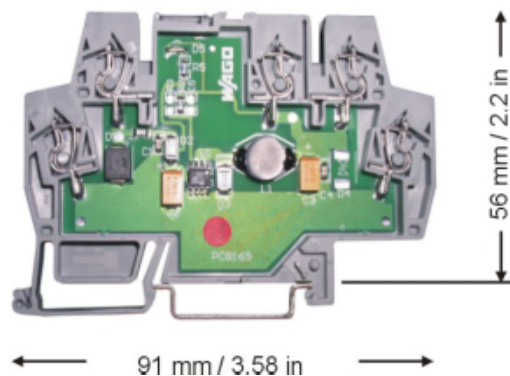


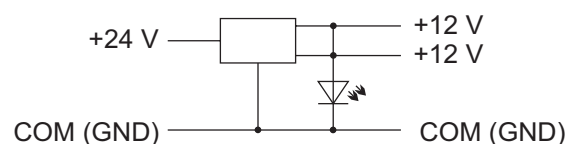
Electronic Terminal Block with DC-DC Converter

1/1

Step Down Converter DC 24 V / DC 12 V

Data sheet


Similar photo



Description	Item-No.	Pack.-unit pcs																																																		
DC/DC Converter 24 V / 12 V ; 0.5 A	859-805	1																																																		
- End plate 859-525 included and attached. - Mounting on DIN 35 rail. Application: When industrial controls that typically require DC 24 V are used in conjunction with industrial sensors operating at DC 12 V, often interface devices are required. This module can cost effectively produce DC 12 V at up to 500 mA from a 24 V source.	Technical Data																																																			
	<table><tr><td>Input nominal voltage U_N</td><td>DC 24 V</td></tr><tr><td>Input voltage range</td><td>DC 15-30 V</td></tr><tr><td>Output voltage</td><td>DC 12 V</td></tr><tr><td>Output voltage range</td><td>DC 12 V ± 2 %</td></tr><tr><td>Max. output current</td><td>500 mA</td></tr><tr><td>Max. line regulation</td><td>0.5 % (from DC 15-30 V, full load)</td></tr><tr><td>Max. load regulation</td><td>0.7 % (no load to full load, DC 24 V in)</td></tr><tr><td>Efficiency</td><td>85 % (DC 24 V in, full load)</td></tr><tr><td>Output noise and ripple</td><td>20 mV P-P (at bandwidth 20 MHz)</td></tr><tr><td>Switching frequency</td><td>200 kHz (nominal)</td></tr><tr><td>Isolation</td><td>Non-isolated</td></tr><tr><td>Input polarity protection</td><td>Yes</td></tr><tr><td>Minimum load requirements</td><td>None</td></tr><tr><td>Max. Transient recovery time</td><td>500 µs (Recovery time for a step load change of 25 % to 75 % of full load)</td></tr><tr><td>Max. start-up time</td><td>3 ms (DC 24 V in, full load)</td></tr><tr><td>Max. hold-up time</td><td>500 µs (DC 24 V in, full load)</td></tr><tr><td>Input protection</td><td>TVS Diode</td></tr><tr><td>Output short circuit protection</td><td>Momentary (Output can be shorted for 1 minute without damaging the device)</td></tr><tr><td>Temperature coefficient</td><td>100 ppm/°C_{typ.}</td></tr><tr><td>Ambient operating temperature</td><td>-25 °C...+55 °C</td></tr><tr><td>Terminal block width</td><td>6 mm / 0.236 in</td></tr><tr><td>Wire connection</td><td>CAGE CLAMP®</td></tr><tr><td></td><td>0.08-2.5 mm² / AWG 28-14</td></tr><tr><td>Stripped length</td><td>5-6 mm / 0.22 in</td></tr><tr><td>Approvals</td><td colspan="2">cUL_{us} UL508 E175199 cUL_{us} UL1604 / CSA22.2 No.213 E198726</td></tr></table>		Input nominal voltage U _N	DC 24 V	Input voltage range	DC 15-30 V	Output voltage	DC 12 V	Output voltage range	DC 12 V ± 2 %	Max. output current	500 mA	Max. line regulation	0.5 % (from DC 15-30 V, full load)	Max. load regulation	0.7 % (no load to full load, DC 24 V in)	Efficiency	85 % (DC 24 V in, full load)	Output noise and ripple	20 mV P-P (at bandwidth 20 MHz)	Switching frequency	200 kHz (nominal)	Isolation	Non-isolated	Input polarity protection	Yes	Minimum load requirements	None	Max. Transient recovery time	500 µs (Recovery time for a step load change of 25 % to 75 % of full load)	Max. start-up time	3 ms (DC 24 V in, full load)	Max. hold-up time	500 µs (DC 24 V in, full load)	Input protection	TVS Diode	Output short circuit protection	Momentary (Output can be shorted for 1 minute without damaging the device)	Temperature coefficient	100 ppm/°C _{typ.}	Ambient operating temperature	-25 °C...+55 °C	Terminal block width	6 mm / 0.236 in	Wire connection	CAGE CLAMP®		0.08-2.5 mm ² / AWG 28-14	Stripped length	5-6 mm / 0.22 in	Approvals	cUL _{us} UL508 E175199 cUL _{us} UL1604 / CSA22.2 No.213 E198726
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