



## Main

|                             |                  |
|-----------------------------|------------------|
| Range of product            | Phaseo Universal |
| Product or component type   | Converter module |
| Rated power in W            | 24 W             |
| Input voltage               | 24...28.8 V DC   |
| Output voltage              | 12 V DC          |
| Power supply output current | 2 A              |

## Complementary

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input voltage limits     | 22...30 V                                                                                                                                                                                                                                                                                                                                                                                                             |
| Efficiency               | 82...100 %                                                                                                                                                                                                                                                                                                                                                                                                            |
| Power dissipation in W   | 4 W                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Input protection type    | Against reverse polarity                                                                                                                                                                                                                                                                                                                                                                                              |
| Output voltage limits    | 7...15 V                                                                                                                                                                                                                                                                                                                                                                                                              |
| Line and load regulation | 1...3 %                                                                                                                                                                                                                                                                                                                                                                                                               |
| Residual ripple          | <= 100 mV                                                                                                                                                                                                                                                                                                                                                                                                             |
| Output protection type   | Against overload, protection technology: automatic reset<br>Against overvoltage, protection technology: tripping if U > 7.8 V, automatic reset<br>Against short-circuits, protection technology: automatic reset                                                                                                                                                                                                      |
| Connections - terminals  | Screw type terminals for input connection, connection capacity: 2 x 0.5...2 x 4 mm <sup>2</sup> AWG gauge24...10<br>Screw type terminals for output connection, connection capacity: 2 x 0.5...2 x 4 mm <sup>2</sup> AWG gauge24...10                                                                                                                                                                                 |
| Fixing mode              | By clips on 35 mm symmetrical DIN rail, operating position: horizontal<br>By clips on 35 mm symmetrical DIN rail, operating position: vertical                                                                                                                                                                                                                                                                        |
| Name of test             | Conducted/Radiated emissions conforming to EN 55022 Class B<br>Electrostatic discharges conforming to EN/IEC 61000-4-2<br>Emission conforming to EN 61000-6-3<br>Induced electromagnetic field conforming to EN/IEC 61000-4-6 level 3<br>Radiated electromagnetic field conforming to EN/IEC 61000-4-3 level 3<br>Rapid transient conforming to IEC 61000-4-4 level 3<br>Surge conforming to EN/IEC 61000-4-5 level 2 |
| Local signalling         | 1 LED green, function: output voltage (> 6 V)                                                                                                                                                                                                                                                                                                                                                                         |
| Product weight           | 0.3 kg                                                                                                                                                                                                                                                                                                                                                                                                                |

## Environment

|                                       |                                                                                                                |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------|
| IP degree of protection               | IP20 conforming to EN/IEC 60529                                                                                |
| Ambient air temperature for operation | -25...60 °C                                                                                                    |
| Ambient air temperature for storage   | -40...85 °C                                                                                                    |
| Relative humidity                     | 0...90 % during operation<br>0...95 % during storage                                                           |
| Electrical shock protection class     | Class III                                                                                                      |
| Vibration resistance                  | 2 gn (f = 11.9...150 Hz) conforming to EN/IEC 61131-2<br>3.5 mm (f = 3...11.9 Hz) conforming to EN/IEC 61131-2 |
| Dielectric strength                   | 500 V between input and ground<br>500 V between input and output<br>500 V between output and ground            |

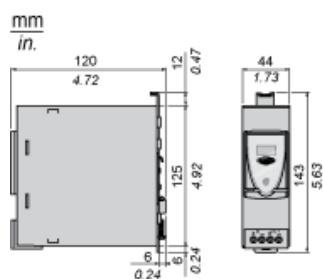
|                              |                                                                                                                                                                               |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product certifications       | CCSAus<br>UL                                                                                                                                                                  |
| Environmental characteristic | EMC conforming to EN 50081-1<br>EMC conforming to EN 61000-6-3<br>EMC conforming to EN/IEC 61000-6-2<br>Safety conforming to EN/IEC 60950-1<br>Safety conforming to IEC 61204 |

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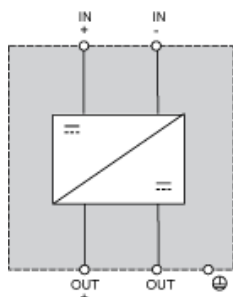
Converter Module

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Dimensions



## Internal Wiring Diagram



## Scheme of Use with ABL4 Power Supplies

