



EVSE OEM Range



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GEWISS



GEWISS



integrity

We create value for our customers by offering innovative and scalable solutions for every type of context, connecting people and things, constantly **improving safety and quality of life**. We are guided every day by **strong integrity**, an innate **culture of excellence** and a propensity for **sustainability**.



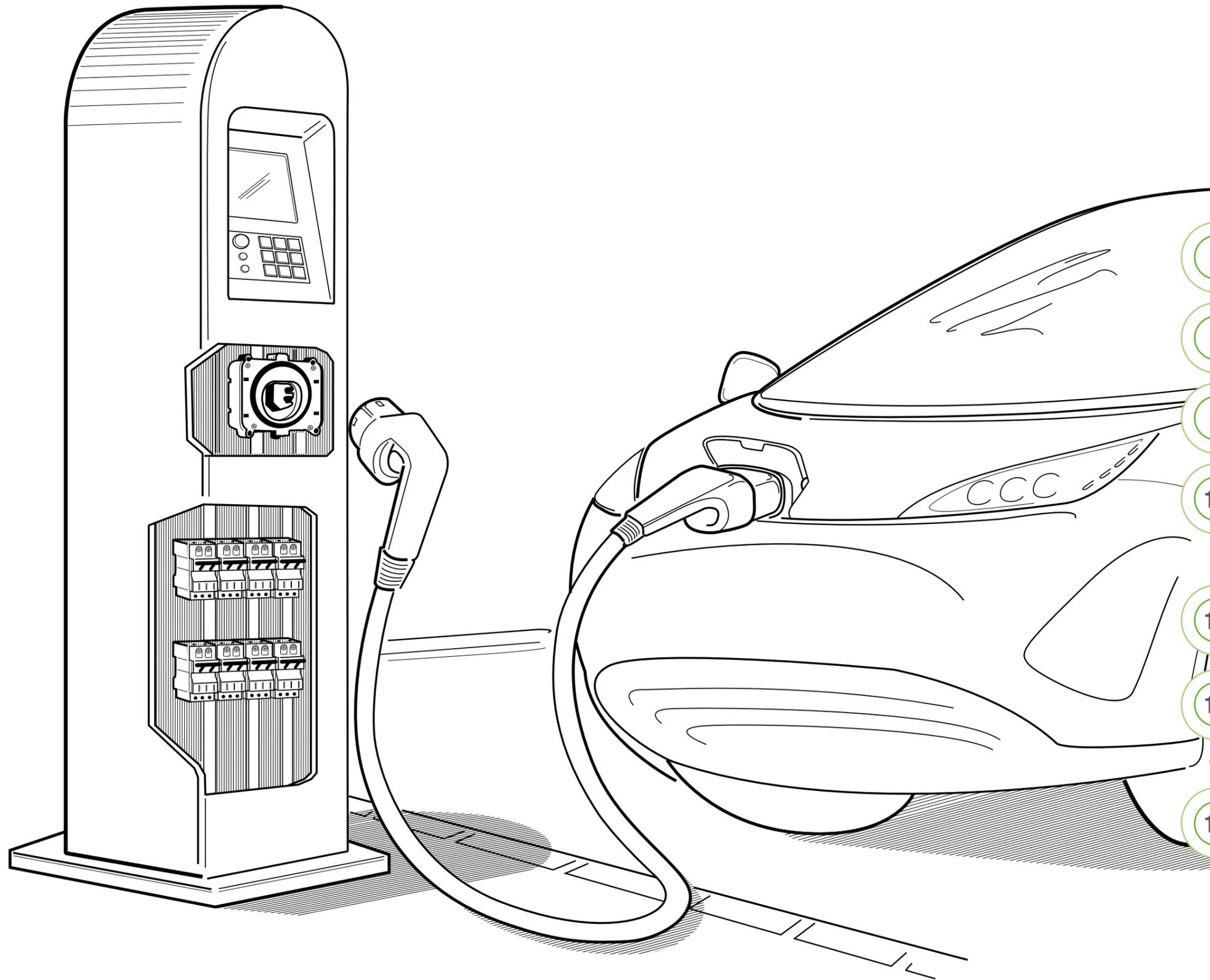
excellence

GEWISS' story is a long entrepreneurial journey that stems from **brilliant product ideas** and is based on the ability to interpret contemporaneity and **foresee the future**. Everyday creating something better **than the day before** exploring innovative solutions and maximizing every single potential. This is our **culture of excellence**.



sustainability

We work to reduce waste and **efficiently manage human, natural and financial resources**. We aim to give this value to our people, our customers, communities and future generations.



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The OEM range

T2 sockets and mobile sockets

DIN rail modular devices



**T2
vandal-proof sockets**

Type 2 sockets, complying with EN 62196-1 and EN 62196-2 and suitable for use on EV charging units according to EN 61851, equipped with a safety shutter (IPXXD protection), and an anti-vandal system implemented by means of lock gates to prevent any access to active parts by an unauthorised user.

**T2
mobile socket**

Type 2 mobile sockets with cable, complying with the EN 62196-1 and EN 62196-2 standards and suitable for use on EV charging units according to EN 61851, equipped with overmolded rubber at the bottom of the handle in order to increase grip and ease of handling.



EV type RCCBs

Residual current circuit breakers available in both 2-pole and 4-pole versions, complying with IEC 62955 standard and suitable for protection against smooth DC residual currents above 6 mA.

**ReStart Automatic
reclosing devices**

In the event of circuit breaker tripping, the ReStart devices, after checking the status of the system, restore power supply ensuring maximum continuity of service in total safety. The range is distinguished by the Autotest function, with periodic and automatic control of the residual current protection.

**Modular
devices**

For all requirements relating to electric vehicle charging, the product offer is complete with:

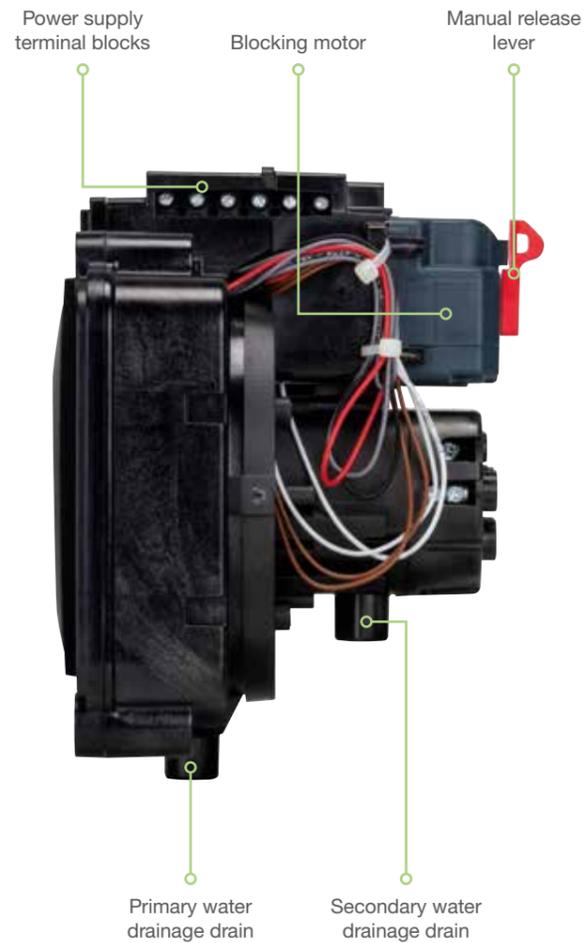
- MCBs (curves C and D)
- Type A and type B RCCBs
- Contactors (2NO and 4NO)
- Switch disconnectors up to 125A
- MID energy meters (single-phase and three-phase).



T2 vandal-proof sockets

Type 2 sockets **with IP55** degree of protection both plugged and unplugged, complying with the EN 62196-1 and EN 62196-2 standards, equipped with a safety **shutter** (IPXXD protection), a double drain for water drainage and an anti-vandal system implemented by means of shutters that still permit the “**one-hand charging**” function, thus making it possible to connect the charging plug using a single hand.

The socket is equipped with 3 micro-contacts to detect the status of the shutters (open or closed) and the status of the block (active or inactive). There are also versions available with integrated LEDs: 1) intermittent: which signal the activation of the socket; 2) RGB, which indicate its status: free (green light), in use (blue light), error (red light).



T2 mobile socket

Type 2 mobile sockets with cable, complying with the EN 62196-1 and EN 62196-2 standards and suitable for use on EV charging units according to EN 61851, equipped with **overmolded rubber** at the bottom of the handle in order to increase grip and ease of handling. The products are equipped with a rubber cable gland for maintaining the **IP55 degree of protection** between the handle and the cable. The special design of the

inclined mobile connector is designed to increase the **ease of inserting** the connector and reduce its space on the outside when it is inserted into the vehicle or stored in the charging station holder.



Residual current circuit breakers

For ground fault protection at charging points, Gewiss offers a wide choice of residual current circuit breakers, to be chosen according to the residual current

waveform (from sinusoidal to smooth DC currents) and as a function of the distribution system.

TYPE A

Tripping of the residual current circuit breaker is ensured for leakage currents:

- sinusoidal
- pulsating
- pulsating with DC component

TYPE EV

Tripping of the residual current circuit breaker is ensured for leakage currents:

- as for type A
- smooth DC above 6mA

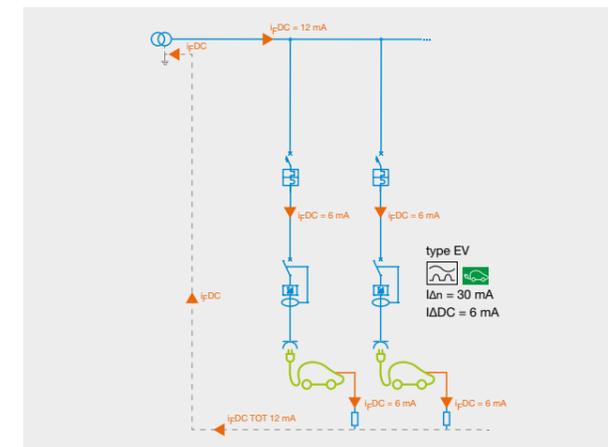
This type of circuit breaker meets the requirements of IEC 62955 standard by combining, in a single product, type A characteristics and residual direct current monitoring device, which is required for the protection of electric vehicle charging infrastructure.

TYPE B

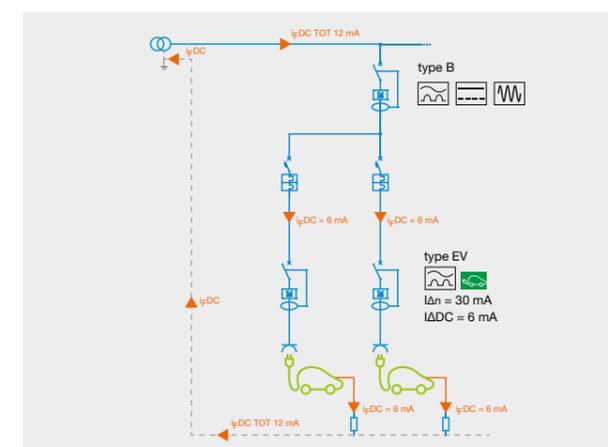
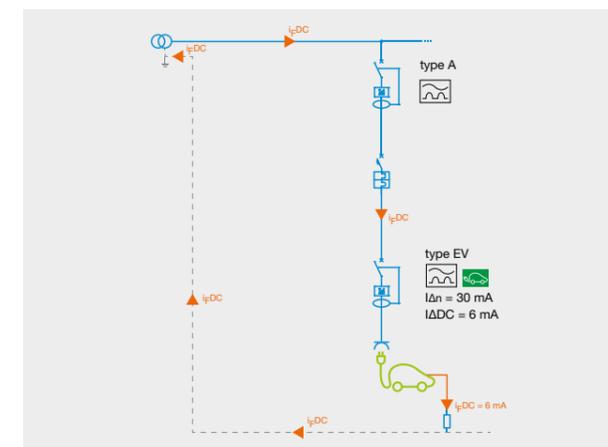
Tripping of the residual current circuit breaker is ensured for leakage currents:

- as for type A
- multi-frequency up to 1 kHz
- smooth DC greater than $2 \times I_{\Delta n}$

TN Distribution system



TT Distribution system



EXAMPLE 1

In this situation, it is enough each socket to be protected by a single EV type RCCB. The main upstream RCCB of the charging points is not necessary even in the case of a charging device powered by two dedicated circuits.

EXAMPLE 2

The presence of the main RCCB is always necessary. If an EV type is installed at the charging point, it guarantees the effectiveness of any main type A RCCB already present upstream, thus avoiding replacement.

EXAMPLE 3

In the case of multiple charging points, each socket must be protected by an EV type RCCB. The main RCCB upstream must necessarily be type B. This is to allow for continuity of service downstream, even in the presence of smooth DC residual currents greater than 6mA, given by the sum of the leakage currents of all charging points.



Automatic reclosing devices

The range of automatic reclosing devices:

- ensure continuity of service with ReStart solutions. In the event of a nuisance trip, ReStart reclose RCCB, only once it has checked that there are no leakage currents.
- ReStart AUTOTEST solutions provide the highest level of safety, by performing a periodic automatic test of the RCCB, without cutting off power to the system.

ReStart, when installed inside the electric vehicle charging units, ensures the continuity of refuelling operations, avoiding annoying power outages*. ReStart and ReStart Autotest can also be installed in unmanned systems, where they can ensure continuity of service and a significant reduction in maintenance costs.

* The use of automatic reclosing devices within the charging units must comply with the local regulations of the country of installation.



The exclusive benefits of ReStart



SERVICE CONTINUITY WITH INSULATION CONTROL

ReStart guarantees automatic reclosing in the event of untimely circuit breaker tripping after checking there are no faults, thereby avoiding inconvenience and possible damage.



NETWORKED DEVICES

ReStart devices can be integrated into a MODBUS RS485 data network, by connecting with the GEWISS BUS interface, to centrally manage all functions of the ReStart devices on the network.



QUICK RECLOSING

ReStart is even faster: all the versions guarantee system control and circuit breaker reclosing in just 10 seconds.

The key benefits of ReStart Autotest



TESTING THE RESIDUAL CURRENT WITH NO LOSS OF VOLTAGE

ReStart Autotest is the only device on the market that can carry out periodic safety testing on the residual current, without disconnecting voltage to the system. This function is guaranteed by special GEWISS-patented bypass contacts.



FREQUENCY OF THE AUTOMATIC TESTING

ReStart Autotest automatically tests the residual current every 28 days, guaranteeing maximum safety for the user and total efficiency of the protective device.



VAST RANGE

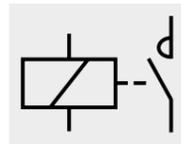
In order to ensure the maximum of safety, ReStart Autotest is also available for RCCBs type B both 2P and 4P for single-phase and three-phase distribution systems.



Other DIN rail modular devices

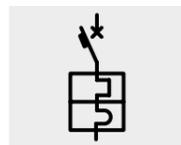
Contactors

Controlled by an electronic board, allow power to be supplied to the socket, thus allowing for the charging of the vehicle once the plug has been inserted into the socket.



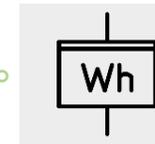
Miniature circuit breakers

Indispensable for protecting charging units from possible fault caused by short circuit or overload. They are available up to 63A with 2 different time-current characteristics (curves C and D).



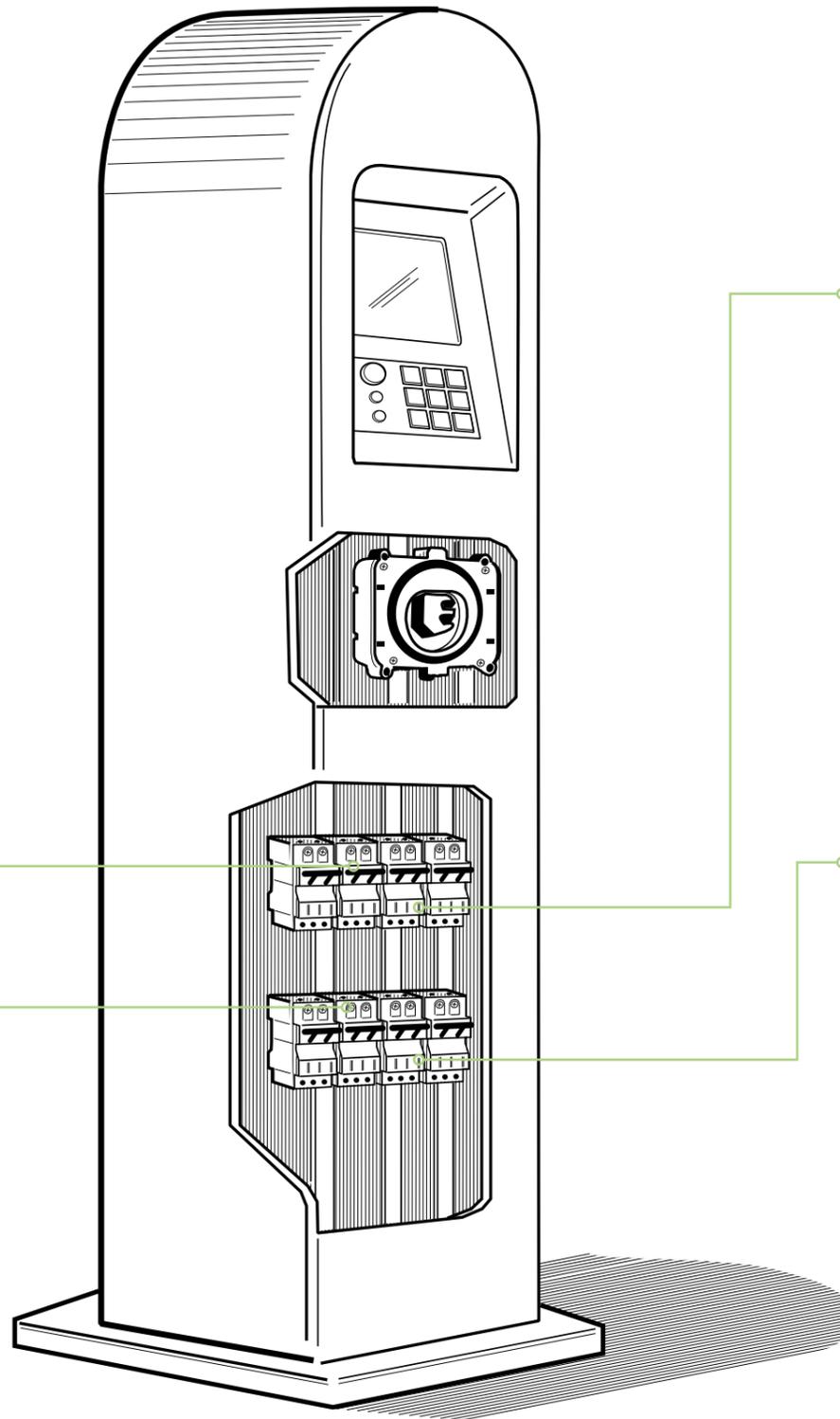
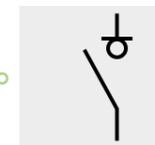
Energy meters

Allowing for the measurement of the power and energy supplied during the charging operation. All meters comply with European MID regulation for tax measurement applications.



Switch disconnectors

Characterised by a red control lever. They are easily recognisable within the charging unit as main device for opening and closing of downstream circuits.





Technical and dimensional characteristics

CHARGING SOCKET TYPE 2 FOR ELECTRIC VEHICLES

VANDAL-PROOF TYPE 2 CHARGING SOCKETS



CHARGING SOCKET TYPE 2 VANDAL-PROOF WITH SHUTTER - IP55

IP 55 **IK 10** **GWT 960°C** **UL94 V0**

Code	Sockets Type	No. of Poles	Current Max.	Power Max.	Shutter Locking system
Cable entry orientation: REAR					
GWJ 5001 B	Type 2	L1 - N- PE - CC - CP	32A	7.4 kW	YES
GWJ 5002 B	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	YES
GWJ 5003 B	Type 2	L1 - N- PE - CC - CP	32A	7.4 kW	NO
GWJ 5004 B	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	NO
Cable entry orientation: RADIAL					
GWJ 5011 B	Type 2	L1 - N- PE - CC - CP	32A	7.4 kW	YES
GWJ 5012 B	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	YES
GWJ 5013 B	Type 2	L1 - N- PE - CC - CP	32A	7.4 kW	NO
GWJ 5014 B	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	NO

CHARACTERISTICS: Charging sockets complying with international standard IEC 62196-2. GWJ50x3B and GWJ50x4B codes without gate block, indicated for creating charging stations without controlled access (example AUTOSTART configuration).
EQUIPMENT: Locking motor to avoid interruptions during the charging process, internal water drainage system, 3 microswitches to check the exact status and position of the charging socket.
NOTES: Actuator connector for Type 2 socket wiring to be purchased separately (code GWJ5901).

TYPE 2 CHARGING SOCKET, VANDAL-PROOF WITH SHUTTER AND LED SYSTEM - IP55

IP 55 **IK 10** **GWT 960°C** **UL94 V0**

Code	Sockets Type	No. of Poles	Current Max.	Power Max.	Shutter Locking system
Cable entry orientation: REAR					
GWJ 5001 G	Type 2	L1 - N- PE - CC - CP	32A	7.4 kW	YES
GWJ 5002 G	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	YES
Cable entry orientation: RADIAL					
GWJ 5011 G	Type 2	L1 - N- PE - CC - CP	32A	7.4 kW	YES
GWJ 5012 G	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	YES

CHARACTERISTICS: Charging sockets complying with international standard IEC 62196-2.
EQUIPMENT: Locking motor to avoid interruptions during the charging process, internal water drainage system, 3 microswitches to check the exact status and position of the charging socket.
Equipped with an internal INTERMITTENT LED lighting system to facilitate insertion of the mobile connector by the Driver/user.
NOTES: Actuator connector for Type 2 socket wiring to be purchased separately (code GWJ5901).

TYPE 2 CHARGING SOCKET, VANDAL-PROOF WITH SHUTTER AND RGB LED SYSTEM - IP55

IP 55 **IK 10** **GWT 960°C** **UL94 V0**

Code	Sockets Type	No. of Poles	Current Max.	Power Max.	Shutter Locking system
Cable entry orientation: REAR					
GWJ 5002 L	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	YES
GWJ 5004 L	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	NO
Cable entry orientation: RADIAL					
GWJ 5012 L	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	YES
GWJ 5014 L	Type 2	L1/L2/L3 - N- PE - CC - CP	32A	22 kW	NO

CHARACTERISTICS: Charging sockets complying with international standard IEC 62196-2.
EQUIPMENT: Locking motor to avoid interruptions during the charging process, internal water drainage system, 3 microswitches to check the exact status and position of the charging socket. Equipped with an internal RGB LED lighting system to identify the status of the socket.
Equipped with an internal INTERMITTENT LED lighting system to facilitate insertion of the mobile connector by the Driver/user.
NOTES: Actuator connector for Type 2 socket wiring to be purchased separately (code GWJ5901).

ACCESSORIES TYPE 2 VANDAL-PROOF SOCKETS



ACTUATOR CONNECTOR

Code	Sockets Type	Shutter Locking System
GWJ 5901	Actuator connector + crimp pins kit	Recharging Socket Type 2

TYPE 2 MOBILE CHARGING SOCKETS



TYPE 2 MOBILE CHARGING SOCKET WITH CABLE - IP55 WITH RELATED HOLDER

IP 55 **IK 10**

Code	Socket type	No. of Poles	Max. Current	Power Max.	Type / Cable length/
GWJ 5111 B	Type 2	L1 - N- PE - CC - CP	20 A	4.6 kW	Smooth / 5 metres
GWJ 5112 B	Type 2	L1 - N- PE - CC - CP	32 A	7.4 kW	Smooth / 5 metres
GWJ 5113 B	Type 2	L1/L2/L3 - N- PE - CC - CP	20 A	11 kW	Smooth / 5 metres
GWJ 5114 B	Type 2	L1/L2/L3 - N- PE - CC - CP	32 A	22 kW	Smooth / 5 metres

CHARACTERISTICS: Overmolded rubber inserts to improve grip handling. Cables of different types and lengths may be requested upon request. Per phase supply cable cross-section: max. 6 mm².
Guaranteed IP55 rating with coupling to a GWJ5912 holder to be purchased separately.



MOBILE CHARGING SOCKET TYPE 2 - IP55 WITH RELATED HOLDER

IP 55 **IK 10**

Code	Sockets Type	No. of Poles	Current Max.	Power Max.
GWJ 5101 B	Type 2	L1 - N- PE - CC - CP	32 A	7.4 kW
GWJ 5102 B	Type 2	L1/L2/L3 - N- PE - CC - CP	32 A	22 kW

CHARACTERISTICS: Overmolded rubber inserts to improve grip handling. Cables of different types and lengths may be requested upon request. Per phase supply cable cross-section: max. 6 mm². Guaranteed IP55 rating with coupling to a GWJ5912 holder to be purchased separately.

TYPE 2 MOBILE CHARGING SOCKETS ACCESSORIES



HOLDER FOR TYPE 2 MOBILE SOCKETS

Code	Installation	Inclination
GWJ 5912	Flush mounting enclosures	40°

CHARACTERISTICS: Can be integrated into charging infrastructure to replace the mobile connector. Its incline reduces the external bulk of the connector + stored cable.



Technical and dimensional characteristics

RESTART - AUTOMATIC RECLOSING DEVICES

RESTART AUTOTEST 2 POLES - VERSIONS COUPLED WITH RCCB'S



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND AUTOMATIC TEST OF THE RESIDUAL CURRENT CIRCUIT BREAKER - PRO VERSION



Code	Rated current	Idn	Type of RCCB	Rated voltage	No. of modules EN 50022	Conf. lmb.
GW 90 901 N	25 A	30 mA	A[I/R]	230 V	5	1/4
GW 90 902 N	40 A	30 mA	A[I/R]	230 V	5	1/4
GW 90 913	63 A	30 mA	A[I/R]	230 V	5	1/4
GW 90 911 B	25 A	30 mA	B[I/R]	230 V	7	1/2
GW 90 912 B	40 A	30 mA	B[I/R]	230 V	7	1/2
GW 90 913 B	63 A	30 mA	B[I/R]	230 V	7	1/2

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate that the automatic reset did not take place.

Compatible with:
 -GWD0953 WiFi Interface Module
 -GW90992 ModBus RS485 interface module.

NOTE: the Autotest function automatically and periodically (every 28 days) tests the RCCB, without interrupting the electric power supply, thus maintaining the performance of the residual current protection over time.

230 V ac power supply, phase-neutral.
 RCCB's type B[I/R] and A[I/R] Impulse Resistant presents greater resistance to untimely tripping in comparison to standard residual current circuit breakers. Immunity level 8/20µs: 3000A for IR type, 250A for standard type.

RESTART AUTOTEST 4 POLES - VERSIONS COUPLED WITH RCCB'S



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CHECK OF THE INSULATION AND AUTOMATIC TEST OF THE RESIDUAL CURRENT CIRCUIT BREAKER - PRO VERSION



Code	Rated current	Idn	Type of RCCB	Rated voltage	No. of modules EN 50022	Conf. lmb.
GW 90 921	25 A	30 mA	A[I/R]	400 V	7	1/2
GW 90 922	40 A	30 mA	A[I/R]	400 V	7	1/2
GW 90 923	63 A	30 mA	A[I/R]	400 V	7	1/2
GW 90 921 B	25 A	30 mA	B[I/R]	400 V	7	1/2
GW 90 922 B	40 A	30 mA	B[I/R]	400 V	7	1/2
GW 90 923 B	63 A	30 mA	B[I/R]	400 V	7	1/2

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate that the automatic reset did not take place.

Compatible with:
 -GW90954 WiFi Interface Module
 -GW90992 ModBus RS485 interface module.

NOTE: the Autotest function automatically and periodically (every 28 days) tests the RCCB, without interrupting the electric power supply, thus maintaining the performance of the residual current protection over time.

RCCB's type B[I/R] and A[I/R] Impulse Resistant presents greater resistance to untimely tripping in comparison to standard residual current circuit breakers. Immunity level 8/20µs: 3000A for IR type, 250A for standard type.

RESTART RD 2 POLES - VERSIONS TO BE COUPLED WITH RCCB'S IDP TYPE A



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CONTROL OF THE INSULATION - PRO VERSION



Code	Suitable for	Rated voltage	No. of modules EN 50022	Conf. lmb.
GW D0 976	IDP RCCBs - 2P up to 100 A - 30 mA	230 V	1	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so.

Compatible with:
 -GWD0951 auxiliary contact
 -GWD0953 WiFi Interface Module
 -GW90992 ModBus RS485 interface module (only if already coupled with GWD0951 auxiliary contact)

NOTES: cannot be used with 4P RCCBs in 3 modules and type B RCCBs. The ARD must be supplied at 230 Vac phase-neutral.

RESTART RD 4 POLES - VERSIONS TO BE COUPLED WITH RCCB'S IDP



AUTOMATIC RECLOSING DEVICES WITH PREVENTIVE CONTROL OF THE INSULATION - PRO VERSION



Code	Suitable for	Rated voltage	No. of modules EN 50022	Conf. lmb.
GW 90 967	IDP RCCBs - 2P/4P up to 100 A - 30 mA	230 V	3	1/4

CHARACTERISTICS: after RCCB has tripped, ReStart checks the insulation prior to the automatic reclosure. In the event of a fault (earth leakage), ReStart will not reset the circuit breaker but will continue to monitor the circuit every 2 minutes reclosing the circuit breaker when safe to do so. In the meantime the integrated configurable auxiliary contact will change state to indicate that the automatic reset did not take place.

Compatible with:
 - GW90945 WiFi Interface Module
 - GW90992 ModBus RS485 interface module.

NOTES: they cannot be used with 4P RCCBs in 3 modules. 230 V ac power supply, phase-neutral.

RESTART ACCESSORIES

ACCESSORIES FOR RESTART DEVICES



BUS RS485 COMMUNICATION INTERFACE MODULE

Code	Suitable for	No. of modules EN 50022	Conf. lmb.
GW 90 992	ReStart Autotest 2P-4P/ReStart Rd PRO 2P-4P/ReStart Rm PRO 2P-4P	1	1

CHARACTERISTICS: the BUS module, by means software available on www.GEWISS.com website, allows to:

- monitor the status of circuit breaker coupled with ReStart
- control Autotest function remotely
- manage automatic reclosing function remotely.

APPLICATION: it allows the installation of ReStart device in monitoring systems with BUS RS485 communication protocol.



Technical and dimensional characteristics

IDP - RCCB

IDP - A TYPE INSTANTANEOUS



RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	Idn	Rated voltage	Auxiliaries compatibility	ReStart compatibility	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P							
GW D4 012	25 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 032	40 A	30 mA	230 V	Yes	Yes	2	1/6
GW D4 052	63 A	30 mA	230 V	Yes	Yes	2	1/6
No. of poles: 4P							
GW D4 112	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 132	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 152	63 A	30 mA	400 V	Yes	Yes	4	1/3

IDP - A[EV] TYPE INSTANTANEOUS



RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	Idn	Rated voltage	Auxiliaries compatibility	ReStart compatibility	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P							
GW D4 562	40 A	30 mA	230 V	Si	Yes	4	1/3
No. of poles: 4P							
GW D4 567	40 A	30 mA	400 V	Si	Yes	4	1/3

APPLICATIONS: electric vehicle charging.

CHARACTERISTICS: type A[EV] trips in the event of fault currents with direct current components greater than 6mA. Type A[EV] presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers. Immunity level 8/20µs is 3000 A.

IDP - B TYPE



RESIDUAL CURRENT CIRCUIT BREAKERS



Code	Rated current	Idn	Rated voltage	Auxiliaries compatibility	ReStart compatibility	No. of modules EN 50022	Conf. lmb.
No. of poles: 2P							
GW D4 502	25 A	30 mA	230 V	Yes	Yes	4	1/3
GW D4 507	40 A	30 mA	230 V	Yes	Yes	4	1/3
GW D4 512	63 A	30 mA	230 V	Yes	Yes	4	1/3
No. of poles: 4P							
GW D4 527	25 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 532	40 A	30 mA	400 V	Yes	Yes	4	1/3
GW D4 537	63 A	30 mA	400 V	Yes	Yes	4	1/3

CHARACTERISTICS: type B presents greater resistance to mains disturbances and atmospheric discharges in comparison to standard residual current circuit breakers. Immunity level 8/20µs is 3000 A.

Electrical auxiliaries for RCCBs IDP



AUXILIARY CONTACTS FOR OPEN/CLOSED POSITION

Code	Suitable for	Contact rating in AC	Contact rating in DC	Type of contacts	No. of modules EN 50022	Pack Carton
GW D6 002	IDP 25-100A 2P-4P	6 A (230 V) 3 A (400 V)	6 A (24 V) 2 A (60 V) 1,5 A (110 V) 1 A (250 V)	1 Changeover	0.5	1/16

APPLICATIONS: signals the position of circuit breaker contacts, when manually open or tripped.



Technical and dimensional characteristics

MT - MCB

MT 60 - C CURVE - 6000 A (EN 60898) - 10 KA (EN 60947-2)



MINIATURE CIRCUIT BREAKERS



BREAKING CAPACITY 1P			
230V	EN60898	EN60947-2	
In	Icn	Icu	
In=1-63 A	6000 A	10 kA	

BREAKING CAPACITY 2-3-4P			
230V	EN60898	EN60947-2	
In	Icn	Icu	
In=1-63 A	6000 A	20 kA	

BREAKING CAPACITY 2-3-4P			
400V	EN60898	EN60947-2	
In	Icn	Icu	
In=1-63 A	6000 A	10 kA	

Code	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 1P				
GW 92 007	16 A	230 - 400 V	1	6/24
GW 92 008	20 A	230 - 400 V	1	6/24
GW 92 009	25 A	230 - 400 V	1	6/24
GW 92 010	32 A	230 - 400 V	1	6/24
GW 92 011	40 A	230 - 400 V	1	6/24
GW 92 012	50 A	230 - 400 V	1	6/24
GW 92 013	63 A	230 - 400 V	1	6/24
No. of poles: 2P				
GW 92 047	16 A	230 - 400 V	2	3/12
GW 92 048	20 A	230 - 400 V	2	3/12
GW 92 049	25 A	230 - 400 V	2	3/12
GW 92 050	32 A	230 - 400 V	2	3/12
GW 92 051	40 A	230 - 400 V	2	3/12
GW 92 052	50 A	230 - 400 V	2	3/12
GW 92 053	63 A	230 - 400 V	2	3/12
No. of poles: 3P				
GW 92 067	16 A	230 - 400 V	3	2/8
GW 92 068	20 A	230 - 400 V	3	2/8
GW 92 069	25 A	230 - 400 V	3	2/8
GW 92 070	32 A	230 - 400 V	3	2/8
GW 92 071	40 A	230 - 400 V	3	2/8
GW 92 072	50 A	230 - 400 V	3	2/8
GW 92 073	63 A	230 - 400 V	3	2/8
No. of poles: 4P				
GW 92 087	16 A	230 - 400 V	4	1/3
GW 92 088	20 A	230 - 400 V	4	1/3
GW 92 089	25 A	230 - 400 V	4	1/3
GW 92 090	32 A	230 - 400 V	4	1/3
GW 92 091	40 A	230 - 400 V	4	1/3
GW 92 092	50 A	230 - 400 V	4	1/3
GW 92 093	63 A	230 - 400 V	4	1/3

MT 60 - D CURVE - 6000 A (EN 60898) - 10 KA (EN 60947-2)



MINIATURE CIRCUIT BREAKERS



BREAKING CAPACITY 1P			
230V	EN60898	EN60947-2	
In	Icn	Icu	
In=6-40 A	6000 A	10 kA	

BREAKING CAPACITY 2-3-4P			
230V	EN60898	EN60947-2	
In	Icn	Icu	
In=6-40 A	6000 A	20 kA	

BREAKING CAPACITY 2-3-4P			
400V	EN60898	EN60947-2	
In	Icn	Icu	
In=6-40 A	6000 A	10 kA	

Code	Rated current	Rated voltage	No. of modules EN 50022	Conf. lmb.
No. of poles: 1P				
GW 92 407	16 A	230 - 400 V	1	6/24
GW 92 408	20 A	230 - 400 V	1	6/24
GW 92 409	25 A	230 - 400 V	1	6/24
GW 92 410	32 A	230 - 400 V	1	6/24
GW 92 411	40 A	230 - 400 V	1	6/24
No. of poles: 2P				
GW 92 447	16 A	230 - 400 V	2	3/12
GW 92 448	20 A	230 - 400 V	2	3/12
GW 92 449	25 A	230 - 400 V	2	3/12
GW 92 450	32 A	230 - 400 V	2	3/12
GW 92 451	40 A	230 - 400 V	2	3/12
No. of poles: 3P				
GW 92 467	16 A	230 - 400 V	3	2/8
GW 92 468	20 A	230 - 400 V	3	2/8
GW 92 469	25 A	230 - 400 V	3	2/8
GW 92 470	32 A	230 - 400 V	3	2/8
GW 92 471	40 A	230 - 400 V	3	2/8
No. of poles: 4P				
GW 92 487	16 A	230 - 400 V	4	1/3
GW 92 488	20 A	230 - 400 V	4	1/3
GW 92 489	25 A	230 - 400 V	4	1/3
GW 92 490	32 A	230 - 400 V	4	1/3
GW 92 491	40 A	230 - 400 V	4	1/3

ELECTRICAL AUXILIARIES FOR CIRCUIT BREAKERS MTC / MT / MTHP / MDC



AUXILIARY CONTACT OF OPEN/CLOSED POSITION

Code	Contact rating in AC	Contact rating in DC	Type of contacts	No. of modules EN 50022	Conf. lmb.
GW 96 001	6 A (230 V) 3 A (400 V)	6 A (24 V) 2 A (60 V) 1,5 A (110 V) 1 A (250 V)	1 Changeover	0.5	1/16

APPLICATIONS: signals the position of circuit breaker contacts, when manually open or tripped.



Technical and dimensional characteristics

SWITCH DISCONNECTORS (EN 60947-3)



AC SWITCH DISCONNECTORS



Code	Rated current	No. of modules EN 50022	Rated voltage AC	Conf. lmb.
No. of poles: 2P				
GW 96 114	32 A	2	415 V	3/12
GW 96 115	40 A	2	415 V	3/12
GW 96 156	63 A	2	415 V	3/12
GW 96 157	80 A	2	415 V	3/12
GW 96 158	100 A	2	415 V	3/12
GW 96 159	125 A	2	415 V	3/12
No. of poles: 3P				
GW 96 124	32 A	3	415 V	2/8
GW 96 125	40 A	3	415 V	2/8
GW 96 166	63 A	3	415 V	2/8
GW 96 167	80 A	3	415 V	2/8
GW 96 168	100 A	3	415 V	2/8
GW 96 169	125 A	3	415 V	2/8
No. of poles: 4P				
GW 96 134	32 A	4	415 V	1/3
GW 96 135	40 A	4	415 V	1/3
GW 96 176	63 A	4	415 V	1/3
GW 96 177	80 A	4	415 V	1/3
GW 96 178	100 A	4	415 V	1/3
GW 96 179	125 A	4	415 V	1/3

NOTES: they can be combined ONLY with an auxiliary position contact (GW96001 or GW96009, configured for open/closed position). They can be padlocked with the accessory GW96041, to lock the operating lever in either the "ON" or "OFF" position. For padlock of max Ø 8 mm.

CONTACTORS CTR



CONTACTORS



Code	Contacts	Control coil voltage (V)	No. of modules EN 50022	Conf. lmb.
Rated current (AC-1/AC-7a): 20 A - CTR20				
GW D6 703	2NA	230 ac	1	6/24
GW D6 709	4NA	230 ac	2	3/12
Rated current (AC-1/AC-7a): 25 A - CTR25				
GW D6 712	2NA	230 ac - 220 dc	2	3/12
GW D6 715	4NA	230 ac - 220 dc	2	3/12
Rated current (AC-1/AC-7a): 40 A - CTR40				
GW D6 721	2NA	230 ac - 220 dc	3	2/8
GW D6 724	4NA	230 ac - 220 dc	3	2/8
Rated current (AC-1/AC-7a): 63 A - CTR63				
GW D6 731	2NA	230 ac - 220 dc	3	2/8
GW D6 734	4NA	230 ac - 220 dc	3	2/8

APPLICATIONS: they are used for automatic control of electrical devices with high number of operations. The switching of contacts happens when the coil is both energized and de-energized. For other applications than AC-1/AC-7a utilization category, please consult the technical pages.

CHARACTERISTICS: they can be combined with auxiliary contacts and sealing terminal covers.

NOTE: it's suggested the use of a spacer insert between adjacent contactors to ensure optimum operation.

ACCESSORIES FOR CTR CONTACTORS AND RLM INSTALLATION RELAYS



AUXILIARY CONTACTS

Code	Contacts	Contact rating in AC-15	No. of modules EN 50022	Conf. lmb.
GW D6 761	2NA	6 A (230 V) 4 A (400 V)	0.5	1/12

APPLICATION: used in order to signal the contacts position (open or closed).

NOTE: each device can be associated with 1 auxiliary contact. Auxiliary contacts cannot be coupled with GWD6608 and GWD6610 installation relays.



Technical and dimensional characteristics

ENERGY METERS



SINGLE-PHASE DIGITAL ENERGY METERS FOR DIRECT CONNECTION



Code	Type MID	No. digits	Accuracy	I max (A)	Rated voltage (V)	No. of modules EN 50022	Conf. lmb.
GW D6 802	Yes	5 unit + 2 decimals	1	32 A	230 ac	1	1/5

APPLICATION: allows the measurement and visualisation on the display of the active energy values (exported and imported), instantaneous active power (exported and imported), voltage, current, power factor and frequency.
 If used with the KNX GW90876 interface, the measured values can be sent on the KNX BUS.
 If used with the MODBUS GWD6820 interface, the measured values can be sent on Modbus RS485.
CHARACTERISTICS: the energy meters have an impulse output for remote energy consumption control.



THREE-PHASE DIGITAL ENERGY METERS



Code	Type MID	No. digits	Accuracy	Connection	Rated voltage (V)	No. of modules EN 50022	Conf. lmb.
GW D6 807	Yes	6 unit + 2 decimals	1 (active energy) 2 (reactive energy)	Direct (I max=80 A)	400 ac	4	1/2
GW D6 809	Yes	6 unit + 2 decimals	1 (active energy) 2 (reactive energy)	Using C.T./5 A	400 ac	4	1/2

APPLICATION: allow the measurement and the visualization on display of the active and reactive energy values (exported and imported), and instantaneous active and (exported and imported). If used with the KNX GW90876 interface, the measured values can be sent on the KNX BUS.
 If used with the MODBUS GWD6820 interface, the measured values can be sent on Modbus RS485.
CHARACTERISTICS: the meters have two impulse outputs for remote energy consumption control.



COMMUNICATION INTERFACES FOR SINGLE-PHASE AND THREE-PHASE ENERGY METERS

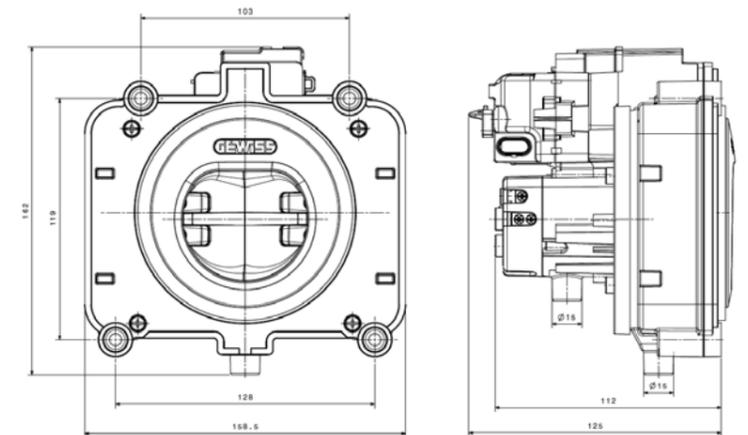
Code	Technology	No. of modules EN 50022	Conf. lmb.
GW D6 820	RS485 MODBUS	1	1/5

APPLICATION: use the KNX BUS or MODBUS RS485 to send the energy and power values measured by the energy meters GWD6801, GWD6802, GWD6806, GWD6807, GWD6808 and GWD6809. The KNX interfaces are optically coupled with the energy meters if installed side-by-side.

SOCKET WITH REAR WIRING – TECHNICAL DATASHEET

CODE	GWJ 5001 B	GWJ 5002 B	GWJ 5003 B	GWJ 5004 B
Product type	Socket with rear wiring			
Socket type	Type 2, with vandal-proof locking system		Type 2, without vandal-proof locking system	
Standard and Regulations	IEC 62196-1, IEC 62196-2, IEC 61851-1, EV-Ready			
ELECTRICAL CHARACTERISTICS				
Power supply	Single Phase	Three Phases	Single Phase	Three Phases
Poles number (type)	5 (L, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)	5 (L, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)
Nominal current	32A			
Nominal voltage	200V-250V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)	200V-250V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)
Nominal frequency	50-60Hz			
Insulation voltage	500V			
Protections (grade)	Shutter (IPXXD)			
MECHANICAL CHARACTERISTICS				
Colore	Black			
IP protection	IP55 (both plug inserted or not)			
Water draining system	Double draining system			
Impact protection	IK10			
Glow Wire Test	850°C (active parts) / 960°C (external parts)			
Thermo-pressure with ball test	125°C (active parts) / 80°C (passive parts)			
Working temperature	-30°C / +50°C			
Storage temperature	-40°C / +70°C			
Cabling input	Rear wiring input			
Maximum wire diameter terminals side	max. 6 mm ² (power poles, with screws) - max. 2,5 mm ² (control poles, with screws)			
Self-extinguishing external parts	V0 according to UL94			
MTTF	10'000 insertions, without load			
Lighting System				
Lighting system	NONE			
Lighting type	n/a			
OPTIONAL ACCESSORIES				
List of optional parts	GWJ 5901 Female connector for locking actuator			

Design and dimensional tables



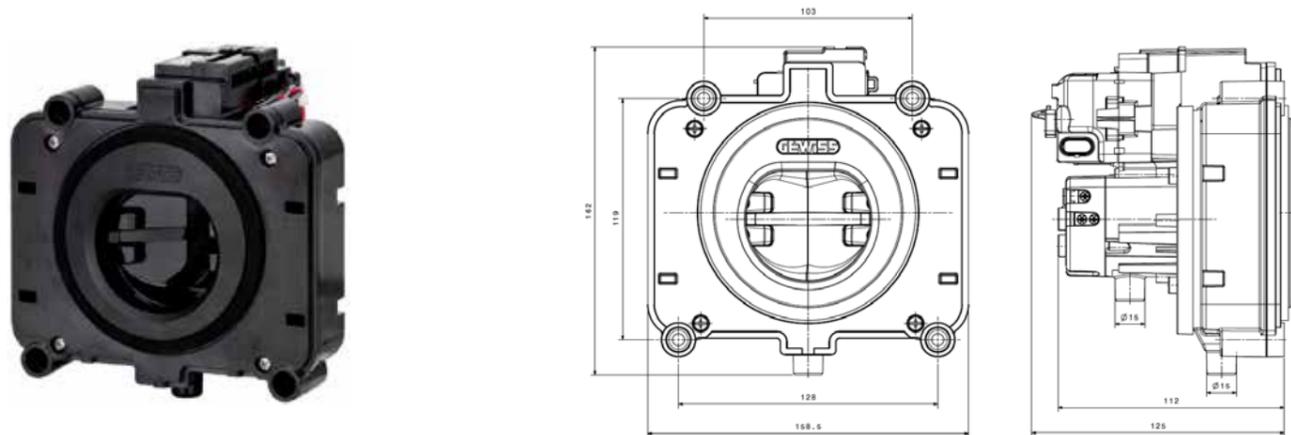


Technical and dimensional characteristics

SOCKET WITH REAR WIRING AND LIGHTING SYSTEM – TECHNICAL DATASHEET

CODE	GWJ 5001 G	GWJ 5002 G	GWJ 5002 L	GWJ 5004 L
Product type	Socket with rear wiring			
Socket type	Type 2, with vandal-proof locking system	Type 2, with vandal-proof locking system	Type 2, with vandal-proof locking system	Type 2, without vandal-proof locking system
Standard and Regulations	IEC 62196-1, IEC 62196-2, IEC 61851-1, EV Ready			
ELECTRICAL CHARACTERISTICS				
Power supply	Single Phase	Three Phases	Three Phases	Three Phases
Poles number (type)	5 (L, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)
Nominal current	32A			
Nominal voltage	200V-250V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)
Nominal frequency	50-60Hz			
Insulation voltage	500V			
Protections (grade)	Shutter (IPXXD)			
Supply for LED	12 V			
MECHANICAL CHARACTERISTICS				
Colour	Black			
IP protection	IP55 (both plug inserted or not)			
Water draining system	Double draining system			
Impact protection	IK10			
Glow Wire Test	850°C (active parts) / 960°C (external parts)			
Thermo-pressure with ball test	125°C (active parts) / 80°C (passive parts)			
Working temperature	-30°C / +50°C			
Storage temperature	-40°C / +70°C			
Cabling input	Cabling input Rear wiring input			
Maximum wire diameter terminals side	max. 6 mm ² (power poles, with screws) - max. 2,5 mm ² (control poles, with screws)			
Self-extinguishing external parts	V0 according to UL94			
MTTF	10'000 insertions, without load			
Lighting System				
Lighting system	YES			
Lighting type	Intermittent		RGB	
OPTIONAL ACCESSORIES				
List of optional parts	GWJ 5901 Female connector for locking actuator			

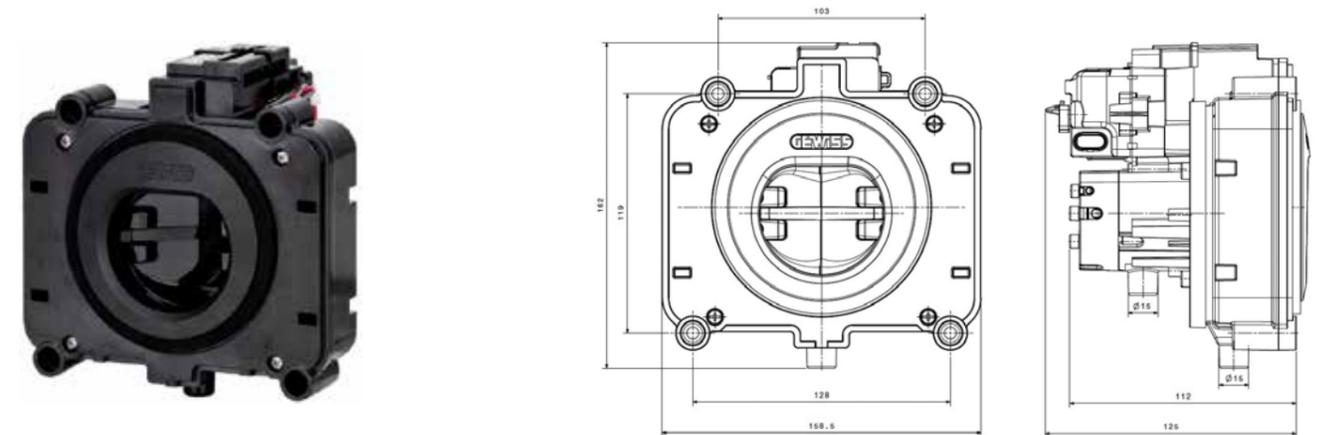
Design and dimensional tables



SOCKET WITH RADIAL WIRING – TECHNICAL DATASHEET

CODE	GWJ 5011 B	GWJ 5012 B	GWJ 5013 B	GWJ 5014 B
Product type	Socket with radial wiring			
Socket type	Type 2, with vandal-proof locking system		Type 2, without vandal-proof locking system	
Standard and Regulations	IEC 62196-1, IEC 62196-2, IEC 61851-1			
ELECTRICAL CHARACTERISTICS				
Power supply	Single Phase	Three Phases	Single Phase	Three Phases
Poles number (type)	5 (L, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)	5 (L, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)
Nominal current	32A			
Nominal voltage	200V-250V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)	200V-250V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)
Nominal frequency	50-60Hz			
Insulation voltage	500V			
Protections (grade)	Shutter (IPXXD)			
PROTECTIONS (GRADE)				
Colour	Black			
IP protection	IP55 (both plug inserted or not)			
Water draining system	Double draining system			
Impact protection	IK10			
Glow Wire Test	850°C (active parts) / 960°C (external parts)			
Thermo-pressure with ball test	125°C (active parts) / 80°C (passive parts)			
Working temperature	-30°C / +50°C			
Storage temperature	-40°C / +70°C			
Cabling input	Radial wiring input			
Maximum wire diameter terminals side	max. 6 mm ² (power poles, with screws) - max. 2,5 mm ² (control poles, with screws)			
Self-extinguishing external parts	V0 according to UL94			
MTTF	10'000 insertions, without load			
Lighting System				
Lighting system	NONE			
Lighting type	n/a			
OPTIONAL ACCESSORIES				
List of optional parts	GWJ 5901 Female connector for locking actuator			

Design and dimensional tables



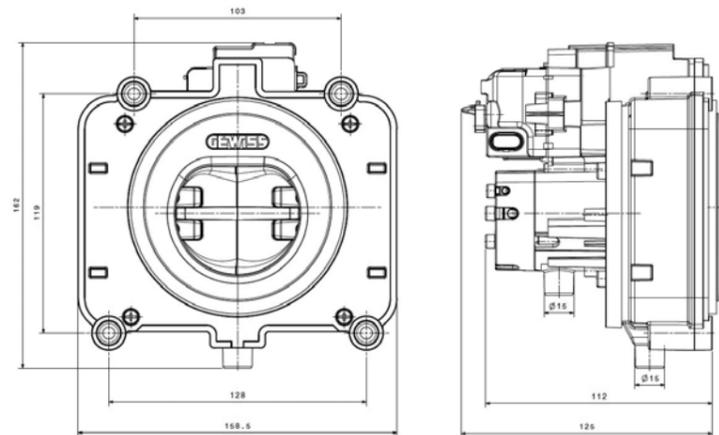


Technical and dimensional characteristics

SOCKET WITH RADIAL WIRING AND LIGHTING SYSTEM – TECHNICAL DATASHEET

CODE	GWJ 5011 G	GWJ 5012 G	GWJ 5012 L	GWJ 5014 L
Product type	Socket with radial wiring			
Socket type	Type 2, with vandal-proof locking system	Type 2, with vandal-proof locking system	Type 2, with vandal-proof locking system	Type 2, without vandal-proof locking system
Standard and Regulations	IEC 62196-1, IEC 62196-2, IEC 61851-1			
ELECTRICAL CHARACTERISTICS				
Power supply	Single Phase	Three Phases	Three Phases	Three Phases
Poles number (type)	5 (L, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)
Nominal current	32A			
Nominal voltage	200V-250V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)	380V-400V (L, N, PE) 30V (PP, CP)
Nominal frequency	50-60Hz			
Insulation voltage	500V			
Protections (grade)	Shutter (IPXXD)			
Supply for LED	12 V			
MECHANICAL CHARACTERISTICS				
Colour	Black			
IP protection	IP55 (both plug inserted or not)			
Water draining system	Double draining system			
Impact protection	IK10			
Glow Wire Test	850°C (active parts) / 960°C (external parts)			
Thermo-pressure with ball test	125°C (active parts) / 80°C (passive parts)			
Working temperature	-30°C / +50°C			
Storage temperature	-40°C / +70°C			
Cabling input	Radial wiring input			
Maximum wire diameter terminals side	max. 6 mm ² (power poles, with screws) - max. 2,5 mm ² (control poles, with screws)			
Self-extinguishing external parts	V0 according to UL94			
MTTF	10'000 insertions, without load			
Lighting System				
Lighting system	YES			
Lighting type	Intermittent			RGB
OPTIONAL ACCESSORIES				
List of optional parts	GWJ 5901 Female connector for locking actuator			

Design and dimensional tables



OPERATING PARAMETERS: LOCKING ACTUATORS

The single actuator that performs both the blocking of the gate valves and locks the plug in the socket is of the bistable type. Below are the operating parameters and the functional diagram.

	Nominal Voltage	12 V	
	Voltage range	9-15,5 V	
	Current Absorption Peak	3,2 A	
	Current without load	≤ 250 mA	
	Operating angle	<=78°	
	Intervention time	40 ms < t < 200 ms	

MICRO CONTACTS CONNECTIONS

Onboard electronics can check the actual state of the socket using the signals it receives from three equipped NO micro-contacts. Connection diagram of the micro-contacts and operating parameters are reported below.

	Terminal Block Clamping Capacity: 0,75 – 2,5 mm ²		MICRO A: Deactivated Lock MICRO B: Activated Lock MICRO C: Open gate-valves	Technical Specification Micro-Contacts: Maximum nominal Voltage: 125 Vac Maximum nominal Current: 5A

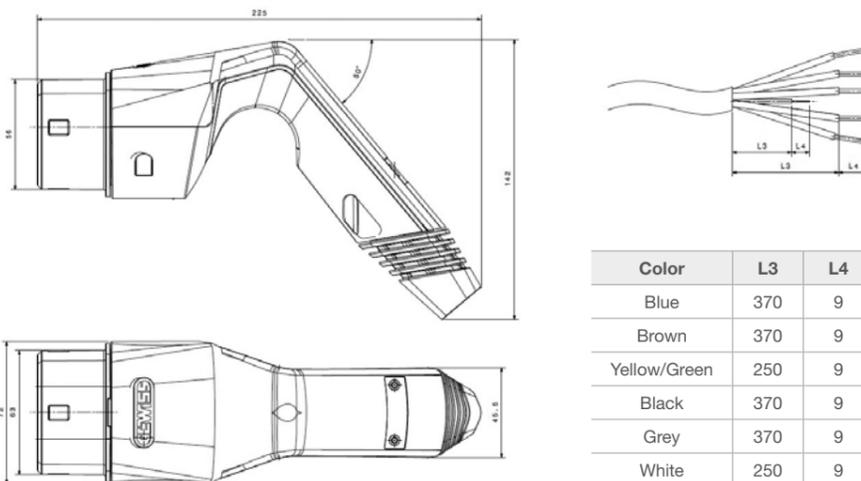


Technical and dimensional characteristics

T2 MOBILE SOCKET WITH CABLE – TECHNICAL DATASHEET

CODE	GWJ 5111 B	GWJ 5112 B	GWJ 5113 B	GWJ 5114 B
Product type	Type 2 connector with cable			
Standard and Regulations	IEC 62196-1, IEC 62196-2, IEC 61851-1			
ELECTRICAL CHARACTERISTICS				
Power supply	Single Phase		Three Phases	
Poles number (type)	5 (L, N, PE, CP, PP)		7 (L1, L2, L3, N, PE, CP, PP)	
Nominal current	20A	32A	16A	32A
Nominal voltage	230V AC		400V AC	
Nominal frequency	50-60Hz			
Insulation voltage	500V			
MECHANICAL CHARACTERISTICS				
Connector				
Handle colour	Light Grey RAL 7035			
Overmoulding colour	Dark Grey RAL 7016			
Socket and cable gland colour	Black			
IP protection	IP55 (with relative holder GWJ5912)			
Impact protection	IK10			
Glow Wire Test	850°C (active parts) / 650°C (external parts)			
Working Temperature	-30°C / +50°C			
Storage Temperature	-40°C / +70°C			
Maximum wire diameter terminals side	max. 6 mm ² (power poles, with screws) - max. 2,5 mm ² (control poles, with screws)			
Cable				
Type	Flat			
Length	5 mt. (custom sizes possible)			
Size	3x2,5 mm ² + 1x0,5 mm ²	3x6 mm ² + 1x0,5 mm ²	5x2,5 mm ² + 1x0,5 mm ²	5x6 mm ² + 1x0,5 mm ²
Terminals type	Without sheath, single wire with ferrule			
OPTIONAL ACCESSORIES				
List of optional parts	GWJ 5912 Recessed holder for type 2 connector			

Design and dimensional tables

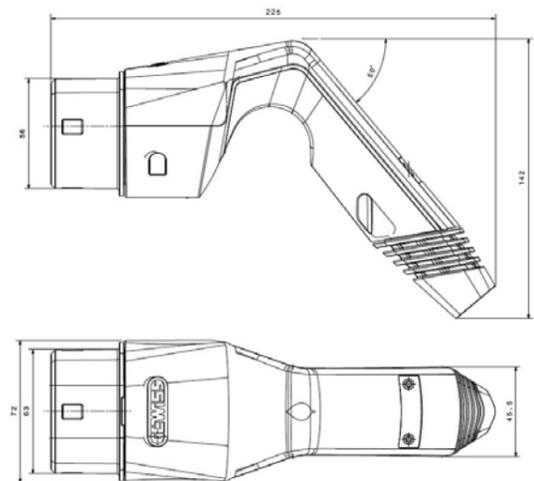



Color	L3	L4
Blue	370	9
Brown	370	9
Yellow/Green	250	9
Black	370	9
Grey	370	9
White	250	9

T2 MOBILE SOCKET WITHOUT CABLE CONNECTOR WITHOUT CABLE – TECHNICAL CHARACTERISTICS

CODE	GWJ 5101 B	GWJ 5102 B
Product type	Type 2 connector, without cable	
Standard and Regulations	IEC 62196-1, IEC 62196-2, IEC 61851-1	
ELECTRICAL CHARACTERISTICS		
Power supply	Single Phase	Three Phases
Poles number (type)	5 (L, N, PE, CP, PP)	7 (L1, L2, L3, N, PE, CP, PP)
Nominal current	32A	32A
Nominal voltage	230V AC	400V AC
Nominal frequency	50-60Hz	
Insulation voltage	500V	
MECHANICAL CHARACTERISTICS		
Connector		
Handle colour	Light Grey RAL 7035	
Overmoulding colour	Dark Grey RAL 7016	
Socket and cable gland colour	Black	
IP protection	IP55 (with relative holder GWJ5912)	
Impact protection	IK10	
Glow Wire Test	850°C (active parts) / 650°C (external parts)	
Working Temperature	-30°C / +50°C	
Storage Temperature	-40°C / +70°C	
Maximum wire diameter terminals side	max. 6 mm ² (power poles, with screws) - max. 2,5 mm ² (control poles, with screws)	
Cable		
Type	NONE	
Length	n/a	
Size	n/a	
OPTIONAL ACCESSORIES		
List of optional parts	GWJ 5912 Recessed holder for type 2 connector	

Design and dimensional tables

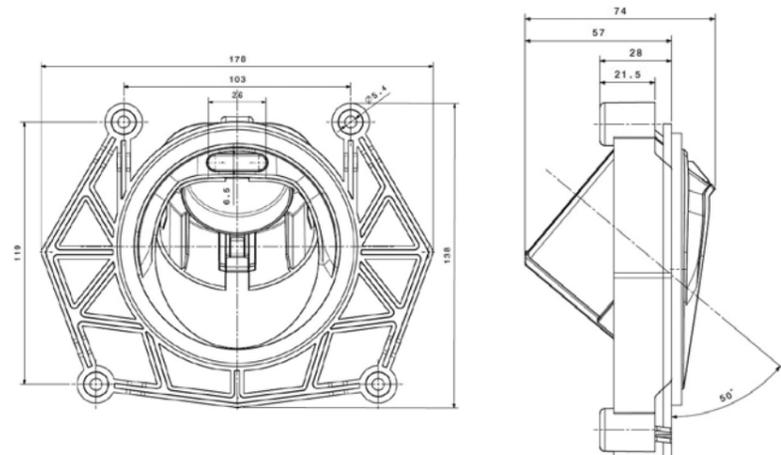


Technical and dimensional characteristics

OPTIONAL ACCESSORIES FOR SOCKETS AND CONNECTORS – TECHNICAL CHARACTERISTICS

CODE	GWJ 5901	GWJ 5912
Product type	Female connector for locking actuator	Holder for Type 2 connector
Standard and Regulations	n/a	IEC 62196-1, IEC 62196-2
ELECTRICAL CHARACTERISTICS		
Power supply type	DC	n/a
Number of poles	3	n/a
Nominal current	13A max.	n/a
Nominal voltage	12V	n/a
MECHANICAL CHARACTERISTICS		
Colour	Nero	Black
Material	Nylon	Thermoplastic
IP protection	n/a	IP55 together with connector
Impact protection	n/a	IK10
Working temperature	-40°C / +125°C	-30°C / +50°C
Storage temperature	-40°C / +125°C	-40°C / +70°C
Wiring method	Crimp terminals	n/a
OTHER CHARACTERISTICS		
	<ul style="list-style-type: none"> • Crimp Terminals included (3) • Vandal-proof socket accessory • Provided with locking system • Compatible with AWG 20 wires 	<ul style="list-style-type: none"> • Same fixing support as vandal-proof connector • 50° tilted down holder • With connector restraint system

Dimensional GWJ 5912



RESTART AUTOTEST

TECHNICAL DATA		ReStart Autotest PRO
TYPE		
Electrical characteristics		
Standards:		EN 50557, EN 61008-1
Distribution system:		TT - TN-S
Rated operational voltage (Ue):	(V)	230 a.c. ⁽¹⁾ 400 a.c.
Minimum operating voltage (min Ue)	(V)	85% Ue
Maximum operating voltage (max Ue):	(V)	110% Ue
Rated insulation voltage (Ui):	(V)	500
Dielectric strength test voltage between pole and earth:	(V)	2500 AC for 1 minute
Rated impulse withstand voltage (Uimp):	(kV)	4
Overvoltage category:		III
Rated frequency:	(Hz)	50
Residual making and breaking capacity (IΔm):	(A)	630
Rated conditional residual short-circuit current with fuse (IΔc):	(A)	Type A[IR] 10000 (gL 63A) for In=25-40A 10000 (gL 80A) for In=63A Type B 10000 (gL 63A) for In=25-40-63A
Number of poles:		2 - 4
Type of associated residual current circuit breaker:		A[IR] - B
Rated current (In):	(A)	25 - 40 - 63
Rated residual operating current (IΔn):	(mA)	30
Rated non-operating resistance between live parts and earth (Rdo):	(kΩ)	8
Rated operating resistance between live parts and earth (Rd):	(kΩ)	16
Power loss at In:	(W)	2,2 (25A) 5,4 (40A) 6,2 (63A) for 2P 3,5 (25A) 6 (40A) 12 (63A) for 4P
Off-load absorbed power:	(VA)	4 (cosφ=0,2)
Power absorbed during automatic reclosing:	(VA)	41 (cosφ=0,5)
Power supply:		from above
Mechanical characteristics		
Width in DIN modules:		Type A[IR]: 5 for 2P Type A[IR]: 7 for 4P Type B: 7
Reclosing time:	(s)	10
Autotest cycle time:	(s)	7
Maximum operational frequency:	(man/h)	30
Max mechanical endurance (total no. operations):		4000
Maximum no. of consecutive automatic reclosure operations ⁽²⁾ :		3
Counter reset time no. of consecutive automatic reclosure operations:	(s)	60
Section of circuit breaker terminals:	(mm ²)	flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 rigid cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10
Rated tightening torque:	(Nm)	2
Mounting position:		any
Degree of protection:		IP20 (terminals) - IP40 (front)
Pollution degree:		2
Operating temperature:	(°C)	-25 +60 ⁽³⁾
Stocking temperature:	(°C)	-40 +70
Tropicalization:		55°C - UR 95%
Auxiliary contact characteristics		
Type of contact:		Photomos (potential free contact)
Operating voltage:	(V)	5-230 a.c. / d.c.
Operating current:	(mA)	0,6 (min) - 100 cosφ=1 (max)
Operating frequency:	(Hz)	50
Category of use:		AC12
Operating mode:		NA / NC / NC + impulse ⁽⁴⁾
Terminal section:	(mm ²)	≤ 2,5
Rated tightening torque:	(Nm)	0,4
AUTOTEST function		
Regular and automatic RCCB test:		•
Light signalling for autotest cycle in progress:		•
Light signalling for any device anomaly:		•
RESTART function		
Automatic reclosure for untimely tripping:		•
Earth leakage check:		•
Continuous system check:		•
Interruption of reclosure operation in the event of a fault:		•
Signalling of reclosure operation in progress:		•
Light signalling of failure:		•
Activation / exclusion of ReStart function:		•
Auxiliary contact for remote operating status access:		•
Compatible with WiFi/ModBus interface module:		•
Internal electrical protection:		PTC

⁽¹⁾ 230V phase-neutral power supply ⁽²⁾ In the absence of failure in the system ⁽³⁾ Average daily temperature ≤ +35°C
⁽⁴⁾ By setting NC+ pulse mode, the auxiliary contact switches for 100ms at the end of each Autotest cycle performed successfully.



Technical and dimensional characteristics

RESTART RD

TECHNICAL DATA		
TYPE	ReStart Rd PRO 2P	ReStart Rd PRO 4P
Electrical characteristics		
Standards: EN 50557		
Sistema di distribuzione: TT - TN-S		
Rated operational voltage (Ue): (V)	230 a.c. (1)	
Minimum operating voltage (min Ue) (V)	85% Ue	
Maximum operating voltage (max Ue): (V)	110% Ue	
Rated insulation voltage (Ui): (V)	500	
Dielectric strength test voltage between pole and earth: (V)	2500 AC for 1 minute	
Rated impulse withstand voltage (Uimp): (kV)	4	
Overvoltage category:	III	
Rated frequency: (Hz)	50/60	50
Residual making and breaking capacity (IΔm): (A)	IΔm of the associated circuit breaker	
Rated conditional residual short-circuit current with fuse (IΔc): (A)	(A) IΔc of the associated circuit breaker	
Number of poles:	2	4
Type of IDP RCCB:	AC - A - A[IR] - A[S] - F - EV - B	
Rated current (In): (A)	25 - 40 - 63 - 80 - 100	
Rated residual operating current (IΔn): (mA)	30 - 100 - 300 - 500	
Rated non-operating resistance between live parts and earth (Rdo): (kΩ)	8 (30mA) - 2,5 (100/300/500mA)	
Rated operating resistance between live parts and earth (Rd): (kΩ)	16 (30mA) - 5 (100/300/500mA)	
Power loss at In: (W)	Power loss of the associated circuit breaker	
Off-load absorbed power: (VA)	3 (cosφ=0,4)	4 (cosφ=0,2)
Power absorbed during automatic reclosing: (VA)	18 (cosφ=0,5)	45 (cosφ=0,5)
Mechanical characteristics		
Width in DIN modules:	1	3
Reclosing time: (s)	10	
Maximum operational frequency: (man/h)	30	
Max mechanical endurance (total no. operations):	4000	
Maximum no. of consecutive automatic reclosure operations (2):	3	
Maximum no. of consecutive automatic reclosure operations (s):	60	
Section of circuit breaker terminals: (mm²)	flexible cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 cable: ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	
Circuit breaker rated tightening torque: (Nm)	3 (IDP) - 2 (IDP NA)	
Mounting position:	any	
Circuit breaker degree of protection:	IP20 (terminals) - IP40 (front)	
Pollution degree:	2	
Operating temperature: (°C)	-5 +60 (3)	-25 +60 (3)
Stocking temperature: (°C)	-40 +70	
Tropicalization:	55°C - UR 95%	
Auxiliary contact characteristics		
Can be fitted with auxiliary:	yes (with GWD0951)	already integrated in the ReStart
Type of contact:	Photomos (potential free contact)	
Operating voltage: (V)	5÷230 a.c. / d.c.	
Operating current: (mA)	0,6 (min) - 100 cosφ=1 (max)	
Operating frequency: (Hz)	50	
Category of use:	AC12	
Operating mode:	NO/NC/NO as signal of handle position	
Terminal section: (mm²)	≤ 2,5	
Rated tightening torque: (Nm)	0,4	
RESTART function		
Automatic reclosure for untimely tripping:	•	•
Earth leakage check:	•	•
Continuous system check:	•	•
Interruption of reclosure operation in the event of a fault:	•	•
Signalling of reclosure operation in progress:	•	•
Light signalling of failure:	•	•
Activation / exclusion of ReStart function:	•	•
Auxiliary contact for remote operating status access:	•	•
Compatible with WiFi/ModBus interface module:	•	•
Internal electrical protection:	PTC	PTC

MT - MCB

TECHNICAL DATA				
TYPE		MT		
Standards		IEC EN 60898-1	IEC EN 60947-2	
Rated current (In)	(A)	16-63		
Utilization category		A		
Rated operational voltage (Ue)	(V)	230/400 - 240/415		
Minimum operating voltage (Ue min)	(V)	12 a.c. / d.c.		
Maximum operating voltage (Ue max)	(V)	440 a.c. / 250 d.c.		
Insulation voltage (Ui)	(V)	500		
Rated frequency	(Hz)	50/60		
Rated impulse withstand voltage (Uimp)	(kV)	4		
Overvoltage category:		III		
Number of poles		1, 1+N	2,3,4	
Energy limiting class (B and C curve):		3	3	
Breaking capacity				
Alternating current	IEC/EN 60898-1	Icn	(A)	
		Ics	(A)	
	IEC/EN 60947-2	Icu	230/240 V (kA)	10
		Ics	400/415 V (kA)	-
Direct current	IEC/EN 60947-2	Ics	(kA)	
		Icu (1 pole)	72 V (kA)	
		Ics	(kA)	
		Icu (2 poles in series)	125 V (kA)	
		Ics	(kA)	
		Icu (4 poles in series)	250 V (kA)	
Wiring		cable section (mm²)	rigid	
			flexible	
Screwdriver suggested: PZ2				
Electrical endurance: 10000				
Mechanical endurance: 20000				
Max. no. of usable modular accessories: 2				
Upline/downline power supply: yes				
ON/OFF status displayed: yes				
Mounting position: any				
Type of residual current device: Add-on RCD BD				
Rated tightening torque: (Nm)				
Degree of protection: terminals IP20, front IP40				
Pollution degree: 2				
Tropicalization: 55°C - UR 95%				
Reference temperature: (°C) 30				
Operating temperature: (°C) -25 +60				
Stocking temperature: (°C) -40 +70				
Double connection (cable+fork busbar): yes (only downstream terminals)				
Weight: (g) 145 (per pole)				
Curve				
Rated currents available In: (A)				
		C	D	
		16	16	
		20	20	
		25	25	
		32	32	
		40	40	
		50	-	
		63	-	





Technical and dimensional characteristics

RCCB - IDP

TECHNICAL DATA		
TYPE	IDP	
Standard	IEC EN 61008-1 IEC EN 61008-2-1 IEC 62955 (Type EV) IEC EN 62423 (Type B) EN 62423 (Type B)	
Rated current (In)	(A)	25-63
Rated operational voltage (Ue)	(V a.c.)	230/400 - 240/415
Insulation voltage (Ui)	(V)	500
Rated impulse withstand voltage (Uimp)	kV	4
Overvoltage category:		III
Rated frequency	(Hz)	50/60
Number of poles		2, 4
Number of modules		2 (2P) 4 (4P) 4 (2P/4P) for Type EV e B
Rated residual operating current (IΔn)	(mA)	
	A	30
	A (EV)	30
	B	30
Level of immunity (8/20μs)	(A)	250 (for A type) 3000 (for A[EV] and B types)
Residual making and breaking capacity (I _{dm})	(A)	10xIn (500A min)
Making and breaking capacity (I _m)	(A)	10xIn (500A min)
Voltage independent working		yes
Wiring	Cable section (mm ²)	rigid flexible
		≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10 ≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10
Electrical endurance		10000
Mechanical endurance		20000
Upline/Downline power supply		yes
Mounting position:		any
Rated tightening torque:	(Nm)	3
Screwdriver suggested		PZ2
Pollution degree		2
Fire resistance		Glow wire Test IEC 60695-2-11 according with IEC 61008-1
IP degree (inside the distribution board)		IP40
Tropicalization		55°C - UR 95%
Installation altitude	(m)	≤ 2000
Operating temperature (average daily temperature ≤35°C)	(°C)	-25 +60
Operating temperature (average daily temperature ≤35°C)	(°C)	-40 +70
Double connection (cable + fork busbar)		yes (only upper and lower terminals)
Signalization of the relay tripping		yes

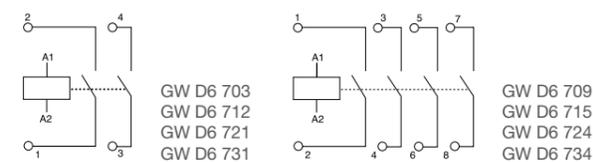


CONTACTORS

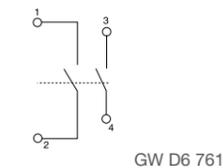
ELECTRICAL CHARACTERISTICS					
Contactor type:	CTR 20	CTR 25	CTR 40	CTR 63	
Standard:	EN 61095, EN 60947-4-1, EN60947-5-1				
Rated current AC-1/AC-7a (In):	(A)	20	25	40	63
Rated operational voltage (Ue):	(V)	400 AC			
Rated insulation voltage (Ui):	(V)	440 AC			
Rated impulse withstand voltage (Uimp):	(kV)	4			
Rated conditional short-circuit current with fuse:	(kA)	3 (gL 20)	3 (gL 25)	3 (gL 63)	3 (gL 80)
Rated frequency:	(Hz)	50/60			
No. of modules:		1 (2NA) 2 (4NA)	2	3	
Power loss per pole (AC-1 / AC-7a):	(W)	1.7	2.2	4	8
Mechanical endurance (no. of operations):		3 x 10 ⁶			
Operating temperature:	(°C)	-25...+55			
Storage temperature:	(°C)	-30...+80			
Max number of contactors (side-by-side):		3 (≤ 40 °C) 2 (40 - 55 °C)			
Rated tightening torque:	(Nm)	1.2		3.5	
Terminal screw type:		M3.5		M5	
Screwdriver suggested:		PZ1		PZ2	
Cable section:	rigid (mm ²)	1...10		1.5...25	
	flexible (mm ²)	1...6		1.5...16	
Weight:	(g)	130	240	420	
CONTROL COIL CHARACTERISTICS					
Control coil voltage (Uc):	(V)	230 AC			
Min operating coil voltage:	(V)	85% U _c			
Max operating coil voltage:	(V)	110% U _c			
Frequency:	(Hz)	50/60 ⁽¹⁾			
Switch-on coil consumption:	(VA / W)	12 / 10	2.6 / 2.6	5 / 5	
Operation coil consumption:	(VA / W)	2.8 / 1.2	2.6 / 2.6	5 / 5	
Rated tightening torque:	(Nm)	0.6			
Terminal screw type:		M3		M3	
Screwdriver suggested:		PZ1			
Cable section:	rigid (mm ²)	1...2.5			
	flexible (mm ²)	1...2.5			
AUXILIARY CONTACT CHARACTERISTICS					
Rated operational voltage (Ue):	(V)	230 - 400 AC			
Rated insulation voltage (Ui):	(V)	500			
Rated impulse withstand voltage (Uimp):	(kV)	4			
Rated current AC-15 (In):	(A)	6 (230V) - 4 (400V)			
No. of modules:		0.5			
Power loss per pole (AC-15):	(W)	0.3			
Mechanical endurance (no. of operations):		3 x 10 ⁶			
Electrical endurance (no. of operations):		50.000			
Rated tightening torque:	(Nm)	0.8			
Terminal screw type:		M3			
Screwdriver suggested:		PZ1			
Cable section:	rigid (mm ²)	1...2.5			
	flexible (mm ²)	1...2.5			
Weight:	(g)	35			

⁽¹⁾ It's suggested the use of a spacer insert (GW D6 766) between adjacent contactors to ensure heat dissipation.
⁽²⁾ The contactors' coils for 25, 40 and 63A versions can be controlled by AC voltage with frequency from 40 to 500Hz.

CIRCUIT DIAGRAMS CONTACTORS



CIRCUIT DIAGRAMS AUXILIARY CONTACTS



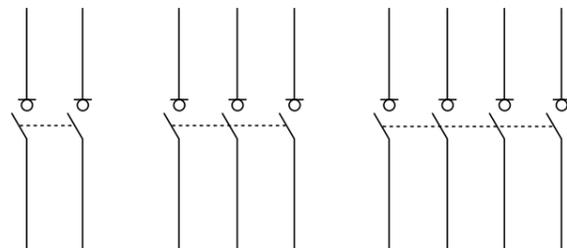


Technical and dimensional characteristics

AC SWITCH DISCONNECTORS

TECHNICAL DATA							
		In<63A		In≥63A			
Standard:		EN 60947-3		EN 60947-3			
Rated operating voltage (Ue):	(V)	415 a.c.		415 a.c.			
Rated insulation voltage (Ui):	(V)	500 a.c.		500 a.c.			
Rated impulse withstand voltage (Uimp):	(kV)	4		4			
Rated frequency:	(Hz)	50 / 60		50 / 60			
Rated current (In):	(A)	32	40	63	80	100	125
Utilization category:		AC-23B		AC-22A			
Rated closing capacity:	(A)	320	400	189	240	300	375
Rated breaking capacity:	(A)	256	320	189	240	300	375
Rated short-time current (Icw):	(A)	384	480	756	960	1200	1500
Rated conditional short-circuit current (Icc):	(kA)						
		4,5	3	3	3	3	3
MTC 45		4,5	3	3	3	3	3
MTC 60 - MT 60		4,5	3	3	3	3	3
MTC 100 - MT 100		4,5	3	3	3	3	3
MT 250		4,5	3	3	3	3	3
MTHP 160 - MTHP 250		3	3	3	3	3	3
Power loss per pole:	(W)	0,8	1,5	2	3,2	5	6
Electrical endurance		1000		1000			
Mechanical endurance		5000		5000			
Screwdriver suggested:		PZ2		Phillips			
Rated tightening torque:	(Nm)	2		2,5			
Connection:	cable	rigid		≤ 1x50 - ≤ 2x25 - ≤ 3x16			
	section (mm²)	flexible	≤ 1x35 - ≤ 2x16 - ≤ 1x16+2x10	≤ 1x70 - ≤ 2x35 - ≤ 2x25+1x16			
Degree of protection:		IP20		IP20			
Operating temperature:	(°C)	-5...+40		-5...+40			
Suitable accessory:		GW 96 001 (position contact)		GW 96 001 (position contact)			
Upline/downline power supply:		YES		YES			
Double connection (cable + fork busbar):		YES (only downstream)		YES (upstream and downstream)			
Lockable:		with GW 96 041 (padlocking lever block)		with GW 96 041 (padlocking lever block)			

2P 3P 4P

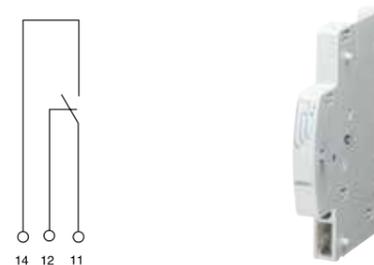


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|-----------|-----------|-----------|
| GW 96 114 | GW 96 124 | GW 96 134 |
| GW 96 115 | GW 96 125 | GW 96 135 |
| GW 96 156 | GW 96 166 | GW 96 176 |
| GW 96 157 | GW 96 167 | GW 96 177 |
| GW 96 158 | GW 96 168 | GW 96 178 |
| GW 96 159 | GW 96 169 | GW 96 179 |



ACCESSORIES AND AUXILIARIES FOR MODULAR CIRCUIT BREAKER

TECHNICAL DATA			AUX CONTACTS FOR MT - IDP	
Code:			GW96001 - GWD6002	
DIN modules:			0,5	
Rated operating voltage (Ue):	AC - 50 Hz	(V)	24 ÷ 400	
	DC	(V)	24 ÷ 250	
Aux contact type:			1 CO	
Rated operating current (Ie):	AC12 - 230V	(A)	6	
	AC12 - 400V	(A)	3	
	DC12 - 24V	(A)	6	
	DC12 - 60V	(A)	2	
	DC12 - 110V	(A)	1,5	
	DC12 - 250V	(A)	1	
Minimum operating current:			(mA)	5
Rated tightening torque:			(Nm)	0,6
Beam stripping cable recommended:			(mm)	6
Screwdriver suggested:				Phillips 1
Operating temperature:			(°C)	-25 ÷ 60
Max cable section (flexible/rigid):			(mm²)	2,5



GW 96 001
GW D6 002

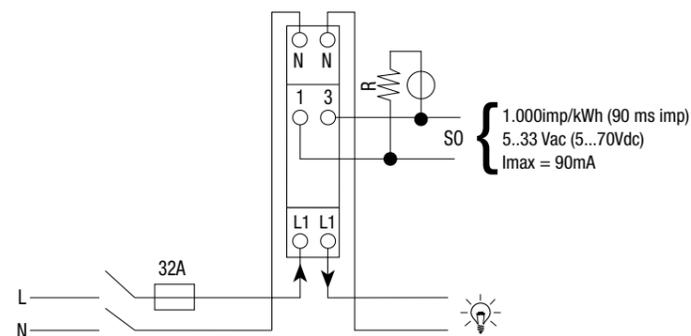


Technical and dimensional characteristics

SINGLE-PHASE DIGITAL ENERGY METER

TECHNICAL DATA		GW D6 802
Code:		GW D6 802
Type MID:		YES
Standards:		EN 50470-1-3, EN 62053-31
DIN modules:		1
Reference voltage Un:	(V)	230 AC
Minimum operating voltage (Un min):	(V)	184 AC
Maximum operating voltage (Un max):	(V)	276 a.c. (continuous) 300 a.c. (momentary 1s)
Activation:		direct
Measured values:		active energy (exported and imported) active power (exported and imported)
Reference frequency:	(Hz)	50
Minimum current measured NOT in Class (Ist):	(A)	0,02
Minimum current measured in Class (Imin):	(A)	0,25
Base current (Ib):	(A)	5
Maximum current (Imax):	(A)	32 (continuous) 960 (momentary 1s)
Precision class:		1
Reading resolution:	(kWh)	0,1
Absorbed power:	(VA)	8
Remote signalling contact:		1 NA
Max. output current with pulse:	(A)	0,09 (max 230V AC/DC)
Pulse output contact operating voltage:	(V)	5÷230 AC 5÷300 DC
Output pulse frequency:	(imp/kWh)	1000
Output pulse duration:	(ms)	90
Display:		LCD (N° 7 digits)
Digits displayed:		999 999.9
Degree of protection:		IP20
Operating temperature:	(°C)	-25...+55
Storage temperature:	(°C)	-25...+70
Maximum cable section:	(mm²)	16 (also with terminal connector)
Screwdriver suggested for main terminals:		PZ1
Maximum cable section for output contact:	(mm²)	2,5 (4 with terminal connector)
Screwdriver suggested for output contact:		PZ0
Resetting of energy count:		NO
Sealing:		YES
Suitable accessory:		with RS485 Modbus GWD6820 interface

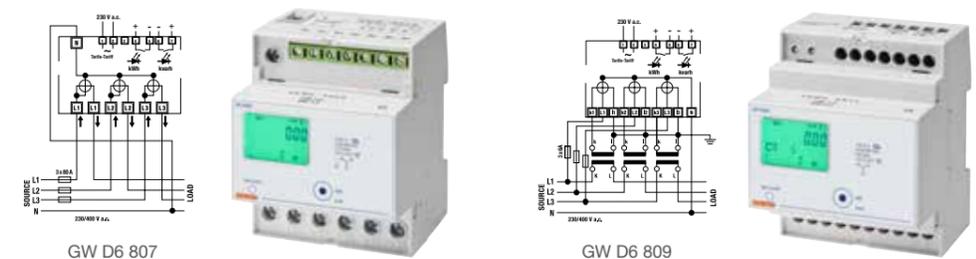
* Interfaces communicate on RS485 Modbus the values of energy and power measured by energy meters. Interfaces are optically coupled with energy meter (the two devices have to be installed side-by-side).

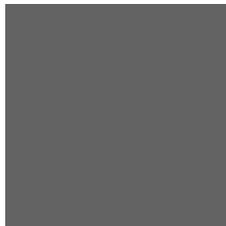


THREE-PHASE DIGITAL ENERGY METERS

TECHNICAL DATA		
	GW D6 807	GW D6 809
Code:	GW D6 807	GW D6 809
Type MID:	YES	YES
Standard:	EN 50470-1-3, EN 62053-23-31	EN 50470-1-3, EN 62053-23-31
Activation:	direct	indirect with C.T.
DIN modules:	4	4
Reference voltage (Un):	(V) 230 a.c. Phase-Neutral	230 a.c. Phase-Neutral
Connection:	single phase line (2 cables) single phase line (4 cables)	three-phase line (4 cables)
Minimum operating voltage (Un min):	(V) 110 AC (F-N) 190 AC (F-F)	110 AC (F-N) 190 AC (F-F)
Maximum operating voltage (Un max):	(V) F-N: 276 AC (continuous) 300 AC (momentary 1s) F-F: 480 AC (continuous) 800 AC (momentary 1s)	F-N: 276 AC (continuous) 300 AC (momentary 1s) F-F: 480 AC (continuous) 800 AC (momentary 1s)
Measured values:	active power (exported and imported) active energy (exported and imported)	active power (exported and imported) active energy (exported and imported)
Reference frequency:	(Hz) 50	50
Minimum current measured NOT in Class (Ist):	(A) 0,015	0,003
Minimum current measured in Class (Imin):	(A) 0,25	0,05
Base current (Ib):	(A) 5	5
Maximum current (Imax):	(A) 80 (continuous) 2400 (momentary 10 ms)	6 (continuous) 120 (momentary 10 ms)
Precision class:		1 (active energy) 2 (reactive energy)
Absorbed power:	(VA) 2	2
Remote signalling contact:		1 contact for carry active energy 1 contact for carry reactive energy
Tariffs:		n° 2 tariffs for active and reactive energy
Max. output current with pulse:	(A) 0,09	0,09
Pulse output contact operating voltage:	(V) 5÷33 AC 5÷70 DC	5÷33 AC 5÷70 DC
Output pulse frequency:	(imp/kWh) (imp/kvar) 500	100-10-1
Output pulse duration:	(ms) 50	50
Display:		LCD (N° 8 digits)
Digits displayed:		999 999.99 (active and reactive energy) 999 (active and reactive power)
Degree of protection:		IP20
Operating temperature:	(°C) -25...+55	-25...+55
Storage temperature:	(°C) -25...+70	-25...+70
Maximum cables section:	(mm²) 35 (also with terminal cable)	4 (also with terminal cable)
Screwdriver suggested for main terminals:		PZ2
Maximum cable pulse output contact:	(mm²) 4 (2,5 with terminal cable)	4 (also with terminal cable)
Screwdriver suggested for output pulse contact:		shear (0,8x3,5)
Resetting of energy count:		NO
Sealing:		YES
Suitable accessory:		with RS485 Modbus GWD6820 interface*

* Interfaces communicate on RS485 Modbus the values of energy and power measured by energy meters. Interfaces are optically coupled with energy meter (the two devices have to be installed side-by-side).





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GEWISS S.p.A.

Registered Office: Via A. Volta, 1
24069 CENATE SOTTO BG - Italy
Tel. +39 035 946 111 - Fax. +39 035 945 222
gewiss@gewiss.com - www.gewiss.com

Single shareholder company - Bergamo Business Register/VAT/Tax Code (IT) 00385040167
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