

GEYER



2022

Electrical Installation Solutions

GEYER



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2022

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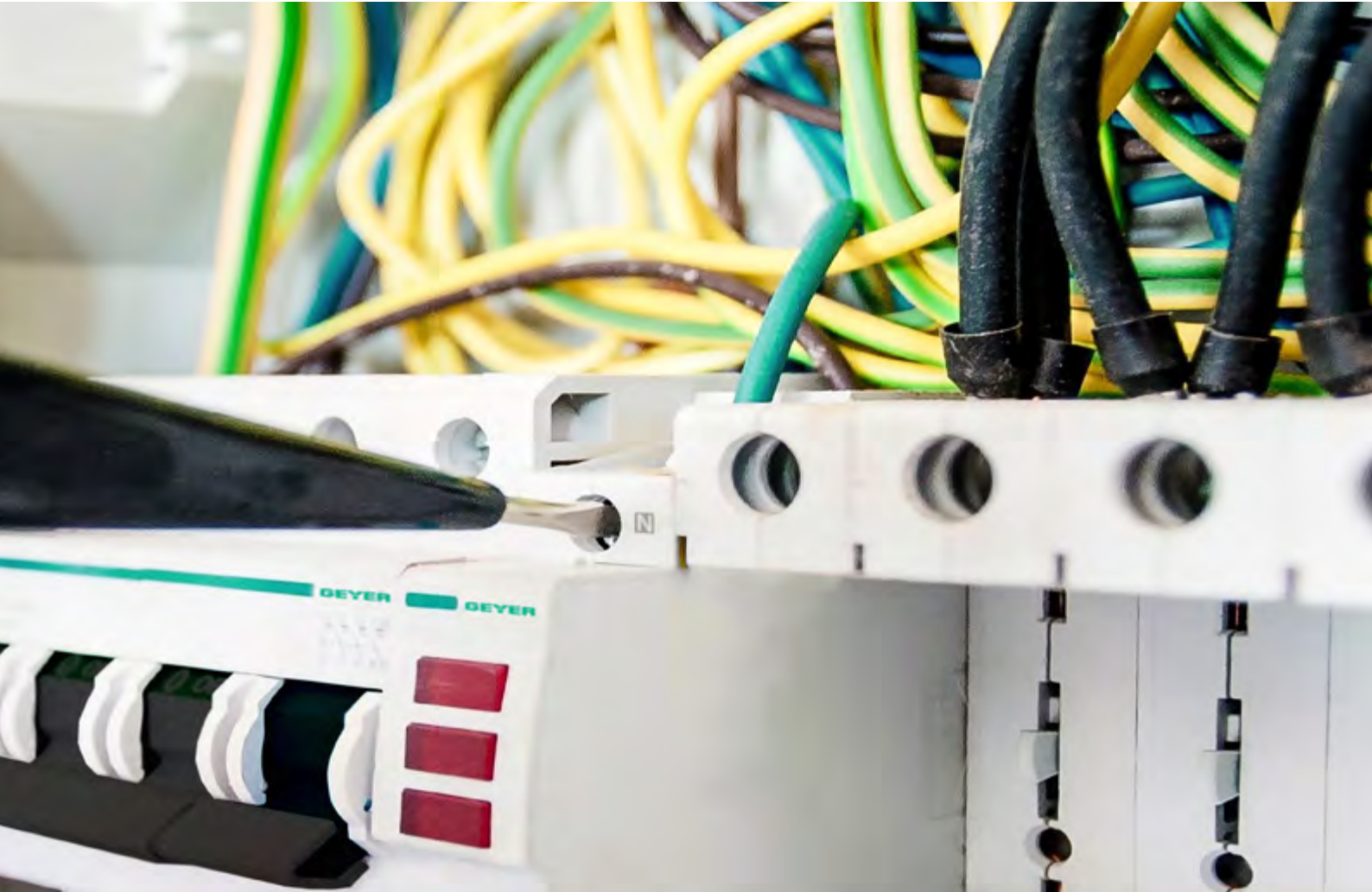
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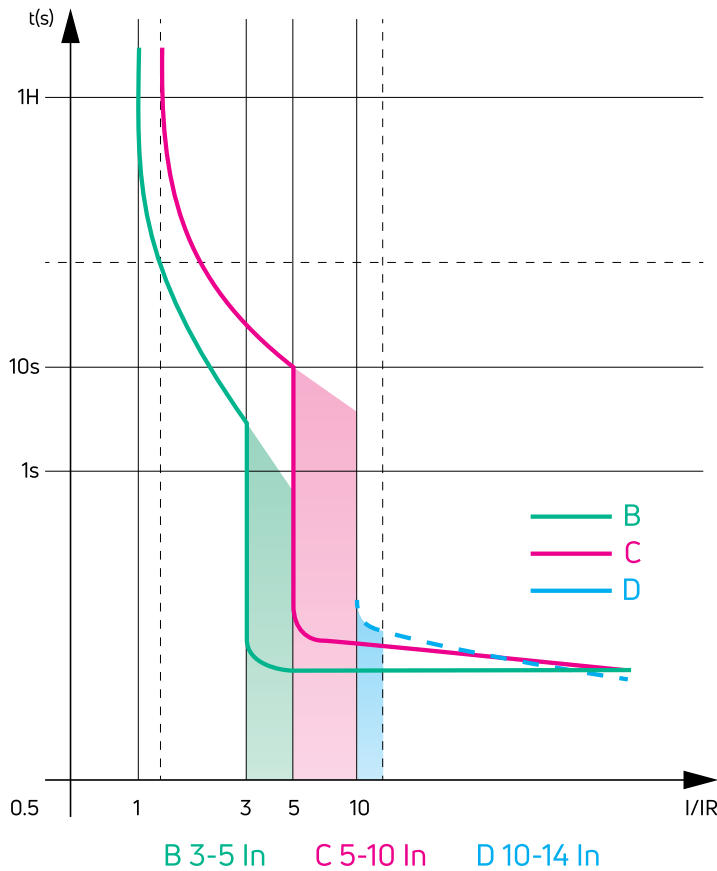
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CHAPTER A

Modular Devices



MCB's are mainly used to protect cables and equipment against overload and short circuit.

To suit different applications you have the option to choose from 2 characteristics.

GEYER MCB's are designed for DIN-rail mounting and have a facility which allows individual MCB's to be removed from the rail without the need to disconnect other devices connected to the busbar.

This feature provides a practical and convenient solution for mounting and servicing.

Release limits

Curves	Thermal release min. testing current	Thermal release min. testing current	Tripping characteristics t	Magnetic release min. testing current	Magnetic release min. testing current	Tripping characteristics
B	$1,13 \times I_N$		$\geq 1h$	$3 \times I_N$		$\geq 0,1s$
		$1,45 \times I_N$	$< 1h$		$5 \times I_N$	$< 0,1s$
C	$1,13 \times I_N$		$\geq 1h$	$5 \times I_N$		$\geq 0,1s$
		$1,45 \times I_N$	$< 1h$		$10 \times I_N$	$< 0,1s$

The influence of frequency on magnetic tripping characteristic

Frequency (Hz)	100	200	400	DC
Coefficient	1,1	1,2	1,5	1,5

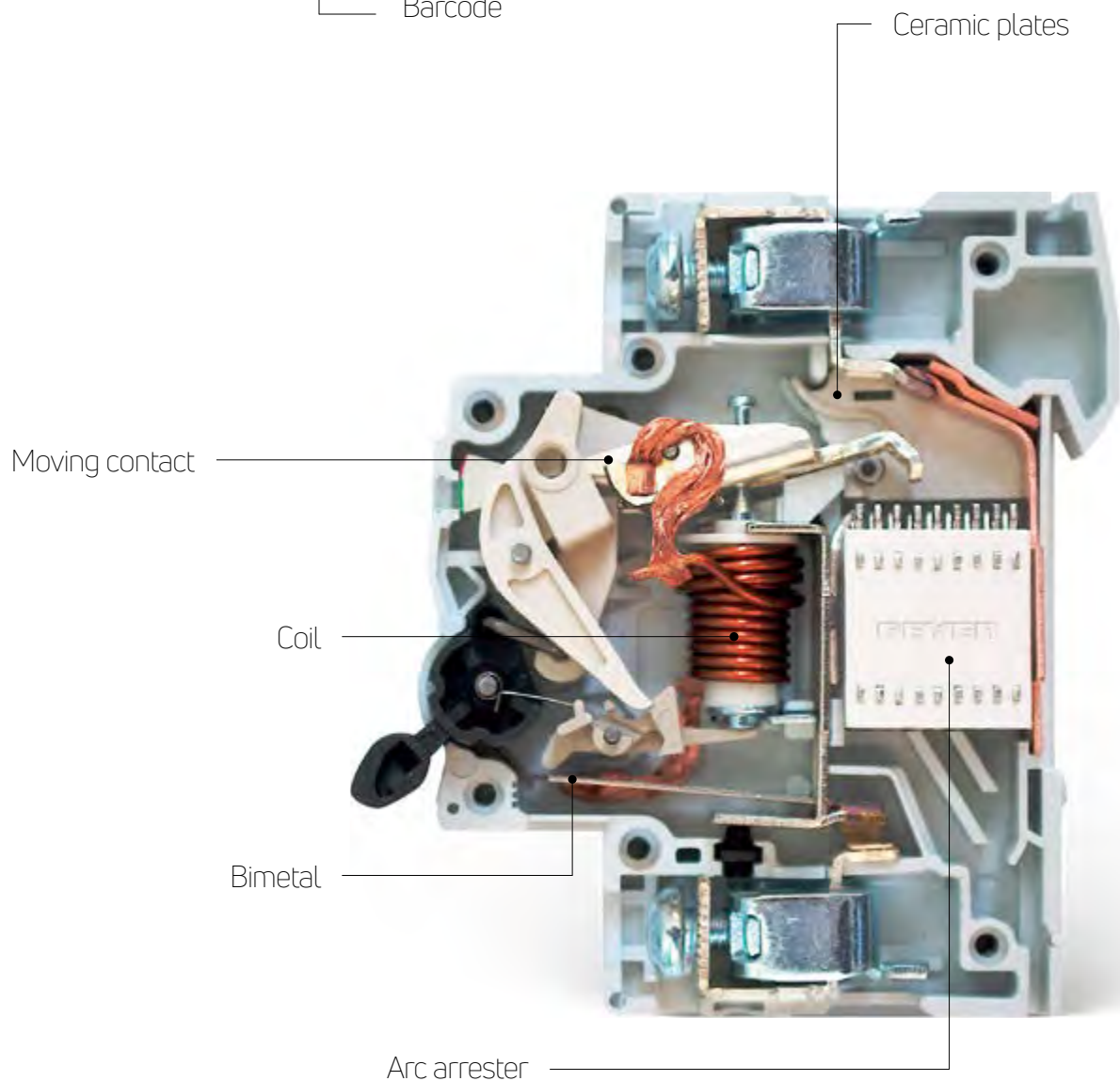
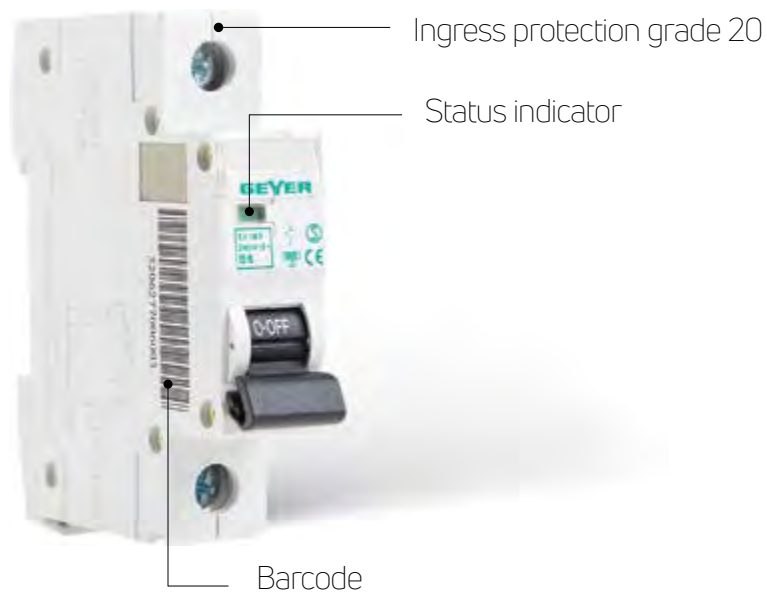
Miniature Circuit Breakers

MCB's with B-Curve are normally used for the protection of cables and equipment in domestic and light commercial applications e.g. normal lightning, sockets etc.

MCB's with C-Curve protect against overload and short circuit. Mainly to protect devices with a higher inrush-current e.g. motors and ballast lightning

Miniature Circuit Breakers

B & C Curve, IEC / EN 60898-1



Modular Devices

EA serie 1P

6kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA102B	2	1	B	12
EA104B	4	1	B	12
EA106B	6	1	B	12
EA110B	10	1	B	12
EA116B	16	1	B	12
EA120B	20	1	B	12
EA125B	25	1	B	12
EA132B	32	1	B	12
EA140B	40	1	B	12
EA150B	50	1	B	12
EA163B	63	1	B	12

EA serie 2P

6kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA206B	6	2	B	6
EA210B	10	2	B	6
EA216B	16	2	B	6
EA220B	20	2	B	6
EA225B	25	2	B	6
EA232B	32	2	B	6
EA240B	40	2	B	6
EA250B	50	2	B	6
EA263B	63	2	B	6

EA serie 3P

6kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA306B	6	3	B	4
EA310B	10	3	B	4
EA316B	16	3	B	4
EA320B	20	3	B	4
EA325B	25	3	B	4
EA332B	32	3	B	4
EA340B	40	3	B	4
EA350B	50	3	B	4
EA363B	63	3	B	4



6kA

EA serie 4P

CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA406B	6	4	B	3
EA410B	10	4	B	3
EA416B	16	4	B	3
EA420B	20	4	B	3
EA425B	25	4	B	3
EA432B	32	4	B	3
EA440B	40	4	B	3
EA450B	50	4	B	3
EA463B	63	4	B	3



6kA

EA serie 1P+N

CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA106BN	6	2	B	6
EA110BN	10	2	B	6
EA116BN	16	2	B	6
EA120BN	20	2	B	6
EA125BN	25	2	B	6
EA132BN	32	2	B	6
EA140BN	40	2	B	6
EA150BN	50	2	B	6
EA163BN	63	2	B	6



6kA

EA serie 3P+N

CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA306BN	6	4	B	3
EA310BN	10	4	B	3
EA316BN	16	4	B	3
EA320BN	20	4	B	3
EA325BN	25	4	B	3
EA332BN	32	4	B	3
EA340BN	40	4	B	3
EA350BN	50	4	B	3
EA363BN	63	4	B	3

EA serie 1P

6kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA102C	2	1	C	12
EA104C	4	1	C	12
EA106C	6	1	C	12
EA110C	10	1	C	12
EA116C	16	1	C	12
EA120C	20	1	C	12
EA125C	25	1	C	12
EA132C	32	1	C	12
EA140C	40	1	C	12
EA150C	50	1	C	12
EA163C	63	1	C	12

EA serie 2P

6kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA202C	2	2	C	6
EA206C	6	2	C	6
EA210C	10	2	C	6
EA216C	16	2	C	6
EA220C	20	2	C	6
EA225C	25	2	C	6
EA232C	32	2	C	6
EA240C	40	2	C	6
EA250C	50	2	C	6
EA263C	63	2	C	6

EA serie 3P

6kA



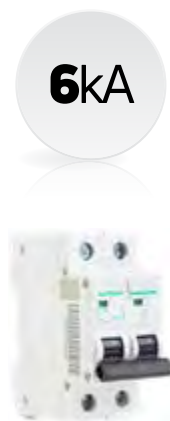
CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA306C	6	3	C	4
EA310C	10	3	C	4
EA316C	16	3	C	4
EA320C	20	3	C	4
EA325C	25	3	C	4
EA332C	32	3	C	4
EA340C	40	3	C	4
EA350C	50	3	C	4
EA363C	63	3	C	4

EA serie 4P



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA402C	2	4	C	3
EA404C	4	4	C	3
EA406C	6	4	C	3
EA410C	10	4	C	3
EA416C	16	4	C	3
EA420C	20	4	C	3
EA425C	25	4	C	3
EA432C	32	4	C	3
EA440C	40	4	C	3
EA450C	50	4	C	3
EA463C	63	4	C	3

EA serie 1P+N



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA106CN	6	2	C	6
EA110CN	10	2	C	6
EA116CN	16	2	C	6
EA120CN	20	2	C	6
EA125CN	25	2	C	6
EA132CN	32	2	C	6
EA140CN	40	2	C	6
EA150CN	50	2	C	6
EA163CN	63	2	C	6

EA serie 3P+N



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA306CN	6	4	C	3
EA310CN	10	4	C	3
EA316CN	16	4	C	3
EA320CN	20	4	C	3
EA325CN	25	4	C	3
EA332CN	32	4	C	3
EA340CN	40	4	C	3
EA350CN	50	4	C	3
EA363CN	63	4	C	3

EA serie 1P+N

4,5kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA106BN1	6	1	B	12
EA110BN1	10	1	B	12
EA116BN1	16	1	B	12
EA120BN1	20	1	B	12
EA125BN1	25	1	B	12
EA132BN1	32	1	B	12

EA serie 1P+N

4,5kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EA106CN1	6	1	C	12
EA110CN1	10	1	C	12
EA116CN1	16	1	C	12
EA120CN1	20	1	C	12
EA125CN1	25	1	C	12
EA132CN1	32	1	C	12

EH serie industrial type 1P

10kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EH180C	80	1.5	C	12
EH100C	100	1.5	C	12
EH125C	125	1.5	C	12

EH serie industrial type 3P

10kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EH380C	80	4.5	C	4
EH300C	100	4.5	C	4
EH325C	125	4.5	C	4

EH serie industrial type 3P+N

10kA



CODE	RATED CURRENT (A)	MODULES (18mm)	CURVE	
EH480C	80	6	C	3
EH400C	100	6	C	3
EH425C	125	6	C	3



ES serie Isolators 1P

CODE	RATED CURRENT (A)	MODULES (18mm)	
ES140A	40	1	12
ES163A	63	1	12



ES serie Isolators 2P

CODE	RATED CURRENT (A)	MODULES (18mm)	
ES240A	40	2	6
ES263A	63	2	6



ES serie Isolators 3P

CODE	RATED CURRENT (A)	MODULES (18mm)	
ES340A	40	3	4
ES363A	63	3	4
ES380A	80	3	4
ES3100A	100	3	4
ES3125A	125	3	4



ES serie Isolators 3P+N

CODE	RATED CURRENT (A)	MODULES (18mm)	
ES440A	40	4	3
ES463A	63	4	3
ES480A	80	4	3
ES4100A	100	4	3
ES4125A	125	4	3



ES serie Change Over Switch 1P+N

CODE	RATED CURRENT (A)	MODULES (18mm)	
ES 240 G	40	2	6



ES serie Change Over Switches 3P+N

CODE	RATED CURRENT (A)	MODULES (18mm)	
ES440G	40	4	3



EP serie Neozed D02 load switches

CODE	In	RATED AC VOLTAGE	POLES	MODULES (18mm)	
EP132T	32A	240VAC	1	1,5	6
EP163T	63A	415VAC	1	1,5	6

EP serie Neozed D02 load switches



CODE	In	RATED AC VOLTAGE	POLES	MODULES (18mm)	
EP332T	32A	415VAC	3	4,5	2
EP363T	63A	415VAC	3	4,5	2
EP363TN	63A	415VAC	3+N	6	1

6kA



EF serie 1P+N Sensitive to AC residual current (Type AC)

CODE	A/mA	MODULES (18mm)	
EF225DG	25/30	2	1
EF225GG	25/100	2	1
EF225EG	25/300	2	1
EF225FG	25/500	2	1
EF240DG	40/30	2	1
EF240GG	40/100	2	1
EF240EG	40/300	2	1
EF240FG	40/500	2	1
EF263DG	63/30	2	1
EF263GG	63/100	2	1
EF263EG	63/300	2	1
EF263FG	63/500	2	1

6kA




EF serie 3P+N Sensitive to AC residual current (Type AC)

CODE	A/mA	MODULES (18mm)	
EF425DG	25/30	4	1
EF425GG	25/100	4	1
EF425EG	25/300	4	1
EF425FG	25/500	4	1
EF440DG	40/30	4	1
EF440GG	40/100	4	1
EF440EG	40/300	4	1
EF440FG	40/500	4	1
EF463DG	63/30	4	1
EF463GG	63/100	4	1
EF463EG	63/300	4	1
EF463FG	63/500	4	1
EF480DG	80/30	4	1
EF480GG	80/100	4	1
EF480EG	80/300	4	1
EF480FG	80/500	4	1
EF4100DG	100/30	4	1
EF4100GG	100/100	4	1
EF4100EG	100/300	4	1
EF4100FG	100/500	4	1

6kA



EF serie 1P+N sensitive to AC and pulsating DC residual current (Type A)

CODE	A/mA	MODULES (18mm)	
EF240D	40/30	2	1
EF240G	40/100	2	1
EF240E	40/300	2	1
EF240F	40/500	2	1
EF263D	63/30	2	1
EF263G	63/100	2	1
EF263E	63/300	2	1
EF263F	63/500	2	1

6kA




EF serie 3P+N sensitive to AC and pulsating DC residual current (Type A)

CODE	A/mA	MODULES (18mm)	
EF440D	40/30	4	1
EF440G	40/100	4	1
EF440E	40/300	4	1
EF440F	40/500	4	1
EF463D	63/30	4	1
EF463G	63/100	4	1
EF463E	63/300	4	1
EF463F	63/500	4	1

10kA




EF serie 1P+N Residual Current Circuit Breakers with overcurrent Protection RCBOs

CODE	A/mA	MODULES (18mm)	CURVE	
EF206DMC	6/30	2	C	1
EF210DMC	10/30	2	C	1
EF216DMC	16/30	2	C	1
EF220DMC	20/30	2	C	1
EF232DMC	32/30	2	C	1
EF240DMC	40/30	2	C	1

10kA



EF serie 3P+N Residual Current Circuit Breakers with overcurrent Protection RCBOs

CODE	A/mA	MODULES (18mm)	CURVE	
EF406DMC	6/30	4	C	1
EF410DMC	10/30	4	C	1
EF416DMC	16/30	4	C	1
EF420DMC	20/30	4	C	1
EF432DMC	32/30	4	C	1
EF440DMC	40/30	4	C	1



Signal lamp 1P

CODE	COLOR	MODULES (18mm)	
EL12R	Red	1	12



Signal lamp with 3 glow lamps

CODE	COLOR	MODULES (18mm)	
EL302H	White	1/2	24



Din Rail Socket

CODE	DESCRIPTION	MODULES (18mm)	
EL216D	DIN Rail Socket	2½	10

Din Rail Bells



CODE	OUTPUT VOLTAGE	
EK008	8	12
EK012	12	12
EK024	24	12
EK200	230	12



Bell transformer

CODE	INPUT VOLTAGE	OUTPUT VOLTAGE	
EK002	230V	8/12/24VAC	6

Electromechanical time switches



CODE	DESCRIPTION	TYPE	MODULES (18mm)	MINIMUM INTERVAL	
201462	without reserve week disk	SKU 35WU	2,5	3 hours	1

Electromechanical time switches mini



CODE	DESCRIPTION	MODULES (18mm)	MINIMUM INTERVAL	
ER111M	without reserve day disc	1	15 minutes	1
ER211M	with reserve day disc	1	15 minutes	1

Digital time switches



CODE	DESCRIPTION	MODULES (18mm)	MINIMUM INTERVAL	
ER371	with reserve week & day disc	2	1 minute	1

Digital time switches



CODE	TYPE	DESCRIPTION	MODULES (18mm)	MINIMUM INTERVAL	
201490	CPU 35WU	with reserve week & day disc	2	1 minute	1

Digital time switches mini



CODE	TYPE	DESCRIPTION	MODULES (18mm)	SETTING RANGE APPROX.	
201499	CPU 17WU	with reserve day disc	1	15 minutes	1



Staircase Switch

CODE	CONTACTS	HEIGHT	MODULES (18mm)	SETTING RANGE APPROX.	
ER116TE*	1(A)	60	1	0.5" -20'	12
ER116L	1(A)	60	1	0.5" -20'	12

* Ideal for push buttons without signal lamp



WIFI Relay 1P 16A



CODE	DESCRIPTION	
ER116W	Wifi Relay up to 16A	12

Contactors



CODE	RATED CURRENT IN (A) / COIL VOLTAGE (V) 50 HZ	POWER OF THE HEATING ELEMENT	MODULES (18mm)	HEIGHT	
ER220B	20A 220/240V AC	20A 440VAC	1	68mm	12
ER220A	20A 24VAC	20A 440VAC	1	68mm	12


3P Contactors, 4 NO contacts



CODE	RATED CURRENT IN (A) / COIL VOLTAGE (V) 50 HZ	POWER OF THE HEATING ELEMENT	MODULES (18mm)	HEIGHT	
ER325B	25A 220/240V AC	25A440VAC	2,5	68mm	6
ER340B	40A 220/240V AC	40A440VAC	3	68mm	4
ER363B	63A 220/240V AC	63A440VAC	3	68mm	1


ER series



CODE	DESCRIPTION	RATED (MAX) CURRENT A	MODULES (18mm)	
ER001E	Digital 1phase	0,25-5 (45)	1	1


ER series



CODE	DESCRIPTION	RATED (MAX) CURRENT A	MODULES (18mm)	
ER815	Digital 3phase	0,5-10 (100)	4	1

Double stage ON DELAY



CODE	COIL VOLTAGE (V)	CONTACTS	RATED (MAX) CURRENT A	MODULES (18mm)	
SJR-2/UNI	12-240V AC/DC	2(C/O)	0,5-10 (100)	1	1



Power relays modular type

CODE	COIL VOLTAGE (V)	CONTACTS	RATED (MAX) CURRENT A	MODULES (18mm)	
VS116K	230VAC	1(C/O)	16	1	1
VS116U	12-240V AC/DC	1(C/O)	16	1	1

Impulse Relays 1P



CODE	COIL VOLTAGE (V)	CONTACTS	MODULES (18mm)	
ER116FE2	12VAC	1NO	1	10
ER116FE4	24VAC	1NO	1	10
ER116FE9	230 VAC	1NO	1	10

Impulse Relays 2P



CODE	COIL VOLTAGE (V)	CONTACTS	MODULES (18mm)	
ER216FE2	12VAC	1NO	1	10
ER216FE4	24VAC	1NO	1	10
ER216FE9	230VAC	1NO	1	10



Monitoring voltage relay

CODE	OUTPUT CONTACT	DESCRIPTION	MODULES (18mm)	LEVEL Umin /Umax	VOLTAGE	
HRN-33	1	Adjustable time delay for all types is 0 - 10 s. Voltage Umin adjusted as % of Umax	1	48-276V	48-276VAC	1



Monitoring voltage relay

CODE	MODULES (18mm)	OUTPUT CONTACT	DESCRIPTION	LEVEL Umin /Umax	VOLTAGE	
HRN-55*	1	1	Adjustable time delay for all types is 0 - 10 s. Voltage Umin adjusted as % of Umax	-	Grid	1
HRN-55N*	1	1	Monitors phase sequence and failure, exceeding of monitored voltage in 3 phase main. 3x 400 V / 230V, 50-60 Hz	-	Grid	1

Supply L1, L2, L3

N means that relay monitors also failure of neutral wire.



Monitoring voltage relay

CODE	MODULES (18mm)	OUTPUT CONTACT	DESCRIPTION	LEVEL Umin /Umax	VOLTAGE	
HRN-57**	1	1	Monitors value of voltage in 3-phase main. Set upper and lower level independently. Adjustable time delay eliminated short voltage peaks and failures in the main. 3x 400 V / 230V, 50-60 Hz	300-380V	Grid	1
HRN-57N**	1	1	Monitors value of voltage in 3-phase main. Set upper and lower level independently. Adjustable time delay eliminated short voltage peaks and failures in the main. 3x 400 V / 230V, 50-60 Hz	170-220V	Grid	1

Supply L1, L2, L3

N means that relay monitors also failure of neutral wire.

Fuse links NEOZED



CODE	TYPE	RATED CURRENT	RATED AC VOLTAGE	
ED01G06	D01	6A	400VAC	10/100
ED01G10	D01	10A	400VAC	10/100
ED01G16	D01	16A	400VAC	10/100
ED02G20	D02	20A	400VAC	10/50
ED02G25	D02	25A	400VAC	10/50
ED02G32	D02	32A	400VAC	10/50
ED02G40	D02	40A	400VAC	10/50
ED02G50	D02	50A	400VAC	10/50
ED02G63	D02	63A	400VAC	10/50

Neozed D01-, D02- fuse sockets ceramic type with Fuse carrier



CODE	TYPE	RATED CURRENT	RATED AC VOLTAGE	
EN116K	D01	16A	400VAC	20
EN163K	D02	63A	400VAC	20

Neozed D01-, D02- fuse sockets ceramic type with Fuse carrier



CODE	TYPE	RATED CURRENT	RATED AC VOLTAGE	
EN316K	D01	16A	400VAC	1
EN363K	D02	63A	400VAC	1

Neozed D02 - fuse sockets plastic without Fuse carrier



CODE	TYPE	POLES	RATED CURRENT	RATED AC VOLTAGE	
002510021	D02	1	63A	400VAC	20

Neozed D02-fuse sockets plastic type without Fuse carrier



CODE	TYPE	POLES	RATED CURRENT	RATED AC VOLTAGE	
002510023	D02	3	63A	400VAC	1

Fuse carrier



CODE	TYPE	
EX14X	D01	20
EX18X	D02	20
002232003	D02	20



AC fuse link 10x38

CODE	TYPE	RATED CURRENT	RATED AC VOLTAGE	
EACF06	10x38	6	500VAC	10/200
EACF10	10x38	10	500VAC	10/200
EACF16	10x38	16	500VAC	10/200
EACF20	10x38	20	500VAC	10/200
EACF25	10x38	25	500VAC	10/200
EACF32	10x38	32	500VAC	10/200



AC Fuse disconnector

CODE	POLES	RATED CURRENT	RATED AC VOLTAGE	MODULES (18mm)	
EAC132	1P	32A	690VAC	1	12



AC Fuse disconnector

CODE	POLES	RATED CURRENT	RATED AC VOLTAGE	MODULES (18mm)	
EAC132N	1P+N	32A	690VAC	2	6
EAC232	2P	32A	690VAC	2	6



AC Fuse disconnector

CODE	POLES	RATED CURRENT	RATED AC VOLTAGE	MODULES (18mm)	
EAC332	3P	32A	690VAC	3	4



AC Fuse disconnector

CODE	POLES	RATED CURRENT	RATED AC VOLTAGE	MODULES (18mm)	
EAC332N	3P+N	32A	690VAC	4	3

DTL HRC-Fuse-Load-Switches



CODE	DIMENSIONS	A	SIZE	
DTL160	107x169x84	160	0	1
DTL250	185x251x114	250	1	1
DTL400	210x288x129	400	2	1
DTL630	256x299x143	630	3	1


Accessories



CODE	DESCRIPTION	
01010	Cover frame for NH fuse disconnector DTL 160	1
03010	Cover frame for NH fuse disconnector DTL 250	1
04010	Cover frame for NH fuse disconnector DTL 400	1
05010	Cover frame for NH fuse disconnector DTL 630	1

NH Fuse links



CODE	DESCRIPTION	
GNH163A	DIN NH2 Fuse link 63A	3
GNH180A	DIN NH2 Fuse link 80A	3
GNH263A	DIN NH2 Fuse link 63A	3
GNH280A	DIN NH2 Fuse link 80A	3
GNH2100A	DIN NH2 Fuse link 100A	3
GNH2125A	DIN NH2 Fuse link 125A	3
GNH2160A	DIN NH2 Fuse link 60A	3
GNH2200A	DIN NH2 Fuse link 200A	3
GNH2250A	DIN NH2 Fuse link 250A	3
GNH2315A	DIN NH2 Fuse link 315A	3
GNH2400A	DIN NH2 Fuse link 400A	3
GBNH1250A	250A Fuse base NH1	3
GBNH2400A	400A Fuse base NH1	3

This fuse link is mainly used in AC50Hz, rated voltage up to 500V, rated current up to 400A and for protecting electric equipment from overload and short-circuit (type gG). Rated breaking capacity 50kA



Lighting - Voltage spike

Lightning is a naturally occurring electrostatic discharge during which two electrically charged regions in the atmosphere or ground temporarily equalize themselves, causing the instantaneous release of as much as one gigajoule of energy. This discharge may produce a wide range of electromagnetic radiation, from very hot plasma created by the rapid movement of electrons to brilliant flashes of visible light in the form of black-body radiation. Lightning causes thunder, a sound from the shock wave which develops as gases in the vicinity of the discharge experience a sudden increase in pressure. Lightning occurs commonly during thunderstorms and other types of energetic weather systems, but volcanic lightning can also occur during volcanic eruptions

Result of lightning

The most recognizable source of surges generated outside the facility is lightning. Although lightning can be somewhat infrequent in certain regions, the damage it can cause to a facility can be catastrophic. Other areas are subjected to thunderstorms and lightning much more frequently.

The surges that are the result of lightning can either be from direct contact of the lightning to a facilities electrical system or, more commonly, indirect or nearby lightning that induces electrical surges onto the power or communication systems. Either scenario can be immediately damaging to the electrical system and/or the connected loads.


Protection


A surge protector (SPD) is a device designed to protect electrical devices from voltage spikes and a protective device for limiting transient voltages by diverting or limiting surge current and is capable of repeating these functions as specified


Wave form 10/350µs: Crest value of the current that circulates in the SPD with a 10/350µs waveform (activation must be guaranteed for 20 times without damage). It is used to classify SPDs in test class I.

Waveform: 8/20µs: Crest value of the current that circulates in the SPD with an (8/20µs waveform (activation must be guaranteed for 20 times without damage). It is used to classify SPDs in test class II.

Typical component typologies used in SPDs

- L/N

 PE
- › SPD comprising metal oxide varistor
 - › No problems with following current IF
 - › Quick response time t_A (25µs) means low residual voltage
 - › Responds well to very low overvoltages
 - › High surge capacity, up to 50kA 10/350µs

- N

 PE
- › SPD comprising gas discharge tube
 - › High surge capacity 100kA 10/350µs
 - › No exhausting of ionised gases
 - › Used in TT systems as galvanic separation between N-PE conductors

- L/N

 PE
- › SPD comprising series arrangement of varistor and gas discharge tube
 - › No following current IF
 - › Quick response time t_A (25µs) means low residual voltage
 - › Responds well to low overvoltages
 - › High surge capacity, up to 25kA 10/350µs

Surge Protective Device Type Application Considerations

For the correct choice of the SPD, the dielectric strength of the equipment to protect needs to be considered. This level is established by IEC 60664-1 standard.

INSTALLATION CATEGORY	IMPULSE WITHSTAND VOLTAGE OF EQUIPMENT	DESCRIPTION
Type 1	6kV	for devices installed upstream of the distribution board (for example, delivery point with the distribution system)
Type 2	4kV	for devices being part of the fixed system (for example, distribution boards, switching devices, isolators, ducting and their accessories)
Type 2	2.5kV	for non electronic devices (for example, household appliances or electric tools)
Type 3	1.5kV	for equipment containing "particularly sensitive" electronic circuits (for example, electronic devices like PCs or TVs)

SPD types

Table below provide type of spds according to their protection

EN 61643-11	IEC 61643-11	SCOPE
Type 1	Class 1	Surge Protection Devices
Type 2	Class 2	Overvoltage for distribution boards
Type 2	Class 3	IT

Type 1 SPD

Permanently connected, hard-wired SPDs intended for installation between the secondary of the service transformer and the line side of the main service equipment overcurrent protective device, as well as the load side of the main service equipment (i.e. Type 1's can be installed anywhere within the distribution system).

Type 2 SPD

Permanently connected, hard-wired SPDs intended for installation on the load side of the main service equipment overcurrent protective device. These SPDs may also be installed at the main service equipment, but must be installed on the load side of the main service overcurrent protective device. Type 2 SPDs may or may not require an overcurrent protection device per their NRTL listing. If a specific overcurrent protection is required, the SPD's NRTL listing file and labeling/instructions are required to note the size and type of overcurrent protective device. Note: In some cases the overcurrent protective device used can impact the nominal discharge rating of the SPD.

Type 3 SPD


These SPDs are called, 'Point of Utilization SPDs', which are to be installed at a minimum conductor length of 10 meter (30 feet) from the electrical service panel unless they are evaluated at Type 2 SPDs (that is, they receive a Nominal Discharge Current Rating of 3 kA minimum). Typically, these are cord-connected surge strips, direct plug-in SPDs, or receptacle-type SPDs installed at the utilization equipment being protected (i.e. computers, copy machines, etc.).

DC SPD

In photovoltaic applications in a domestic environment or industrial facility or other similar circumstances, equipped with lightning rod systems having a safety distance (S), SPD type 2, suitable for DC duty, can be used to protect the installation. It is advisable to install these devices as close as possible to the photovoltaic panels, consequently in the so-called string boards. If the AC/DC inverter is far away from the string boards (indicatively more than 10m), another SPD type 2 DC needs to be installed next to the inverter on the DC side. Installation of SPD type 2 suitable of AC duty is also required downstream of the inverter on the AC side.

AC SPD




CODE	TYPE	POLES	MODULES	Uc	In	I _{max}	BACKUP FUSE gL	
500773	T1+T2	1	1	275VAC	20kA per pole	40kA per pole	125A gL	1

* Remote contacts

AC SPD




CODE	TYPE	POLES	MODULES	Uc	In	I _{max}	BACKUP FUSE gL	
500759	T1+T2	1P+N	2	275VAC	20kA per pole	40kA per pole	125A gL	1

* Remote contacts

AC SPD




CODE	TYPE	POLES	MODULES	Uc	In	I _{max}	BACKUP FUSE gL	
500760	T1+T2	3	3	275VAC	20kA per pole	40kA per pole	125A gL	1

* Remote contacts

AC SPD




CODE	TYPE	POLES	MODULES	Uc	In	I _{max}	BACKUP FUSE gL	
500762	T1+T2	3P+N	4	275VAC	20kA per pole	40kA per pole	125A gL	1

* Remote contacts


Core AC SPD



CODE	TYPE	MODULES	Uc	In	I _{max}	Up	
500777	T1+T2	1	275VAC	20kA per pole	40kA per pole	1,8kV	12

DC SPD



CODE	TYPE	POLES	MODULES	Uc	In	I _{max}	
501654	T1+T2	2	2	500/600VDC	20kA per pole	40kA per pole	1

* Remote contacts

Core DC SPD



CODE	TYPE	MODULES	Uc	In	I _{max}	
500775	T1+T2	1	500/600VDC	20kA per pole	40kA per pole	12



GEYER





CHAPTER B

Photovoltaic

System Protection



Solar panel systems absorb and convert the energy-packed photons of natural sunlight into a usable energy form. A high-quality solar power system can reduce or eliminate dependence on the community power grid that supplies electricity to light, heat, cool, and operate your home.

A residential solar power system installation is a clean, renewable energy source that requires minimal maintenance with savings that may pay back the initial investment in just a few years. Once your solar system is paid off, you will have decades of free energy. **GEYER** offers a variety of components in order your solar to operate for those decades uninterrupted.

DC fuses and links

A range of 10x38mm fuse links specifically designed for protecting photovoltaic strings. These fuse links are capable of interrupting low overcurrents associated with faulted photovoltaic string arrays (reverse current, multi-array fault).

DC isolator

Within the solar installation is the inverter which receives Direct current (DC) from solar strings as input and puts out Alternating Current (AC) to the grid on the output end. During installation, routine maintenance and emergencies it is necessary to isolate the panels from the AC side, and hence, a manually operated isolating switch is placed between the panels and the inverter input. Such a switch is called a DC isolator because it provides DC isolation between the photovoltaic panels and the rest of the system.

A DC isolator can be single pole or double pole. A single pole isolator can be used when a grounded array is to supply a transformer based inverter (inverter feeds the grid through an isolating transformer). When an ungrounded array is required to feed a transformer-less inverter, a double pole DC isolator switch is required. Models of isolators are also available which have an AC isolator in addition to a DC isolator. The switch must be rated to handle approximately 20% above the open circuit array voltage, and 25% above short circuit current of the array. This margin is considered necessary because interrupting DC is more difficult than interrupting AC.

SPD

SPD surge protective device, protect against lightning surge voltages in solar system (photovoltaic power supply system). These units must be installed in parallel on the DC networks to be protected and provide common and different modes protection. Its installed location are recommended at both ends of the DC power supply line (solar panel side and inverter/converter side), especially if the line routing is external and long.

An SPD is needed for each group of strings within the combiner box, the recombiner box, as well as the dc disconnect. High energy MOVs equipped with specific thermal disconnectors and related failure indicators.

RCCB

In the event of a short to earth the residual current operated system prevents shockhazard voltages from remaining on the body of Safety Class 1 electrical equipment or machines.

For this purpose, the residual current circuit breaker (RCCB) monitors the difference between the loads flowing through it and ensures that it is approximately zero. If, as result of an earth fault, this difference exceeds the circuit breakers residual operating current rating $I_{\Delta n}$, then the RCCB will disconnect the faulty equipment

Distribution boards

In a common grid-tie solar system, AC electricity from the solar inverter is sent to the distribution board where it is drawn into the various circuits and appliances in your home. Distribution boards are surface mounted and offer protection degree against intrusion, dust, accidental contact, and water of IP65.



Core AC SPD

CODE	TYPE	MODULES	Uc	In	I _{max}	Up	
500777	T1+T2	1	275VAC	20kA per pole	40kA per pole	1,8kV	12



Core DC SPD

CODE	TYPE	MODULES	Uc	In	I _{max}	
500775	T1+T2	1	500/600VDC	20kA per pole	40kA per pole	12

AC SPD



CODE	TYPE	POLES	MODULES	Uc	In	I _{max}	BACKUP FUSE gL	
500773	T1+T2	1	1	275VAC	20kA per pole	40kA per pole	125A gl	1
500759	T1+T2	1P+N	2	275VAC	20kA per pole	40kA per pole	125A gl	1
500760	T1+T2	3	3	275VAC	20kA per pole	40kA per pole	125A gl	1
500762	T1+T2	3P+N	4	275VAC	20kA per pole	40kA per pole	125A gl	1

* Remote contacts



DC SPD

CODE	TYPE	POLES	MODULES	Uc	In	I _{max}	
501654	T1+T2	2	2	500/600VDC	20kA per pole	40kA per pole	1

* Remote contacts

DC fuse disconnector



CODE	POLES	RATED CURRENT	RATED AC VOLTAGE	MODULES (18mm)	
EDC132	1P	32A	690 VDC	1	10
EDC232	2P	32A	690 VDC	2	6

DC fuse link 10x38



CODE	TYPE	RATED CURRENT	I _{max}	RATED AC VOLTAGE	
EDCF06	10X38mm	6A	30kA	1000 VDC	10
EDCF10	10X38mm	10A	30kA	1000 VDC	10
EDCF12	10X38mm	12A	30kA	1000 VDC	10
EDCF16	10X38mm	16A	30kA	1000 VDC	10
EDCF20	10X38mm	20A	30kA	1000 VDC	10

DC Isolator



CODE	RATED CURRENT	RATED AC VOLTAGE	MODULES (18mm)	
LS16SMAA2	16A	500VDC	2,5	1
LS16SMAA4	16A	1000VDC	3,5	1
LS25SMAA2	25A	500VDC	2,5	1
LS25SMAA4	25A	1000VDC	3,5	1
LS32SMAA2	32A	500VDC	2,5	1
LS32SMAA4	32A	1000VDC	3,5	1



Photovoltaic System Protection





CHAPTER C

Distribution

Boards & Cabinets

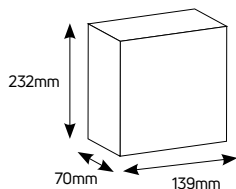


***Hollow wall holders**



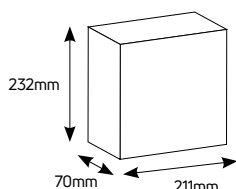
Athos series 1x4

CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP04-T	Transparent Door	2x8	1/5



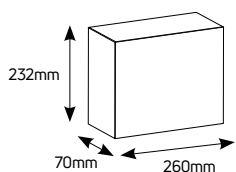
Athos series 1x8

CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP08-T	Transparent Door	2x8	1/5



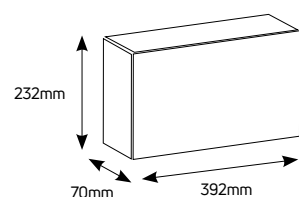
Athos series 1x12

CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP12-T	Transparent Door	2x10	1/5



Athos series 1x18

CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP18-T	Transparent Door	2x13	1/5

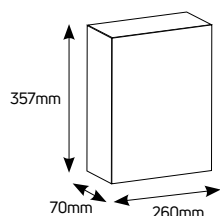


* Dimensions for recess (depth)

Athos series 2x12



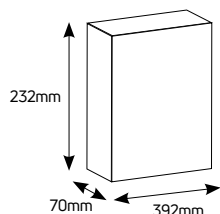
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP24-T	Transparent Door	2x13	1/5



Athos series 2x18



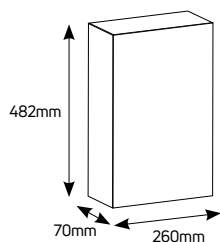
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP2x18-T	Transparent Door	2x13	1/5



Athos series 3x12



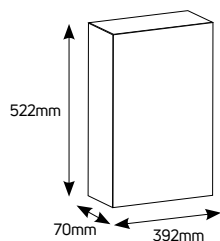
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP36-T	Transparent Door	2x15	1/5



Athos series 3x18



CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VP3x18-T	Transparent Door	2x26	1/5



* Dimensions for recess (depth)

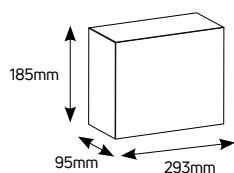


***Hollow wall holders**

Delta series 1x12



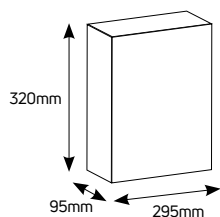
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU142	Full Metal Door	2x8	1
VU142G	Transparent door	2x8	1



Delta series 2x12



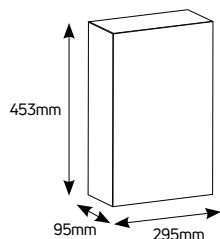
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU243	Full Metal Door	2x12	1
VU243G	Transparent door	2x12	1



Delta series 3x12




CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU344	Full Metal Door	2x16	1
VU344G	Transparent door	2x16	1



* Dimensions for recess (depth)


Blank piece



CODE	DESCRIPTION	
48862	Blank piece for DELTA series	100

Accessories - Outer frame with door and spring catch (for replacement)




CODE	DESCRIPTION	
142	Full Metal Door for VU142	1
142G	Transparent door for VU142G	1
243	Full Metal Door for VU243	1
243G	Transparent door for VU243G	1
344	Full Metal Door for VU344	1
344G	Transparent door for VU344G	1

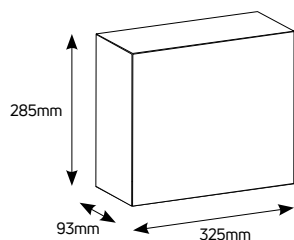


***Hollow wall holders**

Olympus series 1x12




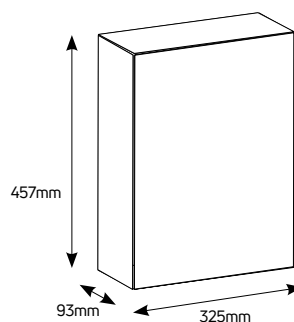
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU131	Full Metal Door	2x12	1
VU131G	Transparent door	2x12	1
VU131P	Full Metal Door and Insulated Terminals	2x12	1
VU131PG	Transparent flush door and Insulated Terminals	2x12	1



Olympus series 2x12



CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU232	Full Metal Door	2x16	1
VU232G	Transparent door	2x16	1
VU232P	Full Metal Door and Insulated Terminals	2x16	1
VU232PG	Transparent flush door and Insulated Terminals	2x16	1

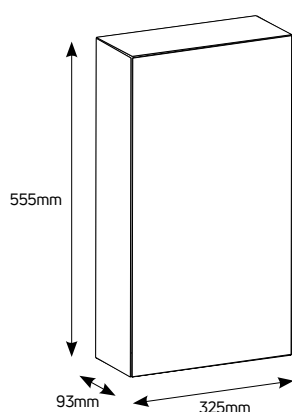


* Dimensions for recess (depth)

Olympus series 3x12




CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU333	Full Metal Door	2x21	1
VU333G	Transparent door	2x21	1
VU333P	Full Metal Door and Insulated Terminals	2x21	1
VU333PG	Transparent flush door and Insulated Terminals	2x21	1




Olympus series accessories



CODE	DESCRIPTION	
44250GS	Connection bracket for drywall	1

Accessories - Outer frame with door and spring catch (for replacement)



CODE	DESCRIPTION	
131	Full Metal Door for VU131	1
131G	Transparent flush door for VU131G	1
232	Full Metal Door for VU232	1
232G	Transparent flush door for VU232G	1
333	Full Metal Door for VU333	1
333G	Transparent flush door for VU333G	1

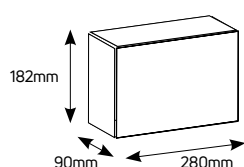
* Dimensions for recess (depth)



Heracles series 1x12



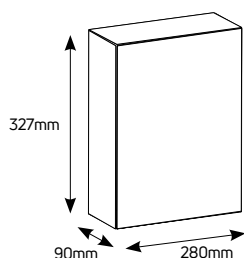
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU142M	Full Metal Door	2x8	1
VU142GM	Transparent door	2x8	1



Heracles series 2x12



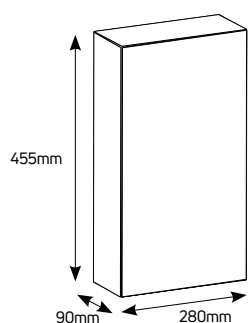
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU243M	Full Metal Door	2x12	1
VU243GM	Transparent door	2x12	1



Heracles series 3x12



CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU344M	Full Metal Door	2x16	1
VU344GM	Transparent door	2x16	1



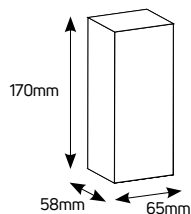
* Dimensions for recess (depth)



Dirfi series 1x2



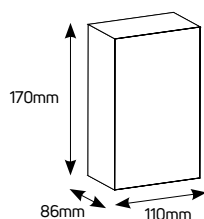
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU102G	Transparent Lid	2x4	16



Dirfi series 1x4



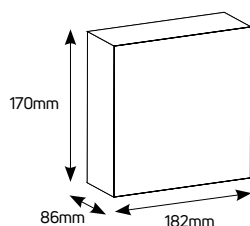
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU104G	Transparent Lid	2x4	10



Dirfi series 1x8



CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU111	Full Metal Door	2x8	1
VU111G	Transparent flush door	2x8	1



Accessories - Outer frame with door and spring catch (for replacement)




CODE	DESCRIPTION	
111D	Full Metal Door for VU111	1
111G	Transparent flush door for VU111G	1

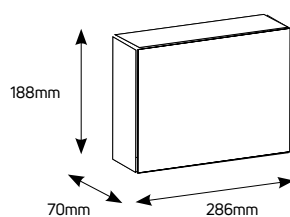
* Dimensions for recess (depth)



Vario series 1x12




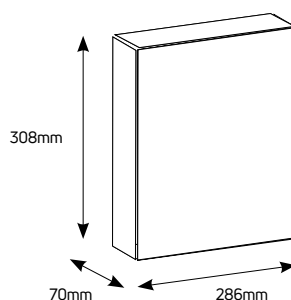
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU117E	For single brick with elevated transparent door	2x8	1



Vario series 2x12



CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VU217E	For single brick with elevated transparent door	2x8	1



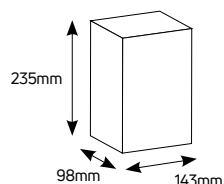
* Dimensions for recess (depth)



Aenos series 1x4



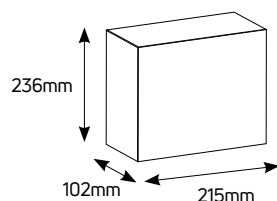
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS04-T	Plastic wall box and transparent plastic door	2x4	1



Aenos series 1x8



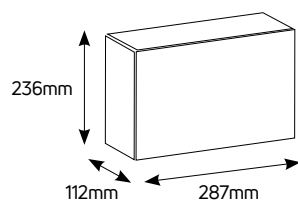
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS08-T	Plastic wall box and transparent plastic door	2x8	1



Aenos series 1x12



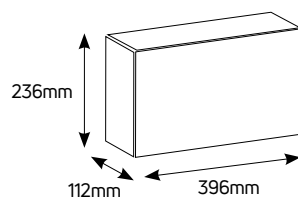
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS12-T	Plastic wall box and transparent plastic door	2x10	1



Aenos series 1x18



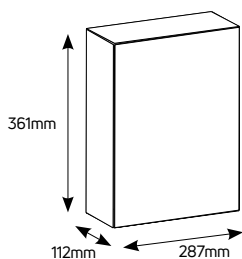
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS18-T	Plastic wall box and transparent plastic door	2x13	1



Aenos series 2x12



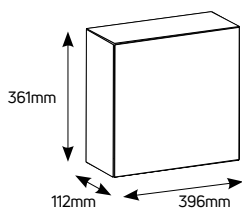
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS24-T	Plastic wall box and transparent plastic door	2x13	1



Aenos series 2x18



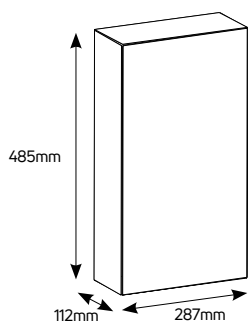
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS2x18-T	Plastic wall box and transparent plastic door	2x13	1



Aenos series 3x12




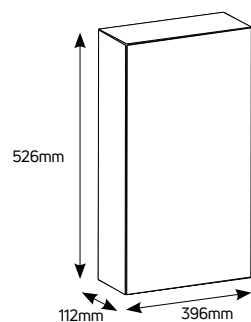
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS36-T	Plastic wall box and transparent plastic door	2x15	1



Aenos series 3x18



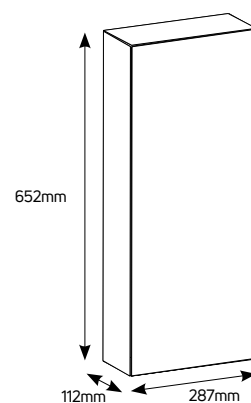
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS3x18-T	Plastic wall box and transparent plastic door	2x26	1



Aenos series 4x12




CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VS48-T	Plastic wall box and transparent plastic door	2x20	1

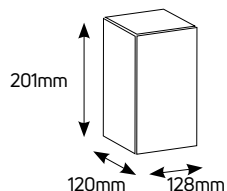




VW series 1x4




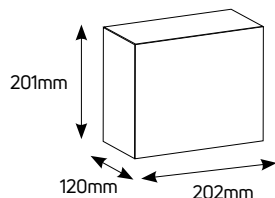
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VW04-T	Consumer units insulated with hinged transparent door	2x4	1



VW series 1x8




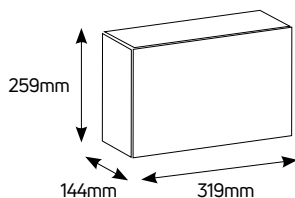
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VW08-T	Consumer units insulated with hinged transparent door	2x8	1



VW series 1x12



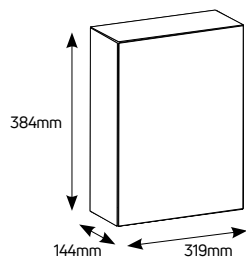
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VW12-T	Consumer units insulated with hinged transparent door	2x10	1



VW series 2x12



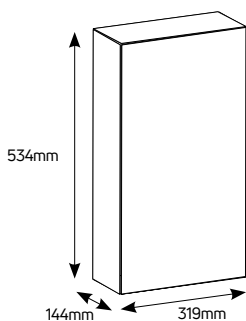
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VW24-T	Consumer units insulated with hinged transparent door	2x13	1



VW series 3x12



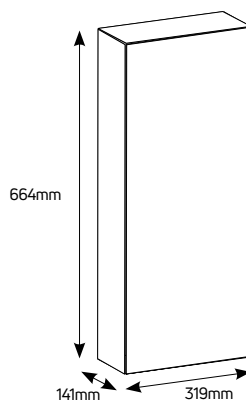
CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VW36-T	Consumer units insulated with hinged transparent door	2x15	1



VW series 4x12



CODE	DESCRIPTION	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VW48-T	Consumer units insulated with hinged transparent door	2x20	1





With or W/O base plate

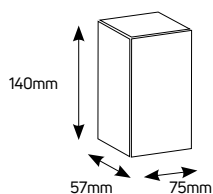
W/O base:

VA 107G, VA208, VA309G

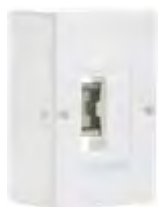
Ossa series 1x4



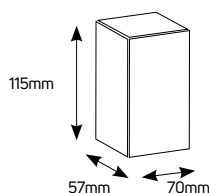
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA102	1x4	-	10
VA102A	1x4	1x4	10
VA102B	1x4	2x4	10



Ossa series 1x2



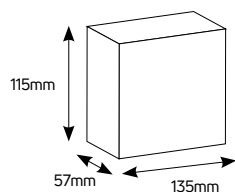
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA104	1x2	2x4	10



Ossa series 1x6



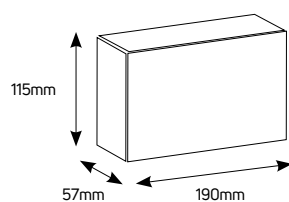
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA105	1x6	2x4	10



Ossa series 1x9



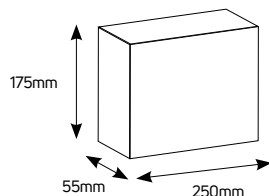
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA106	1x9	2x4	5



Ossa series 1x12



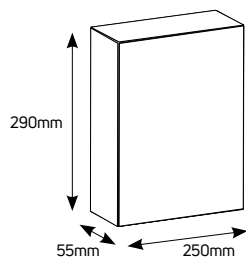
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA107	1x12	2x8	1



Ossa series 2x12



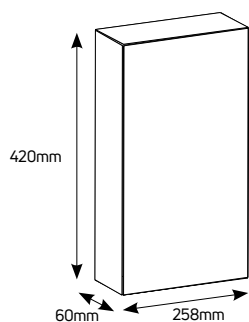
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA208	2x12	2x8	1



Ossa series 3x12



CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA309	3x12	2x8	1

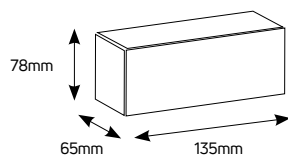




Idi series without lid 1x2



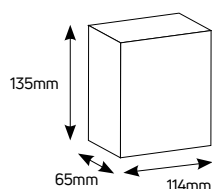
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA02	1x2	2x4	15



Idi series without lid 1x4



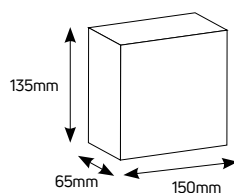
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA04	1x4	2x4	15



Idi series without lid 1x6



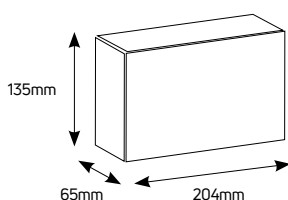
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA06	1x6	2x4	15



Idi series without lid 1x9




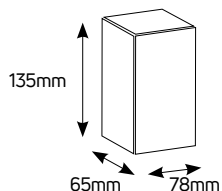
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA09	1x9	2x4	15



Idi series with transparent lid 1x2




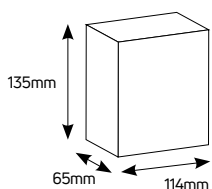
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA02G	1x2	2x4	10



Idi series with transparent lid 1x4




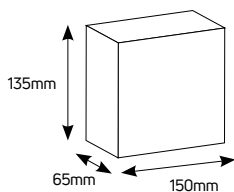
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA04G	1x4	2x4	10



Idi series with transparent lid 1x6




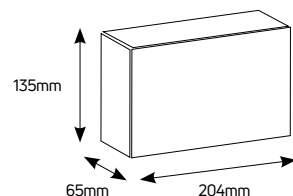
CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA06G	1x6	2x4	10



Idi series with transparent lid 1x9



CODE	MODULES (18mm)	EARTH(PE) / NEUTRAL(N) - TERMINALS	
VA09G	1x9	2x4	10



IP55



Round junction boxes

CODE	DIAMETER	DEPTH	
VAR50	Ø50	50mm	1
VAR80	Ø80	50mm	1

IP65



Square - Rectangular junction boxes

CODE	DIMENSIONS (WxHxD mm)	PLUGS	
VAS80*	80x80x50mm	7	1
VAS85	85x85x50mm	7	1
VAS100	100x100x70mm	7	1
VAS150110	150x110x70mm	7	1

* IP55

IP65



Square - Rectangular junction boxes

CODE	DIMENSIONS (WxHxD mm)	PLUGS	
VAS150	150x150x70mm	10	1
VAS200155	200x155x80mm	10	1

IP65




Square - Rectangular junction boxes

CODE	DIMENSIONS (WxHxD mm)	PLUGS	
VAS200100	200x100x70mm	8	1

IP65



Square - Rectangular junction boxes

CODE	DIMENSIONS (WxHxD mm)	PLUGS	
VAS200	200x200x80mm	12	1
VAS255200	255x200x80mm	12	1
VAS300250	300x250x120mm	12	1

IP65



Square - Rectangular junction boxes

CODE	DIMENSIONS (WxHxD mm)	PLUGS	
VAS400350	400x350x120mm	16	1

Busbars - Fork



CODE	DESCRIPTION	
52882	Single pole, 1 meter	50
52881	Single pole, 12 modules	20

Insulated Busbars - Prong / Fork



CODE	DESCRIPTION	
52881X	Insulated Single Pole Busbars -Prong, 12 modules	10
64721	Insulated Triple Pole Busbars -Fork, 1m	20
64720	Insulated triple pole, 12 modules	50
64719	Insulated single pole, Prong 1 meter	50

Blank



CODE	DESCRIPTION	
48862U	Blank cover (not for Delta series)	100

Earth/Neutral terminals (for replacement) flush mounting type



CODE	DESCRIPTION	
44962AB	8 screws Neutral terminals	1
44962AY	8 screws Earth terminals	1
44246AB	13 screws Neutral terminals	1
44246AY	13 screws Earth terminals	1
49247AB	17 screws Neutral terminals	1
49247AY	17 screws Earth terminals	1
448001	7 screws Neutral terminals insulated	1
448002	7 screws Earth terminals insulated	1
448003	12 screws Neutral terminals insulated	1
448004	12 screws Earth terminals insulated	1
448005	15 screws Neutral terminals insulated	1
448006	15 screws Earth terminals insulated	1
VU31P	Insulated terminals for VU 131 P and VU 131 PG	1
VU32P	Insulated terminals for VU 232 P and VU 232 PG	1
VU33P	Insulated terminals for VU 333 P and VU 333 PG	1


Lock



CODE	DESCRIPTION	
VS.VP.L	For VS/VP distribution boards	1
VW.VP.L	For VW distribution boards	1

Accessories - Outer frame with door and spring catch (for replacement)



CODE	DESCRIPTION	
142	Full Metal Door for VU142	1
142G	Transparent flush door for VU142G	1
243	Full Metal Door for VU243	1
243G	Transparent flush door for VU243G	1
344	Full Metal Door for VU344	1
344G	Transparent flush door for VU344G	1
131	Full Metal Door for VU131	1
131G	Transparent flush door for VU131G	1
232	Full Metal Door for VU232	1
232G	Transparent flush door for VU232G	1
333	Full Metal Door for VU333	1
333G	Transparent flush door for VU333G	1
111D	Full Metal Door for VU111	1
111G	Transparent flush door for VU111G	1
117E	Transparent flush door for VU117E	1
217E	Transparent flush door for VU217E	1
65606G	Frame for VU117E	1
65607G	Frame for VU217E	1





CHAPTER D

Preassembled

standard distribution boards



Custom or 5 lines

Including RCCB

No additional cost for assembly



Vario series, Single phase, 5 lines

Distribution Board contains: 1 x RCCB 40A, 1 x Isolator 40A, 1 x mcb + isolator 20A, 1 x mcb + isolator 25A, 2 x Pilot Lamps, 2 x mcb 10A, 1 x mcb 16A

CODE	WAY	
VU217ER	2x12	1
VU217ERD	2x12	1

* Photo is only as a reference



Hercules series, Single phase, 5 lines

Distribution Board contains: 1 x RCCB 40A, 1 x Isolator 40A, 1 x mcb + isolator 20A, 1 x mcb + isolator 25A, 2 x Pilot Lamps, 2 x mcb 10A, 1 x mcb 16A

CODE	WAY	
VU243GMD	2x12	1
VU344GMD	3x12	1

* Photo is only as a reference



Delta series, Single phase, 5 lines

Distribution Board contains: 1 x RCCB 40A, 1 x Isolator 40A, 1 x mcb + isolator 20A, 1 x mcb + isolator 25A, 2 x Pilot Lamps, 2 x mcb 10A, 1 x mcb 16A

CODE	WAY	
VU243GD	2x12	1
VU344GD	3x12	1

* Photo is only as a reference



Olympus series, Single phase, 5 lines

Distribution Board contains: 1 x RCCB 40A, 1 x Isolator 40A, 1 x mcb + isolator 20A, 1 x mcb + isolator 25A, 2 x Pilot Lamps, 2 x mcb 10A, 1 x mcb 16A

CODE	WAY	
VU232GD	2x12	1
VU333GD	3x12	1

* Photo is only as a reference



Compact series plastic IP44



CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VF120	Distribution Board contains: 1 x RCCB 40A, 2p., 1 x Isolator 40A, 1p., 1 x Pilot Lamps, 1p., 1 x mcb 32A, 1p., C curve, 1 x mcb 16A, 1p., C curve, 2 x socket outlet, straight, System F German standard (schuko)	163x264x131	1
VF140	Distribution Board contains: 1 x RCCB 40A, 2p., 1 x Isolator 40A, 1p., 1 x Pilot Lamps, 1p., 1 x mcb 32A, 1p., C curve, 1 x mcb 16A, 1p., C curve, 4 x socket outlet, straight, System F German standard (schuko)	163x264x131	1

* Photo is only as a reference



Compact series plastic IP44

CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VF221	Distribution Board contains: 1 x RCCB 40A, 4p., 1 x Isolator 40A, 4p., 1 x Signal Light, 1/2p., 3 x mcb 40A, 1p., C curve, 2 x mcb 16A, 1p., C curve, 1 x mcb16A, 3p., C Curve, 2 x socket outlet, straight, System F German standard (schuko), 1 x 3p+N+PE Panel mounting socket outlet, straight	180x460x171	1

* Photo is only as a reference



Compact series plastic IP44

CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VF322	Distribution Board contains: 1 x RCCB 40A, 4p., 1 x Isolator 40A, 4p., 1 x Signal Light, 1/2p., 3 x mcb 40A, 1p., C curve, 2 x mcb 16A, 1p., C curve, 2 x mcb16A, 3p., C Curve, 2 x socket outlet, straight, System F German standard (schuko), 2 x 3p+N+PE Panel mounting socket outlet, straight	276x460x148	1
VF332	Distribution Board contains: 1 x RCCB 40A, 4p., 1 x Isolator 40A, 4p., 1 x Signal Light, 1/2p., 3 x mcb 40A, 1p., C curve, 3 x mcb 16A, 1p., C curve, 2 x mcb16A, 3p., C Curve, 3 x socket outlet, straight, System F German standard (schuko), 2 x 3p+N+PE Panel mounting socket outlet, straight	276x460x148	1

* Photo is only as a reference

Preassembled standard distribution boards





Euroline series plastic IP65

CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VW120M	Distribution Board contains: 1 x RCCB 40A, 2p., 1 x Isolator 40A, 1p., 1 x Pilot Lamps, 1p., 1 x mcb 32A, 1p.,C curve, 2 x mcb 16A, 1p.,C curve, 2 x DINRail Socket F German standard (schuko)	318x383x142	1

*** Photo is only as a reference**



Euroline series plastic IP65

CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VW230T	Distribution Board contains: 1 x RCCB 40A, 2p., 1 x Isolator 40A, 1p., 1 x Pilot Lamps, 1p., 3 x mcb 40A, 1p.,C curve, 3 x mcb 16A, 1p.,C curve, 3 x DINRail Socket F German standard (schuko)	318x507x142	1

*** Photo is only as a reference**



Euroline series plastic IP65

CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VW240M	Distribution Board contains: 1 x RCCB 40A, 2p., 1 x Isolator 40A, 1p., 1 x Pilot Lamps, 1p., 1 x mcb 32A, 1p.,C curve, 4 x mcb 16A, 1p.,C curve, 4 x DINRail Socket F German standard (schuko)	318x507x142	1

*** Photo is only as a reference**

Preassembled standard distribution boards

Preassembled standard distribution boards





Metalline series IP65

CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VA-MB-140	Distribution Board contains: 1 x RCCB 40A, 2p. 1 x Isolator 40A, 1p., 1 x Pilot Lamps, 1p., 1 x mcb 32A, 1p.,C curve, 3 x mcb 16A, 1p.,C curve, 1 x DINRail Socket F German standard (schuko)	300x400x160	1
VA-MB-130T	Distribution Board contains: 1 x RCCB 40A, 4p. 1 x Isolator 40A, 4p., 1 x Signal lamp, 1/2p., 3 x mcb 40A, 1p.,C curve, 3 x mcb 16A, 1p., C curve, 1 x mcb 16A, 3p.,C curve, 3 x DINRail Socket F German standard (schuko)	330x400x200	1

* Photo is only as a reference

Metalline series IP65



CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
VA-MB-231	Distribution Board contains: 1 x RCCB 40A, 4p., x Isolator 40A, 4p., 1 x Signal lamp, 1/2p., 3 x mcb 40A, 1p.,C curve, 3 x mcb 16A, 1p.,C curve, 1 x mcb 16A, 3p., C curve, 3 x DINRail Socket F German standard (schuko), 1 x Socket outlet 3P+N+PE	350x500x150	1

* Photo is only as a reference

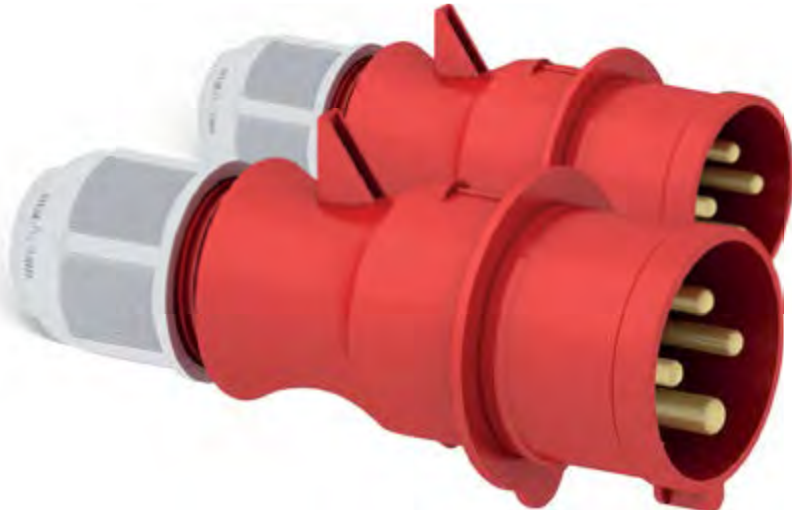
Metalline series IP65



CODE	DESCRIPTION	DIMENSIONS (WxHxD)	
Ideal for power supply of elevators			
VM112PA	Distribution Board contains: 1 x Isolator 63A, 4p., 1 x Sig- nal lamp, 1/2p., 1 x mcb 32A, 3p., C curve, 1 x mcb 16A, 1p., B curve, 1 x mcb 10A, 1p.,B curve, 1 x Isolator 40A, 1p., 1 x DINRail Socket F German standard (schuko)	370x250x160	1

* Photo is only as a reference

Preassembled standard distribution boards





CHAPTER E


CEE Plugs

& connectors

IP44




Wall mounting socket outlet - with external fixing 16A

CODE	NUMBER OF POLES	VOLTAGE	
11765	3x16A	230	10
11645	4x16A	400	10
100	5x16A	400	10

IP44




Wall mounting socket outlet - with external fixing 32A

CODE	NUMBER OF POLES	VOLTAGE	
11651	3x32A	230	10
11646	4x32A	400	10
101	5x32A	400	10

IP44



Wall mounting socket outlet 63A

CODE	NUMBER OF POLES	VOLTAGE	
1104	3x63A	230	10
1127	4x63A	400	10
1124	5x63A	400	10

IP44




Panel mounting socket outlet, angled 16A

CODE	NUMBER OF POLES	VOLTAGE	
1217	3x16A	230	10
1221	4x16A	400	10
1227	5x16A	400	10

IP44




Panel mounting socket outlet, angled 32A

CODE	NUMBER OF POLES	VOLTAGE	
1229	3x32A	230	10
1233	4x32A	400	10
1239	5x32A	400	10

IP44




Panel mounting socket outlet, straight 63A

CODE	NUMBER OF POLES	VOLTAGE	
1307	3x63A	230	5
134	4x63A	400	5
136	5x63A	400	5




Wall mounting socket outlet 16A

CODE	NUMBER OF POLES	VOLTAGE	
1133	3x16A	230	10
1137	4x16A	400	10
1143	5x16A	400	10




Wall mounting socket outlet 32A

CODE	NUMBER OF POLES	VOLTAGE	
1145	3x32A	230	10
1149	4x32A	400	10
1155	5x32A	400	10




Wall mounting socket outlet 63A

CODE	NUMBER OF POLES	VOLTAGE	
1157	3x63A	230	5
1161	4x63A	400	5
1112	5x63A	400	5




Wall mounting socket outlet 125A

CODE	NUMBER OF POLES	VOLTAGE	
11437	3x125A	230	10
11441	4x125A	400	10
11447	5x125A	400	10

IP44




Panel mounting socket outlet, angled 63A

CODE	NUMBER OF POLES	VOLTAGE	
12135	3x63A	230	5
1201	4x63A	400	5
1202	5x63A	400	5

IP67




Panel mounting socket outlet, straight 63A

CODE	NUMBER OF POLES	VOLTAGE	
1396	3x63A	230	5
13100	4x63A	400	5
13104	5x63A	400	5

IP67




Panel mounting socket outlet, straight 125A

CODE	NUMBER OF POLES	VOLTAGE	
13452	3x125A	230	5
13447	4x125A	400	5
13451	5x125A	400	5

IP44




Plugs 16A

CODE	NUMBER OF POLES	VOLTAGE	
21001	3x16A	230	10
21005	4x16A	400	10
203	5x16A	400	10

IP44




Plugs 32A

CODE	NUMBER OF POLES	VOLTAGE	
21013	3x32A	230	10
21017	4x32A	400	10
204	5x32A	400	10

IP44




Plugs 63A

CODE	NUMBER OF POLES	VOLTAGE	
2104	3x63A	230	5
2151	4x63A	400	5
2155	5x63A	400	5

Plugs 63A

IP67




CODE	NUMBER OF POLES	VOLTAGE	
2181	3x63A	230	5
2185	4x63A	400	5
2189	5x63A	400	5

Plugs 125A

IP67




CODE	NUMBER OF POLES	VOLTAGE	
2191	3x125A	230	5
2195	4x125A	400	5
2199	5x125A	400	5

IP44




Wall mounting appliance inlet 16A

CODE	NUMBER OF POLES	VOLTAGE	
240	3x16A	230	10
24329	4x16A	400	10
24142	5x16A	400	10

IP44




Wall mounting appliance inlet 32A

CODE	NUMBER OF POLES	VOLTAGE	
24331	3x32A	230	10
24330	4x32A	400	10
24143	5x32A	400	10

IP44




Wall mounting appliance inlet 63A

CODE	NUMBER OF POLES	VOLTAGE	
24336	3x63A	230	5
24338	4x63A	400	5
24134	5x63A	400	5


Wall mounting appliance inlet 63A



CODE	NUMBER OF POLES	VOLTAGE	
24340	3x63A	230	5
24035	4x63A	400	5
24062	5x63A	400	5

Wall mounting appliance inlet 125A




CODE	NUMBER OF POLES	VOLTAGE	
24198	3x125A	230	5
24200	4x125A	400	5
24202	5x125A	400	5

IP67




Flanged appliance inlet 63A

CODE	NUMBER OF POLES	VOLTAGE	
28176	3x63A	230	5
28178	4x63A	400	5
28180	5x63A	400	5

IP67



Flanged appliance inlet 125A

CODE	NUMBER OF POLES	VOLTAGE	
2860	3x125A	230	5
2861	4x125A	400	5
2876	5x125A	400	5

IP44




ELV plug 16A

CODE	NUMBER OF POLES	VOLTAGE	
446	3x16A	24	10
447	3x16A	42	10

IP44




ELV plug 32A

CODE	NUMBER OF POLES	VOLTAGE	
4417	3x32A	24	10
4418	3x32A	42	10

IP44




Phase inverter 16A

CODE	NUMBER OF POLES	VOLTAGE	
225	5x16A	400	10
2602	5x16A	400	10

IP44




Phase inverter 32A

CODE	NUMBER OF POLES	VOLTAGE	
227	5x32A	400	10
2603	5x32A	400	10

IP44




Connector 16A

CODE	NUMBER OF POLES	VOLTAGE	
31001	3x16A	230	10
31005	4x16A	400	10
303	5x16A	400	10

IP44




Connector 32A

CODE	NUMBER OF POLES	VOLTAGE	
31013	3x32A	230	10
31017	4x32A	400	10
304	5x32A	400	10

IP44




Connector 63A

CODE	NUMBER OF POLES	VOLTAGE	
3104	3x63A	230	5
3151	4x63A	400	5
3112	5x63A	400	5

IP67




Connector 63A

CODE	NUMBER OF POLES	VOLTAGE	
3181	3x63A	230	5
3185	4x63A	400	5
3124	5x63A	400	5

IP67



Connector 125A

CODE	NUMBER OF POLES	VOLTAGE	
3191	3x125A	230	5
3195	4x125A	400	5
3199	5x125A	400	5

IP44




ELV wall mounting socket outlet 16A

CODE	NUMBER OF POLES	VOLTAGE	
416	3x16A	24	10
417	3x16A	42	10

IP44




ELV wall mounting socket outlet 32A

CODE	NUMBER OF POLES	VOLTAGE	
4117	3x32A	24	10
4118	3x32A	42	10

IP44



wall mounting socket outlet switched 16A

CODE	NUMBER OF POLES	VOLTAGE	
16149	3x63A	230	1
16034	4x63A	400	1
16035	5x63A	400	1

IP67




wall mounting socket outlet switched 16A

CODE	NUMBER OF POLES	VOLTAGE	
16028	4x16A	400	1
16029	5x16A	400	1

IP67



wall mounting socket outlet switched 32A

CODE	NUMBER OF POLES	VOLTAGE	
16103	3x32A	230	1
16032	4x32A	400	1
16033	5x32A	400	1

IP67




wall mounting socket outlet switched 63A

CODE	NUMBER OF POLES	VOLTAGE	
16121	3x63A	230	1
16036	4x63A	400	1
16037	5x63A	400	1

IP67




wall mounting socket outlet switched 125A

CODE	NUMBER OF POLES	VOLTAGE	
16419	3x125A	230	1
1667	4x125A	400	1
1670	5x125A	400	1


Domestic panel mounting socket outlet, straight, System F German standard



CODE	DESCRIPTION	VOLTAGE	
71094	Domestic panel mounting socket outlet, straight, System F German standard	250	10
724	wall mounting socket outlet	250	10

Connector



CODE	DESCRIPTION	VOLTAGE	
7486	Domestic Connector	250	10

Adapter



CODE	DESCRIPTION	VOLTAGE	
8615	CEE 230V to domestic type "F" German Earthing System	250	1

Plug

IP44




CODE	DESCRIPTION	
7370	Domestic Plug	20

Combined wall mounting socket outlet 16A

IP44




CODE	NUMBER OF POLES	VOLTAGE	
107	5x16A	400	10
1059	4x16A	400	10

Combined wall mounting socket outlet 32A

IP44



CODE	NUMBER OF POLES	VOLTAGE	
108	5x32A	400	10
1060	4x32A	400	10

Quick and Easy without service maintenance

QUICK  CONNECT



Insert cable through the cable sleeve and strip the conductors



There is no need for the use of cable ferrules or tools, if wires are multiple



Insert the conductor into the appropriate terminal and push down the contact to lock the conductor into position.

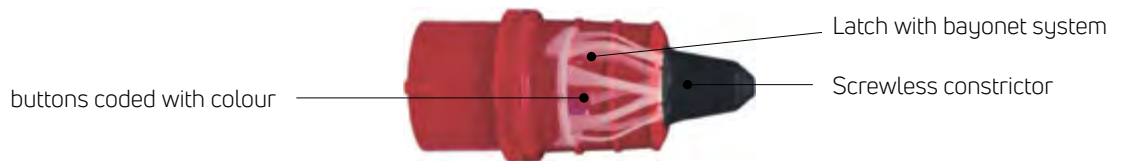


There is no need to tighten the cable clamp.

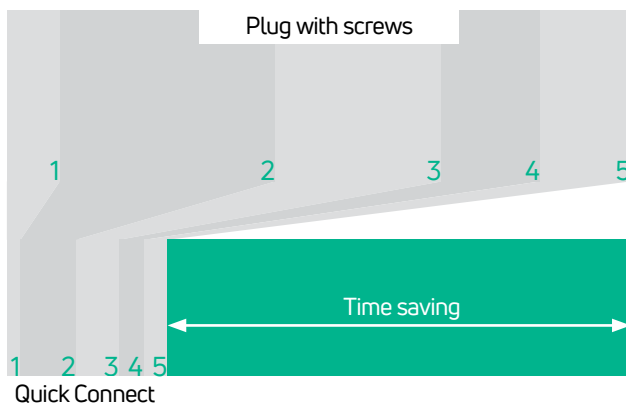


Rejoin terminal, connector housings and turn by turn degrees into lock position the four point bayonet catches are engaged and the screwless cable clamp is automatically pressed into the conical clamping area so that the cable is fixed durable and maintenance free.

CEE Plugs & Connectors



Saving time with QUICK  CONNECT



In the diagram you see the saving of time during the connection of Quick-Connect products compared to standard industrial plugs.

The connection process 1 - 5 is illustrated on the drawings to the right

IP44



Wall mounting socket outlet Quick-Connect 16A

CODE	NUMBER OF POLES	VOLTAGE	
11895	3x16A	230	10
11905	4x16A	400	10
112001	5x16A	400	10

IP44



Wall mounting socket outlet Quick-Connect 16A

CODE	NUMBER OF POLES	VOLTAGE	
11944	4x16A	400	10
11909	5x16A	400	10

IP44



Wall mounting socket outlet Quick-Connect 32A

CODE	NUMBER OF POLES	VOLTAGE	
11919	3x32A	230	10
11922	4x32A	400	10
112002	5x32A	400	10

IP44




Wall mounting socket outlet Quick-Connect 32A

CODE	NUMBER OF POLES	VOLTAGE	
11949	3x32A	230	10
11956	4x32A	400	10
11962	5x32A	400	10

IP44




Panel mounting socket outlet Quick-Connect, straight 16A

CODE	NUMBER OF POLES	VOLTAGE	
13686	3x16A	230	10
13693	4x16A	400	10
132001	5x16A	400	10

IP44




Panel mounting socket outlet Quick-Connect, angled 16A

CODE	NUMBER OF POLES	VOLTAGE	
12772	3x16A	230	10
12779	4x16A	400	10
12730	5x16A	400	10

IP44




Panel mounting socket outlet Quick-Connect, straight 32A

CODE	NUMBER OF POLES	VOLTAGE	
13703	3x32A	230	10
13710	4x32A	400	10
132002	5x32A	400	10

IP44




Panel mounting socket outlet Quick-Connect, angled 32A

CODE	NUMBER OF POLES	VOLTAGE	
12789	3x32A	230	10
12795	4x32A	400	10
12801	5x32A	400	10

IP67




Panel mounting socket outlet Quick-Connect, straight 16A

CODE	NUMBER OF POLES	VOLTAGE	
13734	3x16A	230	10
13739	4x16A	400	10
13745	5x16A	400	10

IP67




Panel mounting socket outlet Quick-Connect, angled 16A

CODE	NUMBER OF POLES	VOLTAGE	
12813	3x16A	230	10
12814	4x16A	400	10
12817	5x16A	400	10

IP67




Panel mounting socket outlet Quick-Connect, straight 32A

CODE	NUMBER OF POLES	VOLTAGE	
13750	3x32A	230	10
13756	4x32A	400	10
13762	5x32A	400	10

IP67




Panel mounting socket outlet Quick-Connect, angled 32A

CODE	NUMBER OF POLES	VOLTAGE	
12819	3x32A	230	10
12821	4x32A	400	10
12824	5x32A	400	10

IP44




Plug QUICK-CONNECT 16A

CODE	NUMBER OF POLES	VOLTAGE	
2126	3x16A	230	10
2130	4x16A	400	10
2136	5x16A	400	10

IP44




Plug QUICK-CONNECT 32A

CODE	NUMBER OF POLES	VOLTAGE	
2138	3x32A	230	10
2142	4x32A	400	10
2148	5x32A	400	10

IP67




Plug QUICK-CONNECT 16A

CODE	NUMBER OF POLES	VOLTAGE	
210576	3x16A	230	10
210583	4x16A	400	10
210589	5x16A	400	10

IP67




Plug QUICK-CONNECT 32A

CODE	NUMBER OF POLES	VOLTAGE	
210594	3x32A	230	10
210601	4x32A	400	10
210607	5x32A	400	10

IP44




Wall mounting appliance inlet Quick-Connect 16A

CODE	NUMBER OF POLES	VOLTAGE	
24423	3x16A	230	10
24392	4x16A	400	10
242001	5x16A	400	10

IP44




Wall mounting appliance inlet Quick-Connect 32A

CODE	NUMBER OF POLES	VOLTAGE	
24402	3x32A	230	10
24405	4x32A	400	10
242002	5x32A	400	10

IP67




Wall mounting appliance inlet 16A

CODE	NUMBER OF POLES	VOLTAGE	
2473	3x16A	230	10
2477	4x16A	400	10
2483	5x16A	400	10

IP67




Wall mounting appliance inlet 32A

CODE	NUMBER OF POLES	VOLTAGE	
24020	3x32A	230	10
24021	4x32A	400	10
2402	5x32A	400	10

IP44




Flanged appliance inlet Quick-Connect, straight 16A

CODE	NUMBER OF POLES	VOLTAGE	
28111	3x16A	230	10
28112	4x16A	400	10
282001	5x16A	400	10

IP44




Flanged appliance inlet Quick-Connect, straight 32A

CODE	NUMBER OF POLES	VOLTAGE	
28010	3x32A	230	10
28012	4x32A	400	10
282002	5x32A	400	10

IP44




QUICK-CONNECT connector 16A

CODE	NUMBER OF POLES	VOLTAGE	
3126	3x16A	230	10
3130	4x16A	400	10
3136	5x16A	400	10

IP44




QUICK-CONNECT connector 32A

CODE	NUMBER OF POLES	VOLTAGE	
3138	3x32A	230	10
3142	4x32A	400	10
3148	5x32A	400	10

TLS connector Multi-Grip cable gland 16A

IP67




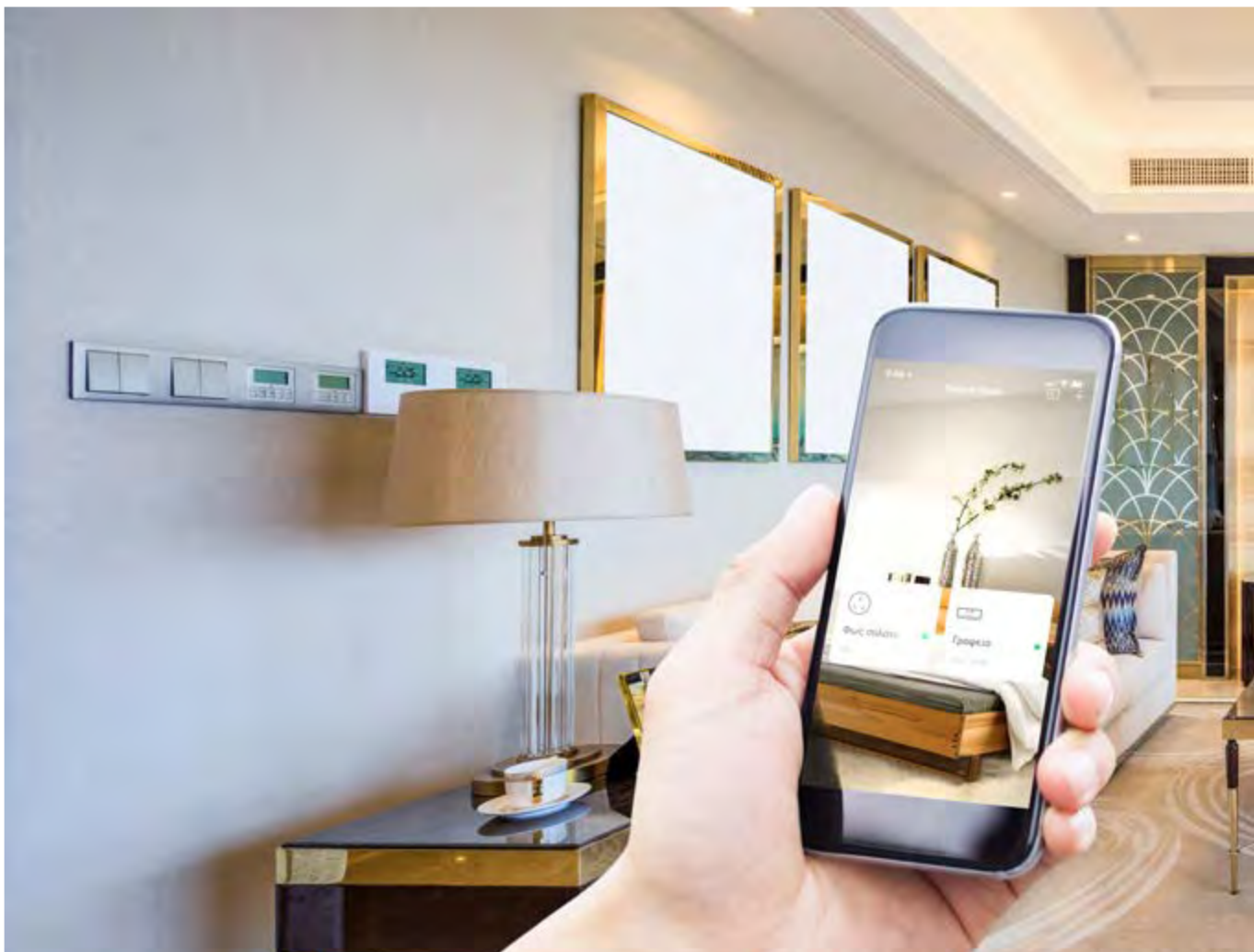
CODE	NUMBER OF POLES	VOLTAGE	
310333	3x16A	230	10
310340	4x16A	400	10
310346	5x16A	400	10

TLS connector Multi-Grip cable gland 32A

IP67



CODE	NUMBER OF POLES	VOLTAGE	
310351	3x32A	230	10
310358	4x32A	400	10
310364	5x32A	400	10





CHAPTER F

Smart

Home

What is a smart home?

It is the combined total of automations, with which the functions of a residence are clustered, organized and automated in accordance with the needs of the respective owner. What this basically means is that the same systems can be used for more than one usage, e.g. a switch can control the lighting of a room, while at the same time it can turn the shutters on/off (for instance with a double tap). The key element of a smart home is its ability to be managed remotely via a smart phone and its capability of the automatic actuation of specific functions (e.g. by leaving the house, all the electrical consumers, the heating and the blinds are turned off and the alarm system is enabled).



Advantages of the **GEYER-dS** System

- › No further wiring is required
- › No purchase or installation of a software is required
- › No Wi-Fi is required
- › No replacement of the switches with sockets is required for its function
- › Its installation can happen in only 1-2 days from your electrician
- › It is easy to manage
- › It is expandable with capability to control all the elements of the house (from lamps to home devices)
- › It can work remotely

With **GEYER -dS** home automation be easily achieved since you can control all for home's appliances under one platform. Most common home automation is:



Heating and Cooling Control

The System can adjust your heating and your cooling remotely, not just as an on/off operation, but by assuming all the regulating functions that your air conditioner's control can do.



Lighting Control

The System can turn on, turn off and dim all the lights in the house, creating freely all the lighting scenarios, wherever you are.



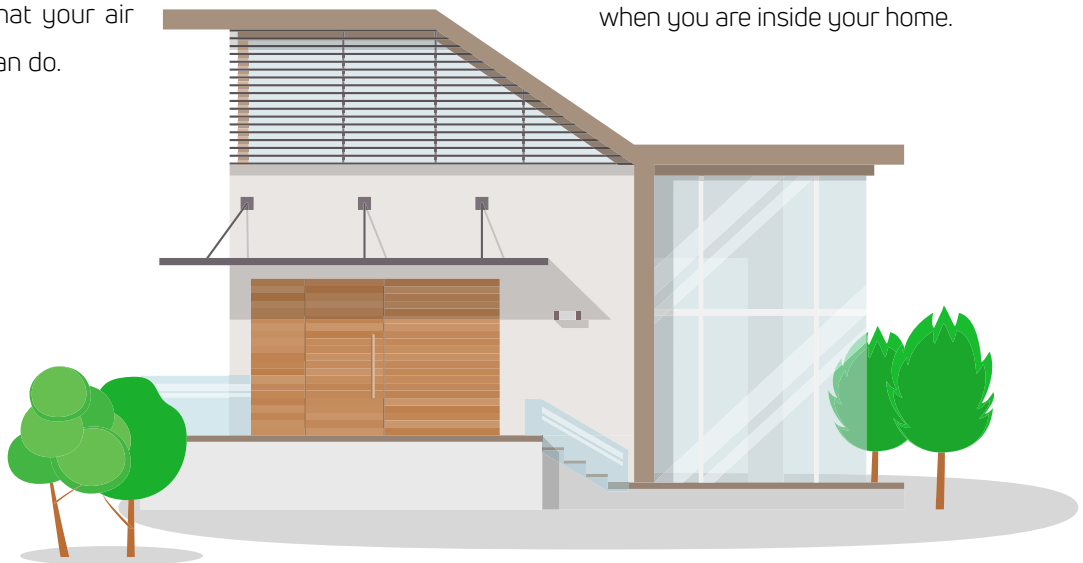
House Security

The System can monitor your house's areas remotely and create panic circumstances if necessary. Common panic circumstances are the simultaneous turning on off all the lights, the shutters opening, the alarm activation or the simulation of dogs inside the house (aggressive barking). The activation of panic circumstances can also be made by pressing a switch when you are inside your home.



Boiler, Watering System and Electrical Devices Control

The System can activate and deactivate many electrical devices and Systems, with the flick of a switch when you are at home or via your phone when you are outside



Shades and Shutters control

The System can open and close the shutters and your awnings, independently or in groups, with the flick of a switch when you are at home or via your phone when you are outside.

Installation

A **GEYER-dS** installation couldn't be simpler. Only phase (L) and neutral (N) conductors are needed for wiring in the electrical boxes in the rooms. No jumper wires are needed.

Existing 230 V power lines are quite simply used by **GEYER-dS** in a new way and the extremely small size of the digitalSTROM components means they can be installed invisibly in the electrical boxes.

The **GEYER-dS** components are simply installed in the existing push buttons, lights, shutters, etc. This makes retrofitting child's play with no mess, even in existing electrical installations. The existing light switches are replaced with standard push buttons and equipped with digitalSTROM push button terminal blocks.



1. The distribution board: The heart of digitalSTROM

A digitalSTROM Smart Home is based on a decentralised concept. This means that each device has its own artificial intelligence. The devices need only be connected to the supply lines via digitalSTROM lustre terminals for this purpose. In this way, analogue devices can easily become part of a digitalSTROM Smart Home. All additional network components required are installed on a top-hat rail in a distribution board.



2. Terminals

They look like screw terminals, but are microcomputers. They are switches, dimmers, motor controllers, computers, data storage media and network adapters in one. Every electrical device gets one of the function-specific terminal blocks, which differ on the outside in their colours and on the inside in the hardware and software

3. Let there be light: various operation options for intelligent home control

A digitalSTROM Smart Home is synonymous with convenience and comfort, as well as simplicity and practicality. In other words, you can also switch on and dim the lamps in your home in a flexible manner, and in the way you prefer: via light switch, voice or smartphone app – whatever's easiest and most practical for you.



digitalSTROM Filter 230 V



CODE	DESCRIPTION	
dSF20	The installation of digitalSTROM Filters in the distribution board serves to condition the electrical grid to enable optimum communication between the components.	1

digitalSTROM Meter 230 V AC / 50 Hz, 16A



CODE	DESCRIPTION	
dSM12	The (dSM), like the circuit breaker, are installed into the distribution board. The dSM ensures communication to the individual devices in the power circuit. It also measures their performance.	1

digitalSTROM Server + power supply



CODE	DESCRIPTION	
dSS11-1GB-N	The installation of a digitalSTROM Server enables connection to the Internet or a local network. With the digitalSTROM Server, installed devices and additional functions can be easily managed and configured via the web-based digitalSTROM Configurator.	1

digitalSTROM Server



CODE	DESCRIPTION	
dSS20	<p>The digitalSTROM server (dSS) with integrated power supply is available with all digitalSTROM meters (dSM) connected by dS485 bus.</p> <ul style="list-style-type: none"> Integration of IP devices (e.g. Sonos, Philips Hue, V-Zug, Logitech Harmony, etc.) and IP-gateways. Remote access with your smartphone via the digitalSTROM cloud. Server app allow addition features such as timer, send notifications via push and email, etc. Configuration via the web browser without any additional software. 	1

digitalSTROM Server IP



CODE	DESCRIPTION	
dSS-IP	<ul style="list-style-type: none"> Integration of IP devices such as Sonos, Philips Hue lights or Smarter iKettle. Easy connection and interaction of devices with each other. Convenient operation via smartphone apps or voice. Intelligent services that are constantly learning. Connected IP devices are detected on the network and labeled as digitalSTROM device integrated. Easy setting over a web interface. <p>Package contains: 1x dSS-IP, Model: MiniM8S II 1x Network Kabe</p>	1


DinClip



CODE	DESCRIPTION	
dS-DinClip200	DinClip - Set of 5 pcs	1


JOKER 4-way Push-button Terminal



CODE	DESCRIPTION	
SW-TKM200	Connection of 4 standard 230V buttons For buttons from any switch program (light, shading, audio, etc.)	1

JOKER 2-way Push-button Terminal



CODE	DESCRIPTION	
SW-TKM210	Connection of 2 standard 230V buttons For buttons from any switch program (light, shading, audio, etc.)	1

LIGHT Terminal Block LIGHT 1-Step Push-button Terminal with Dimmer



CODE	DESCRIPTION	
GE-TKM210	Connection for a typical 230V button dimmer output at the terminal Change brightness in dimmer mode Switch the connected luminaire on and off via dS commands	1

LIGHT Terminal M Switch/Dimmer 150W/105VA



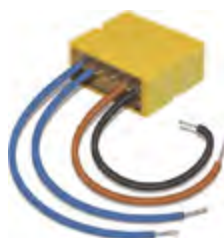
CODE	DESCRIPTION	
GE-KM200	<ul style="list-style-type: none"> › For the connection of electrical loads (e.g. ceiling lights or wall lights) › Switch connected luminaires on and off via the 230V line › Change brightness in dimmer mode › Switching also possible without digitalSTROM › Dimming curve can be adapted via dSS 	1

LIGHT Terminal L Switch 1400W/700VA



CODE	DESCRIPTION	
GE-KL200	<ul style="list-style-type: none"> › For connection of large lamp loads › Built-in behind the button › Connected loads can be controlled via the 230V line via digitalSTROM commands. › Switching also possible without digitalSTROM 	1


LIGHT Terminal M Universal Dimmer



CODE	DESCRIPTION	
GE-KM300	<ul style="list-style-type: none"> › Detects the connected load in dimming mode and automatically selects dimming mode › The dimming curve of the terminal can be changed with the Dim Wizard (app on the dSS server) › Switching operation for non-dimmable lamps/light sources › No button connection 	1


digitalSTROM Residual Voltage Filter



CODE	DESCRIPTION	
GE-FD300	Avoids afterglow, flashing or continuous flickering of vulnerable LED/ESL lamps.	1


LIGHT Cord Dimmer M Switch/Dimmer 150W/105VA



CODE	DESCRIPTION	
GE-SDM200	<ul style="list-style-type: none"> › For connection to free-standing luminaires (floor or table luminaires) › Suitable for retrofitting › Installation in the supply line of the luminaire › Switching on and off via the 230V line via dS commands › Brightness can be changed in dimmer mode 	1

LIGHT Cord dimmer S, black Switch/Dimmer 150W/105VA



CODE	DESCRIPTION	
GE-SDS200-CS (Black)	<ul style="list-style-type: none"> › Connection to free-standing luminaires for retrofitting › Installation as supply line for the › Switch on and off via the 230V line via digitalSTROM commands › Change brightness in dimmer mode › Operation via rocker switch with two buttons, with configurable features 	1

LIGHT Cord dimmer S, White Switch/Dimmer 150W/105VA



CODE	DESCRIPTION	
GE-SDS200-CW (White)	<ul style="list-style-type: none"> › Connection to free-standing luminaires for retrofitting › Installation as supply line for the › Switch on and off via the 230V line via digitalSTROM commands › Change brightness in dimmer mode › Operation via rocker switch with two buttons, with configurable features 	1

LIGHT Cord dimmer M (Euro plug), black, pluggable Switch/Dimmer 150W/105VA



CODE	DESCRIPTION	
GE-SDM200-CS (Black)	<ul style="list-style-type: none"> › For connection to free-standing luminaires (floor or table luminaires) › Suitable for retrofitting › Switching on and off via the 230V line via dS commands › Brightness can be changed in dimmer mode 	1

1-10V Universal Module



CODE	DESCRIPTION	
GE-UMV200	<ul style="list-style-type: none"> › Control of LED and fluorescent lamp ballasts with analogue dimming input (1..10 V) › 4 output channels › 1 input for one operator button › Complete switching off of the connected devices via switch relay 	1

SHADE Terminal Block L Shade Shutters



CODE	DESCRIPTION	
GR-KL200	<ul style="list-style-type: none"> › Connection of roller shutter drives with mechanical limit switches › Control of connected loads via the 230V line via digitalSTROM commands › Drive can also be operated via the button without digitalSTROM 	1

SHADE Terminal Block L Blinds



CODE	DESCRIPTION	
GR-KL210	<ul style="list-style-type: none"> › Connection of awning drives with mechanical limit switches › Control of connected loads via the 230V line via digitalSTROM commands › Drive can also be operated via the button without digitalSTROM 	1

SHADE Terminal Block L Venetian Blinds



CODE	DESCRIPTION	
GR-KL220	<ul style="list-style-type: none"> › Connection of lamella blind drives with adjustable lamella angle and two mechanical limit switches › Control of connected loads via the 230V line via digitalSTROM commands › Drive can also be operated via the button without digitalSTROM 	1


SHADE Relay Terminal Block Venetian Blinds, Hirschmann Plugs



CODE	DESCRIPTION	
GR-HKL230	<ul style="list-style-type: none"> › Connection of lamella blind drives with adjustable lamella angle and two mechanical limit switches › Control of connected loads via the 230V line via digitalSTROM commands 	1




HEATING/COOLING Terminal Block M for Thermoelectric Control Valves

CODE	DESCRIPTION	
BL-KM200	<ul style="list-style-type: none"> > For connection of thermoelectric actuators > The terminal block responds directly to the actuating values of a digitalSTROM installation with individual room temperature > Switchable for NC/NO valves 	 1

FTW06 dS Gira E2 rws



CODE	DESCRIPTION	
X-TK-624787	<p>Living Room Sensor for Relative Humidity and Temperature (Flush mounting) 55 x 55mm frame White matt finish</p> <ul style="list-style-type: none"> > Monitoring of the current room temperature and humidity > Measured values are automatically made available to the digitalSTROM temperature control system 	 1


FTW04ds surface mounting sensor



CODE	DESCRIPTION	
X-TK-619219	<p>Thermokon Sensor for Relative Humidity and Temperature</p> <ul style="list-style-type: none"> > Monitoring of the current room temperature and humidity > Measured values are automatically made available to the digitalSTROM temperature control system 	 1


Push-Button Panic



CODE	DESCRIPTION	
RT-SDM200	Panic button function (digitalSTROM triggers "alarm" in the house)	1


JOKER 4-Way Automation Terminal Block



CODE	DESCRIPTION	
SW-AKM200	Connection of 1-4 different sensors with 230V switching output (e.g. motion detectors, wind and rain sensors). Sensor states for controlling the loads are transferred to the dS system via the 230V line	1


JOKER 2-Way Automation Terminal Block



CODE	DESCRIPTION	
SW-AKM210	Connection of 1-2 different sensors with 230V switching output (e.g. motion detectors, wind and rain sensors). Sensor states for controlling the loads are transferred to the dS system via the 230V line	1

JOKER L Terminal Switch 1400W/700VA



CODE	DESCRIPTION	
SW-KL200	Connection of 1-2 different sensors with 230V switching output (e.g. motion detectors, wind and rain sensors). Sensor states for controlling the loads are transferred to the dS system via the 230V line	1

Universal Relay Module



CODE	DESCRIPTION	
SW-UMR200	Potential-free capture of mains and low voltage signals (e.g. from bell systems). Switching of loads. Inputs and 2 potential-free change-over contacts. Input states in the digitalSTROM system for triggering processes	1

u::lux Switch dS



CODE	DESCRIPTION	
	Intelligent Room Control Unit with 55 x 55 Design (Flush-Mounted)	
X-UL-10230AB	● > Display and operation of room and range buttons > Control of ventilation and room temperature	1
X-UL-10230	○ > Display of current weather and temperature data > Option to report faults or alarms acoustically and visually > Switch between day and night mode	

u::lux AddOn RH+Temp



CODE	DESCRIPTION	
X-UL-10952AB	● Additional module for measuring air humidity and temperature	1
X-UL-10952	○	

u::lux AddOn MD+RH+Temp



CODE	DESCRIPTION	
X-UL-11092AB	● Additional module for measuring temperature, air humidity & motion sensor	1
X-UL-11092	○	

u::lux AddOn CO2+RH+Temp+CO2



CODE	DESCRIPTION	
X-UL-11103AB	● Additional module for measuring CO2, air humidity & temperature.	1
X-UL-11103	○	

FTW06 LCD dS Gira E2 rws



CODE	DESCRIPTION	
	Multifunctional Room Control Unit (Flush-Mounted) 55 x 55mm	
X-TK-624800	<ul style="list-style-type: none"> > Frame White matt finish > Control of ventilation groups > Monitoring and display of the current room temperature and humidity 	1


Thanos rH S dS



CODE	DESCRIPTION	
	Touch room control unit (flush-mounted)	
X-TK-613446	● Elegant control unit for complete and central room control	1
X-TK-613439	○ Easy mounting on the wall in combination with a standard flushmounted device box.	

Cord Switch L (Schuko), black, pluggable



CODE	DESCRIPTION	
SW-SSL200-FS	<ul style="list-style-type: none"> › For pluggable connection of large electrical loads › For buttons from any switch program (light, shading, audio, etc.) › Control of the connected loads via the 230V line via digitalSTROM commands 	 1

Device Filter, black, pluggable



CODE	DESCRIPTION	
dS-FD200-FS	<p>In rare cases, high interference pulses enter the 230V network during the operation of electrical devices, which can disrupt digitalSTROM communication. In such cases, the device filter is inserted into the connection cable of the interfering device and the socket outlet and minimises interference to the mains supply</p>	 1



What is **Fibaro**?

- › **Fibaro** is the best advanced wireless solution in the home automation market. It offers a non-invasive installation process to the existing décor with minimal disruption.
- › Aesthetic of the modules and sensors are miniaturized to provide flexibility to place them anywhere in the house.
- › Wireless nature of the system will mean that it can be retrofitted at any time and they are not permanent to building's infrastructure.
- › It is simply smart home without the need to go through expensive renovations.
- › Modular approach of **FIBARO** allows you to start small and grow as your needs change.

Your FIBARO home automation system will keep a track of all the individual devices connected within the network. In case of any accidents or mishaps, the system will notify you through its in-app notifications and helps you take the necessary action in time. The system will also update and keep backup of your settings at regular intervals of time. Additionally, users are also informed in case any battery powered devices need the necessary battery replacement.

The modules for the FIBARO Home Automation are aesthetically designed giving users the required flexibility to be placed anywhere within your home without disturbing the existing decor. The wireless functionality of the FIBARO Home Automation system modules offer easy retrofit solutions without the need for any kind of expensive changes or renovations within your home wiring systems. Due to this modular feature, users can even expand their FIBARO eco-system with ease.



Temperature control



Lighting Control & Management



Doors and windows monitoring



Temperature management



Fire protection



Flood detection



Roller shutter control



Control of electrical appliances



Multimedia management



Watering system management



Carbon monoxide detection



Anti-theft protection



Compatibility and the Z-Wave technology

Fibaro is compatible with Majority of mobile phones available on the market. Wireless products from nearly 300 independent manufacturers and with all other devices. All IP cameras available on the market - upon detecting an incident, the system will send a picture or a video to your mobile phone.

User friendly and Intuitive Interface

The main control units of the **FIBARO** system like the Home Center and the Home Center 2 come with extremely user friendly and intuitive interface that lets users control various aspects of their **FIBARO** Home Automation system with ease. Moreover, with the help of **FIBARO** apps available for Apple and Android devices, users can remotely control and monitor the **FIBARO** system from anywhere in the world.

Home Center Lite



CODE	DESCRIPTION
FGHCL	Home Center Lite is an extremely compact controller using a web based and featuring graphic interface for simple programming.

Home Center 2



CODE	DESCRIPTION
FGHC2	Home Center 2 is an indispensable part of the FIBARO System. The smart home hub collects and analyzes information about devices, communicates them with each other and thus directs the operation of the entire system and takes care of its security.

Home Center 3



CODE	DESCRIPTION
FGHC3	Home Center 3 is the most advanced smart home management unit in the world. Advanced technology within its components guarantees the highest stability and performance of the FIBARO System.

Home Center 3 Lite



CODE	DESCRIPTION
HC3L-001	Home Center 3 is Lite and smaller version of the most advanced smart home management unit in the world. The device has been designed based on the solutions used in the Home Center 3 platform.



Swipe



CODE	DESCRIPTION
FGGC-001	The intelligent SWIPE detects not only simple moves, but combinations of moves as well. The high resolution sensor interprets the most complex commands. You will be surprised by the power of your hands. Based on Z-Wave



Button (White)



CODE	DESCRIPTION
FGPB-101-1	FIBARO Button is a compact, battery-powered, Z-Wave Plus compatible device. It allows you to control devices through the Z-Wave network and run various scenes defined in FIBARO System.



Button (Black)



CODE	DESCRIPTION
FGPB-101-2	FIBARO Button is a compact, battery-powered, Z-Wave Plus compatible device. It allows you to control devices through the Z-Wave network and run various scenes defined in FIBARO System.



Button (Red)



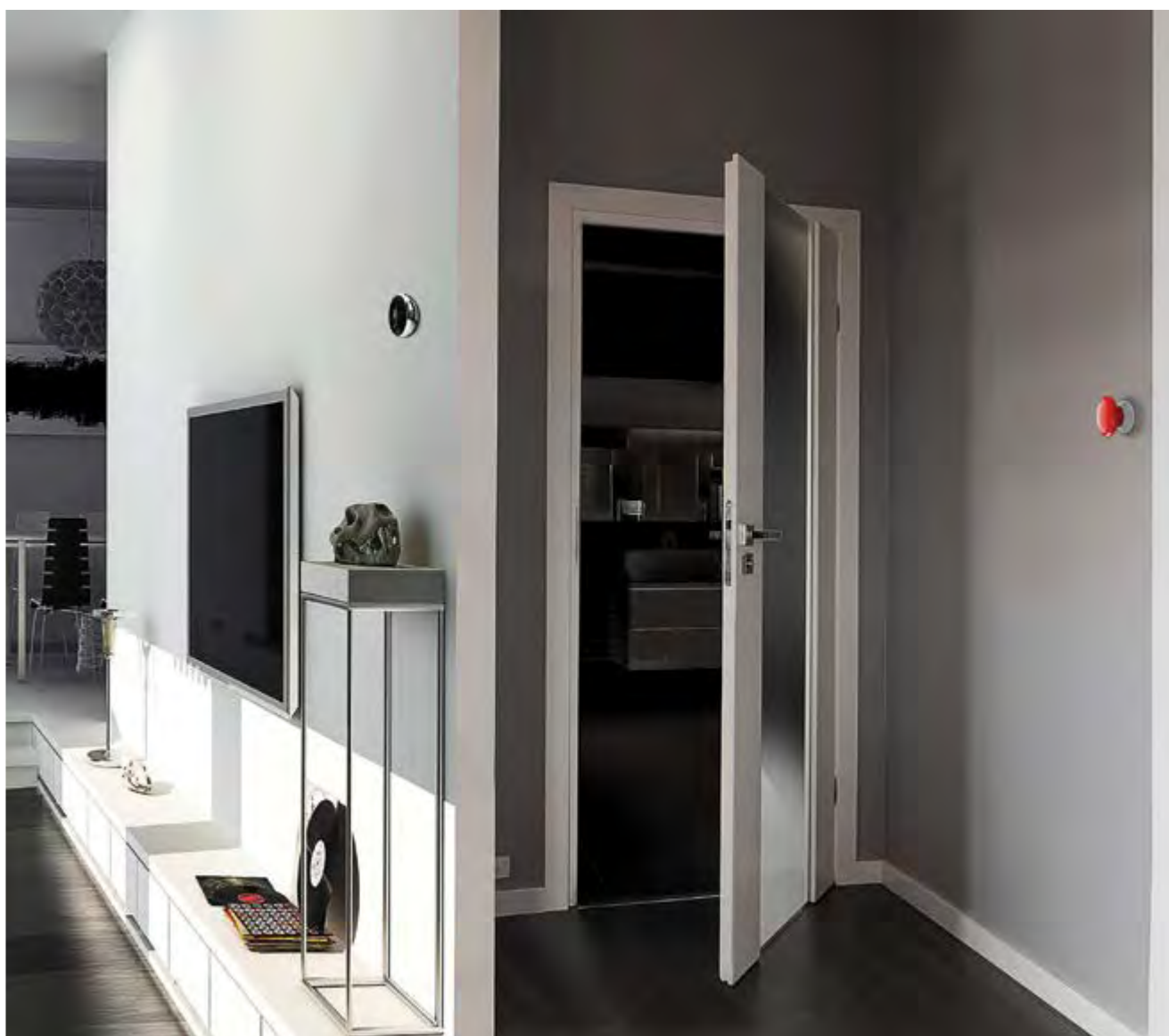
CODE	DESCRIPTION
FGPB-101-3	FIBARO Button is a compact, battery-powered, Z-Wave Plus compatible device. It allows you to control devices through the Z-Wave network and run various scenes defined in FIBARO System.



KeyFob



CODE	DESCRIPTION
FGKF-601	FIBARO KeyFob is a Z-Wave Plus compatible, battery-powered, compact remote control. Six buttons allow you to control other devices through the Z-Wave network and run various scenes defined in FIBARO System.



Smart Home



Dimmer



CODE	DESCRIPTION
FGD-212	Dimmer 2 is a compound dimmer switch unit adjusting luminous intensity which, despite its small size combines many practical functions. It is installed in electrical box or switch. Based on Z-Wave



Roller Shutter



CODE	DESCRIPTION
FGR-223	FIBARO Roller Shutter 3 is a new version of the radio-controller based on Z-Wave 5 technology. It works with motorized roller blinds, venetian blinds, awnings and gates. The Roller Shutter 3 is powered by a single-phase AC and provides precise positioning of blinds, awnings or gates so they can be set to the position you choose. The module is also equipped with a power metering feature when used with a FIBARO Home Center.



Single Switch



CODE	DESCRIPTION
FGS-213	The FIBARO Single Switch modules are key elements for managing your home. They will prove useful in different places and serve a variety of functions. Smart switch will let you turn on/off the lights, electrical appliances or cut off power from the sockets. Thanks to the power metering feature, it will provide precise information about electric energy consumption. Based on Z-Wave

Double Switch



CODE	DESCRIPTION
FGS-223	The FIBARO Double Switch modules are key elements for managing your home. They will prove useful in different places and serve a variety of functions. Smart switch will let you turn on/off the lights, electrical appliances or cut off power from the sockets. Thanks to the power metering feature, it will provide precise information about electric energy consumption. Based on Z-Wave

RGBW Controller



CODE	DESCRIPTION
FGRGBWM-442	RGBW Controller 2 is a plain, inconspicuous cube which allows you to adjust colours in your house the way you want them to be. Power Supply 12/24V DC.

Smart Module



CODE	DESCRIPTION
FGS-214	The remotely operated FIBARO Smart Module is designed to turn an electrical device or circuit on and off. The compact size of the device allows for the product to be installed in the housings of other devices. FIBARO Smart Module can be controlled either via the Z-Wave network or with a button connected directly to it



Double Smart Module



CODE	DESCRIPTION
FGS-224	The remotely operated FIBARO Double Smart Module is designed to turn up to two electrical devices or circuits on and off. The compact size of the device allows for the product to be installed in the housings of other devices. FIBARO Double Smart Module can be controlled either via the Z-Wave network or with a button connected directly to it.



Wall Plug



CODE	DESCRIPTION
FGWPF-102	FIBARO Wall Plug is the smallest and most attractive device of this type available in the world. A smart switch with power metering for electrical devices



Bypass



CODE	DESCRIPTION
FGB-002	FIBARO Bypass 2 is a device complementary to FIBARO Dimmer 2. Its installation makes possible to dim light sources with minimum power consumption, such as e.g. single 0.5 Watt LED.

Motion Sensor



CODE	DESCRIPTION
FGMS-001	The FIBARO Motion Sensor is a universal Z-Wave multi-sensor. Along with detecting motion the device measures the temperature and light intensity. The sensor has a built-in accelerometer to detect any tampering of the device. The FIBARO Motion Sensor is battery powered device and designed to be installed quickly and easily on any surface.

Smart Implant



CODE	DESCRIPTION
FGBS-222	FIBARO Smart Implant allows to enhance the functionality of wired sensors and other devices by adding Z-Wave network communication. You can connect binary sensors, analog sensors, DS18B20 temperature sensors or DHT22 humidity and temperature sensor to report their readings to the Z-Wave controller. It can also control devices by opening/closing output contacts independently of the inputs.

Flood Sensor



CODE	DESCRIPTION
FGFS-101	FIBARO Flood Sensor is a universal, Z-Wave Plus compatible, flood and temperature sensor. Device can be battery or VDC powered (12 or 24 VDC).



Smoke Sensor



CODE	DESCRIPTION
FGSD-002	The FIBARO Smoke Sensor is a universal, optical Z-Wave smoke detector. Device has a builtin temperature sensor, which is programmable indicator of exceeding set temperature level. Device can be battery or VDC powered (12 or 24 VDC).



Intercom



CODE	DESCRIPTION
FGIC-002	FIBARO Intercom (FGIC-002) is a smart device which can show you everyone who has arrived at your doorstep with a 180-degree high-definition view and night vision.



CO sensor



CODE	DESCRIPTION
FGCD-001	FIBARO CO Sensor is an ultra-light, compact, battery-powered carbon monoxide detector, designed to be placed on a wall. Additionally, The device is equipped with a temperature sensor.

Door - Window sensor



CODE	DESCRIPTION
FGDW-002-1	FIBARO Door/Window Sensor 2 is a wireless, battery powered, Z-Wave Plus compatible magnetic contact sensor.. It is equipped with a built-in temperature sensor.

The heat controller

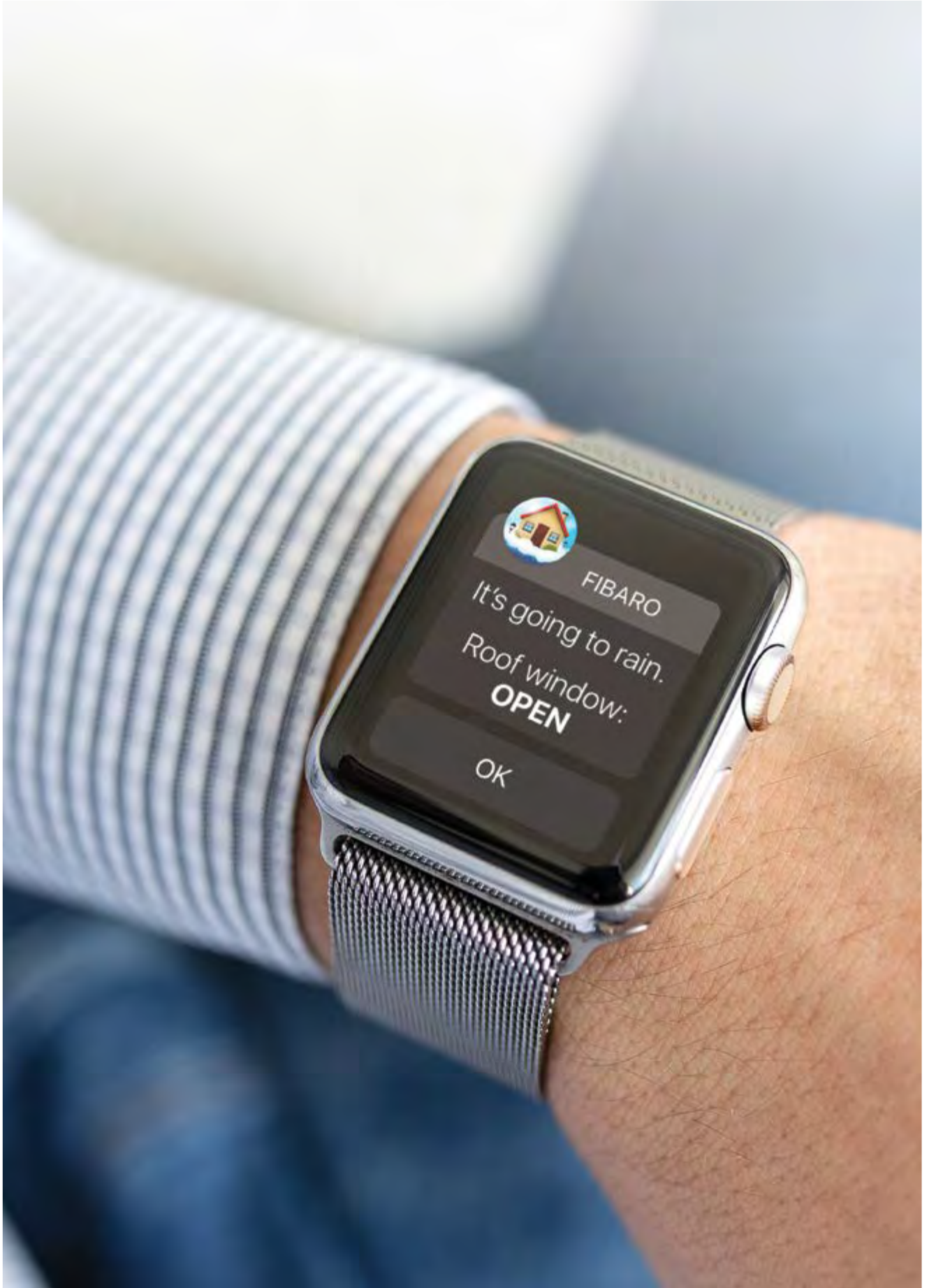


CODE	DESCRIPTION
FGT-001	FIBARO The Heat Controller (Z-Wave) is a remotely controlled thermostatic head to control temperature in your room. It measures the temperature and automatically adjusts the heat level. It can be mounted without tools on three types of thermostatic radiator valves.

Temperature sensor



CODE	DESCRIPTION
FGBRS-001	FIBARO Temperature Sensor (FGBRS-001) is a wireless temperature sensor which can be used with FIBARO The Heat Controller to provide best temperature regulation.



Walli Outlet F



CODE	DESCRIPTION
FGWOF-011	○ An intelligent electrical outlet that allows to control and manage the device connected to it. Equipped with a LED ring, informing about current consumption. The maximum load is 3680W
FGWOF-011-8	●

Walli Switch



CODE	DESCRIPTION
FGWDSEU-221	○ An intelligent switch integrated with the button used in a system with one or two independently controlled loads. Designed for quick installation in sockets. Equipped with a LED ring and functionalities known from FIBARO modules.
FGWDSEU-221-8	●

Walli Dimmer



CODE	DESCRIPTION
FGWDEU-111	○ Intelligent lighting dimmer with integrated light switch. Works with commercially available lighting source such as: LED diodes, compact lamps, traditional bulbs and halogen lamps. The device is equipped with automatic calibration functions and active power and energy measurement.
FGWDEU-111-8	●

Walli Roller Shutter



CODE		DESCRIPTION
FGWREU-111	<input type="radio"/>	Intelligent roller blinds controller that allows you to manage the gate, roller blinds, blinds and scenes with a single click.
FGWREU-111-8	<input checked="" type="radio"/>	

Walli Controller



CODE		DESCRIPTION
FGWCEU-201-1	<input type="radio"/>	An intelligent on-wall battery or DC operated controller. Can be used in Walli multiframes and act as additional button for other devices.
FGWCEU-201-8	<input checked="" type="radio"/>	

Walli N TV-SAT Outlet



CODE		DESCRIPTION
FGWTFEU-021	<input type="radio"/>	AVAILABLE UPON REQUEST
FGWTFEU-021-8	<input checked="" type="radio"/>	High quality tool-free TV-SAT socket with 2 SAT connectors and 1 TV connector.

Walli N Ethernet Outlet



CODE	DESCRIPTION
FGWEEU-021	<input type="radio"/> AVAILABLE UPON REQUEST
FGWEEU-021-8	<input checked="" type="radio"/> Double Ethernet socket equipped with 2 RJ45 cat.6 sockets.

Walli N USB Outlet



CODE	DESCRIPTION
FGWU-021	<input type="radio"/> AVAILABLE UPON REQUEST
FGWU-021-8	<input checked="" type="radio"/> Socket with a double USB charger with a 2400mA charging current (total).

Walli N Outlet type F



CODE	DESCRIPTION
FGWSONF-011	<input type="radio"/> AVAILABLE UPON REQUEST
FGWSONF-011-8	<input checked="" type="radio"/> Single high quality power outlet equipped with one socket type F. Max load current is 16A.

Walli Switch Unit



CODE	DESCRIPTION
	AVAILABLE UPON REQUEST
FG-WDSEU221-AS-8001	An intelligent switch unit integrated with the button used in a system with one or two independently controlled loads. Compatible with mounting frames: <ul style="list-style-type: none"> > GIRA - System 55 > Legrand - Céliane > Schneider - Odace

Walli Dimmer Unit



CODE	DESCRIPTION
	AVAILABLE UPON REQUEST
FG-WDEU111-AS-8001	Intelligent lighting dimmer unit with integrated light switch. Works with commercially available lighting source such as: LED diodes, compact lamps, traditional bulbs and halogen lamps. Compatible with mounting frames: <ul style="list-style-type: none"> > GIRA - System 55 > Legrand - Céliane > Schneider - Odace

Walli Roller Shutter Unit



CODE	DESCRIPTION
	AVAILABLE UPON REQUEST
FG-WREU111-AS-8001	Intelligent roller blinds controller unit that allows you to manage the gate, roller blinds, blinds and scenes with a single click. Compatible with mounting frames: <ul style="list-style-type: none"> > GIRA - System 55 > Legrand - Céliane > Schneider - Odace

Single Cover Plate



CODE	DESCRIPTION
FG-Wx-PP-0001	<input type="radio"/> AVAILABLE UPON REQUEST
FG-Wx-PP-0001-8	<input checked="" type="radio"/> Single cover plate for Walli devices.

Double Cover Plate



CODE	DESCRIPTION
FG-Wx-PP-0003	<input type="radio"/> AVAILABLE UPON REQUEST
FG-Wx-PP-0003-8	<input checked="" type="radio"/> Double cover plate for Walli devices.

Triple Cover Plate



CODE	DESCRIPTION
FG-Wx-PP-0004	<input type="radio"/> AVAILABLE UPON REQUEST
FG-Wx-PP-0004-8	<input checked="" type="radio"/> Triple cover plate for Walli devices.

Mounting Frame FIBARO/Gira55



CODE	DESCRIPTION
	AVAILABLE UPON REQUEST
FG-Wx-AS-4001	Mounting frame for Walli units installation with selected Gira fronts.



Mounting Frame Legrand



CODE	DESCRIPTION
AVAILABLE UPON REQUEST	
FG-Wx-AS-4002	Mounting frame for Walli units installation with selected Legrand fronts.



Mounting Frame Schneider



CODE	DESCRIPTION
AVAILABLE UPON REQUEST	
FG-Wx-AS-4003	Mounting frame for Walli units installation with selected Schneider fronts



Switch Button with lightguide



CODE	DESCRIPTION
FG-WDSEU221-AS-8100	<input type="radio"/> AVAILABLE UPON REQUEST
FG-WDSEU221-AS-8100-8	<input checked="" type="radio"/> Switch Button with lightguide for all FIBARO Walli fronts.



Switch Button Adapter Legrand/Gira



CODE	DESCRIPTION
AVAILABLE UPON REQUEST	
FG-WDSEU221-PP-0007	Button adapter for selected Legrand and Gira fronts.

Motion sensor



CODE	DESCRIPTION
FGBHMS-001	HomeKit-enabled multi-sensor using Bluetooth® low energy technology. Along with detecting motion, the accessory measures the ambient temperature and light intensity. The sensor has a built-in accelerometer to detect any tampering with the accessory.

Flood sensor



CODE	DESCRIPTION
FGBHFS-101	HomeKit-enabled water sensor using Bluetooth® low energy technology. Along with detecting water, the accessory also measures the ambient temperature. Tampering is detected whenever the accessory is moved or casing is opened.

Door Window Sensor



CODE	DESCRIPTION
FGBHDW-002	HomeKit-enabled Hall effect sensor using Bluetooth® low energy technology. Along with detecting positioning and opening/closing, the accessory also measures the ambient temperature. Opening is detected by separating the sensor's body and the magnet.

CO sensor



CODE	DESCRIPTION
FGBHCD-001	HomeKit-enabled carbon monoxide detector using Bluetooth® low energy wireless technology. Its high sensitivity allows to detect the presence of the carbon monoxide (CO) gas at the early stage in order to prevent carbon monoxide poisoning.



Single switch



CODE	DESCRIPTION
FGBHS-213	FIBARO Single Switch allows to control connected devices either via HomeKit technology (using Bluetooth® low energy) or via a switch connected directly to it. The active power and energy consumption metering functionality allows you to keep an eye on your bills and measurable savings.



Wall Plug F



CODE	DESCRIPTION
FGBWHWPF-102	FIBARO Wall Plug is a HomeKit-enabled smart plug using Wi-Fi® connection and Bluetooth® low energy wireless technology. This remotely controlled outlet adapter is equipped with an active power and energy metering function.



The Button



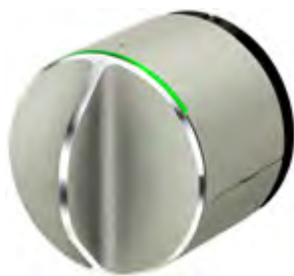
CODE	DESCRIPTION
FGBHPB-101	HomeKit-enabled, compact, battery-powered wireless controller using Bluetooth® low energy wireless technology. Various actions may be triggered with one clicks, two clicks or by holding the button down.



The Heat Controller



CODE	DESCRIPTION
FGBHT-001	FIBARO The Heat Controller is a remotely controlled thermostatic head to control temperature in your room. It can be mounted without tools on three types of thermostatic radiator valves.



Danalock V3



CODE	DESCRIPTION
DOZE2SI	Wireless smart lock that lets you easily control access to your home with your smartphone. Motorized locking assistance with Twist Assist



SALTO Nickel cylinder



CODE	DESCRIPTION
DCE33530NID5	Euro profile mechanical cylinder Nickel; 30, 40, 45 and 50 mm cylinder for SmartLock



SALTO Danapad (Bluetooth)



CODE	DESCRIPTION
DOBPOSI	Bluetooth Keypad for Danalock smart lock to perform openings through PIN codes.



Qubino Smart Meter



CODE	DESCRIPTION
QUSM1PH	Smart Meter measures the consumption of your devices or your entire home. Save energy and lower your bills by tracking energy consumption from your smartphone. Simple installation on the DIN rail of the distribution board. Up to 65A for single phase.



QUBINO Smart Meter 3 Phase



CODE	DESCRIPTION
QUSM3PH	Smart Meter measures the consumption of your devices or your entire home. Save energy and lower your bills by tracking energy consumption from your smartphone. Simple installation on the DIN rail of the distribution board. Up to 65A for three phase.



QUBINO BICOM 432 controller (IR)



CODE	DESCRIPTION
QUBICOM432	Contacteur for loads up to 32A. It communicates with the smart meter via IR.



QUBINO IKA232 controller



CODE	DESCRIPTION
QUIKA232	Contactor for loads up to 32A. It communicates with the smart meter via port.



QUBINO Flush Dimmer 0-10V



CODE	DESCRIPTION
QUFDIM010	This device is used for the lights and control of any device with 0-10V input control. The device has a standard 0-10V output and a multi-function input, which can be pressed a button / switch, stopwatch or 0-10V signal.



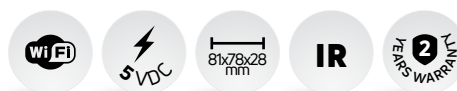
Qubino Smart Plug, 16A



CODE	DESCRIPTION
QUSPLUG	A Smart Plug 16A that controls on/off the connected device. Measures the power consumption of the connected device according to the principle of voltage and current signal sampling.



Intensis Universal IR AirConditioner-WiFi



CODE	DESCRIPTION
IS-IR-WMP-1	Intesis AC Interface Gateways allows a complete and natural integration to monitor and control, fully bi-directionally, AC units from the most popular manufacturers via IR.

MCOHome Water Heating Thermostat



CODE	DESCRIPTION
MH7H-WHB	● Recessed thermostat for room temperature control using Z-Wave wireless technology.
MH7H-WH	○ Applied to control wall mounted boiler, water valve/pump, under floor pipes, radiator system etc.

MCOHome Fan Coil Thermostat (2-pipe)



CODE	DESCRIPTION
MH8-FC	● Recessed thermostat for room temperature control using Z-Wave wireless technology. Applied to a 2-pipe fan coil AC system for indoor temperature control.
MH8-FC-W	○ It can read room temperature and local time, and automatically control fan speed based on the temperature difference.

MCOHome Fan Coil Thermostat (4-pipe)



CODE	DESCRIPTION
MH8-FC4	● Recessed thermostat for room temperature control using Z-Wave wireless technology. Applied to a 4-pipe fan coil AC system for indoor temperature control.
MH8-FC4-W	○ It can read room temperature and local time, and automatically control fan speed based on the temperature difference.



MCOHome CO2 Sensor



CODE	DESCRIPTION
MH9-CO2-WA	Air quality detector used to monitor CO2 concentration in industrial, agricultural, and residence environment, while monitoring the indoor temperature and humidity.



Remotec AC Master ZXT600



CODE	DESCRIPTION
ZW-REMEZXT600	ZXT-600, AC Master, is a Z-Wave plus compliant Z-Wave-to-IR Bridge to control split air conditioner by receiving Z-Wave command and translating to Infrared command. With its comprehensive built-in and cloud-stored IR database (library), ZXT-600 can control different brands and models of air conditioners worldwide.



DIN Adapter for FGS-213



CODE	DESCRIPTION
EUFS213	DIN Adapter for Fibaro Single Switch 2 FGS-213 with push-buttons is used to install the Fibaro Single Switch 2 FGS-213 module on DIN TH355 type rail in the distribution board.



DIN Adapter for FGS-223



CODE	DESCRIPTION
EUFS223	DIN Adapter for Fibaro Single Switch 2 with two push-buttons is used to install the Fibaro Single Switch 2 FGS-213 module on DIN TH355 type rail in the distribution board.



DIN Adapter for FGD-212



CODE	DESCRIPTION
EUFD212	DIN Adapter for Fibaro dimmer with two push-buttons is used to install the dimmer module on DIN TH355 type rail in the distribution board.




























































DIN Adapter for FGR-223



CODE	DESCRIPTION
EUFR223	DIN Adapter for Fibaro Roller Shutter with two push-buttons is used to install the roller shutter module on DIN TH355 type rail in the distribution board.

Symbols

	0-10V Dimming		Signal extender		Cat 6
	3 poles		Accelerometer		Cloud
	2 outputs		Επίτρoixn Τοποθέτησoν		Dimming
	Light sensor		Sound warning		Ethernet
	Temperature sensor		Maximum resistive load		GPS
	Multiple entering codes		Maximum current		HomeKit
	Depth		Consumption meter		IR transmitter
	RJ45		Nominal rated current		LCD display
	Single phase		Buttons		LUA
	Three phase		Video resolution		Master
	Dimensions 35mm		Output current 32A		Micro USB
	Installation in wall boxes		Power supply		Mini USB
	E27		Material Ni		ON/OFF
	Warranty		DIN rail installation		RTV
	Entering warning		Χωνευτή Τοποθέτησoν		SAT
	Battery type		PIN code		Slave
	Z-Wave signal strength		Anti-freeze operation		WiFi
	Battery status		Apple Siri		Z-wave
	LED indicator		Auto-Lock		Z-wave Plus
	dB		Bluetooth		2x USB





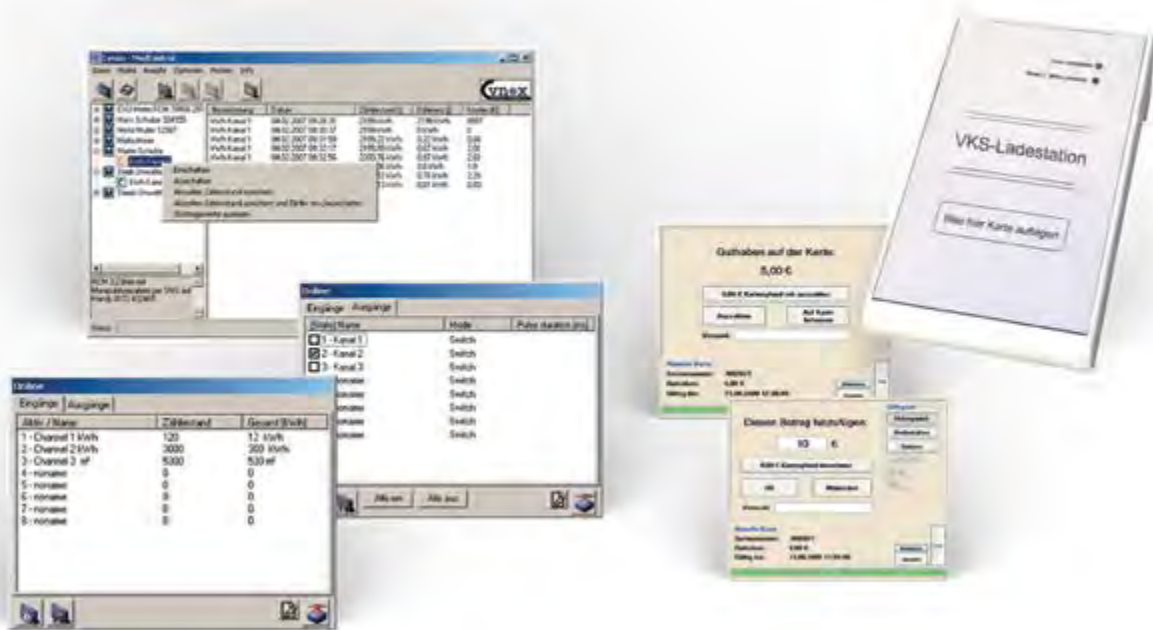
Chapter G Pedestals



The internal heavy-duty, hot-dipped galvanised steel chassis, combined with the option of stainless steel, aluminium or composite external skins ensures that the marina service pedestal is strong, durable and easy to maintain. Available in a variety of sizes with LED lighting as well as limitless electrical and water outlet combinations, this service pedestal is a cost effective solution for all waterfront locations.

Accommodating additional services such as TV, telephone and data outlets, hose pipes and hooks, locking/security facilities and metering as well as Rolec's industry leading utility management systems, the Campus Pedestal offers a versatile and adaptable solution for all.

- › Convenient cashless system - no admin authorisation required before using the pedestal
- › Control – only pay for consumption used
- › Visibility – easily track how much credit is remaining on the service pedestal and know when to top-up at the marina office
- › Self-operating system – the pedestals will dispense electricity/water services according to the credit made available
- › Pre-pay solution – berth holders always pay for their services upfront
- › Flexible tariffs – can apply multiple tariffs for different services
- › Self-contained – administered RFIDcards can only operate on your marina



Software is a cost effective stand alone pre-payment system, enabling the marina operator to take control of the services from the office, by issuing the boat owner with a re-useable RFID card, allowing flexibility for the boat owner to add or retract credit from their chosen service.

Utilising MID Approved meters, the software requires no additional cabling and no monthly fees, making this an idea solution to recover energy costs whilst falling in line with any budgetary constraints.

- › Easy to Follow on screen Instructions
- › Easy to Install
- › Facility to Set Validity Date
- › MID Approved Meters
- › Multiple Tariff Facility
- › No Additional Data Cabling Needed
- › No Monthly Charges
- › RFID cards are Charged/Refunded using Office Based Card Reader
- › Upfront Pay As You Go System
- › Contactless RFID technology
- › Credit return facility
- › Disposable or rechargeable security encrypted card
- › Prepayment function



RFID cards

Contactless, re-useable plastic RFID.
Complying with ISO7810.

CAMPUS100

- › V2A, 1.4301 (AISI304)
- › RFID or coin
- › Can accommodate sockets up to 32A
- › 1/2 inch Water Outlet Option
- › IP54
- › LED Illumination



CAMPUS200

- › Manufactured in marine grade HDPE, Campus 200 has been designed to withstand the effects of salt water, moisture, direct sunlight, along with extreme temperatures. Unique and innovative design also affords the complete segregation of it's water and power services as a standard feature.
- › High impact strength as well as excellent tensile strength, and the resistance to cracking.
- › The decorative textured surface does not show wear, dirt or scratches resulting in a minimal cleaning and maintenance programme.
- › 1/2, 3/4, 1 inch Water Outlet Options
- › 16amp to 125 amp outlets
- › Almost Maintenance Free
- › LED Illumination
- › Segregation of Water and Power services
- › UV Stabilised
- › With or w/o RFID



Installation materials for CAMPUS

Power supply

- CEE plugs IP44/67
- CEE plugs straight or angled
- With or w/o isolators

Energy meters

- Single or Three phase, MID approved up to 63A
- LCD monitor
- Digital

CAMPUS300

- › With it's non corrosive internal chassis, the Campus 300 offers style, strength, durability, along with it's outstanding ability to accommodate many services.
- › 1/2, 3/4, 1 inch Water Outlet Options
- › Can Accommodate Sockets upto 250Amps
- › High Density Polyethylene Internal Chassis
- › IP 65 Rated
- › UV Stabilised Scratch Resistant Acrylic Capped ABS)
- › LED Illumination



CAMPUS400

- › Campus400 with it's unique semi-recessed design of services giving a sleek stylish look offers durability and quality.
- › It has the ability to accommodate many other services that include TV, telephone and data whilst affording complete segregation of it's electricity and water services as a standard feature.
- › 1/2, 3/4, 1 inch Water Outlet Options
- › Can Accommodate Sockets upto 250Amps
- › Computer or SMART Card Control Options Available
- › IP 65 Rated
- › Low Energy LED Lighting
- › Manufactured in Aluminium Powder Coated or Stainless Steel Powder Coated
- › Segregation of Water and Power services
- › Sleek Attractive Design
- › TV, SAT, Telephone & Internet Options Available







Installation materials for CAMPUS

Power supply

- CEE plugs IP44/67
- CEE plugs straight or angled
- With or w/o isolators




Energy meters

- Single or Three phase, MID approved up to 63A
- LCD monitor
- Digital





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