

Part no. **KLV-24HWS-F**  
 Catalog No. **178824**

## Delivery program

|  |                                      |                 |  |
|--|--------------------------------------|-----------------|--|
| Basic function                                   |                                      |                 | Basic device   |
| Product function                                 |                                      |                 | Installation distribution boards   |
| Product range                                    |                                      |                 | KLV energy   |
| Design   |                                      |                 | Hollow wall  |
| Installation site                                |                                      |                 | Indoor   |
| Type of installation                             |                                      |                 | Hollow-wall mounting   |
| Door/Flap  |                                      |                 | White  |
| Degree of Protection                             |                                      |                 | IP30   |
| Colour   |                                      |                 | White  |
| Module rack                                      |                                      |                 | Rail-frame   |
| Shroud for protection against accidental contact |                                      |                 | Plastic  |
| Rows   | Count                                |                 | 2  |
| Module units per row                             |                                      |                 | 12   |
| Description                                      |                                      |                 | IP30<br>Protection Class II<br>Plastic enclosure with sheet steel door, white (RAL 9016)   |
| Cable entries                                    |                                      |                 | Cable entries on top and bottom, side, back plate  |
| PE and N terminals design                        |                                      |                 | Screw terminals  |
| PE and N terminals                               | Number<br>x cross-<br>sectional area | mm <sup>2</sup> | PE: 13 x (0.75 - 16)<br>N: 16 x (0.75 - 16)<br>N - Fi: 4x (0.75 - 16)  |
| Equipment supplied                               |                                      |                 | Wall trough<br>Door/Frame<br>Device support rails<br>Front cover<br>Neutral and protective conductor terminals with SK screw terminal technology<br>Spirit level for leveling<br>3D adjustment element for mounting designed to adjust the mounting depth by up to 18 mm<br>Cable retainer<br>Hollow-wall anchor<br>Installation instructions<br>Imprintable sheet |

## Technical data

### General

|   |                |      |                                    |
|---|----------------|------|------------------------------------|
| Standards   |                |      | IEC/EN 62208, IEC/EN 60670-24 (PD) |
| RoHS (in accordance with Directive 2002/95/EC of the European Parliament and Council) |                |      | conform                            |
| Ambient temperature   |                | °C   | -5 - +40                           |
| Degree of Protection  |                |      | IP30                               |
| Protection class  |                |      | II (totally insulated)             |
| Rated operational voltage   | U <sub>e</sub> | V AC | 400                                |
| Rated frequency   | f              | Hz   | 50                                 |

### Material characteristics

|          |  |  |  |
|----------|--|--|--|
| Material |  |  | Polystyren (plastic)<br>Sheet steel, powder-coated |
| Colour   |  |  | white (RAL 9016)                                   |

### Material properties

|                   |  |  |      |
|-------------------|--|--|------|
| Mechanical        |  |  |      |
| Impact resistance |  |  | IK05 |

## Design verification as per IEC/EN 61439

|  |  |  |  |
|--|--|--|--|
| Technical data for design verification |  |  |  |
|--|--|--|--|

|   |                |   |  |
|---|----------------|---|--|
| Heat dissipation, at an ambient temperature of 35°C, delta T: 20 degrees in top of the enclosure, calculated as per IEC 60890 |                |   |  |
| Individual enclosure, flush mounting  | P <sub>V</sub> | W | 16   |
| Heat dissipation, at an ambient temperature of 35°C, delta T: 35 degrees in top of the enclosure, calculated as per IEC 60890 |                |   |  |
| Individual enclosure, flush mounting  | P <sub>V</sub> | W | 34   |
| IEC/EN 61439 design verification  |                |   |  |
| 10.2 Strength of materials and parts  |                |   |  |
| 10.2.2 Corrosion resistance   |                |   | Meets the product standard's requirements.   |
| 10.2.3.1 Verification of thermal stability of enclosures  |                |   | Meets the product standard's requirements.   |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat  |                |   | Meets the product standard's requirements.   |
| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects        |                |   | 850 °C; meets the product standard's requirements.   |
| 10.2.4 Resistance to ultra-violet (UV) radiation  |                |   | Not relevant to indoor installations.  |
| 10.2.5 Lifting  |                |   | Does not apply to enclosures without lifting aids.   |
| 10.2.6 Mechanical impact  |                |   | IK05   |
| 10.2.7 Inscriptions   |                |   | Meets the product standard's requirements.   |
| 10.3 Degree of protection of ASSEMBLIES   |                |   | IP30   |
| 10.4 Clearances and creepage distances  |                |   | Is the panel builder's responsibility.   |
| 10.5 Protection against electric shock  |                |   | Protection class 2, therefore not applicable.  |
| 10.6 Incorporation of switching devices and components  |                |   | Is the panel builder's responsibility.   |
| 10.7 Internal electrical circuits and connections   |                |   | Is the panel builder's responsibility.   |
| 10.8 Connections for external conductors  |                |   | Is the panel builder's responsibility.   |
| 10.9 Insulation properties  |                |   |  |
| 10.9.2 Power-frequency electric strength  |                |   | U <sub>i</sub> = 400 V AC  |
| 10.9.3 Impulse withstand voltage  |                |   | 4 kV   |
| 10.9.4 Testing of enclosures made of insulating material  |                |   | Meets the product standard's requirements.   |
| 10.10 Temperature rise  |                |   | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating  |                |   | Is the panel builder's responsibility.   |
| 10.12 Electromagnetic compatibility   |                |   | Is the panel builder's responsibility.   |
| 10.13 Mechanical function   |                |   | Meets the product standard's requirements.   |

## Technical data ETIM 8.0

|   |  |    |             |
|---|--|----|-------------|
| Distribution boards (EG000023) / Small distribution board (EC000214)  |  |    |             |
| Electric engineering, automation, process control engineering / Electrical installation, device / Electrical distribution system (incl. small distribution board) / Small distribution board (ecI@ss10.0.1-27-14-24-09 [ACN387011]) |  |    |             |
| Mounting method   |  |    | Hollow wall |
| Number of rows  |  |    | 2           |
| Width in number of modular spacings   |  |    | 12          |
| Type of cover   |  |    | Door        |
| Cover model   |  |    | With notch  |
| Transparent cover/door  |  |    | No          |
| Material housing  |  |    | Plastic     |
| Height  |  | mm | 465         |
| Width   |  | mm | 360         |
| Depth   |  | mm | 100         |
| Built-in depth  |  | mm | 88          |
| Built-in height   |  | mm | 0           |
| Built-in width  |  | mm | 0           |
| Internal depth  |  | mm | 75          |
| Earthing terminal block   |  |    | No          |
| Neutral terminal block  |  |    | No          |
| DIN-rail  |  |    | Yes         |
| With mounting plate   |  |    | No          |
| Extension possible  |  |    | Yes         |
| EMC-version   |  |    | Yes         |

|                           |  |  |       |
|---------------------------|--|--|-------|
| Colour                    |  |  | White |
| RAL-number                |  |  | 9016  |
| Degree of protection (IP) |  |  | IP30  |
| With lock                 |  |  | No    |
| Type of closure           |  |  | Other |
| Signal passing door       |  |  | No    |