

# INSTALLATION INSTRUCTION

## RCM60 Series 60 Watt 10:1 DC-DC Converters

### OPERATION RANGE

Refer to product rating label for input and output ratings.

### INSTALLATION

Connection to the system with cables having wire section 0.08 – 2.5 mm<sup>2</sup> (28 – 12 AWG) or with mating connectors define in product datasheet (option K). Other installation methods may not meet the safety requirements.

Pin no. 4 on input connector is reliably connected to the case. For safety reasons it is essential to connect this pin to the protective earth.

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

### PROTECTION DEGREE AND CLEANING LIQUIDS

The converters are not hermetically sealed. In order to avoid possible damage, any penetration of liquids shall be avoided.

The converters correspond to protection degree IP 30.

### CAUTIONS

These converters are components, intended exclusively for inclusion by an industrial assembly process or by a professionally competent person. Installation must strictly follow the national safety regulations in respect of the enclosure, mounting, creepage distances, clearances, 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.

### PROTECTIVE EARTHING

There's a protective earth (PE) pin available on input connector.

### FUSING

The railway standard EN 50155 does not allow fuses in the converters. Consequently, the installer must add an external fuse listed in below table or corresponding type of circuit breaker. However, when this is not possible, an incorporated fuse is available (option F). This fuse is not accessible and will not trip, except if the converter is defect.

External fuses:

Model	Fuse type	Reference and rating
XRCM60-12	8 A fast acting	Littelfuse 0507 008.MXEP
XRCM60-15	8 A fast acting	Littelfuse 0507 008.MXEP
XRCM60-24	8 A fast acting	Littelfuse 0507 008.MXEP
12RCM60-12	15 A fast acting	BEL 0ADE (P) 15-R
12RCM60-15	15 A fast acting	BEL 0ADE (P) 15-R
12RCM60-24	15 A fast acting	BEL 0ADE (P) 15-R

### SERVICING

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

### LIMITED WARRANTY

For all models 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 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.

### CONNECTOR DETAILS

Refer to the product datasheet at [belfuse.com/power-solutions](http://belfuse.com/power-solutions)

## MECHANICAL DIMENSIONS AND MOUNTING REQUIREMENTS

Refer to the product datasheet at [belfuse.com/power-solutions](http://belfuse.com/power-solutions)

## ALLOWED MOUNTING POSITION

Make sure that there is sufficient airflow available for convection cooling and that the temperature of the bottom plate is within the specified range. This should be verified by measuring the case temperature at the specified measuring point, when the converter is operated in the end-use application. TC max defined in datasheet should not be exceeded. Ensure that a failure of the converter does not result in a hazardous condition.

## 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.