

# OMP 100

STABILIZED SOURCE TO DIN RAIL



## 1. DESCRIPTION



### DESCRIPTION

The OMP 100 model is a universal power source with active compensation of power factor.

The source is in a plastic box with terminal board to DIN rail.

Located on the front of the transmitter there is a bi-color LED, which signals the operational status of the source.

### LED SIGNALIZATION

#### LED status

|       |                  |
|-------|------------------|
| green | source switch-on |
| red   | source overload  |

## 2. CONNECTION

### SAFETY INSTRUCTIONS

Please, read the enclosed safety instructions carefully and abide by them!

These instrument shall be safeguarded by independent or common fuses (breakers) with regard to their real consumption!

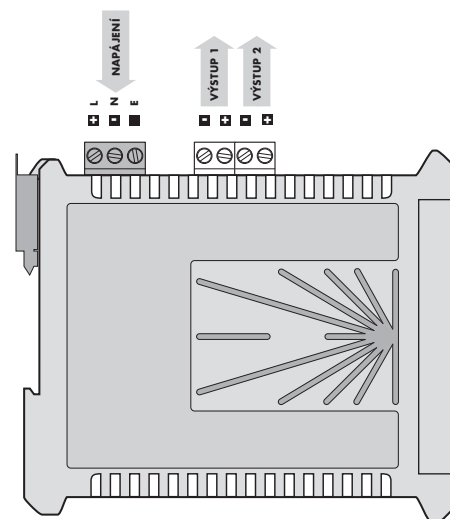
For safety information, the EN 61 010-1 + A2 must be obeyed.

This instrument is not explosionproof!

### TECHNICAL DATA

Power sources of the OMP 100 series meet the European regulation 89/336/EEG and statutory order 168/1997 Coll.

The instrument is fit for unlimited use in agricultural and industrial areas.



! Grounding on terminal „E“ has to be connected at all times.

### SETTING INPUT VOLTAGE

The source output consists of two independent output voltages in the value of 5 or 12 V, with mutual isolation of 60 V.

Technical solution allows even to load one output only.

Outputs may be connected in daisy chain or in parallel.

## 3. TECHNICAL DATA

### OUTPUT

|                          |                                                                                     |
|--------------------------|-------------------------------------------------------------------------------------|
| Output:                  | 2x 5 VDC/8 A or 12 VDC/4 A, max. 96 W                                               |
| Tolerance:               | ±0,25 V                                                                             |
| Regulation:              | ±0,1 V                                                                              |
| Ripple:                  | < 50 mVpp                                                                           |
| Power loss ride-through: | > 200 ms                                                                            |
| Efficiency:              | > 80 %                                                                              |
| Isolation:               | 60 V between outputs                                                                |
| Function:                | active current restriction as per selected range, exceeding is indicated by red LED |

### POWER SUPPLY

|                   |                                     |
|-------------------|-------------------------------------|
| Range:            | 230 V AC/DC, 50/60 Hz, ±20%, 90 VA  |
| Input frequency:  | DC, 47...63 Hz                      |
| Input current:    | 500...45 mA                         |
| Starting current: | < 20 A, < 1,5 ms                    |
| Protection:       | by fuse inside the instrument (T4A) |

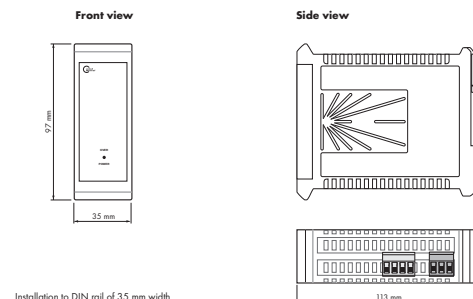
### MECHANIC PROPERTIES

|               |                                      |
|---------------|--------------------------------------|
| Material:     | PA 66, incombustible UL 94 V-1, blue |
| Dimensions:   | 113 x 98 x 35 mm                     |
| Installation: | to DIN rail, width 35 mm             |

### OPERATING CONDITIONS

|                     |                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------|
| Connection:         | terminal board, conductor section < 2,5 mm <sup>2</sup>                                                |
| Setting time:       | within 5 minutes after switchon                                                                        |
| Working temp.:      | 0°...60°C                                                                                              |
| Storage temp.:      | -10°...85°C                                                                                            |
| Cover:              | IP20                                                                                                   |
| El. safety:         | EN 61010-1, A2                                                                                         |
| Insul.resistance:   | for pollution degree II, measuring category III.<br>Instrument supply, output > 300 V (ZI), 250 V (DI) |
| EMC:                | EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11;<br>EN 55022, A1, A2                                    |
| Seismic capability: | IEC 980: 1993, čl. 6                                                                                   |

## 4. INSTRUMENT DIMENSIONS



Installation to DIN rail of 35 mm width

! Upon installation it is recommended to ensure air circulation along the side walls.

## 5. DECLARAT. OF CONFORMITY

**Company:** ORBIT MERRET, spol.s.r.o.  
Klánova 81/141, 142 00 Prague 4  
Czech Republic  
Trade licence No. 00551309

**Manufacturer:** ORBIT MERRET, spol.s.r.o.  
Vodňanská 675/30, 198 00 Prague 9  
Czech Republic

declares at its explicit responsibility that the product presented hereunder meets all technical requirements, is safe for use when utilised under the terms and conditions determined by ORBIT MERRET, spol.s r.o. and that our company has taken all measures to ensure conformity of all products of the types referred-to hereunder, which are being brought out to the market, with technical documentation and requirements of the appurtenant Czech statutory orders.

**Product:** Stabilized source

**Type:** OMP 100

It has been designed and manufactured in line with requirements of:

Statutory order no. 17/2003 Coll., on low-voltage electrical equipment (directive no.73/23/EHS)

Statutory order no. 18/2003 Coll., on electromagnetic compatibility (directive no.89/336/EHS)

The product qualities are in conformity with harmonized standard:

Electrical safety: EN 61010-1

EMC:

|                                |                     |
|--------------------------------|---------------------|
| EN 50131-1, chapters 14 and 15 |                     |
| EN 50130-4, chapter 7          |                     |
| EN 50130-4, chapter 8          | EN 61000-4-11, ed.2 |
| EN 50130-4, chapter 9          | EN 61000-4-2        |
| EN 50130-4, chapter 10         | EN 61000-4-3, ed.2  |
| EN 50130-4, chapter 11         | EN 61000-4-6        |
| EN 50130-4, chapter 12         | EN 61000-4-4, ed.2  |
| EN 50130-4, chapter 13         | EN 61000-4-5        |
| EN 6100-4-8                    |                     |
| EN 6100-6-1                    |                     |
| EN 6100-6-2                    |                     |
| EN 55022, chapters 5 and 6     |                     |

The product is furnished with CE label issued in 2007.

As documentation serve the protocols of authorized and accredited organizations:

MO ČR, Agency for development of informatics, testing lab no.1558, accredited ČIA, in compliance with EN ISO/EIC 17025

Assessment of conformity pursuant to §22 of Act no. 22/1997 Coll. and changes as amended by Act no.71/2000 Coll. and 205/2002 Coll.

Prague, 13 November 2007

Miroslav Hackl, v.r.  
Company representative

## 6. CERTIFICATE OF GUARANTEE

**Product** OMP 100

**Type** .....

**Manufacturing No.** .....

**Date of sale** .....

# GUARANTEE

A guarantee period of 60 months from the date of sale to the user applies to this instrument.

Defects occurring during this period due to manufacture error or due to material faults shall be eliminated free of charge.

For quality, function and construction of the instrument the guarantee shall apply provided that the instrument was connected and used in compliance with the instructions for use.

The guarantee shall not apply to defects caused by:

- mechanic damage
- transportation
- intervention of unqualified person incl. the user
- unavoidable event
- other unprofessional interventions

The manufacturer performs guarantee and post.guarantee repairs unless provided for otherwise.

Stamp, signature



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