

# Consumer Unit

## Design 10 Dual Row

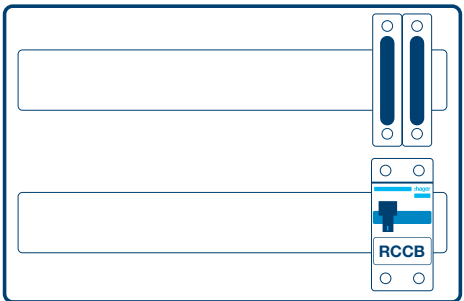
### RCCB Incomer

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

Design 10 dual row consumer unit is an entry level board designed for all applications and allows compliance with BS 7671:2008 regulations; 411.3.3 additional protection by means of a 30mA RCD, 314.1&2 segregation of circuits to avoid danger and minimise inconvenience in the event of a fault, 522.6.202 protection of wiring concealed in walls or partitions.

Metal enclosure manufactured to allow compliance with BS 7671 regulation 421.1.201

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



VML30606H

| Description                             | Size  | Cat ref.  |
|---|-------|-----------|
| 6+6 Way 100A 30mA RCCB Incomer Dual Row | 3 (2) | VML30606H |

| Devices                   | MTN*** |
|---------------------------|--------|
| MCB 6kA 6A to 63A B Curve |        |

## Features & Benefits

- Provides for large quantities of outgoing ways or space for additional devices
- Enclosure fully open between rows giving easy access for cables
- 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 $I_{nC}$                | 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<br>4 Way to 5 Way - 0.7<br>6 Way to 9 Way - 0.6<br>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.<br>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

|                             |   |                       |
|-----------------------------|---|-----------------------|
| Top Wall cable entry plates | Provide more options for cable entry, when used with 50x50mm trunking IP ratings can be achieved.                         | <b>VM03CE</b>         |
| Blind cable entry plates    | A blank plate for drilling which allows the installer to decide on the method of incoming cables - compression gland etc. | <b>VM04CB, VM03CB</b> |
| Rear cable entry plate      | Provides protection for cables entering from the rear of the board  | <b>VM02CE</b>         |
| Cable Clamp                 | Secures supply cables on entry to main incoming device  | <b>VA10MT</b>         |
| Grommet strip               | For protecting cables against damage when entering the board  | <b>VM05GS</b>         |
| Rear stand off plates       | To stand consumer unit off wall allowing surface mounted cables to enter through rear of unit.                            | <b>VM01SP</b>         |

### Dual Row Design 10 Dimensions (mm)

|         | Enclosure Size |
|---------|----------------|
|         | <b>3 (2)</b>   |
| Height  | 486            |
| Width   | 227            |
| Depth 1 | 83             |
| Depth 2 | 100            |

|   | Number of Knockouts |
|---|---------------------|
| <input type="checkbox"/> Top Face 30 x 25 (mm)    | 2                   |
| <input type="checkbox"/> Top Face 40 x 30 (mm)    | 2                   |
| <input type="checkbox"/> Back 100 x 50 (mm)       | 2                   |
| <input type="checkbox"/> Bottom Face 30 x 25 (mm) | 3                   |

