

Consumer Unit Design 10 RCCB Incomer

For the distribution of power in a residential application, conforming to BS EN 61439-3 including Annex ZB (16kA rating).

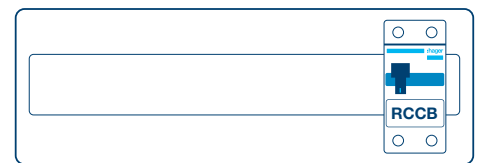
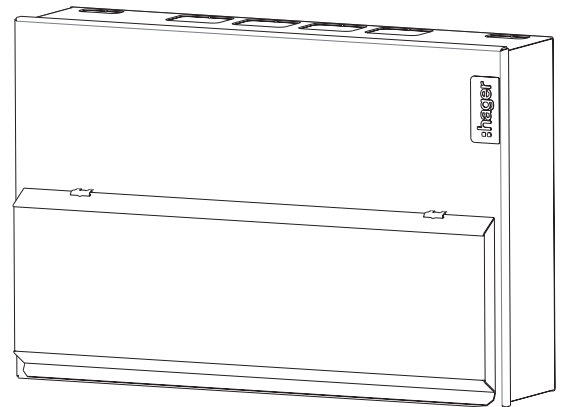
Design 10 consumer unit is an entry level board designed for all applications and allows compliance with BS 7671:2018;

Regulation 421.1.201 within domestics (household) applications consumer units and similar assemblies shall comply with BS EN 61439-3 and shall have their enclosure manufactured from a non-combustible material.

Regulation 411.3.3 additional protection by means of a 30mA RCD.
Regulation 522.6.202 protection of wiring concealed in walls or partitions.

Regulation 531.3.3 Selection of appropriate RCD. Type A RCCBs can detect and respond to both AC and pulsating DC components.

RCCB incomer boards are generally used as sub distribution boards in residential applications where all outgoing circuits share the same 30mA RCD protection.



VML306H

Description	Size	Cat ref.
2 Way 40A 30mA Type A RCCB Incomer	Size 2	VML402AH
6 Way 63A 30mA Type A RCCB Incomer	Size 3	VML406AH
6 Way 100A 30mA Type A RCCB Incomer	Size 3	VML306AH
10 Way 63A 30mA Type RCCB Incomer	Size 4	VML410AH
10 Way 100A 30mA Type RCCB Incomer	Size 4	VML310AH
14 Way 100A 30mA Type RCCB Incomer	Size 5	VML314AH

Features & Benefits

- Type A RCCBs for general purpose circuits and circuits containing equipment incorporating electronic components.
- Square cable entry points top and bottom for use with cable trunking
 - Meter tail cable entry plate (VM04CE) provided
 - Rigid top wall – Enhances rigidity to prevent distortion when removing knockouts
 - Rear Knockouts for ease of cable entry – Cable protector plate (VM02CE) available as accessory
 - Front cover retained screws – Prevents loss during installation
- Full metal DIN rail – Secure and stable attachment of devices
- Quick release clip on MCB – Allows removal of MCB with busbar still in place
- Optimised cabling space – DIN rail position allows maximum cabling space.
- Top mounted terminal rail for each row makes the wiring of the neutral and earth connections neat and simple.
- Torque settings displayed inside front cover – easily accessible to electrician during installation and maintenance.

Technical Characteristics

Standards	BS EN 61439-3
Classification	Consumer Unit
Rated & Operational Voltage (U_n/U_e)	230V a.c 50 Hz
Rated Insulation Voltage (U_i)	320V a.c. 50Hz
Rated Frequency (fn)	50 Hz
Rated impulse withstand voltage (U_{imp})	4kV
Rated Current of the Assembly (I_{na})	40A/63A/100A
Rated Current of an Outgoing Circuit (InC)	MCB 6A-63A (Marked Rated Current on Device)
Rated Conditional Short Circuit of the Assembly (I_{cc})	Annex ZB: 16kA rms at 250V, power factor 0.6 with equipment and arrangements specified in Hager's technical documentation/catalogue
Protection against electric shock	Consumer Unit shall be installed in an electrical system conforming to IEC 60364 / BS 7671
Rated Diversity Factor (RDF) / Values of assumed loading	2 Way to 3 Way - 0.8 4 Way to 5 Way - 0.7 6 Way to 9 Way - 0.6 10 Way and above - 0.5
Note: RDF only applies to continuously and simultaneously loaded circuits. In principle, this means adjacent circuit breakers having a load on time exceeding 30 minutes or where a load not exceeding 30 minutes has an 'off' time less than the 'on' time will need to have the rated diversity factor applied as indicated.	
Pollution Degree	2
Types of System Earthing for which the assembly is designed	TNC-S and TN-S when installed in an electrical system conforming to BS 7671
Intended locations	Indoor use only
Stationary assembly	
Degree of protection	IP2XC with door open / closed and full compliment of devices / blanks fitted. Note: Where cables are installed through the top wall of the enclosure, gaps of IP4X to be maintained.
Intended use	Intended for use in domestic (residential) or similar premises
Electromagnetic compatibility (EMC) classification	EMC environment B
External design	Wall mounted, surface type, enclosed assembly.
Mechanical impact protection	IK05
Type of construction	Fixed parts
Incoming Line/Neutral terminal (80 - 100A board)	50mm ²
Incoming Line/Neutral terminal (63A board)	25mm ²
Incoming Earth Terminal	16mm ²

Warranty - Hager undertakes to replace or repair at its discretion products should they become inoperable within the time periods as stated. - 2 Years.

Accessories

Cable clamp	Secures supply cables on entry to main incoming device	VA10MT
Top wall cable entry plates	Provide more options for cable entry, when used with 50x50mm trunking IP ratings can be achieved.	VM03CE
Blind cable entry plates	A blank plate for drilling which allows the installation of cable glands etc.	VM04CB, VM03CB
Grommet strip	For protecting cables against damage when entering board	VM05GS
Rear stand off plates	To stand consumer unit off wall allowing surface mounted cables to enter through rear of unit.	VM01SP

Devices

MCB 6kA 6A to 63A B Curve

MTN***

Design 10 Dimensions (mm)

	Enclosure Size			
	2	3	4	5
Height	246	246	246	246
Width	155	227	299	370
Depth 1	83	83	83	83
Depth 2	100	100	100	100

Number of Knockouts

<input type="checkbox"/> Top Face 30 x 25 (mm)	2	2	2	2
<input type="checkbox"/> Top Face 40 x 30 (mm)	0	2	4	4
<input type="checkbox"/> Back 100 x 50 (mm)	1	1	1	3
<input type="checkbox"/> Bottom Face 30 x 25 (mm)	2	3	4	4

