INSTALLATION INSTRUCTION

PSC/PSL Series

Positive Switching Regulators / Up to 288 W DC-DC Converters

OPERATION RANGE

Refer to product rating label for input and output ratings.

INSTALLATION

The PSC Series is designed for wall or chassis mounting with faston connections (6.3 – power, 2.8 – auxiliary). The PSL Series is designed for insertion into a 19" DIN-rack and exhibits a H11 connector; Other installation methods may not meet the safety requirements.

The input pin (Vi+) is not connected via a built-in fuse except an option C - Crowbar. An additional external fuse suitable for the application,might be necessary in the wiring to the input other input (Vi-), particularly if:

- Earth impedance is high or undefined

Notes:

– Do not open the converters, or warranty will be invalidated.

For more details refer to Product datasheet / Accessories datasheets (application notes) at belfuse.com/power-solutions and go to the respective product or family part number listing.

PROTECTION DEGREE AND CLEANING LIQUIDS

Condition: Female connector fitted to the converter.

- IP 30: All models except those with option P including a potentiometer.
- IP 20: All models fitted with option P with potentiometer.

In order to avoid damage, any penetration of cleaning fluids has to be prevented, since the power supplies are not hermetically sealed.

SENSE LINES

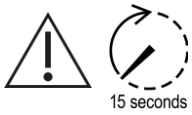
This model does not enable feature compensation of the voltage drop across the connector contacts and the load lines.

For more details refer to Product datasheet/ Accessories datasheets (application notes) at belfuse.com/power-solutions and go to the respective product or family part number listing.

CAUTIONS

The converters are components intended exclusively for inclusion within other equipment by an industrial assembly operation or by professional installers. Installation must strictly follow the national safety regulations in compliance with the enclosure, mounting, creepage, clearance, casualty, markings, and segregation requirements of the end-use application.

This is a Class A product. In a residential environment this product may cause radio interference in which case the user may be required to take adequate measures.



CAUTION For units with 144 V input power supply – High Voltage: Turn off the power supply before disconnecting any terminal. Discharge the power terminals or wait 15 second before servicing. Do not turn on when any terminal is not connected.

ATTENTION Pour les unités avec alimentation d'entrée 144 V – Haute tension: éteindre le l'alimentation avant de déconnecter toute borne. Déchanger les bornes d'alimentation ou patienter 15 sec. avant toute réparation. Ne pas mettre l'alimentation en marche lorsqu'aucune borne n'est connectée.

SAFETY OF OPERATOR-ACCESSIBLE OUTPUT CIRCUITS

The input and the output circuits are not separated. The negative path is internally interconnected. The regulators should be connected to a secondary circuit. Check for hazardous voltages before connecting. Make sure that a regulator failure (e.g. by an internal short-circuit) does not result in a hazardous condition.

For more information see datasheet and for PSL see also Accessories datasheet: *Cassette Style Mating Connectors*.

ISOLATION AND PROTECTIVE EARTHING

PSC Positive switching regulators do not use input to output isolation – It can be provided by an external front end only (e.g., a transformer with rectifier). These appliances have no protective-earth connection and feature only a single level of insulation between live parts and exposed metalwork.

PSC Positive switching regulators are Class 0 – They shall only be used for equipment intended for connection by means of cord and plug /to circuits operating at voltage not exceeding 150 V to earth. Refer to product rating label for input and output ratings.

PSL Positive switching regulators do not use input to output isolation – It can be provided by an external front end only (e.g., a transformer with rectifier). For protective-earth connection use Pin no. 32 (⏚) – Class I. The resistance between earth connection and case (<0.1 Ω) is tested as well.

FUSING

A fuse mounted inside the converter protects against fatal defects.

Fuse Specification (only with C- option):

Model with option C - Crowbar	Fuse type	Reference	Rating
PSC / PSL with Ionom = 6 A	slow-blow 1	Littlefuse	6.3 A / 250 V
PSC / PSL with Ionom > 6 A	slow-blow 1	Littlefuse	16 A / 250 V

[1] Fuse size 6.3 × 32 mm

SERVICING

The product(s) must be returned to the Authorized Bel Service Center for repair with a pre-assigned RMA number.

LIMITED WARRANTY

For models with -9 and RoHS (suffix G) the company warrants each power supply of its manufacture for a period of five years from the date of original shipment. This warranty applies to defects in materials and workmanship that result in non-performance to published specifications. The product(s) must be returned to the Authorized Service Center for repair with a pre-assigned RMA number.

The company assumes no liabilities for consequential damages of any kind through the use or misuse of its products by any user. No other obligations are expressed or implied.

Please note that the specifications, terms, and conditions stated are subject to change without notice.

INPUT AND OUTPUT CONNECTOR DETAILS

Refer to Product datasheet at belfuse.com/power-solutions.

MECHANICAL DIMENSIONS AND MOUNTING REQUIREMENTS

Refer to Product datasheet at belfuse.com/power-solutions.

ALLOWED MOUNTING POSITION

Make sure that there is a sufficient airflow available for convection cooling and verify it by measuring the case temperature T_C, when the converter is installed and operated in the end-use application; see Thermal Considerations in Product datasheet at belfuse.com/power-solutions

NUCLEAR AND MEDICAL APPLICATIONS

These products are not designed or intended for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems.

TECHNICAL REVISIONS

The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

