



**Complete surface-mounted flat distribution board, white, 24 SU per row, 5 rows, type C**

**Part no.**  
**Catalog No.**

**BF-O-5/120-C**  
**283033**

## Delivery program

|                                                  |                                      |                                                                                                                                                                      |
|--------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic function                                   |                                      | Basic device                                                                                                                                                         |
| Product function                                 |                                      | Installation distribution boards                                                                                                                                     |
| Product range                                    |                                      | BF flat DBO                                                                                                                                                          |
| Design                                           |                                      | Surface mounted                                                                                                                                                      |
| Installation site                                |                                      | Indoor                                                                                                                                                               |
| Type of installation                             |                                      | Surface mounting                                                                                                                                                     |
| Door/Flap                                        |                                      | White                                                                                                                                                                |
| Degree of Protection                             |                                      | IP30                                                                                                                                                                 |
| Colour                                           |                                      | White                                                                                                                                                                |
| Module rack                                      |                                      | Rail-frame                                                                                                                                                           |
| Shroud for protection against accidental contact |                                      | Metal                                                                                                                                                                |
| Rows                                             | Count                                | 5                                                                                                                                                                    |
| Module units per row                             |                                      | 24                                                                                                                                                                   |
| Description                                      |                                      | IP30<br>Protection Class I<br>Steel sheet enclosure white (RAL 9016)                                                                                                 |
| Cable entries                                    |                                      | Cable entries on top and bottom                                                                                                                                      |
| PE and N terminals design                        |                                      | Screw terminals                                                                                                                                                      |
| PE and N terminals                               | Number<br>x cross-<br>sectional area | mm <sup>2</sup><br>PE: 2 x 25 + 43 x 16<br>N: 2 x 25 + 43 x 16                                                                                                       |
| Equipment supplied                               |                                      | Enclosure<br>Door with three-point turn-lock<br>DIN rail mounting frame<br>Cable gland plate inserts (top)<br>Front plates<br>Neutral-/protective conductor terminal |

## Technical data

### General

|                                                                                       |                |                                              |
|---------------------------------------------------------------------------------------|----------------|----------------------------------------------|
| Standards                                                                             |                | IEC/EN 61439-1, IEC/EN 61439-3, IEC/EN 62208 |
| 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                                                                      |                | I (earthed)                                  |
| Rated operational voltage                                                             | U <sub>e</sub> | V AC 415                                     |
| Rated frequency                                                                       | f              | Hz 50/60                                     |

### Material characteristics

|          |  |                            |
|----------|--|----------------------------|
| Material |  | Sheet steel, powder-coated |
| Colour   |  | white (RAL 9016)           |

### Material properties

|                   |  |      |
|-------------------|--|------|
| Mechanical        |  |      |
| Impact resistance |  | IK07 |

## 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 for wall mounting                                                                                        | P <sub>V</sub> | W | 59 |
| Starting enclosure for wall mounting                                                                                          | P <sub>V</sub> | W | 56 |

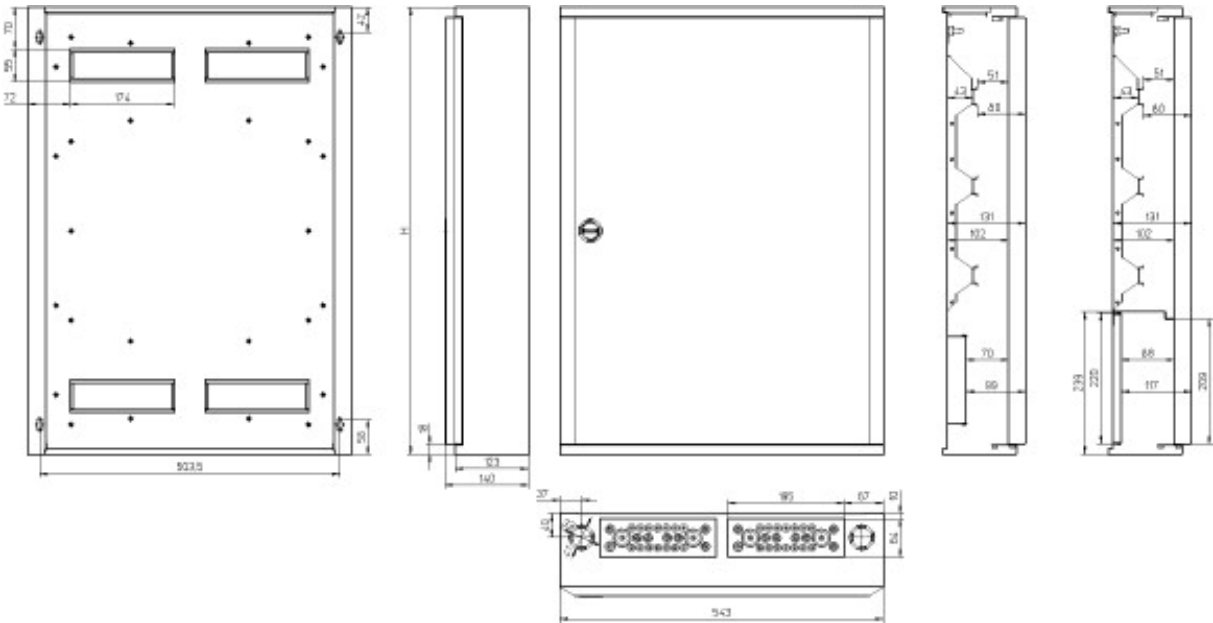
|                                                                                                                               |                |   |                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------|----------------|---|----------------------------------------------------------------------------------------------------------------------------------|
| Middle enclosure for wall mounting                                                                                            | P <sub>V</sub> | W | 53                                                                                                                               |
| 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 for wall mounting                                                                                        | P <sub>V</sub> | W | 118                                                                                                                              |
| Starting enclosure for wall mounting                                                                                          | P <sub>V</sub> | W | 112                                                                                                                              |
| Middle enclosure for wall mounting                                                                                            | P <sub>V</sub> | W | 107                                                                                                                              |
| 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        |                |   | 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                                                                                                      |                |   | IK07                                                                                                                             |
| 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                                                                                        |                |   | < 0.1 Ω; meets the product standard's requirements.                                                                              |
| 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> = 415 V AC                                                                                                        |
| 10.9.3 Impulse withstand voltage                                                                                              |                |   | Does not apply to basic enclosures as defined in EN 62208.                                                                       |
| 10.9.4 Testing of enclosures made of insulating material                                                                      |                |   | Does not apply to metal enclosures.                                                                                              |
| 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 7.0

|                                                                                                                                                                                                                                     |  |    |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----|---------------------------|
| 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 (ec1@ss10.0.1-27-14-24-09 [ACN387011]) |  |    |                           |
| Mounting method                                                                                                                                                                                                                     |  |    | Surface mounted (plaster) |
| Number of rows                                                                                                                                                                                                                      |  |    | 5                         |
| Width in number of modular spacings                                                                                                                                                                                                 |  |    | 24                        |
| Type of cover                                                                                                                                                                                                                       |  |    | Door                      |
| Cover model                                                                                                                                                                                                                         |  |    | Closed                    |
| Transparent cover/door                                                                                                                                                                                                              |  |    | No                        |
| Material housing                                                                                                                                                                                                                    |  |    | Steel                     |
| Height                                                                                                                                                                                                                              |  | mm | 900                       |
| Width                                                                                                                                                                                                                               |  | mm | 543                       |
| Depth                                                                                                                                                                                                                               |  | mm | 140                       |
| Built-in depth                                                                                                                                                                                                                      |  | mm | 140                       |
| Internal depth                                                                                                                                                                                                                      |  | mm | 131                       |
| DIN-rail                                                                                                                                                                                                                            |  |    | Yes                       |
| With mounting plate                                                                                                                                                                                                                 |  |    | No                        |
| Extension possible                                                                                                                                                                                                                  |  |    | No                        |
| EMC-version                                                                                                                                                                                                                         |  |    | No                        |
| Colour                                                                                                                                                                                                                              |  |    | White                     |
| RAL-number                                                                                                                                                                                                                          |  |    | 9016                      |
| Degree of protection (IP)                                                                                                                                                                                                           |  |    | IP30                      |

|                 |  |       |
|-----------------|--|-------|
| With lock       |  | No    |
| Type of closure |  | Other |

Dimensions



Height H [mm] = 900