Datasheet

Eve Double PG-line

Technical specification

Product Variant

Eve Double PG-line, RFID card reader, logo	Art.nr. 904462002
Eve Double PG-line, DE GCB single Grid meter, RFID card reader, logo	Art.nr. 904462003
Eve Double PG-line, DE Dual Grid meter, RFID card reader, logo	Art.nr. 904462004
Eve Double PG-line, DE Dreipunktzähler, RFID card reader, logo	Art.nr. 904462005
Packaging unit	Eve Double PG-line, 1 piece
Contents of delivery	Eve Double PG-line, installation manual, mounting accessories and hoists

General Product Specifications

Number of sockets	2	
Types of sockets	Type 2 socket, in accordance with IEC62196-2, lockable	
Charging mode according to IEC61851	Mode 3	
User Interface	7" TFT color display Resolution: 800 x 480 pixels Brightness: 400 Nits	
Status indication	Status LEDs on sockets	
Energy meter, per socket	4 quadrant meter, MID certified, Eichrecht certified	
Earthing systems	TN system (PE cable)	
Nominal output voltage (+/- 10%)	400 V (3x230 V)	
Charging current	Max. 32 A per phase (22 kW per socket) Standad load balancing is required if input power is less than the total power of the two charging points.	
Main Switch	Single feeder cable 1-phase: 4-pole, 80 A, 400 V 3-phase: 4-pole, 80 A, 400 V	Dual feeder cable 1-phase: 4-pole, 80 A, 400 V 3-phase: 8-pole, 40 A, 400 V
Input current	Max. 64 A, 3-phase	
Terminal block	N, L1, L2, L3, PE: max. 25 mm^2	
Rated input voltage (+/- 10 %)	400 V (3 x 230 V)	
Rated frequency	50 Hz	
Cable diameter	30 mm to 45 mm	
Contactors	Per phase controllable relays Integrated per socket, simultaneous activation of all phases Extra safety relay in series for emergency situations	

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Overcurrent protection	Integrated in firmware, overcurrent response scenarios: 105% after 1,200 seconds 112% after 100 seconds 120% after 5 seconds 150% after 2 seconds
Residual current protection	Per socket integrated RCD, 4-pole, rated at 40 A, breaking triggered at 30 mA, type B
Short-circuit protection	Fuse type gG 32 A
Available in- and outputs	RJ-45 (Ethernet/LAN) RJ-11 (Standard Load Balancing)
Tilt sensor	Vandalism and accidents can be detected in the backend

Protection and integrated components

Short-circuit protection	Fuse type gG 32 A
Residual current protection	Per socket integrated RCD 4P 40 A 30 mA type B
Energy metering	1 MID energy meter per socket
Circuits	3-fold protection circuit, with soft-start via triacs
Overcurrent protection	Implemented in firmware, throttling to: • 105 % to 1000 seconds; • 110 % to 100 seconds; • 120 % to 10 seconds; • 150 % to 2 seconds
Disconnector	Main switch
Surge protection:	• Type 1+2 pre-installed in charging station for art.no. 904462002 • Type 1+2 pre-installed in Grid Connection Box for art.no. 904462003, 904462004, 904462005

Conformity

Conformity to German calibration law (Eichrecht)	Through proprietary encryption module, evaluated and certified by the Physikalisch-Technische Bundesanstalt (PTB) on 19-07-2019

Communication and Protocols

Controller board	NG920
Vehicle communication	Mode 3 in accordance with IEC 61851-1 ed. 3 (2017)
RFID card reader authentication	ISO/IEC 14443A/B, 13.56 MHz MIFARE Classic 1K/4K, MIFARE Ultralight, DESFire (EV1/EV2) Maximum length: 7 bytes
Internet/networking possibilities	GPRS (2G) LTE (4G) Ethernet/LAN

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Supported mobile communication bands	2G: EGPRS quad-band: 850 / 900 / 1800 / 1900 MHz 4G: LTE Cat M1 bands: 3, 8, 20
Communication protocol Back office communication	OCPP 1.5 (JSON) OCPP 1.6 (JSON) OCPP 2.0.1 (JSON)
Preset OCPP backends	Several options, information available from your sales representative upon request.
Local energy management	Modbus TCP/IP (client or server)

Certifications

Standards	IEC61851-1 (2017), IEC61851-22 Conformity to German calibration law (Eichrecht) (B+D) TAB 4100 CE Low Voltage Directive 2014/35/EU VDE-AR-N 4100: 2019-04 with Ber 1 2019-10 DIN EN 61439-2:2012-06

Operating Conditions

Ambient temperature for operation	-25 °C to 40 °C
Relative atmospheric humidity	5 % to 95 %
Protection Class	I
IP degree of protection according to IEC60529	IP54
Mechanical impact resistance according to IEC62262	IK10
Standby power consumption	approx. 9 to 12 W
Environmental conditions	indoor / outdoor use
Electromechanical environmental conditions	E2 *
Mechanical environmental conditions	M1 *

* according to 2014/32/EU (Measuring Instruments Directive)

Housing

Charging station type	Charging pole
Mounting options	Directly on solid ground or on optional concrete base
Housing material	304 stainless steel (body), fibreglass-reinforced DCPD polyester resins (front and top covers) Fire-resistant concrete plywood panel on power supply side for mounting a grid connection box.
Housing colors	RAL 7043 Traffic grey (body) RAL 9016 Traffic white (front)

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Locking	Lockable lever with space for 2 lock cylinders on the grid operator side Lockable lever with space for 2 lock cylinders on the charging station side Lock cylinder type - half cylinder 30/10 mm
Dimensions (H x W x D)	
Power supply side (interior dimensions)	1226 x 250 x 163 mm
Charging station	1637.8 x 350 x 437.5 mm
Packaging	1795 x 515 x 601 mm
Weight	
Charging station	approx. 80 kg
Incl. packaging and pallet	approx. 90 kg

Standard and Selectable Settings Ex-Works

Setting	Options
Access control	RFID reader RFID reader + Giro-e *
Nominal current	Max. 32 A per socket *
Load Management	Off Standard load management between the 2 sockets * Active Load Balancing (via P1, Modbus) * Smart Charging Network *
Behaviour when charging station is off-line	Accept all RFID cards Only accept locally registered RFID cards Charging not possible
Behaviour when plug is unplugged from electric vehicle	End charging process and unlock plug on charging station Pause charging process until plug is inserted into electric vehicle
Backend selection	Several options, information available from sales representative upon request. *
Internet access options	2G: GPRS 4G: LTE-M Ethernet UTP/LAN

The settings marked with a * may result in additional costs when purchasing your charging station. The default settings are always mentioned first. For more information about the options, please contact your sales representative.

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