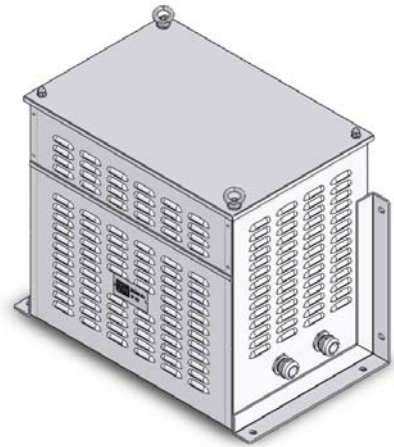


## Operation manual BGUK- housing

Order Number: **BGUK 1**  
**BGUK 2**  
**BGUK 3**  
**BGUK 10**  
**BGUK 20**  
**BGUK 30**  
**BGUK 40**  
**BGUK 50**  
**BGUK 60**



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### 1. General Information

The housings of the BGUK series are designed to increase protection of electrical components that are built into it. The housings are made from sheet steel and are powder coated. Inbuilt fins allow self-cooling. Lead connection via entry glands are allocated on one side of the housing. On the following pages information on the selection and further processing of the enclosure are given. Further information is available from [info@blockuk.co.uk](mailto:info@blockuk.co.uk).

#### 1.1 Choice of model

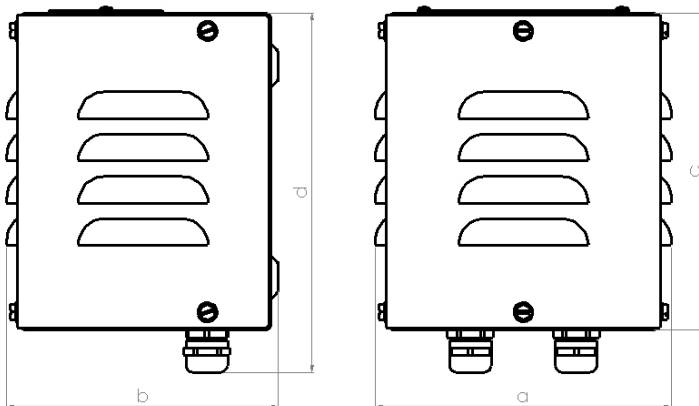
The housings are available in different sizes. For the selection of housing various criteria are to be considered:

- a) Dimensions of housing
  - b) Dimensions of the components to be integrated in the housing
  - c) Maximum power loss of the components to be integrated
  - d) Dimensions of the leads
  - e) Installation Site
- Dimension data are to be found in the following table.

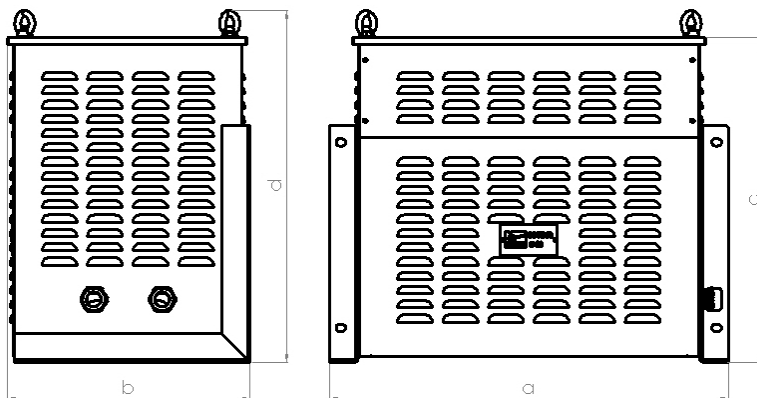
## 1.2 Dimensions/ installation site/Degree of protection IP

	a	b	c	d	Weight	Degree of protection Wall mounting	Degree of protection ground mounting
BGUK 1	140	130	150	170	ca. 1,5 kg	IP 23	IP 20
BGUK 2	190	170	200	220	ca. 2,7 kg	IP 23	IP 20
BGUK 3	230	210	250	270	ca. 4 kg	IP 23	IP 20
BGUK 10	320	200	250	265	ca. 7 kg	IP 23	IP 23
BGUK 20	420	230	325	365	ca. 12 kg	IP 23	IP 23
BGUK 30	470	270	425	465	ca. 16 kg	IP 23	IP 23
BGUK 40	580	325	475	515	ca. 22 kg	IP 23	IP 23
BGUK 50	700	425	570	615	ca. 32 kg	IP 23	IP 23
BGUK 60	950	575	745	795	ca. 65 kg	IP 23	IP 23

### BGUK 1 – BGUK 3:



### BGUK 10 – BGUK 60:



## 1.3 Effective inside dimension / Max. Power loss / cable gland

	a	b	c	Power loss in Watt*	Power loss in Watt* (when using a front plate without cooling fins)	Integrated glands	permissible cable diameter
BGUK 1	120	115	120	16	-	2x M 20	7 – 12 mm
BGUK 2	170	155	170	29	-	2x M 20	7 – 12 mm
BGUK 3	210	195	220	48	-	2x M 20	7 – 12 mm
BGUK 10	235	155	220	110	100	2x M 25	9 – 14 mm
BGUK 20	305	185	290	240	225	2x M 25	9 – 14 mm
BGUK 30	355	225	370	260	240	2x M 25	9 – 14 mm
BGUK 40	455	275	420	340	320	2x M 32	13 – 17 mm
BGUK 50	555	375	520	760	720	2x M 40	17 – 24 mm
BGUK 60	805	525	690	1000	950	2x M 50	23 – 32 mm

\* based on an ambient temperature of 40°C

## 2. Installation

### 2.1 Important points to remember before installation

Installation must be in accordance with the relevant standards and by a qualified electrical engineer. All exposed metal parts must be electrically interconnected. For this purpose pre-assembled cables (yellow / green) are included and have to be installed.

The lines are to be properly connected to the existing blade terminals (BGUK1 BGUK-3) or are to be fixed correctly to the existing studs using the included mounting hardware (BGUK10-BGUK60). The removable lid and front plates (10-BGUK BGUK 60) are to be connected to the central ground point at the bottom of the housing by lines. The cross section of the enclosed lines are based on typical applications for each case determined (BGUK1-3 = 14 AWG / 2.081 mm<sup>2</sup>; BGUK10 = AWG 12 / 3,309 mm<sup>2</sup>; BGUK 20-50 = AWG 10 / 5,262 mm<sup>2</sup>; BGUK 60 = 8 AWG / 8,368 mm<sup>2</sup>). Depending on the application and the standards to be followed a change of lines to another cross section may be required. It is important to ensure that the ground wires are not damaged during the assembly of the components into the housing.

In addition to the available effective inside dimension when installing the components it is important to maintain clearance and creepage distances in accordance with DIN norms and the distances to active parts. Furthermore, positioning within the housing must not affect the heat dissipation of other components. For example inside concealed cooling fins may have an impact on the dissipation of heat.

### 2.2 Installation site

The housing is designed for either wall or ground mounting and must be installed by a qualified engineer. When installing, make sure that the cooling fins are mounted with the opening downwards. If this is not the case, a protection index of only IP 20 is fulfilled.

For quick fastening easily accessible mounting holes are integrated in the base plate or on the sides. When installing, make sure that the space beneath and beside the integrated cooling fins is not obstructed by objects and the dissipation of the heat loss is prevented during operation. The required minimum distance of 30mm from adjacent parts must be maintained so as not to interfere with the cooling system!

## 3. Transport

Two lifting eyes mounted on the top of the housings BGUK 20 to 60 are for transport by a qualified operator to the installation site using the appropriate means. If components are already installed within the housing these eyelets are only recommended for further use / transport with consideration of the below max gross weight table

Type	Max Gross Weight
BGUK 20	60 kg
BGUK 30	60 kg
BGUK 40	100 kg
BGUK 50	170 kg
BGUK 60	170 kg

## 4. Storage

Ambient storage temperature : -25...+85°C

Ambient permitted humidity : 30...80% relative humidity

## 5. Accessory

As accessories for housing BGUK 10 to 60 a removable front panel without cooling fins may be ordered. This panel is suitable to be provided with additional holes to mount additional components such as switches. By using these front panels, the maximum heat loss will decrease. Please compare with table in section 1.3).

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