

Household switchboards

Domae

The right solution for every home

Household guide

2002



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Schneider
 **Electric**
Building a New Electric World.

Merlin Gerin

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Domae

A manufacturer's know-how...

Safety of people and equipment is top on the list of priorities for electrical installation professionals who must demand products designed and produced by a manufacturer, guaranteeing:

- *compliance with electrical switchgear manufacturing standards,*
- *a high performance industrial process, producing quality switchgear complete with their quality certificates.*

Conform to European and international standards

Merlin Gerin guarantees conformity of Domae products to European and international standards for construction of equipment intended for domestic and similar installations:

- **EN 60898 - IEC 60898:**
"Overcurrent protection circuit-breakers".
- **EN 61008 - IEC 61008:**
"Automatic residual current circuit-breakers".
- **EN 61095 - IEC 61095:**
"Electromechanical contactors".
- **EN 61669-2-2 - IEC 60669-2-2:**
"Electromagnetic remote control switches (impulse relays)" a specific specification taken from the "Fixed installation switch" standard.
- **IEC 61643-1:**
"Overvoltage protection devices connected to LV distribution networks".
- **IEC 60670:**
"General rules concerning switchgear enclosures for fixed electrical installations for household or similar use".

Install according to proper practices

Standard EN 60364 – IEC 60364
"Electrical installation in buildings" defines switchgear installation rules.

The installation diagrams and recommendations proposed in this guide conform to this standard.

For Domae, ISO 9001/2000 certified production plants



Benefiting from the international experience of the 26 Merlin Gerin modular switchgear development and production plants, the Domae switchgear are all produced in ISO 9001/2000 certified plants.

From design through to dispatch, ISO certification guarantees professional organisation and consistent quality of products.



Guaranteed quality

Domae: Aenor approved

The quality marks prove product conformity to their reference standard.

They guarantee:

- safety of installers,
- suitability of products for their use.

Merlin Gerin guarantees that all Domae switchgear will have the Aenor  quality mark. This approval was awarded on completion of tests performed in an approved laboratory in the presence of independent third parties. This third-party organisation monitors conformity to the quality mark by means of new tests conducted after random sampling.



*For electrocution protection:
Domae residual current circuit-breakers*



*For short-circuit and overload protection:
Domae circuit-breakers*



*For easy installation:
Domae enclosures*



*For quick connection:
Domae comb busbars*



*For lightning protection:
Surge arrester*



*For remote control:
Impulse relay and contactor*

CE marking

An administrative formality for free movement and sales on the European Union territory.

Made compulsory by European directives, CE marking of Domae products satisfies both administrative and legal requirements: intended for European supervisory authorities (customs), the "CE marking" declarations and files are prepared under the manufacturer's sole responsibility and undergo no conformity checking by a third-party organisation.

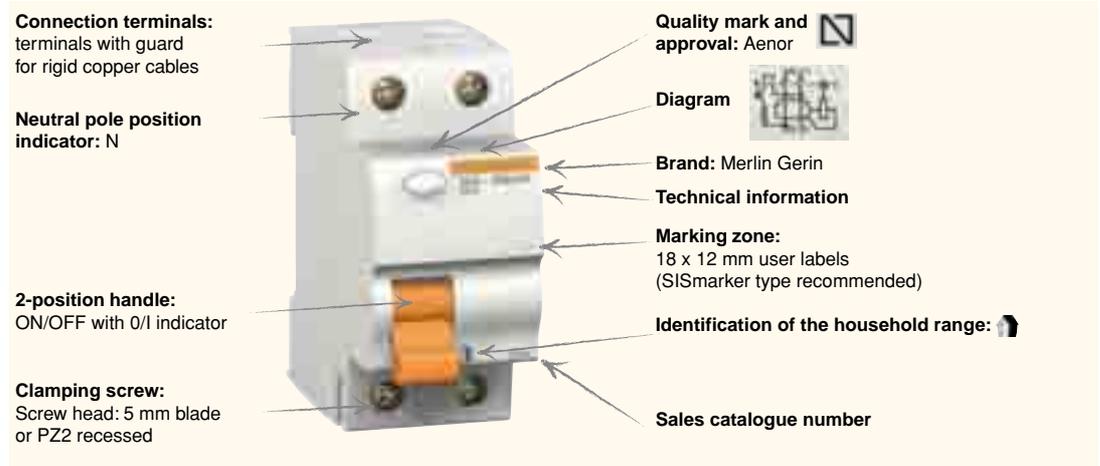
Only the quality marks, issued and checked by an independent third-party organisation, provide complete guarantee of operation, compatibility and safety according to national and international standards.



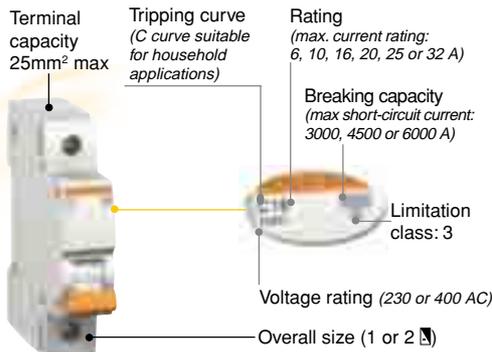
Domae

A comprehensive range...

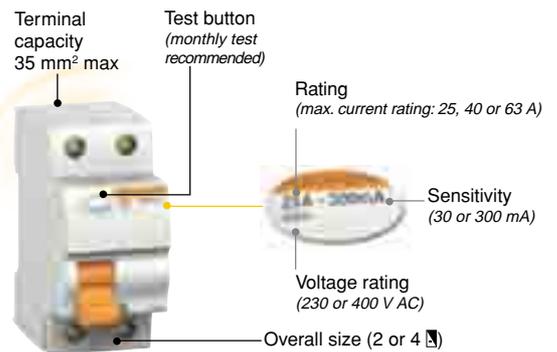
Domae products can be easily identified by their new design



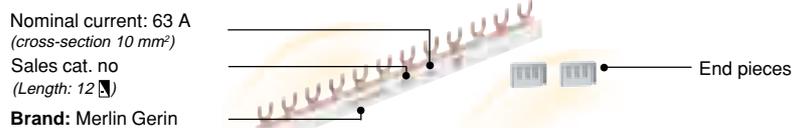
Domae circuit-breaker



Domae residual current circuit-breaker



Domae comb busbar



Surge arrester, Contactor, Impulse relay



To perform lightning protection and remote control functions, surge arresters, impulse relays and contactors can be incorporated in all *Domae* switchboards.

Consult the General Catalogue.

.... adapted solutions

The *Domae* enclosures



- **Colour:**
white RAL 9003
- **Material:**
insulating self-extinguishing material flame resistance 650°/30 s
- **Degree of protection against solids:**
IP40 (protected against solids dia. > 1mm)
- **Degree of protection against impacts:**
IK 07 (protected against impacts < 2 joules / 0.5 kg)
- **Class of protection against indirect contacts:**
class 2
- **Capacity:**
4, 6, 8, 12, 18, 24 or 36

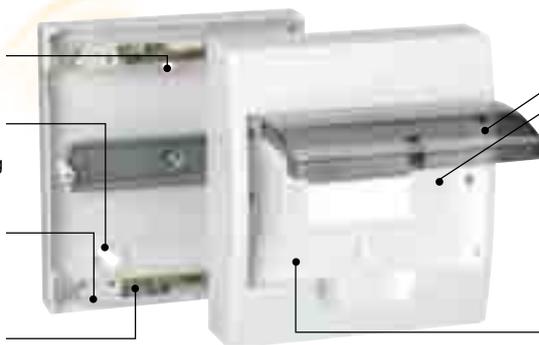
Domae surface-mounted enclosure

■ Back:

- **Easy to position:**
 - centred oblong opening (equipped with a class 2 enclosure insulating plug)
 - vertical position adjustment oblong holes (equipped with a class 2 enclosure insulating plug)

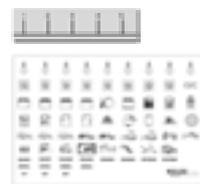
- **Convenient to install:**
Cable insertion by drilling pre-punched out zones

- **Quick to connect:**
terminal blocks



■ Cover:

- **Design:**
 - curved door
 - blanking plate
- **Professional:**
 - circuit identification by self-adhesive strip (enclosure delivered with one strip per row),
 - sheets of symbols to be pasted and key-lock for door locking (to be ordered separately).



- **Identification of the household range:**

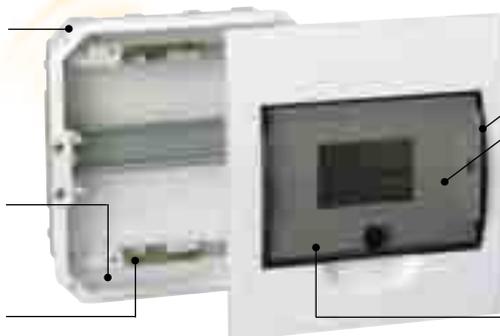
Domae flush-mounted enclosure

■ Tank:

- **Easy to flush mount:**
 - thin (depth: 7 cm)
 - flush-mounting in masonry
 - flush-mounting kit for hollow partition

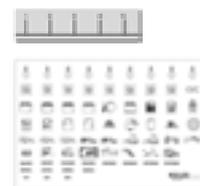
- **Convenient to install:**
Tube insertion by drilling pre-punched out zones

- **Quick to connect:**
terminal blocks



■ Cover:

- **Design:**
 - curved door
 - blanking plate
- **Professional:**
 - circuit identification by self-adhesive strip (enclosure delivered with one strip per row),
 - sheets of symbols to be pasted and key-lock for door locking (to be ordered separately).



- **Identification of the household range:**





Domae

Electrical hazards in the home

Choice of protection devices

Short-circuit and overload protection



	Cables	Protection
"Power socket circuit": <i>1 protection device for 8 sockets maximum</i>	2.5 mm ²	1 C16 circuit-breaker
"Lighting circuit": <i>1 protection device for 10 lighting points maximum</i>	1.5 mm ²	1 C10 circuit-breaker
"Specific circuit": <i>1 protection device by appliance (washing machine, cooker, water heater, etc.)</i>	4 mm ²	1 C32 circuit-breaker

Electrocution protection



1 protection device <i>for the "power socket circuit" and "specific circuit" assembly</i>		1 30 mA residual current circuit-breaker
--	--	--

Fire protection



1 general protection device		1 300 mA ID residual current circuit-breaker
-----------------------------	--	--

Lightning protection



1 general protection device		1 STD surge arrester
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Everyday comfort

Multiple control for lighting circuit



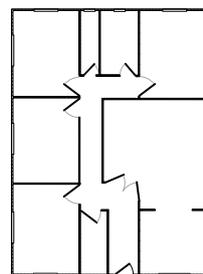
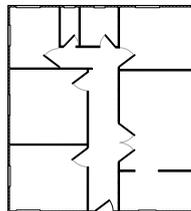
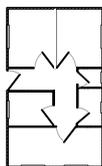
	Comande
1 relay by multiple control circuit	1 TL impulse relay

Power control



1 relay by specific circuit	1 CT contactor
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Standard equipment for the home



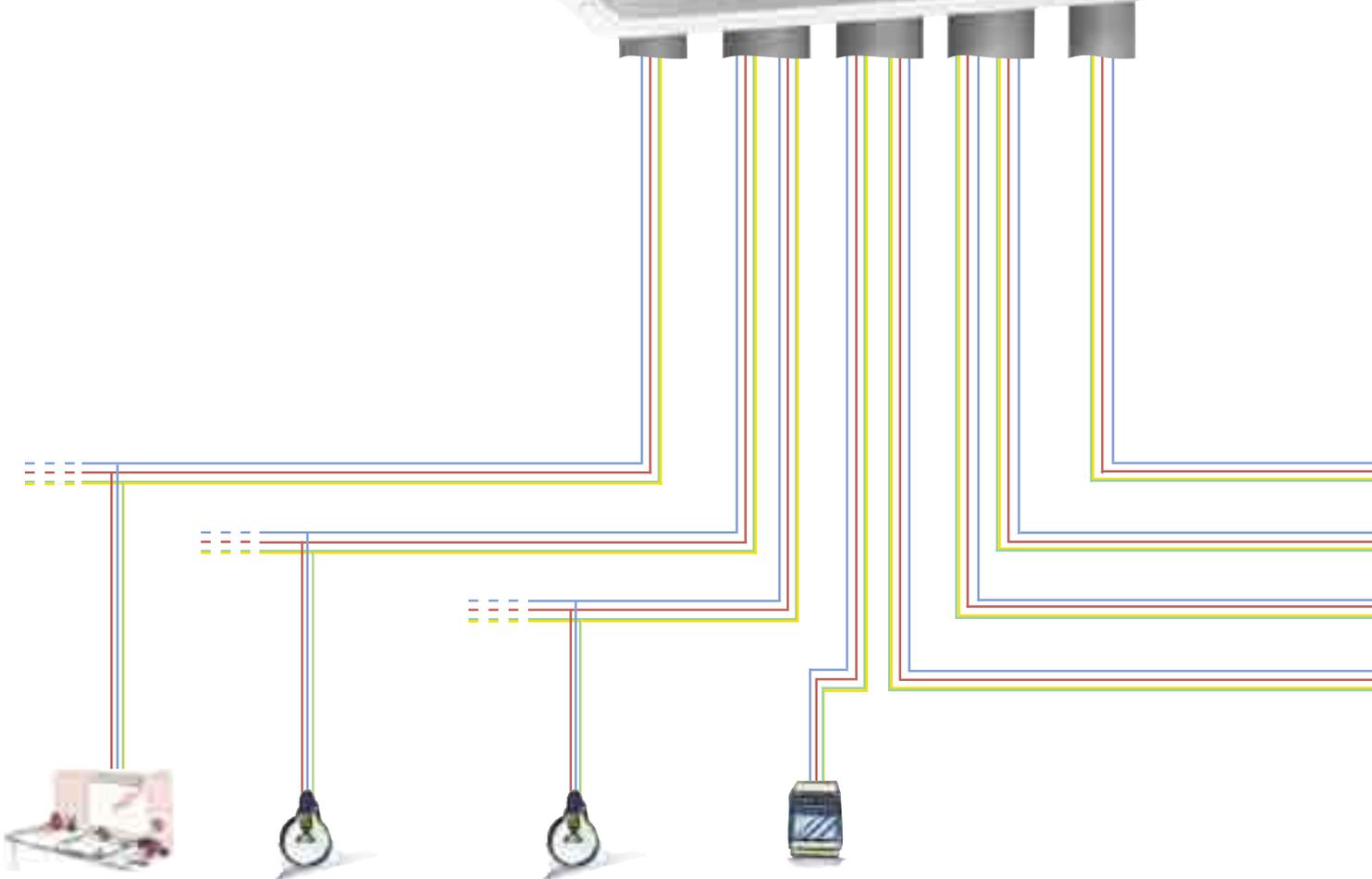
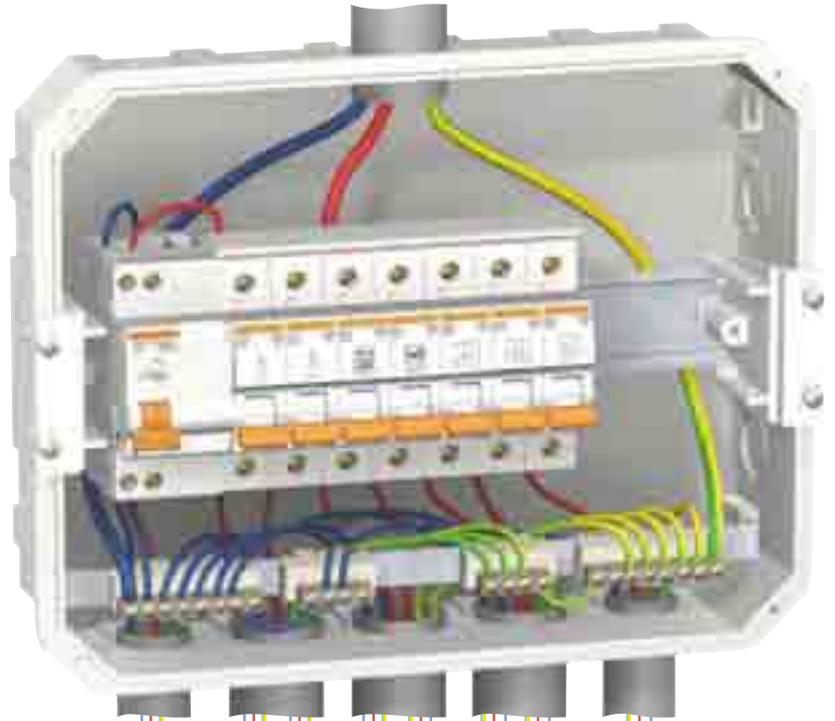
Surface area		60 m²	100 m²	>100 m²
Subscribed demand		3000 VA	6000 VA	>6000 VA
"Household incoming" connection				
Number of "power socket" circuits		1	2	2
Number of "lighting circuits"		1	1	2
Number of "specific circuits"		0	1	2
Distribution				
Living room 	1 socket for 6 m ² 1 lighting for 20 m ²	1 socket for 6 m ² 1 lighting for 20 m ²	1 socket for 6 m ² 1 lighting for 20 m ² 1 special purpose socket	
Bedroom 	1 lighting 2 sockets	1 lighting 3 sockets	1 lighting 3 sockets 1 special purpose socket	
Kitchen 	1 lighting 3 sockets	2 lightings 3 sockets 1 socket per electrical household appliance	2 lightings 3 sockets 1 special purpose socket 1 socket per electrical household appliance	
Bathroom 	1 lighting 1 socket	2 lightings 1 socket	2 lightings 3 sockets 1 special purpose socket	
Entrance hall 	1 lighting 1 socket	1 lighting for 12 m ² 1 socket for 12 m ²	1 lighting for 12 m ² 1 socket for 12 m ² 1 special purpose socket for 12 m ²	
Garage and outside 	1 lighting	1 lighting for 5 m ² 1 socket for 5 m ²	1 lighting for 5 m ² 1 socket for 5 m ² 1 special purpose socket for 5 m ²	

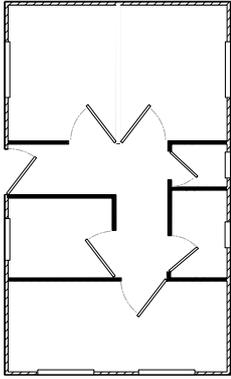




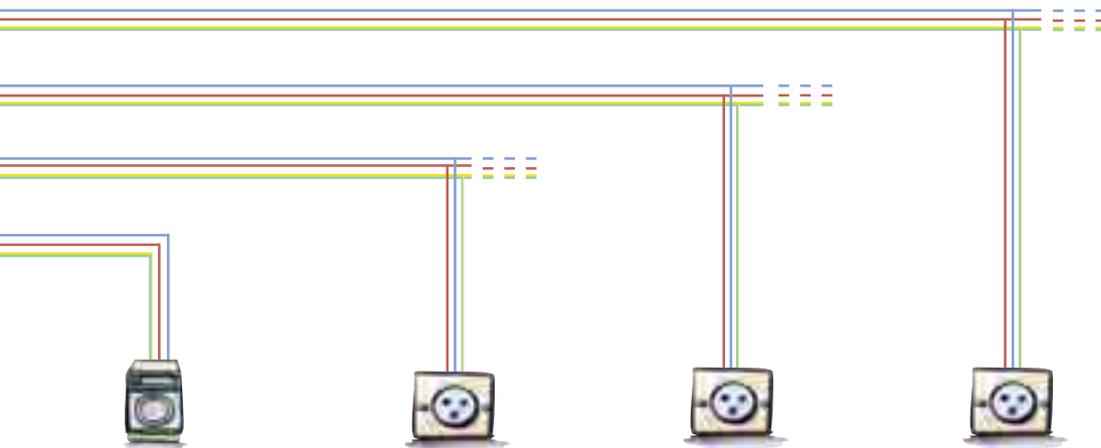
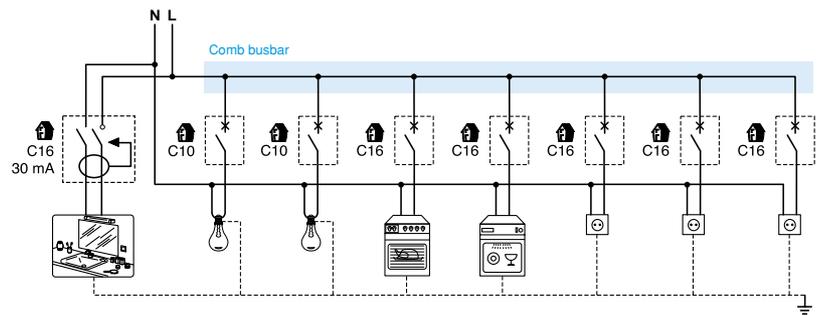
Domae Applications

The switchboard for a 60 m² home





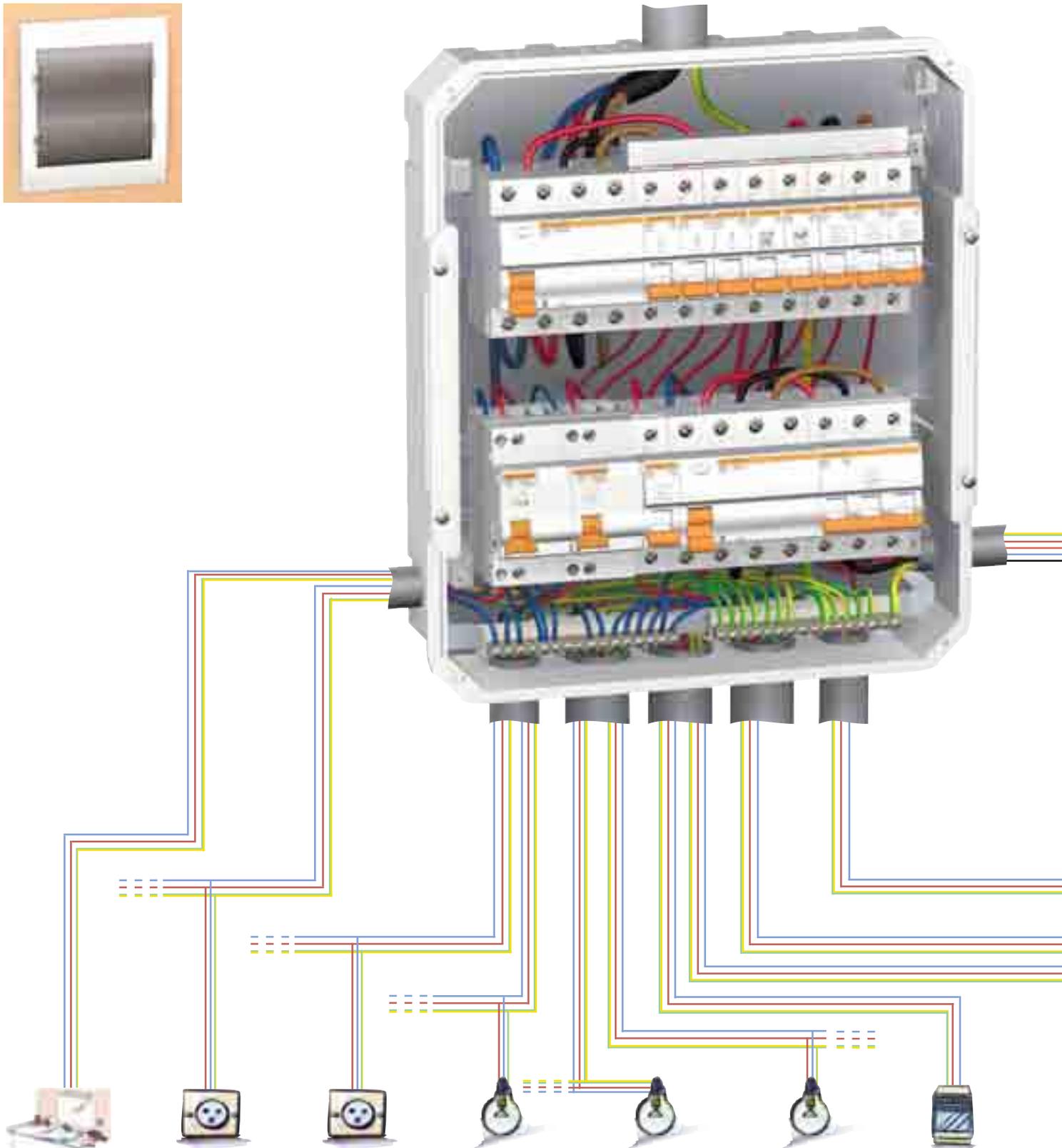
			Cat.no
■ 1 residual current device 1 pole + neutral	🏠 C16 30mA		XXXXXX
■ 2 circuit-breakers 1 pole	🏠 C10		XXXXXX
■ 5 circuit-breakers 1 pole	🏠 C16		XXXXXX
■ 1 surface-mounted enclosure (equipped with two 4-hole + two 8-hole terminal blocks)	🏠 12		XXXXXX
■ 1 comb busbar for 1 pole distribution			XXXXXX

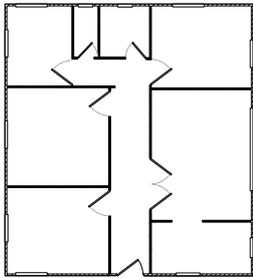




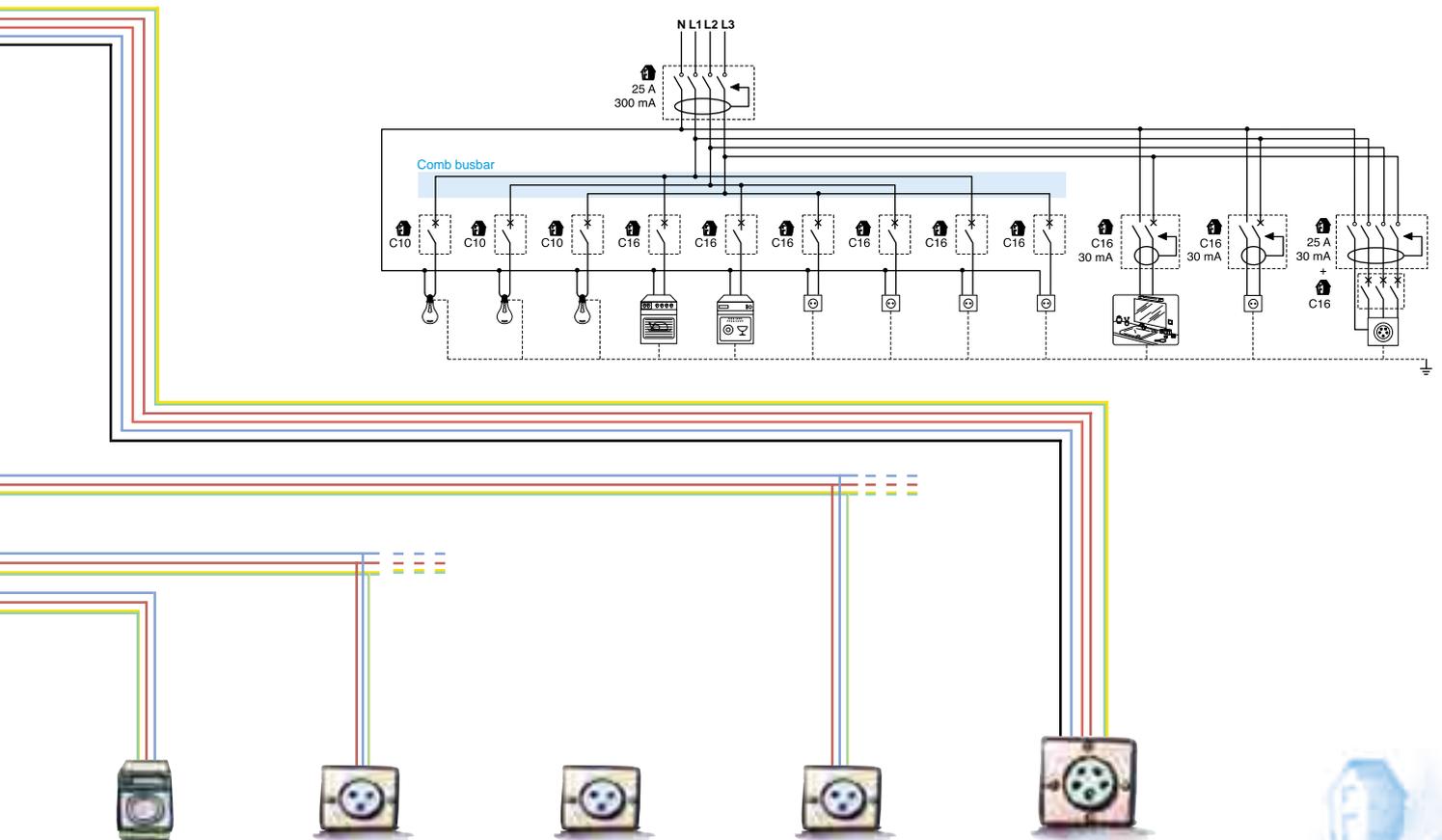
Domae Applications

The switchboard for a 100 m² home





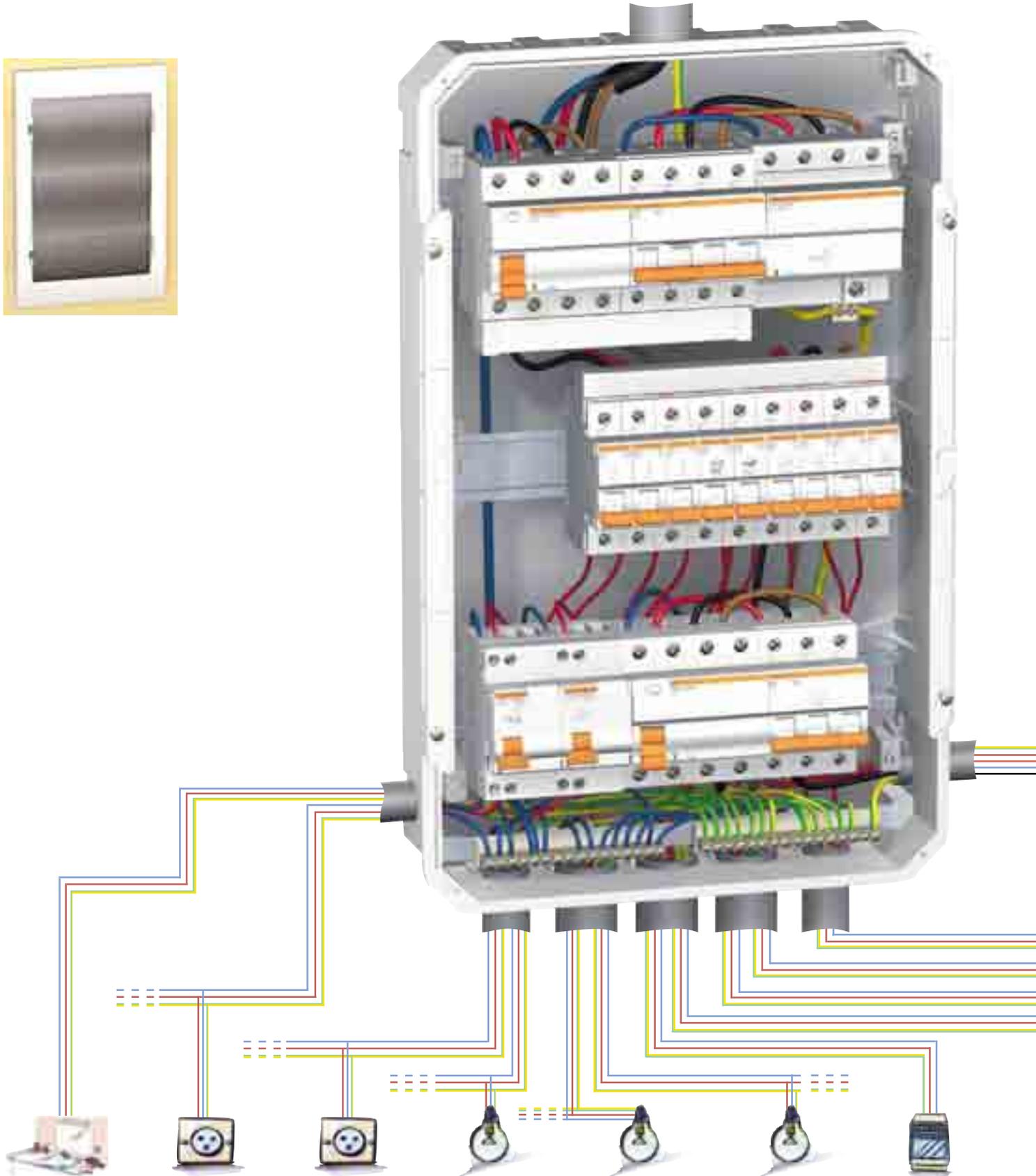
	Cat.no
■ 1 residual current circuit-breaker 4 poles 25A 300mA	XXXXXX
■ 3 circuit-breakers 1 pole C10	XXXXXX
■ 6 circuit-breakers 1 pole C16	XXXXXX
■ 2 residual current devices 1 pole + neutral C16 30mA	XXXXXX
■ 1 residual current circuit-breaker 4 poles 25A 30mA	XXXXXX
■ 1 circuit-breaker 3 poles C16	XXXXXX
■ 1 surface-mounted enclosure (equipped with two 16-hole terminal blocks) 24	XXXXXX
■ 1 comb busbar for 3 poles distribution	XXXXXX

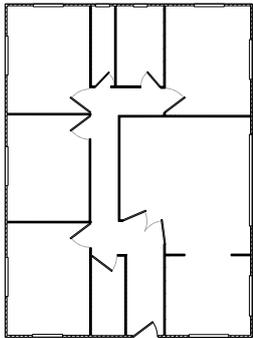




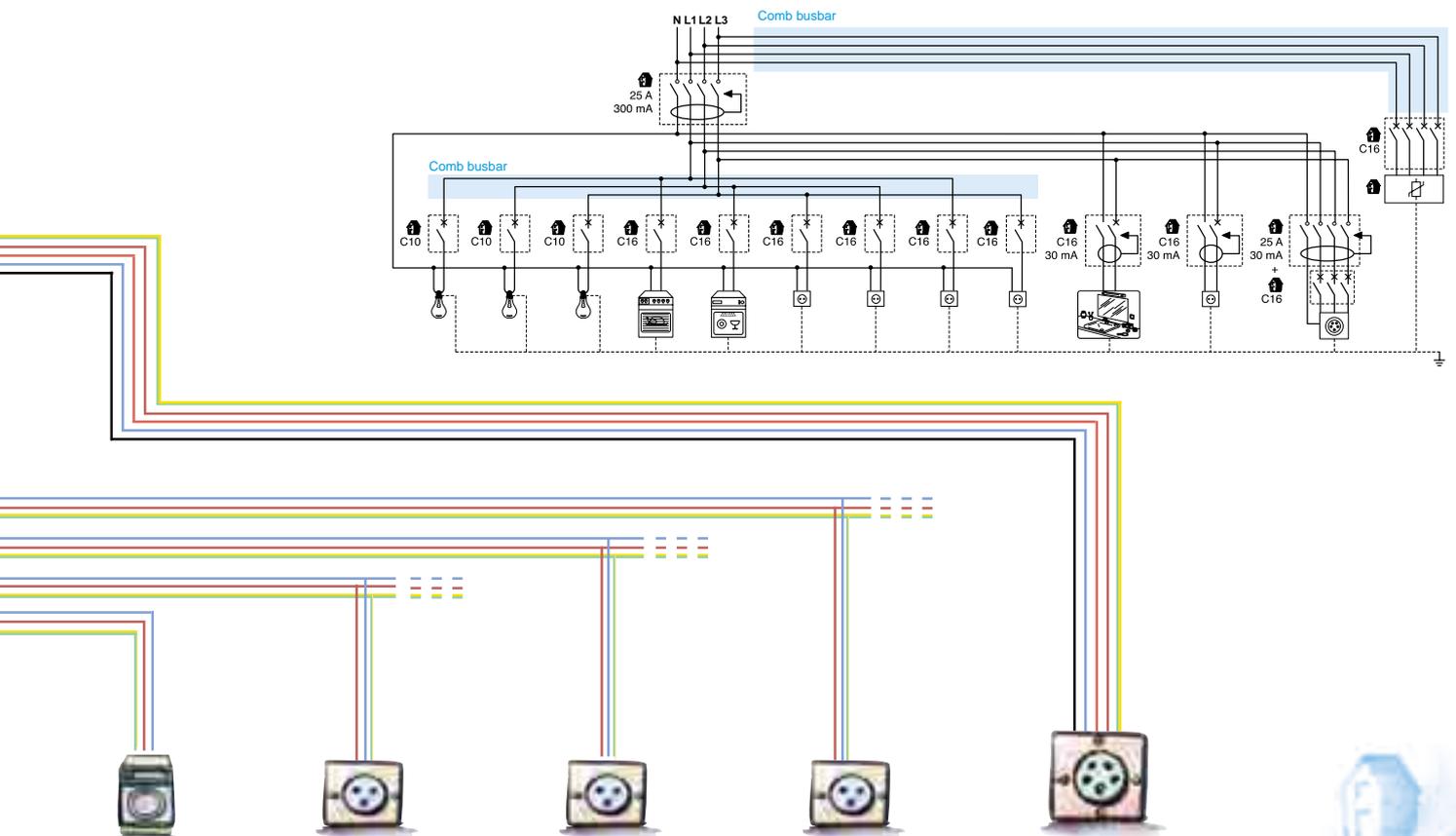
Domae Applications

The switchboard for a home of more than 100 m²





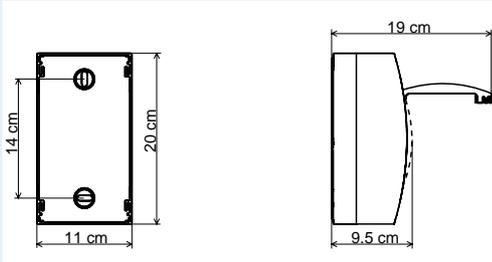
		Cat.no
■ 1 residual current circuit-breaker		
4 poles	25A 300 mA	XXXXXX
■ 1 circuit-breaker		
4 poles	C16	XXXXXX
■ 1 surge arrester		
4 poles		XXXXXX
■ 3 circuit-breakers		
1 pole	C10	XXXXXX
■ 6 circuit-breakers		
1 poles	C16	XXXXXX
■ 2 residual current devices		
1 pole + neutral	C16 30mA	XXXXXX
■ 1 residual current circuit-breaker		
4 poles	25A 30 mA	XXXXXX
■ 1 circuit-breaker		
3 poles	C16	XXXXXX
■ 1 surface-mounted enclosure		
(equipped with two 22-hole terminal blocks)	36	XXXXXX
■ 1 comb busbar		
for 3 poles distribution		XXXXXX
■ 1 comb busbar		
for 4 poles distribution		XXXXXX



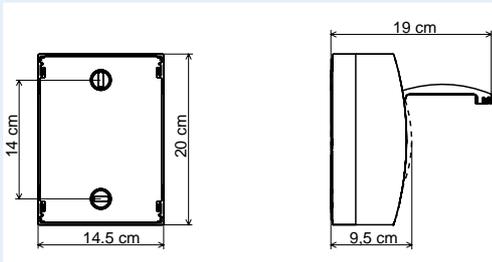


Domae Dimensions

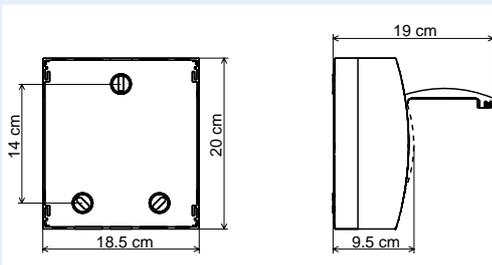
Surface-mounted enclosures



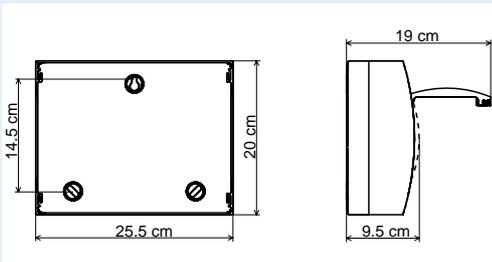
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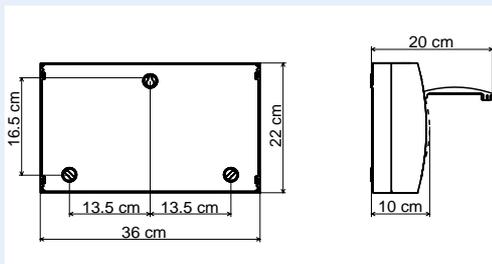
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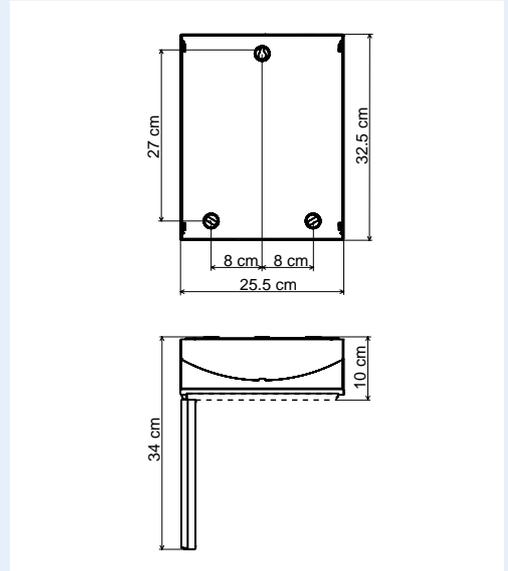
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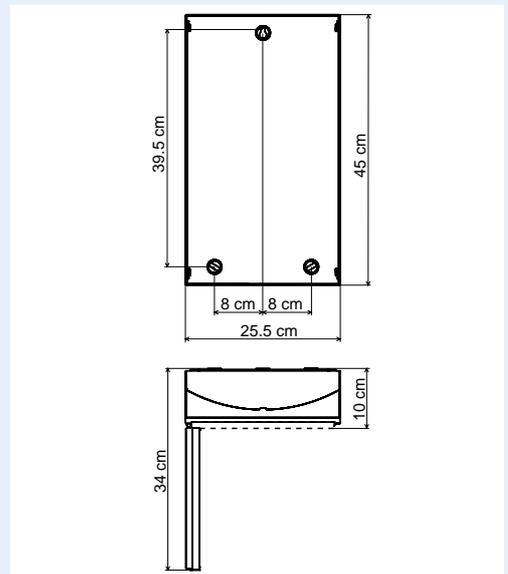
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18

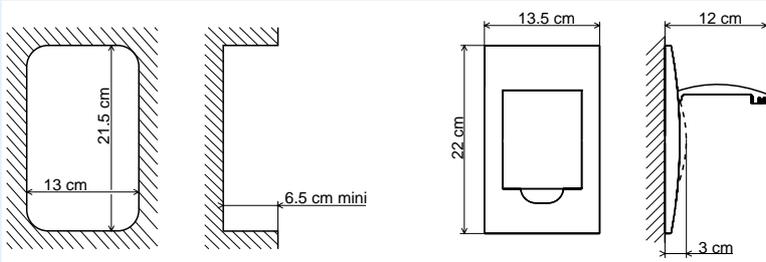


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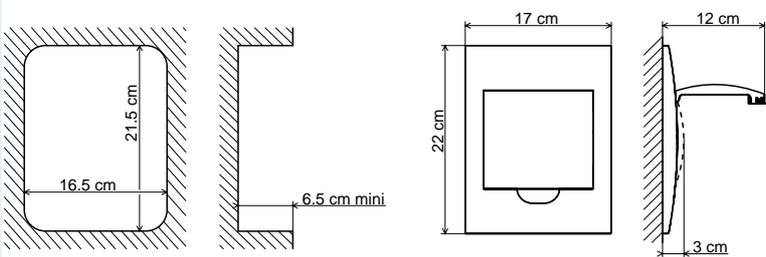


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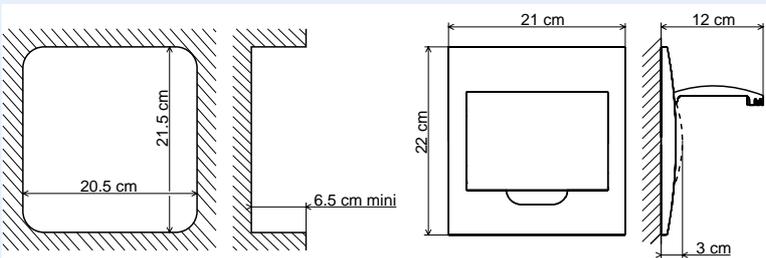
Flush-mounted enclosures



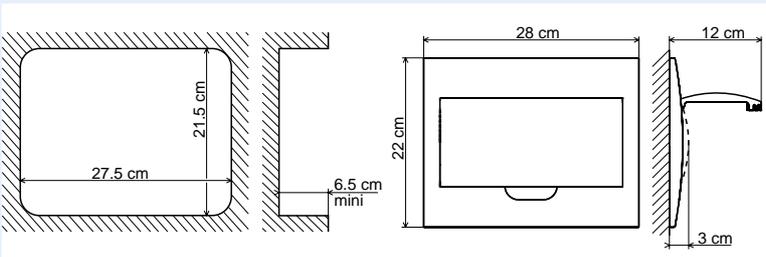
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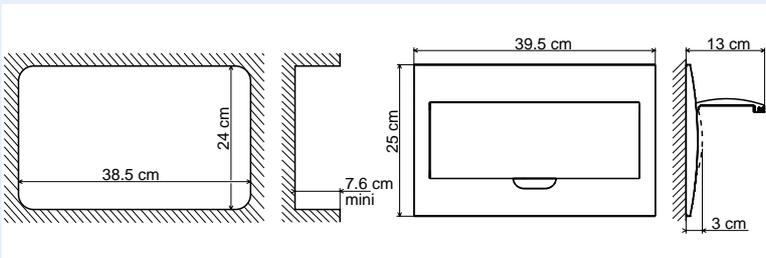
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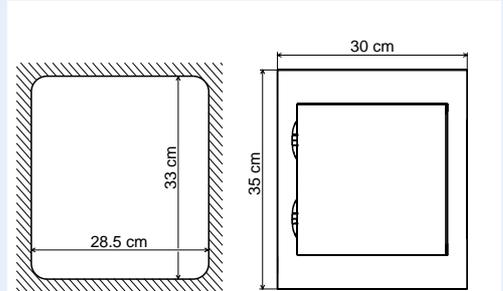
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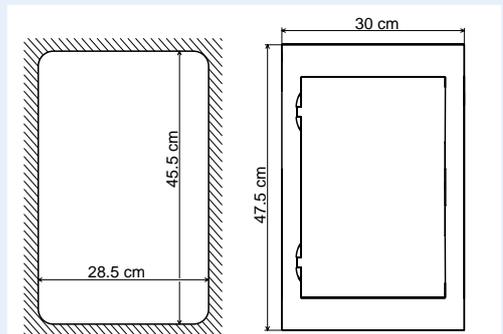
12



18



24



36



Domae Order form

1 Choice of switchgear

Choice of switchgear for a Domae switchboard

	Rating (A)	Cat. no	Qty	Dimensions
Residual current circuit-breakers				
4P-30 mA	25	16807		
	40	16810		
Sum of residual current circuit-breakers	4P	=	x 4	=
2P-30 mA	25	16790		
	40	16792		
Sum of residual current circuit-breakers	2P	=	x 2	=
Circuit-breakers				
1P	10	12912		
	16	12913		
	20	12914		
	25	12915		
	32	12916		
Sum of circuit-breakers	1P	=	x 1	=
2P	10	12992		
	16	12993		
	20	12994		
	25	12995		
	32	12996		
Sum of circuit-breakers	2P	=	x 2	=
Total dimensions =				

2 Choice of enclosure

Type of installat.	Enclosure maximum capacity						
	4	6	8	12	18	24	36
Flush-mounted	13356 <input type="checkbox"/>	13357 <input type="checkbox"/>	13358 <input type="checkbox"/>	13359 <input type="checkbox"/>	13691 <input type="checkbox"/>	13692 <input type="checkbox"/>	13693 <input type="checkbox"/>
Surface-mounted	13646 <input type="checkbox"/>	13647 <input type="checkbox"/>	13648 <input type="checkbox"/>	13649 <input type="checkbox"/>	13650 <input type="checkbox"/>	13642 <input type="checkbox"/>	13643 <input type="checkbox"/>
Number of rows	1 row		2 row		3 row		

Choose your enclosure according to the result

3 Choice of comb busbars

Distribution in enclosure	Cat. no	Qty of comb busbars per enclosure		
		1	2	3
1P	10387	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2P	10389	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4P	10393	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The number of rows determines the quantity of comb busbars to be used

4 Choice of accessories

Accessories	Cat. no	Qty

List in the table opposite the accessories presented on page 17 that you would like to order.

Accessories offer

Accessories				Cat. no
<i>Accessories for comb busbar</i>	10 end pieces	2P		10398
		4P		10405
	4 connectors 35 mm ²			10397
	10 tooth shields			10396
<i>Terminal block brackets for enclosure</i>	4			13361
	6			13362
	8			13363
	18			13381
	12, 24, 36			13364
<i>Terminal blocks</i>	Width (mm)	holes 10 mm ²	holes 16 mm ²	
	85	2	2	13575
	85	4	4	13576
	202	8	8	13577
	202	11	11	13578
	202	16	16	13579
<i>Blanking plate</i>	batch of 10			13229
<i>Key-lock</i>	for 1 row enclosure			14180
	for 2 and 3 row enclosure			13315
<i>Flush-mounting kit in hollow partition</i>				13360
<i>Symbol sheets</i>				13735

Using the order form

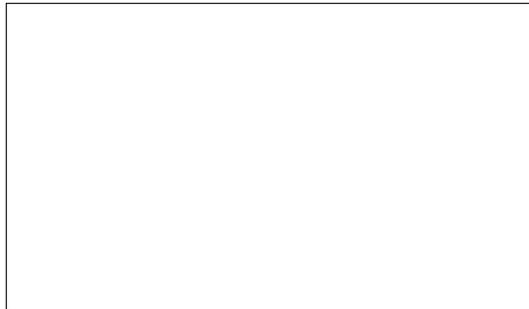
Exemple

Ordering Domae products for the switchboard of a home of more than 100 m² (see pages 12 and 13).

	Rating (A)	Cat. no	Qty	Dimensions			
<i>Residual current circuit-breakers</i>							
4P	25	16807					
	40	16810					
Sum of residual current circuit-breakers			4P	=	x 4 =		
2P	25	16790					
	40	16792	1		+		
Sum of residual current circuit-breakers			2P	= 1	x 2 = 2		
<i>Circuit-breakers</i>							
1P	10	12912					
	16	12913					
	20	12914					
	25	12915					
	32	12916					
Sum of circuit-breakers			1P	=	x 1 =		
2P	10	12992	2				
	16	12993	2		+		
	20	12994					
	25	12995					
	32	12996	2				
Sum of circuit-breakers			2P	= 6	x 2 = 12		
Total dimensions =					14		
Type of installat.							
Enclosure capacity							
	4	6	8	12	18	24	36
Flush-mounted	13356 <input type="checkbox"/>	13357 <input type="checkbox"/>	13358 <input type="checkbox"/>	13359 <input type="checkbox"/>	13691 <input checked="" type="checkbox"/>	13692 <input type="checkbox"/>	13693 <input type="checkbox"/>
Surface-mounted	13646 <input type="checkbox"/>	13647 <input type="checkbox"/>	13648 <input type="checkbox"/>	13649 <input type="checkbox"/>	13650 <input type="checkbox"/>	13642 <input type="checkbox"/>	13643 <input type="checkbox"/>
Number of rows	1 row		2 rows		3 rows		
Distribution in enclosure							
Cat. no							
Qty of comb busbars by enclosure							
		1	2	3			
1P	10387	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
2P	10389	1	<input type="checkbox"/>	<input type="checkbox"/>			
4P	10393	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			



For more details :



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As standards, specifications and designs develop from time to time, always ask for confirmation of the information given in this publication

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