



**Braking resistance, IP20, 50 Ω, 3.1 kW, For use with: DC1, DA1, DL1, DG1, SVX, SPX**



**Part no. DX-BR050-3K1**  
**Catalog No. 171918**  
**Alternate Catalog No. DX-BR050-3K1**

### Delivery program

|                           |                 |   |     |
|---------------------------|-----------------|---|-----|
| Product range             |                 | Accessories   |     |
| Accessories               |                 | Braking resistances   |     |
| Degree of Protection      |                 | IP20  |     |
| For use with              |                 | DC1, DA1, DL1, DG1, SVX, SPX  |     |
| Description               |                 | Steel grid resistor, combined<br>Installed in a housing designed to prevent accidental contact and featuring a temperature monitoring switch and internal connection terminals/terminal bolts |     |
| Resistance value          | R               | Ω   | 50  |
| Continuous braking rating | P <sub>DB</sub> | kW  | 3.1 |

### Design verification as per IEC/EN 61439

|  |  |  |
|--|--|--|
| 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   |  | Meets the product standard's requirements.   |
| 10.2.5 Lifting   |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.6 Mechanical impact   |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.7 Inscriptions  |  | Meets the product standard's requirements.   |
| 10.3 Degree of protection of ASSEMBLIES  |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.4 Clearances and creepage distances   |  | Meets the product standard's requirements.   |
| 10.5 Protection against electric shock   |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.6 Incorporation of switching devices and components   |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 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   |  | Is the panel builder's responsibility.   |
| 10.9.3 Impulse withstand voltage   |  | Is the panel builder's responsibility.   |
| 10.9.4 Testing of enclosures made of insulating material   |  | Is the panel builder's responsibility.   |
| 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. The specifications for the switchgear must be observed.                                   |
| 10.12 Electromagnetic compatibility  |  | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.13 Mechanical function  |  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

### Technical data ETIM 7.0

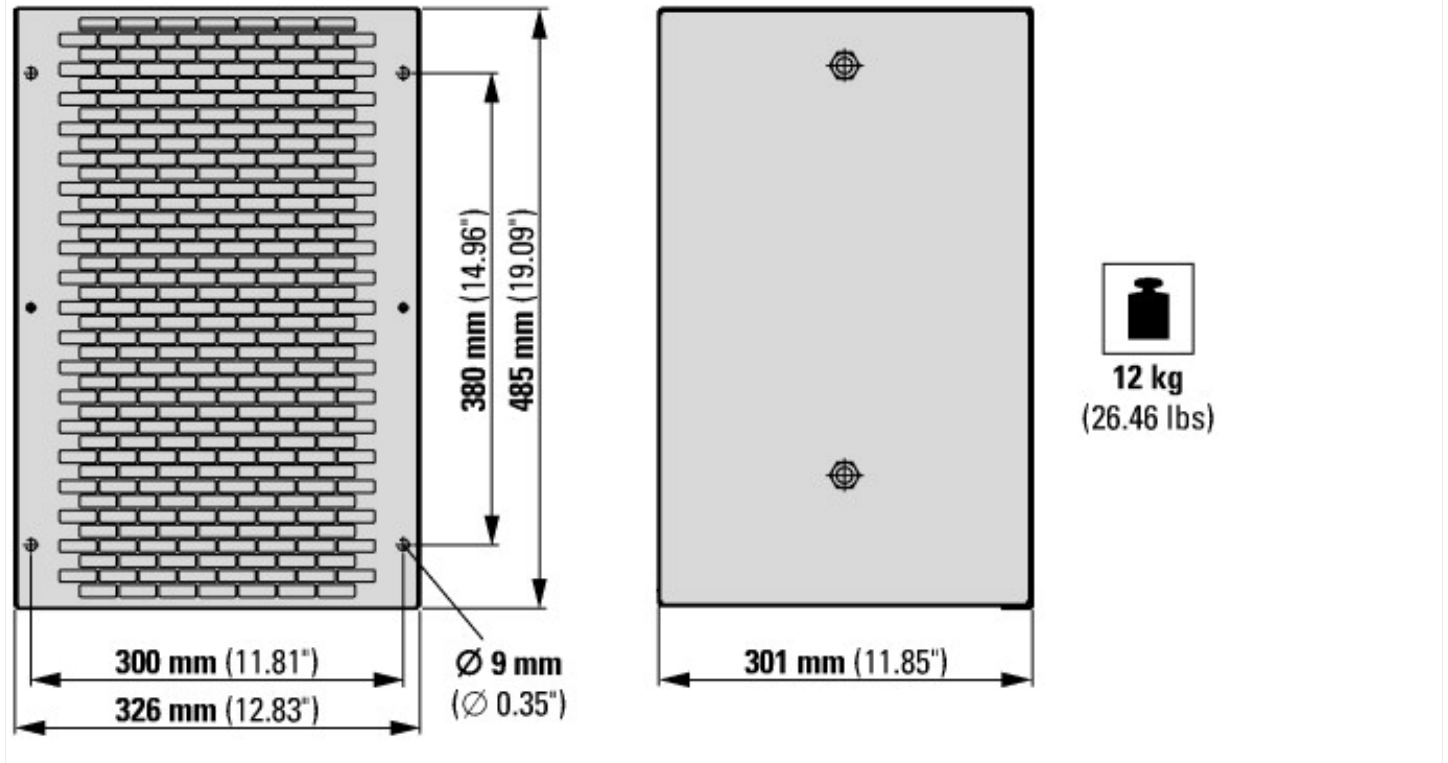
|   |  |                    |
|---|--|--------------------|
| Low-voltage industrial components (EG000017) / Accessories for frequency controller (EC002025)  |  |                    |
| Electric engineering, automation, process control engineering / Electrical drive / Static frequency converter / Static frequency converter (accessory) (ecl@ss10.0.1-27-02-31-92 [AFR303003]) |  |                    |
| Type of accessory   |  | Braking resistance |

### Approvals

|                   |  |              |
|-------------------|--|--------------|
| Product Standards |  | UL508; C22.2 |
|-------------------|--|--------------|

|                             |  |
|-----------------------------|--|
| UL File No.                 | E300273                                      |
| UL Category Control No.     | NMTR2, NMTR8                                 |
| CSA File No.                | UL report applies to both US and Canada      |
| North America Certification | UL listed, certified by UL for use in Canada |
| Suitable for                | Branch circuits                              |
| Max. Voltage Rating         | 1000   |
| Degree of Protection        | IEC: IP00                                    |

## Dimensions



## Assets (links)

### Declaration of CE Conformity

00003137

### Instruction Leaflets

IL040011ZU2018\_04

## Additional product information (links)

|   |   |
|---|---|
| <b>IL040011ZU Braking Resistor</b>  |   |
| IL040011ZU Braking Resistor   | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL040011ZU2018_04.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL040011ZU2018_04.pdf</a>   |
| CA04020001Z-EN Product Range Catalog: Efficient Engineering for Starting and Controlling Motors | <a href="http://www.eaton.eu/DE/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1095238.pdf">http://www.eaton.eu/DE/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_1095238.pdf</a> |