

# Consumer Unit Design Evo RCCB Incomer

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



VME406AH

Design Evo is the board for use in applications where the consumer unit is located in a living area of the dwelling and allows compliance with BS 7671:2018;

Regulation 421.1.201 within domestic (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 with RCD 30mA.

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.

Description	Size	Cat ref.
6 Way 63A 30mA Type A RCCB Incomer	3	VME406AH
10 Way 63A 30mA Type A RCCB Incomer	4	VME410AH

## Features & Benefits

- Type A RCCBs for general purpose circuits and circuits containing equipment incorporating electronic components.
- Cable clamp – Secures supply cables on entry to main incoming device preventing any movement being transmitted through meter tails to device.
- Round cable entry points top, bottom and sides.
- Rear Knockouts for ease of cable entry – Cable protector plate provided
- Rigid top wall – Enhances rigidity to prevent distortion when removing knockouts
- Locate and hold cover - allows use of both hands whilst fixing cover
- Front cover retained screws – Prevents loss during installation
- Full metal din rail – Secure and stable attachment of devices.
- Quick release clip on MCB – Allows fitting and removal of device with busbar in place.
- Optimised cabling space – Din rail positioned to provide maximum space at top of board.
- Top mounted terminal rail 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 (InA)	40A/63A/100A
Rated Current of an Outgoing Circuit $I_{nC}$	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
<p>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.</p>	
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 <sup>2</sup>
Incoming Line/Neutral terminal (63A board)	25mm <sup>2</sup>
Incoming Earth Terminal	16mm <sup>2</sup>
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 protector plate	Provides protection for cables entering from the rear of the board	<b>VM02CE</b>
Rear stand off plates	To stand consumer unit off wall allowing surface mounted cables to enter through rear of unit.	<b>VM01SP</b>

**Design Dimensions (mm)**

	Enclosure Size			
	2	3	4	5
Height	240	240	240	240
Width	149	221	293	364
Depth	102.5	102.5	102.5	102.5

