ambient temp.)	60,0
Enclosure	Max.44,2 (corrected to 40 ambient temp.)	85,0
Ambient	23,7	_
Supplementar	y information:	

Table 24.1	1 TABLE: Heating Test		Р
	Test current (A)::	2 for signal; 42 for power (tested on EPT-32X)	_
	Ambient (°C):	See table below	_
Thermocoup e Locations		max. temperature limit (°C)	
	L1 – L2 – L3		
L1 Terminal	Max.54,7	72,3	
L2 Terminal	Max.54,4	72,3	
L3 Terminal	Max.55,5	72,3	
CP Terminal	Max.33,2	72,3	
Handle	Max.47,9 (corrected to 40 ambient temp.)	60,0	
Enclosure	Max.53,0 (corrected to 40 ambient temp.)	85,0	
Ambient	22,3	_	
	L1 – PE		
L1 Terminal	Max.57,9	72,9	
PE Terminal	nal Max.59,8 72,9		
CP Terminal	erminal Max.42,2 72,9		
Handle	Max.45,4 (corrected to 40 ambient temp.)	60,0	
Enclosure	Max.47,0 (corrected to 40 ambient temp.)	85,0	

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Ambient	22,9	_			
	L3 – N				
L3 Terminal	Max.43,5	72,9			
N Terminal	Max.41,9	72,9			
CP Terminal	Max.44,2	72,9			
Handle	Max.45,4 (corrected to 40 ambient temp.)	60,0			
Enclosure	Max.47,0 (corrected to 40 ambient temp.)	85,0			
Ambient	22,9	_			
Supplementary information:					

Table 27.1 TABLE: Threaded Part Torque Test					N/A
	aded part tification	Diameter of thread (mm)	Column number (I, II, or III)	Applied torqu	e (Nm)
Supplement	ary information:				

Table 28.1	Table 28.1 TABLE: Clearance And Creepage Distance Measurements							Р
	Rated voltage (V): See page 6						_	
	Pollution degree: 3					_		
	Overvoltage cate	gory		:	П			_
	Insulation group: Illa					_		
clearance cl and creepage distance dcr at/of:		Up (V)	U r.m.s. (V)	Require cl (mm		cl (mm)	Required dcr (mm)	dcr (mm)
Between live	e parts of different	_	480	3,0		>3,9	7,7	>10,01
Between live accessible n		_	250	3,0		>3,9	8,0	>10,4
Between live parts and earthing contacts, fixing screws and similar devices			250	1,5		>1,95	4,0	>5,2
Supplement	ary information:							



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Table 29.3 TABLE: Ball Pressure Test of Thermoplastics						
Allowed impression diameter (mm)			_			
Part	Test temperature (°C) Impression diameter		eter (mm)			
Contact base/ base cover	125	Max.1,0)			
Enclosure	80	Max.0,8	3			
Supplementary information:						

Table 29.4 TABLE: Glow-wire Test					
part under test	material designation	test temperature (°C)	visible flame and sustained glowing (Y/N)	flames and glowing extinction time	ignition of the tissue paper (Y/N)
Enclosure	PC	650	N	-	N
Contact base/ base cover	PA66	850	Υ	35s	N
Sealing cover	Silicone	650	N	-	N
Cable sealing	Silicone	650	N	-	N
Supplementary information			•		

Table 29.5 TABLE: Tracking Test				
part under test	material designation	test voltage (V)	breal	over / kdown s/No)
Contact base/ base cover	PA66	175	١	No
Supplementary information:				



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Table 33.2	TABLE: \	ABLE: Vehicle Drive Over Test					
	Tire Size	······:	P225/75R15	_			
	Force Ap	plied (N):	5000	_			
	Tire Pressure (kPa):		220				
	Velocity (km/h):		8				
Sample N	lumber	Orientation	Results / Observations				
А		Front	Pass				
В	B Back		Pass				
C Middle		Pass					
Supplement	Supplementary information:						



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9	DIMENSIONS	
9.1	Addition to subclause 9.2:	
	9.2.Z1 If other non-EV standardized accessories may be physically joined together with the EV accessories, these shall not be able to function.	N/A



PHOTO DOCUMENTATION CN216GRS 001

For

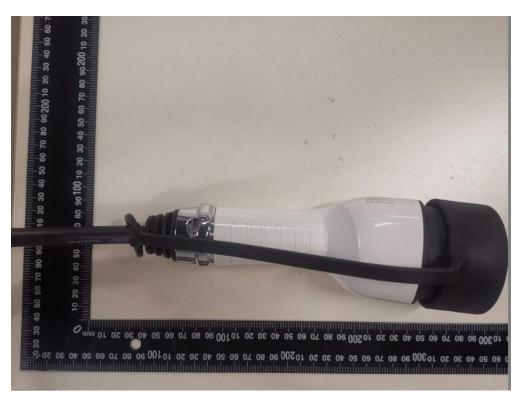
Connectors for Conductive Charging of Electric Vehicles EVT-32X, EVT-20X, EVS-32X, EVS-20X RENHAO WEIYE TECHNOLOGY (WUHAN) CO.,LTD



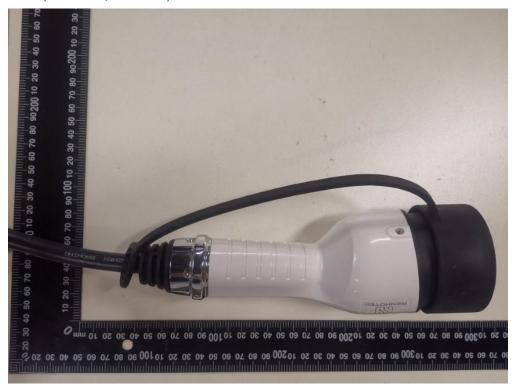
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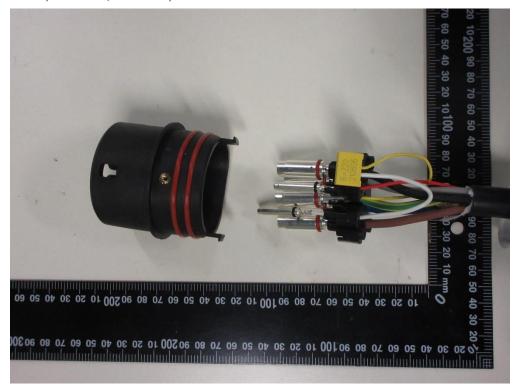


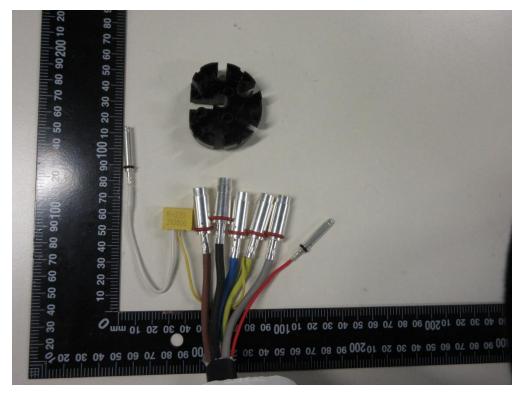
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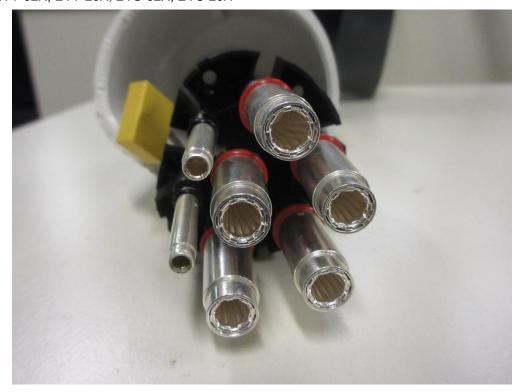


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Remark: All models are identical except model numbers, ratings, pin configurations, and cable length.

Type No.	Rated current	Rated voltage	Cables	Phase details	Coding resistor
EVT-20X	20A	480V~ (three-phase)	5×2,5mm ² +1×0,5mm ²	L1, L2, L3, N, PE	680Ω
EVS-20X	20A	250V~ (single-phase)	3×2,5mm ² +1×0,5mm ²	L1, N, PE	680Ω
EVT-32X	32A	480V~ (three-phase)	5×6,0mm ² +1×0,5mm ²	L1, L2, L3, N, PE	220Ω
EVS-32X	32A	250V~ (single-phase)	3×6,0mm ² +1×0,5mm ²	L1, N, PE	220Ω



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Attachment 2: Additional requirements according to EN 17186:2019			
Clause	Requirement + Test	Result - Remark	Verdict

IDENTIFICATION OF VEHICLES AND INFRASTRUCTURES COMPATIBILITY - GRAPHICAL EXPRESSION FOR CONSUMER INFORMATION ON EV POWER SUPPLY

EN 17186:2019

5	General identifier requirements				
5.1	Shape of identifier		Р		
	A single hexagonal, regular and horizontal shape of identifier has been selected for all kind of electrical interfaces.		Р		
	The shape for all electrical interfaces is a regular and horizontal hexagon.		Р		
5.2	Colour scheme for electrical interfaces		Р		
	The identifier shall be executed according to Annex	A:	Р		
	 for the plug and socket-outlet, in black symbol with a white/silver internal background and a black outline; 	$\langle x \rangle$	N/A		
	 for the vehicle connector and vehicle inlet, in a white/silver symbol with black internal background and a white/silver outline. 	X	Р		
5.3	Size		Р		
	The minimum size of the identifier is defined for a potential need of more than one identifier to be put on a vehicle which can regularly use more than one electrical interface offered on the market, in combination with the available space.		Р		
	In order for the consumer to recognize the electrical interface when approaching the connecting point, a larger minimum size is set for the EV charging station.		N/A		
	The size of the identifier shall be:		Р		
	— a minimum of 13 mm in diameter (width), with an outer line thickness of at least 1,4 points, for placement on the plug, on the vehicle connector, on the vehicle in the immediate proximity of the vehicle inlet, in the vehicle manual, and at the selection device;	Min.13mm (Width)	Р		
	— a minimum of 30 mm in diameter (width), with an outer line thickness of at least 3,2 points, for placement on the EV charging station adjacent to the socket outlet and in the vehicle dealership.		N/A		
	The font size of the symbol shall be scalable to the size of the shape, but the minimum being 14 points for the 13 mm diameter and 32 points for 30 mm diameter.	Min.14 points, Min.4,94mm in height	Р		



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	Attachment 2: Additional requirements according to EN 17186:2019				
Clause	Requirement + Test	Result - Remark	Verdict		
5.4	Compatibility categorization		Р		
	The electrical interface is categorized by a symbol.		Р		
	The symbol consists of a single letter in normal, Latin script. The symbol shall be based on an Arial Bold font.		Р		
	The symbol shall be placed in the middle of the shape		Р		
	The symbol categorization is provided by the Annex B		Р		
5.5	Durability		Р		
	The label on the car shall have a 10-year lifetime and shall be readable	Lazered on body of connector	Р		
	Labels on the EV charging station and the cable shall have a 10-year lifetime and shall be readable when tested in accordance with EN 62196-1:2014, 8.8		Р		
6	Label description		—		
6.1	General		Р		
	The implementation of Directive 2014/94/EU provides information that is additional and complementary to legal metrology, national regulations and other information		Р		
	For recognition by newcomers at a connection point, especially consumers driving throughout Europe, the form and expression of such national information should be similar throughout Europe.		Р		
6.2	Basic label with mandatory identifier content		Р		
6.2.1	Content of the label		Р		
	The content of the basic label is only composed of the mandatory part (identifier) with no optional information.		Р		
6.2.2	Design of the label		Р		
	The design is mandatory.		Р		
	The height of section B is 130 % of the height of the hexagon.		Р		
	The minimum width of the rectangle containing an identifier is 130 % of the width of the hexagon. The maximum width of the rectangle containing an identifier is 300 % of the width of the hexagon.				
6.3	Full label with mandatory identifier and possibly optional information	for the EV charging station only	N/A		
6.3.1	Content of the label	-	N/A		
	Table 1 describes the content of the complete label, composed of a mandatory part and optional information		N/A		



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	Attachment 2: Additional requirements accord	aing to EN 1/186:2019	
Clause	Requirement + Test	Result - Remark	Verdict
	A — Product name		N/A
	B — Identifier		N/A
	C — Power		N/A
	D — Additional information		N/A
6.3.2	Design of the label		N/A
	The design is mandatory.		N/A
	The height of section B is 130 % of the height of the hexagon.		N/A
	The minimum width of the rectangle containing an identifier is 130 % of the width of the hexagon. The maximum width of the rectangle containing an identifier is 300 % of the width of the hexagon.		N/A
	The heights of sections A and D are defined from the height of the section B and no more than 50 %.		N/A
	The height of the section C is defined from the height of the section B and no more than 33 %.		N/A
7	Placement of the label		_
7.1	General		Р
	The use of the identifier is intended to meet the informational needs of a vehicle user arriving at a connecting point regarding the station/vehicle compatibility so that a consumer can easily identify the electrical interface that their vehicle can use.		P
	The presentation of the identifier shall be clearly visible during normal use, easily legible and displayed to the consumer on the location described in this clause.		Р
7.2	Label location on EV charging stations, electric vehicles and detachable cable assembly		Р
7.2.1	EV charging station		N/A
	Labels shall be affixed to an EV charging station as	follows:	N/A
	 Label according to 6.2 adjacent to socket- outlet(s) or to the storage location(s) of vehicle connector(s) and; 		N/A
	Labels according to 6.1 with the identifier according to Annex B shall be affixed on the vehicle connector of each cable assembly or on a flag attached to each cable in the immediate proximity of the vehicle connector.		N/A
	— Label according to 6.1, in case of a payment or selection terminal that is separate from the EV charging station, it shall be affixed near or as part of the selection device.		N/A
7.2.2	Electric vehicle		N/A



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Attachment 2: Additional requirements according to EN 17186:2019					
Clause	Requirement + Test Result - Remark	Verdict			
	Labels with the identifier according to Annex B shall be affixed to an electric vehicle as follows:				
	— near each vehicle inlet and;	N/A			
	— on each plug.	N/A			
7.2.3	Detachable cable assembly	Р			
	Labels with the identifier according to Annex B shall be affixed to a detachable cable assembly as follows:				
	— on the plug and;	N/A			
	— on the vehicle connector.	Р			
7.3	Vehicle manuals and dealerships	N/A			
	Information on whether a vehicle can use an electrical interface shall be indicated by use of the identifier in the user manuals and in vehicle dealerships in a way that is common practice and is easy to obtain and understand by the user of the	N/A			

vehicle.