DC-DC CONVERTER 110/24 V DC

110/24 V DC, 4,2A

QS5.241-60
DC-DC conv. 110/24VDC 100W 4,2A, Railway

- Width 40 mm
- 91,1 % efficiency
- Acc. to EN 50155 railway application standard
- 50% bonuspower for 4 seconds
- Conformal coated PC-boards

PRODUCT DESCRIPTION

The QS5.241-60 DC/DC converter is designed specifically for railway & transportation applications. It is approved according to the EN 50155 standard, which is an international standard covering electronic equipment used on rolling stock for railway applications. The standard covers aspects such as temperature, humidity, shock, vibration, EMI and other parameters. Because of these requirements, the unit is equipped with conformal coated pc-boards.

The unit features a DC-OK signal contact for remote monitoring, and quick-connect spring-clamp terminals for a reliable connection even when mechanical vibration and shock are involved. The unit also covers an extreme wide temperature range from -25°C up to +70°C with full output current.

This DC/DC converter comes in a very compact housing and requires only 40mm space on the DIN-rail due to the high efficiency and low power losses. The high efficiency is achieved by utilizing cutting edge technology and other unique design techniques.

SPECIFICATIONS

Max entrance tripple	15 V pp
Inrush current	Typ. 10 A @ 110 V DC
Input voltage dc max	154 V DC
Input voltage DC	110 V
Input voltage dc min	77 V DC
Ripple. max	50 mV pp
Output voltage min	24 V DC
Temperature Range Without Derating From	-25 °C
Output voltage	24 V DC
Output voltage max	28 V DC

Effect	100 W
Output Current	4,2 A
Temperature Range Without Derating To	60 °C
Life span	127000 h @ 24 V DC, 4,2 A, 40 °C
Efficiency	91,1 %
MTBF (IEC 61709)	127000 h @ 24 V DC, 4,2 A, 40 °C
Weight	0,64 kg
Depth	117 mm
Width	40 mm
Height	124 mm
Clamp type	Spring-clamp
IP Class	IP20
DC relay output	Yes
Series	Dimension Q
Keep time	Typ. 42 ms @ 4,2 A
Approvals	CE, EN 50155
Material Protection	Aluminium
Conformal coated	Yes

Fig. 6-1 **Output voltage vs. output current, typ.**

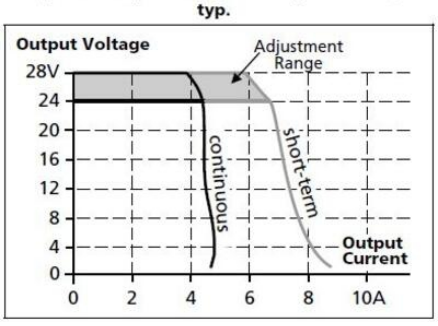


Fig. 6-2 **Bonus time vs. output power**

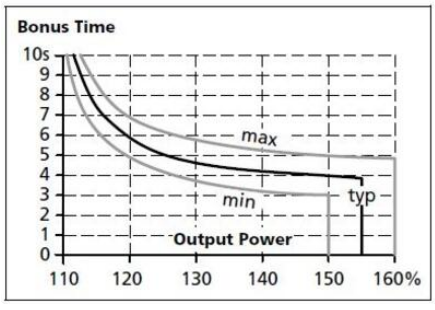


Fig. 9-1 **Efficiency vs. output current, at 24V, typ.**

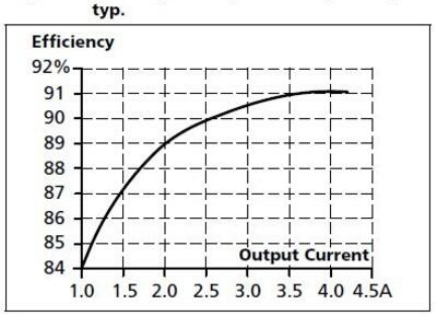


Fig. 13-1 **Front side**

Fig. 22-1 Front view

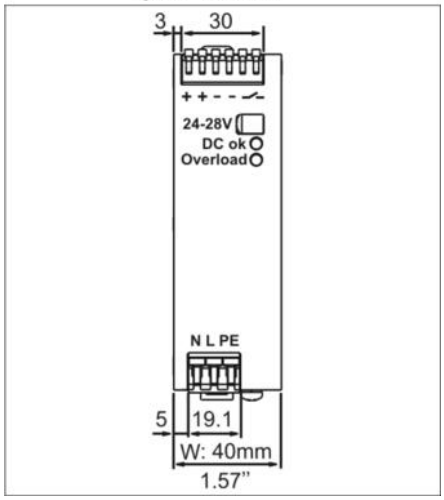
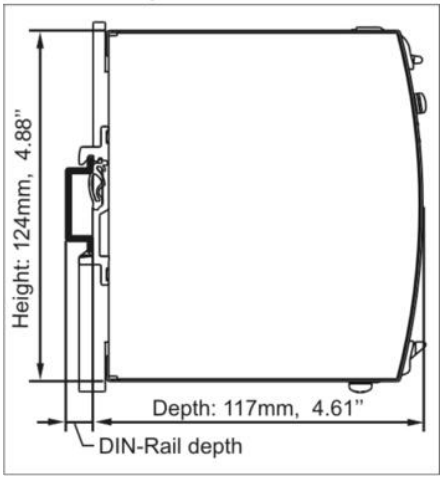


Fig. 22-2 Side view



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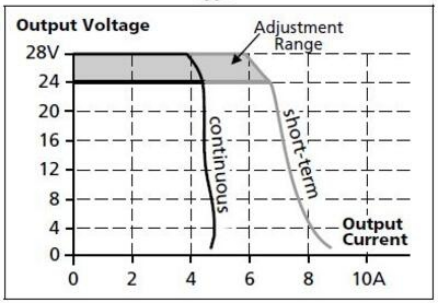

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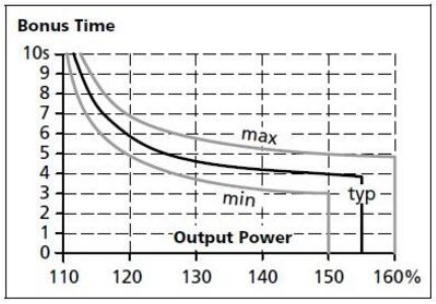

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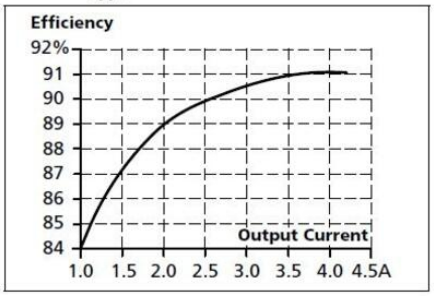

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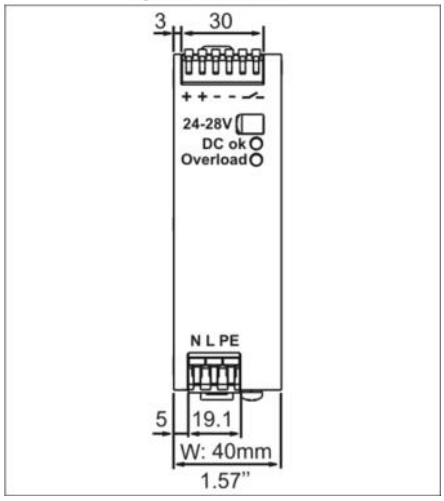

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