



# Series AXS-600 / AXF-600 / AXP-600

600 W Power Resistor at 125°C bottom case, different terminal options available

1/2

Due to our Non-Inductive design, the AXS, AXF, AXP series is ideally suited for high-frequency and pulse-loading applications. Through direct mounting on a heat sink, significant cost advantage can be realized. Main applications are: variable speed drives, power supplies, control devices, telecommunications, robotics, motor controls and other switching devices.

## Features

- Multiple resistors in 1 package
- Different terminal options available
- Non-Inductive design
- ROHS compliant
- Materials in accordance with UL 94 V-0
- General pulse load information (ask for details)
- Resistor is also available with preapplied PCM (Phase Change Material) (ask for details)

## Technical Specifications

<b>Resistance value</b>	0.15 Ω ≤ 5 KΩ (higher values on special request)
<b>Resistance tolerance</b>	±5 % to 10 % (configuration 4,5,6 only tolerance ±10% possible)
<b>Temperature coefficient</b>	> 1R: ±250 ppm/°C (at +85°C ref. to +25°C) lower TCR on special request for limited ohmic values
<b>Power rating</b>	up to 600 W at 125°C bottom case temperature (see configurations)
<b>Short time overload</b>	1.25x rated power at 85°C bottom case temperature for 10 sec., ΔR = 0.4% max. (for conf. 1, 2 and 3)
<b>Maximum working voltage</b>	1,000 V DC (higher on request)
<b>Voltage proof</b>	dielectric strength up to 4,000 V DC against ground
<b>Insulation resistance</b>	> 10 GΩ at 1,000 V DC
<b>Isolation voltage between R1 &amp; R2 &amp; R3</b>	500 V DC (1,000 V DC on special request)
<b>Protection class</b>	acc. to IEC 950/CSA22.2 950/M-89 and EN 60950.88:2
<b>Heat resistance to cooling plate</b>	Rth ≤ 0.083 K/W
<b>Capacitance/mass</b>	25 pF (typical), measuring frequency 10 kHz (depending on type/connection option, ask for details)
<b>Serial inductivity</b>	50 nH (typical), measuring frequency 10 kHz (depending on type/connection option, ask for details)
<b>Working temperature range</b>	-55°C to +155°C
<b>Mounting - torque for base plate (static)</b>	1.3 Nm to 1.5 Nm M4 screws
<b>Mounting - torque for contacts (static)</b>	1.1 Nm to 1.3 Nm M4 screws, screw-in depth max. 5mm
<b>Standard cable length (AXP-600)</b>	100 mm (other lengths on special request)
<b>Standard cable type (AXP-600)</b>	4GKW-AX 1800V
<b>Weight</b>	~16 g

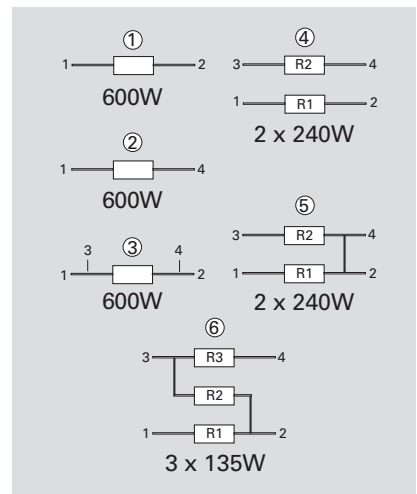


## How to make a request

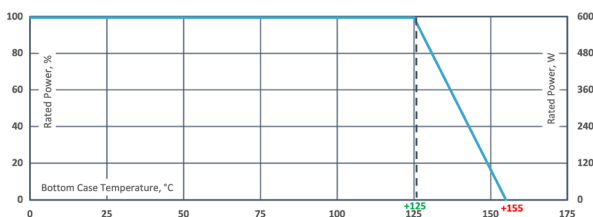
**AXS-600-Configuration\_Ohmic Value\_Tolerance**  
**AXF-600-Configuration\_Ohmic Value\_Tolerance**  
**AXP-600-Configuration\_Ohmic Value\_Tolerance**

**For example:**  
 AXS-600 27R 10% or  
 AXP-600 2x220R 5%

## Configurations (P / package)



Version 5: ohmic value between contact 2 and 4 approx. 3mΩ

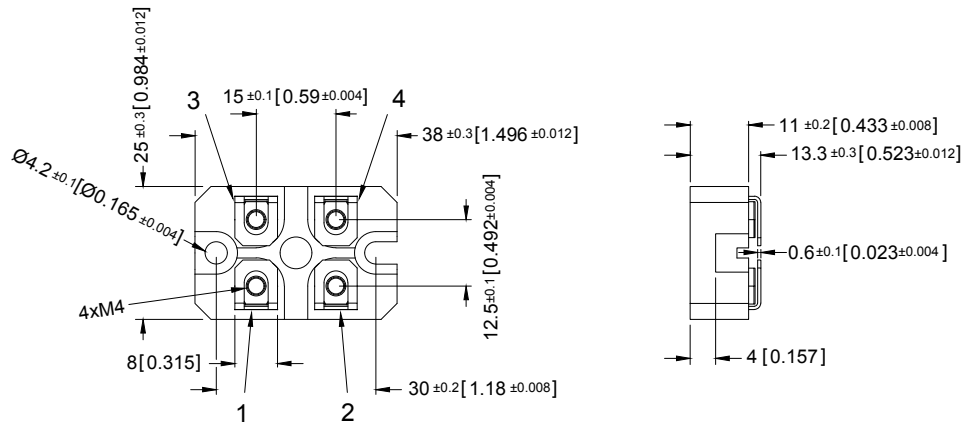


Derating (thermal resist.) AXS-600:  
 12.05 W/K (≤ 0.083 K/W) (for conf. 1, 2 and 3)

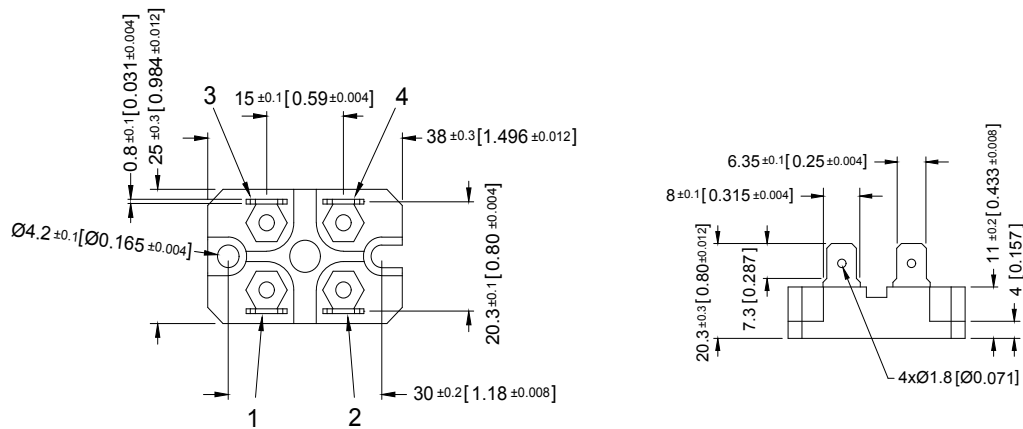
Best results can be reached by using a thermal transfer compound with a heat conductivity of at least 2.9 W/mK. The flatness of the cooling plate must be better than 0.05 mm overall. Surface roughness should not exceed 6.4 μm.

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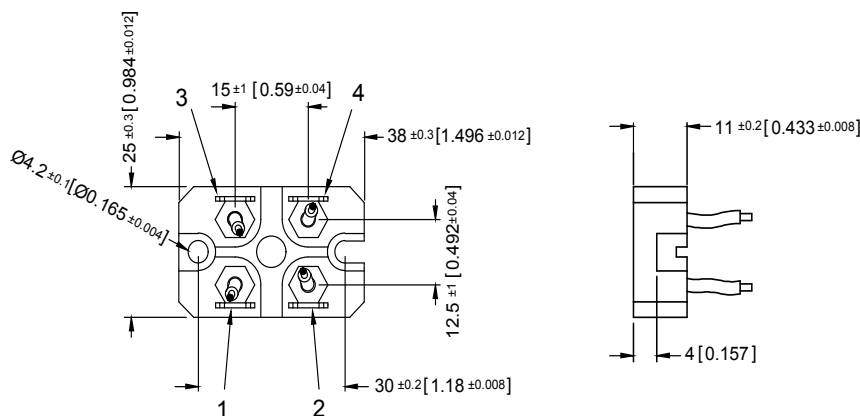
**AXS-600 (screw connection)**  
dimensions in mm [inches]



**AXF-600 (fast-on connection)**  
dimensions in mm [inches]



**AXP-600 dimensions in mm [inches]**  
(Terminal standard length = 100mm, others on special request)





# Disclaimer

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