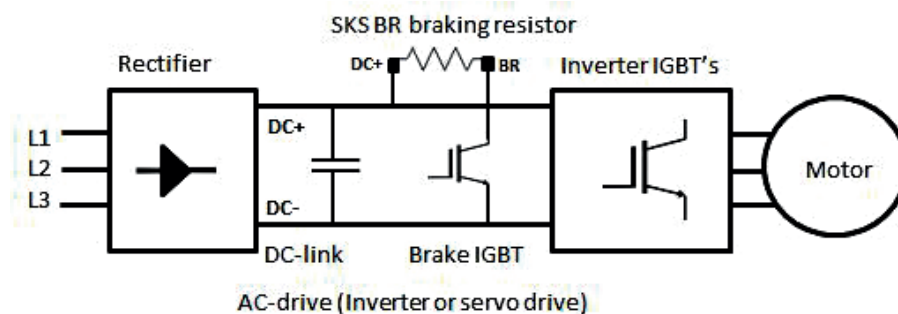


# SKS BR Brake Resistor

SKS BR braking resistors are made of strong aluminium profile with IP54 class ingress protection. The resistor is equipped with a temperature sensor (200 °C) for overheat protection. On the connection box are two metal cable glands. Inside the box are terminals for thermistor and resistor connections.



SKS BR is a power resistor for installation outside (externally) of inverter or servo drive. It will convert the braking energy of the motor into heat. Braking resistor power rating must be sufficient to avoid resistor overheating and its resistance ( $\Omega$ ) value must be according to drive manufacturer values.



## Technical data

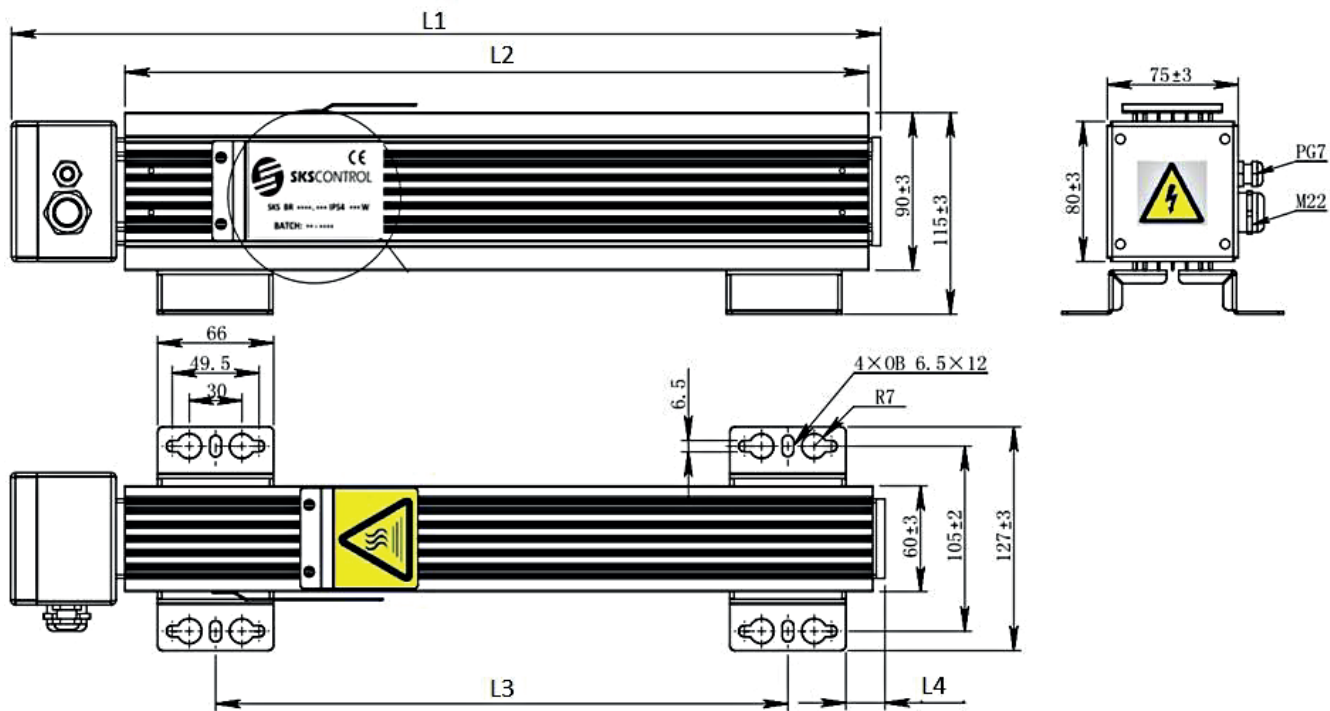
| Type        | Power Pn/W<br>@40 °C | Max.<br>surface<br>temp. °C | Pulse load in         |                       |                        |                        | Resistance range<br>R/ $\Omega$ $\pm 5$ % |
|-------------|----------------------|-----------------------------|-----------------------|-----------------------|------------------------|------------------------|-------------------------------------------|
|             |                      |                             | 1 s/120 s<br>kW@40 °C | 5 s/120 s<br>kW@40 °C | 10 s/120 s<br>kW@40 °C | 40 s/120 s<br>kW@40 °C |                                           |
| SKS BR 0300 | 300                  | 300                         | 9                     | 3                     | 1,5                    | 1,5                    | 1 - 10 000                                |
| SKS BR 0500 | 500                  | 300                         | 15                    | 5                     | 2,5                    | 2,5                    | 1 - 10 000                                |
| SKS BR 1000 | 1000                 | 380                         | 30                    | 10                    | 5                      | 3                      | 5 - 10 000                                |
| SKS BR 1500 | 1500                 | 380                         | 45                    | 15                    | 7,5                    | 4,5                    | 5 - 10 000                                |
| SKS BR 1800 | 1800                 | 450                         | 54                    | 18                    | 9                      | 5,4                    | 5 - 10 000                                |

| General Specification   |                            |                            |                                        |
|-------------------------|----------------------------|----------------------------|----------------------------------------|
| Temperature coefficient | < $\pm 100$ ppm            | Ambient temp.              | - 40...+ 90 °C                         |
| Dielectric strength     | 3000 V AC/5 s              | Temperature derating       | Linearly: 40 °C = Pn to 70 °C = 0,5 Pn |
| Operating voltage       | CE <690 VAC, 1000 VDC      | Thermal protection contact | 200 °C, NC, 2 A/250 V                  |
| Insulation resistance   | >100 M $\Omega$ , 1000 VDC | Time constant              | 1000 s                                 |
| Overload                | 10xPn/5 s, 30xPn/1 s       | Approvals                  | CE                                     |

Order code example:

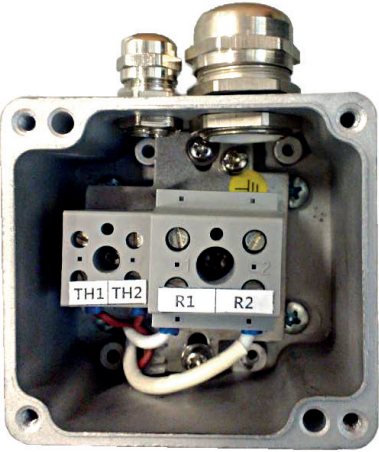
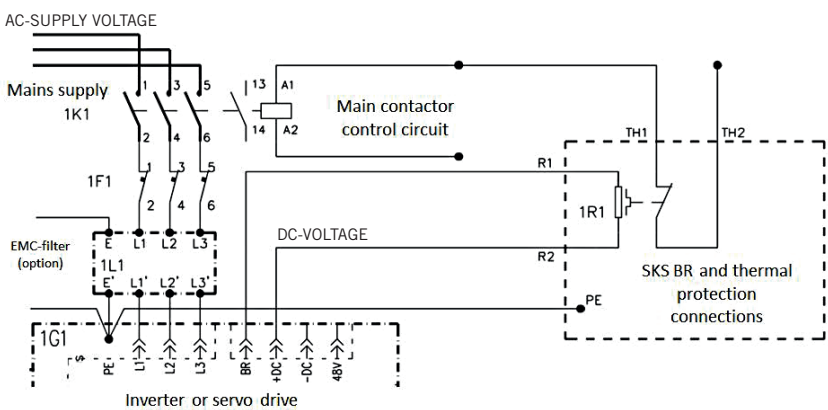
SKS BR 0500.020 IP54 500W BRAKING RESISTOR  
- Power 500 W, resistance 20 ohm, ingress protection IP54

| Dimensions (mm)      |        |     |        |    |
|----------------------|--------|-----|--------|----|
| Type                 | L1     | L2  | L3     | L4 |
| SKS BR 0300 and 0500 | 366 ±4 | 295 | 195 ±3 | 24 |
| SKS BR 1000          | 498 ±4 | 426 | 326 ±3 | 22 |
| SKS BR 1500 and 1800 | 798 ±4 | 726 | 626 ±3 | 22 |



Overheat protection and PE/ground connection:

The temperature sensor (TH1/TH2) must be connected in such a way, that in case of resistor overheat, the supply voltage of drive, or DC voltage over resistor, is switched off. Obey drive manufacturer instructions for braking resistor cabling. Connect PE/grounding to grounding point inside the connection box.



SKS CONTROL BRAKE RESISTOR 260115