



**Braking resistance, IP20, 22 Ω, 3.1 kW, For use with: DC1, DA1, DL1, DG1, SVX, SPX**



**Part no. DX-BR022-3K1**  
**Catalog No. 171928**  
**Alternate Catalog No. DX-BR022-3K1**

### 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 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	22
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

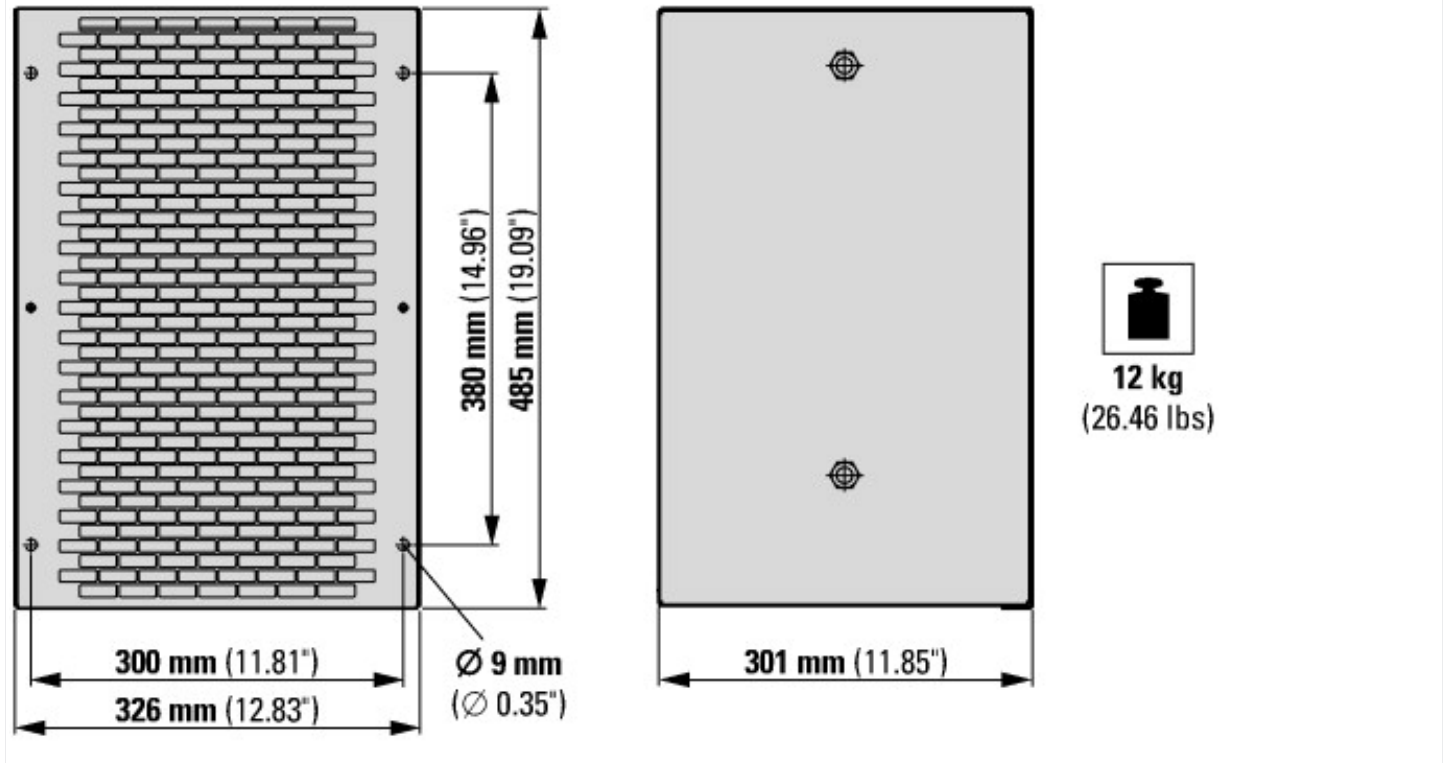
Low-voltage industrial components (EG000017) / Accessories for frequency controller (EC002025)		
Electric engineering, automation, process control engineering / Electrical drive / Static frequency converter / Static frequency converter (accessory) (ecl@ss10.0.1-27-02-31-92 [AFR303003])		
Type of accessory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

### Approvals

Product Standards		UL508; C22.2
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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>