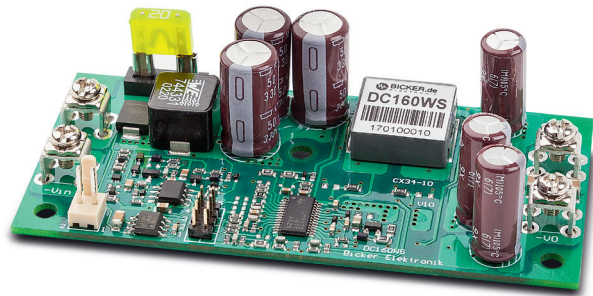


DC160WS

160 Watt



- ✓ DC/DC converter with 160 W continuous fanless power
- ✓ Ultra wide input range 6...36 VDC
- ✓ Selectable output voltage 12, 19 or 24 V via jumper
- ✓ Extended temperature range -20...+70 °C
- ✓ High efficiency up to 98 %
- ✓ Compact design
- ✓ High reliability due to premium high quality components
- ✓ Delivery includes optional thermal pad for heat dissipation, jumper and distance bolts



Technical data	
Input voltage	24 VDC (6...36 VDC)
Input current	Max. 7.2 A (24 VDC)
Inrush current	20 A max. (24 VDC)
Efficiency	Up to 98 %
Standby consumption	<1 W
Power ON/OFF : J6	Module OFF: 0...0.8V / Module ON: >3.5...36V or open circuit
Protection	Input: Inverse-polarity protection Output: Short circuit protection Overvoltage protection: +28 V Overtemperature protection: Depends on ambient temp., load and cooling
Insulation voltage	No separation between input / output
Temperature	Operating: -20...+70 °C / Storage: -20...+85 °C
Derating	See diagrams
MTBF	>410 000 h according to MIL-HDBK-217F at 25 °C, 12 V _{in}
Humidity	Operating: 10...90 % RH, non-condensing / Storage: 10...95 % RH, non-condensing
Dimensions (W x D x H)	95.0 x 45.0 x 25.4 mm ±0.5 mm
Weight (net)	0.08 kg

DC/DC converters

Article No.	Jumper J5 Setting	Output Voltage	Output current		Load regulation	Ripple & Noise
			min	free air convection max		
DC160WS	1 ■■■■ delivery settings	+12 V	0 A	8.3 A	±3 %	120 mV
	1 ■■■	+19 V	0 A	5.2 A	±3 %	190 mV
	1 ■■■	+24 V	0 A	4.1 A	±3 %	240 mV

For detailed max. power please consider the derating diagrams. No galvanic isolation! Ripple and noise was measured by a 20 MHz bandwidth limited oscilloscope with connected 10 µF and 0.1 µF capacitors at each output. The final assembly has to comply with the valid EMC standards.

Optional Accessories

▷▷▷ For detailed information please visit our website www.bicker.de and refer to the article number.

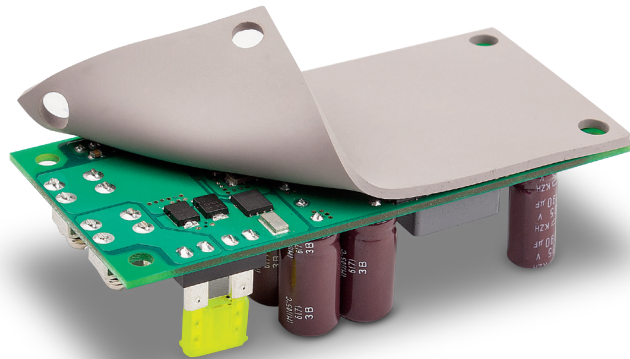
PSZ-1040 | EMC filter

Reduces conducted noise and emission

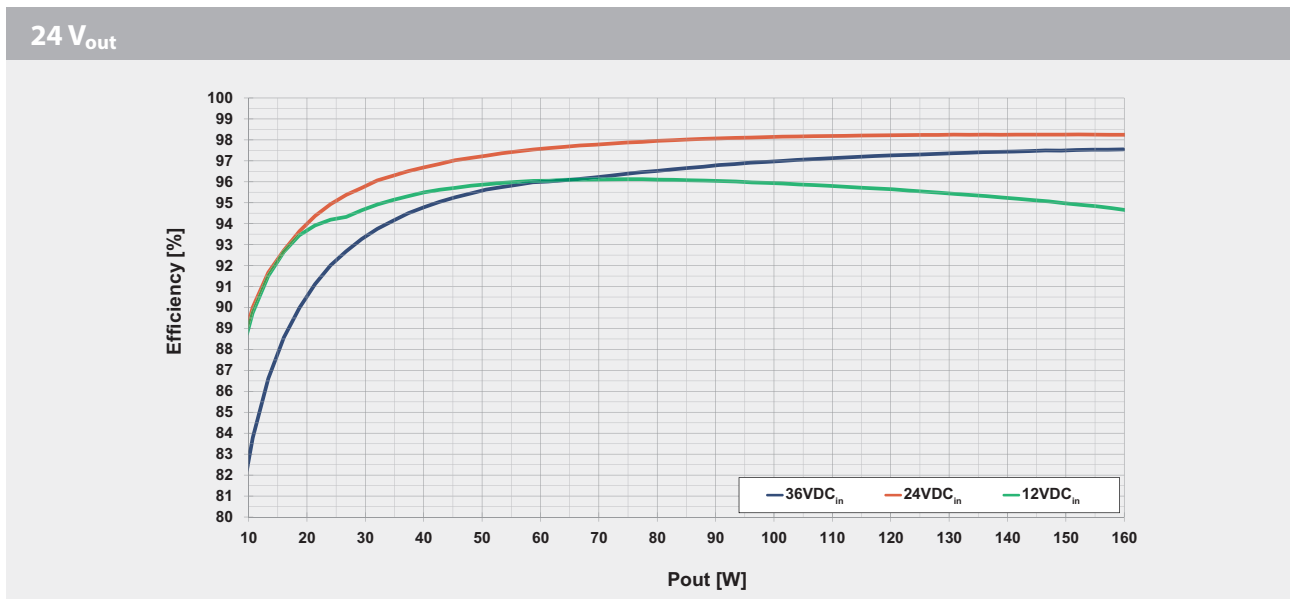
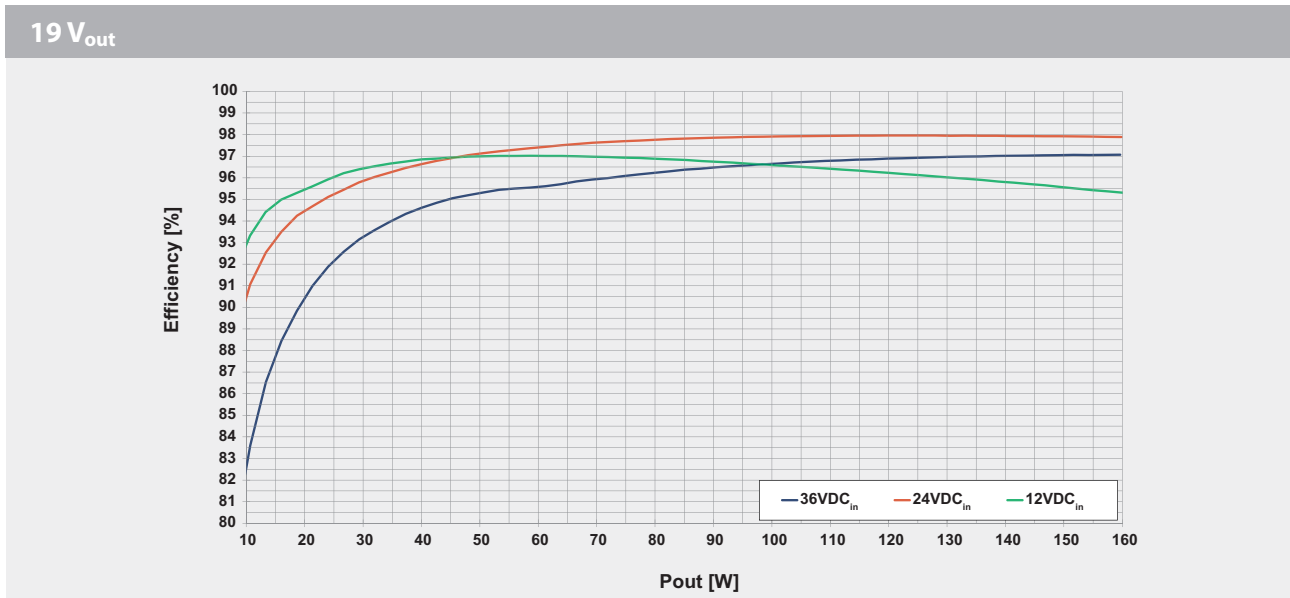
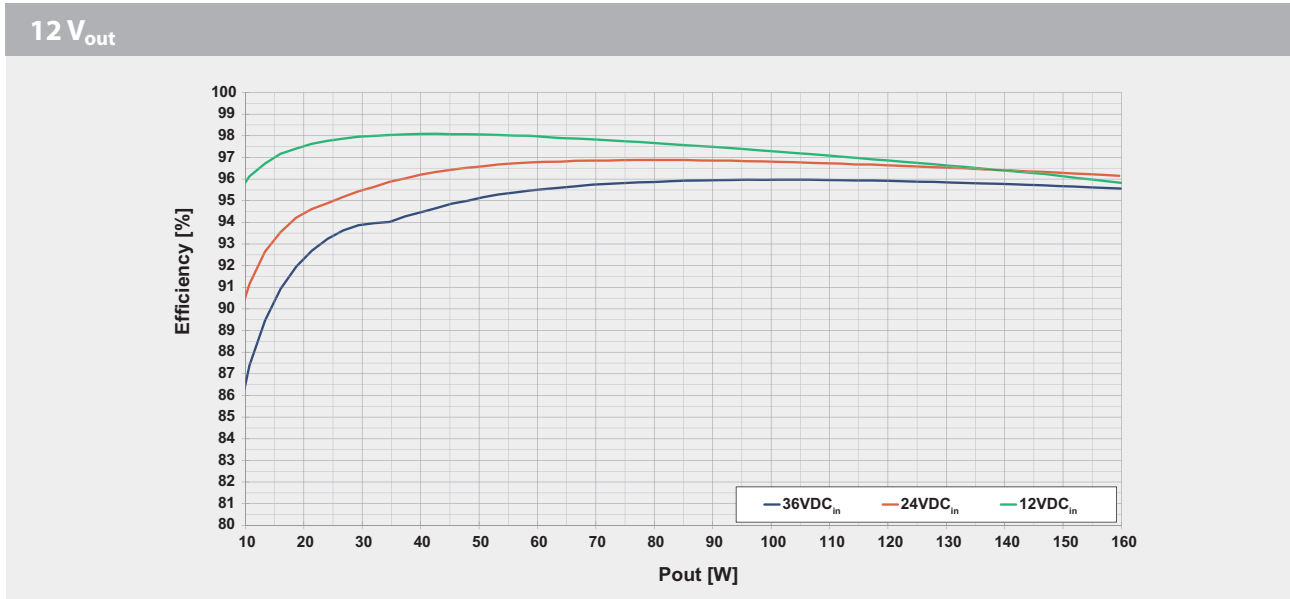


+ TIP!

To ensure the best heat dissipation from PCB to chassis, please use the **thermal pad** (included in delivery).



Efficiency curves DC160WS

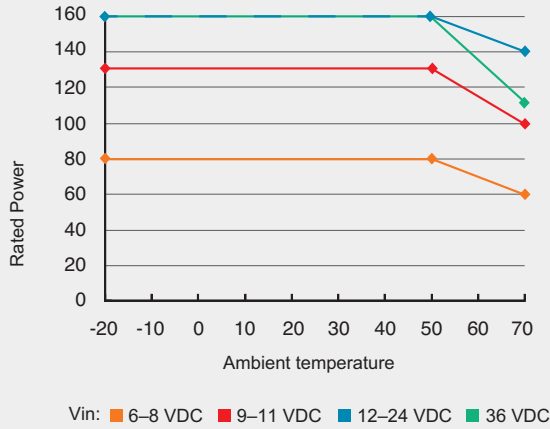


DC/DC converters

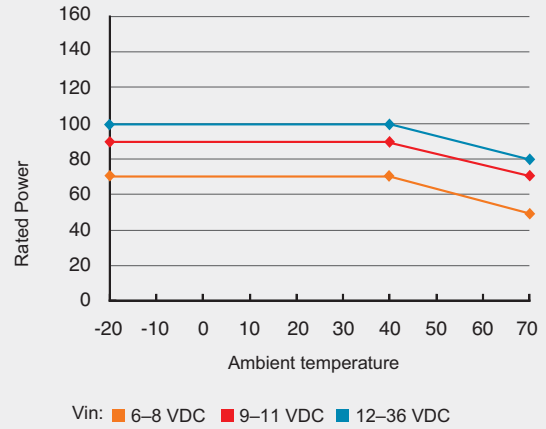
Derating curves DC160WS

12 V_{out}

Chassis mounted

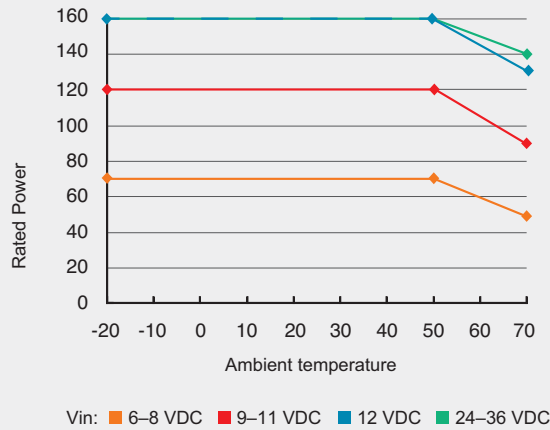


Free air convection

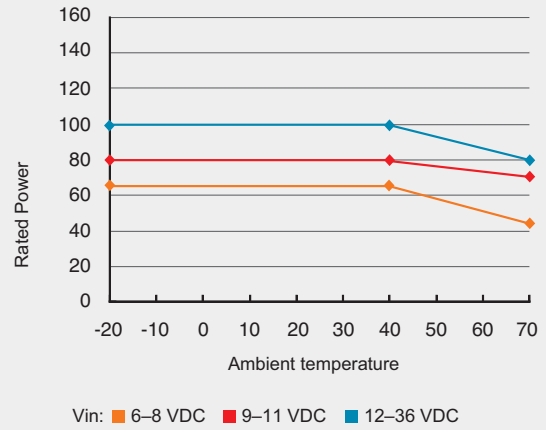


19 V_{out}

Chassis mounted

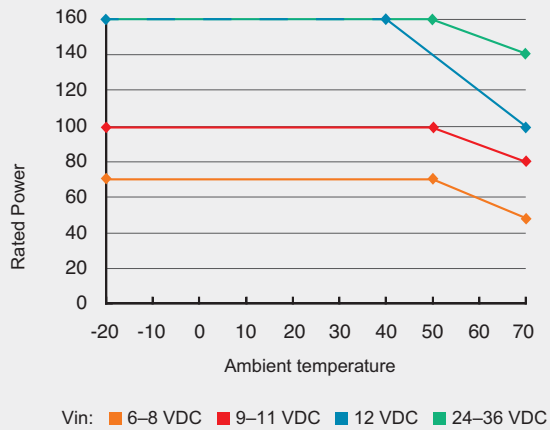


Free air convection

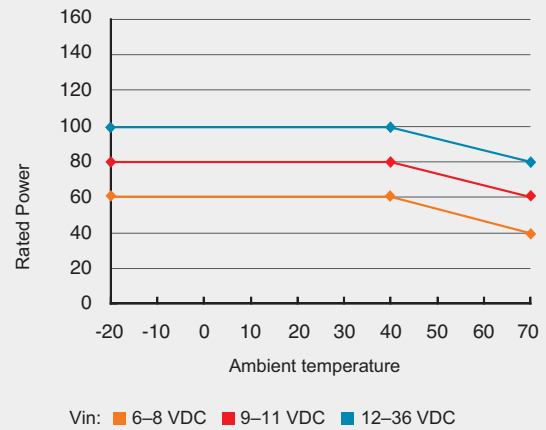


24 V_{out}

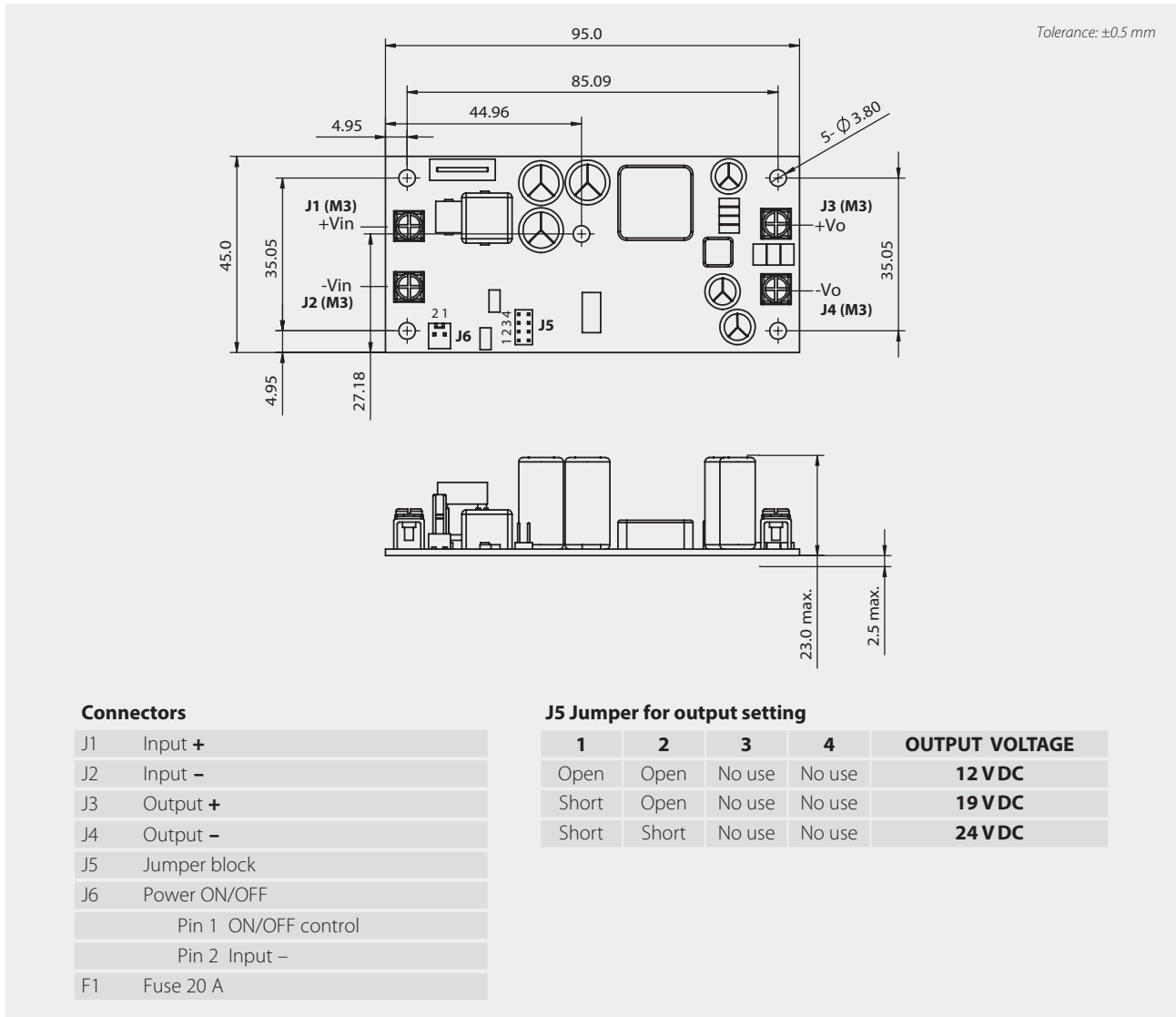
Chassis mounted



Free air convection

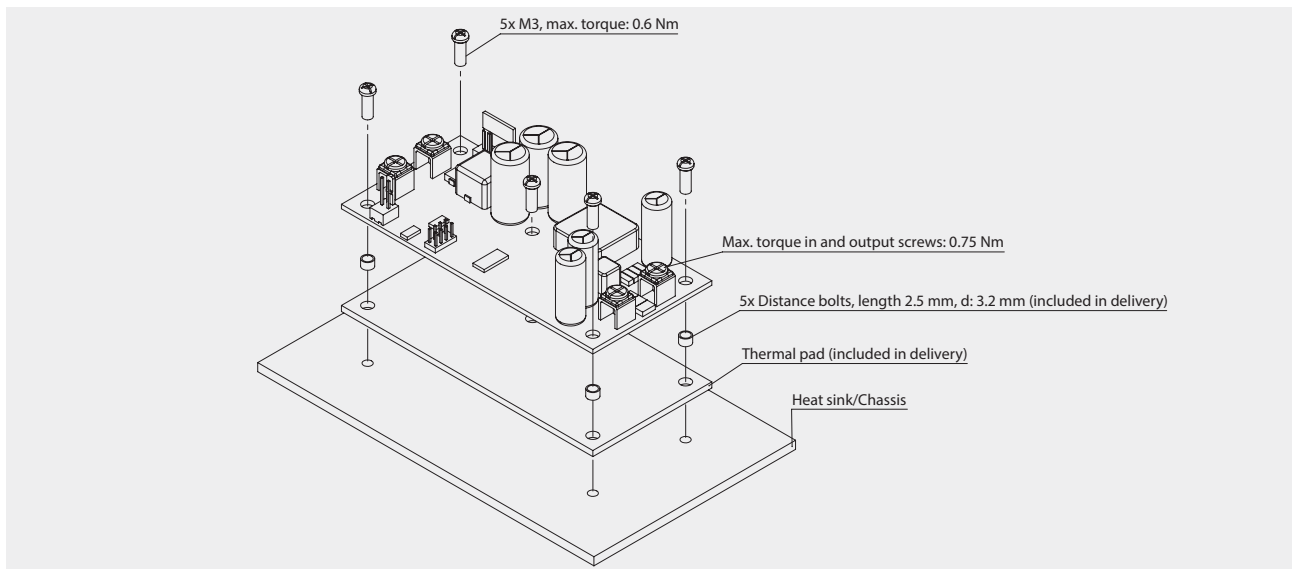


Drawing DC160WS



DC/DC converters

Mounting instruction



Specification is subject to change without notice. Errors excepted. Status as at: 17.02.2020