

# Operating Manual LCM-EXT



**Powecon Oy**  
**WWW.POWECON.FI**

|                   |                                                                |             |                                                 |         |          |             |
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## **1 Warranty**

Powecon Oy warrants its products to be free from defects in material and workmanship under normal use and service for one year, beginning on the date of shipment. The warranty does not cover manuals, fuses, disposable batteries, damage from neglect, misuse, contamination, alteration, accident or abnormal conditions of operation or handling, including failures caused by use outside of the product's specifications, or normal wear and tear of mechanical components.

## **2 Safety information**

Before use read this operating manual.

Do not open the unit cover or remove any parts of the load unit.

In case of unit failure send it always to the Powecon repair service.

This unit is intended only for indoor use. Pollution degree 2.

Operation ambient temperature range is +5°C – +40°C

Use only 24-220VDC supply voltage. Unit has 100A breaking capacity fuses inside. Do never connect this unit to low impedance current source like battery or similar without fuse with adequate breaking capability in series.

Do never exceed maximum voltage of the unit.

Do not reverse the input polarity of the unit.

This unit is for professional use only.

## **3 Abbreviations and terminology**

|      |                               |
|------|-------------------------------|
| EUT  | Equipment under test          |
| Tamb | Ambient temperature           |
| ELU  | Electronic load unit          |
| EMC  | Electromagnetic compatibility |
| Max  | Maximum                       |
| Min  | Minimum                       |
| PWB  | Printed wire board            |
| TBD  | To be defined                 |

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## **4 List of appendices**

## **5 Introduction**

LCM-EXT is extension unit which shall be used with LCM6 leakage current monitor.  
If DC distribution system is floating (PLUS or MINUS is not connected to protective earth PE)  
, must LCM-EXT unit be used with LCM6. Otherwise LCM6 does not work as intended in  
case of high leakage current.

## **6 Specification**

### **Absolute maximum ratings**

Input voltage range 18-265VDC  
Storage temperature -20°C - +50°C  
Operating temperature +5°C - +40°C

## **7 Operating**

LCM-EXT unit can only be used with LCM6 leakage current monitor.  
LCM-EXT is designed for DC use.

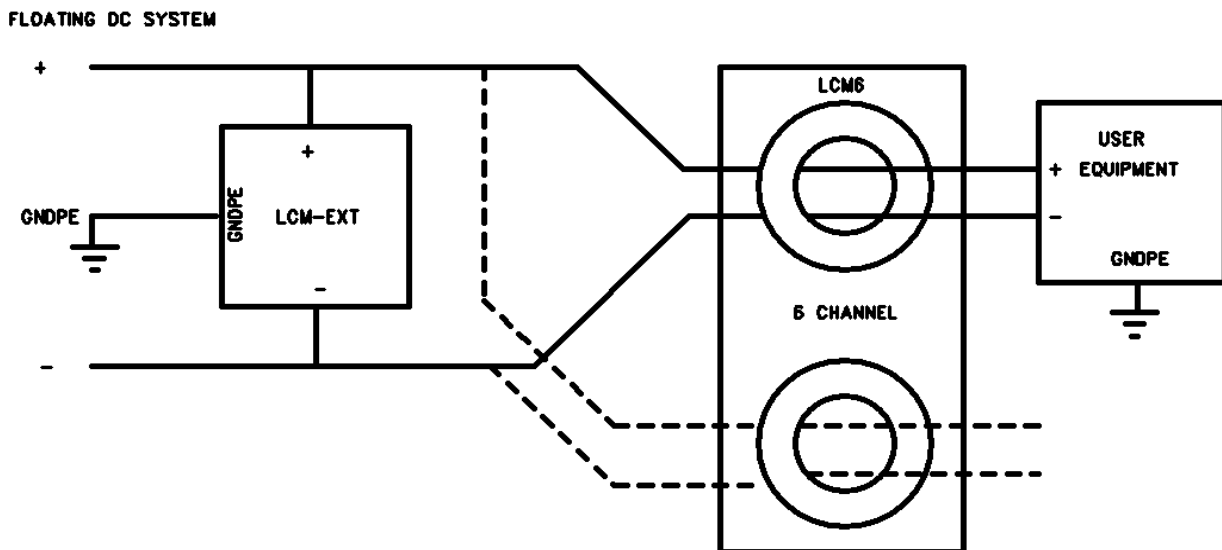
Connect LCM-EXT input connector to system PLUS, system MINUS and GNDPE.  
Connect DIN-rail to GNDPE if it is used to mount LCM-EXT unit.

One LCM6 channel at a time can give alarm if LCM-EXT is used.

If LCM-EXT unit is mounted using screws, be sure that mounting surface is connected to  
GNDPE.

When unit is operating, small current flows between PLUS and GNDPE. Also small current  
flows between MINUS and GNDPE.

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Connection diagram of DC distribution system when LCM6 and LCM-EXT is used.

LCM-EXT input connector type is Phoenix Contact MSTB 2,5/3-G 1754452 5,0mm pitches, angle or similar type.

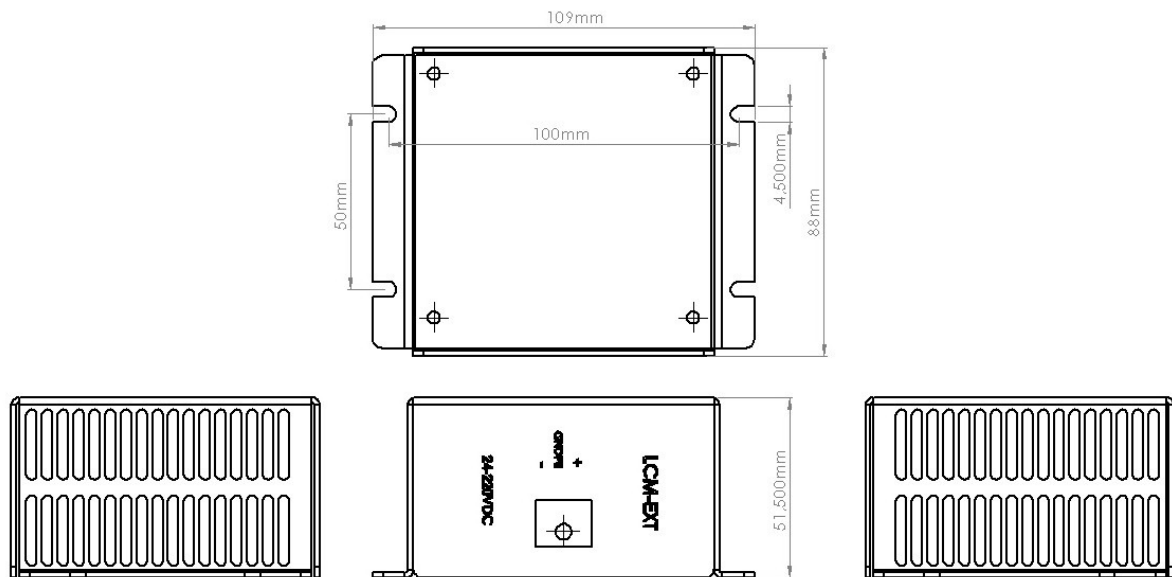
Input connector mating surface is tin plated. So tin plated mating connector is recommended.

Suitable mating connector is for example Phoenix Contact MSTB 2,5/3-ST 1754465.

## 8 Mechanical dimension

Width 88mm  
 Depth 55mm  
 Height 110mm  
 Weight 0,1kg

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## Input connector

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**Screw mounting possibility**



**DIN-Rail clip mounting possibility**

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