### UC/DC-wide rangepower supplies isolated



Cover optionally

®registered trademark of company SYKO GmbH & Co.

- Euro card 3U, 9TE
- Input noise suppression EN 55011.B
- **EMC-disturbance protection:** EN 61000-4-4/-5 level 3
- Short circuit, no-load, over load protected
- 5 mm air and creepage distances
- **CE-conformity declaration on request**
- Active transient protection filter (SYKO patent no. 3804074 and 0402367)

# Series ROS 02 U/B



telecommunications / automation and railway applications

# Main points:

#### **Output:**

- Accuracy absolute ± 1%
- Regulation <±5%  $\Sigma(U_{in}/I_{out}/T_{U})$ Short circuit current  $\leq 1,3 I_{nom}$
- No-load, static over load protected
- Ripple <50 mV (const. over  $T_{\nu}$ ) Spikes <260 mV (T 1:10/200MHz) Response time  $\Delta I = 50\% \le 250 \ \mu s$

#### Input:

- · Input filter EN 55011.B
- Disturbance protection: EN 61000-4-4 (Burst) level 3 EN 61000-4-5 (Surge) level 3

#### General:

- · EN 60950 security
- · Isolation test voltage

Input - output Input - Ground 3,75 KV AC 2,50 KV AC Output - Ground 2,50 KV AC

- CE-conformity on request
- Ambient temperature -10°C / +50°C
- Limit temperature on KK-★ max. 95°C
- Free air convection
- MTBF on request
- Weight on request
- Style Euro card 160 x 100 mm<sup>2</sup> Height 9 TE front panel
- Connector DIN 41612, 15-pol., style H
- Option: connection with screw terminal or other connector on request
- Intergrated input fuse

<u>Uin</u>	<u>Uout</u>	<u>lout</u>	Model
V	V	A	number
82 - 264 V AC	12	8,0	ROS 02·U 20·12·80
110 - 220 V DC	15	6,0	ROS 02·U 20·15·60
	24	4,0	ROS 02·U 20·24·40
	12.12	2,0.2,0	ROS 02·B 20·12·12·20·20

Modification costs for possible changes above values: on request

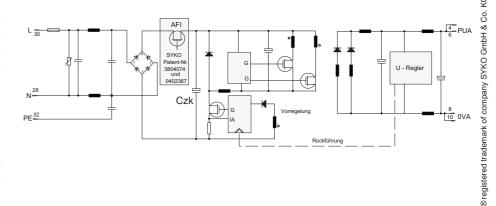
# single / double up to 125 Watt

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The **ROS02** series can replace the old, conventional linear transformer solutions in all applications based on the positive characteristics. The euro card style allows the build-in in multiple standard applications.

The advantages of switching mode power supplies are clear: small dimensions, processing of worldwide standard network voltages without switchover, higher efficiency, low input capacity. The disadvantages of the known



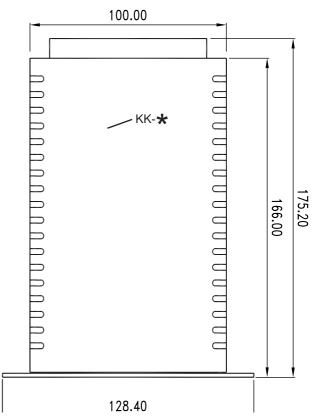
switch-mode concepts are bought to a minimum. E.g. the radio interference level acc. to the EN55011.B standard is kept with lowest filter effort. Special effort was put in the security requirements in the development phase. Our power supplies can guarantee secured potential isolation with sufficient air and creepage distances also in the transformer.

Unsymmetrical disturbances of surge pulses are handled with the combination of passive and active transient filters (TK-technology, SYKO-patents no. 3804074 and 0402367). Also an active inrush current limitation (ICL) prevents switch-on currents and fast transients. The input is not loaded with high capacitive intermediate- and storage capacitors.

Symmetrical disturbances based on burst and surge pulses have no consequences because of the secured air- and creepage distances of > 5 mm on the PCB and in the special transformer. Loose coupling and the neutral operation of the transformer's windings (low coupling capacity) effect these results.

# 45.40

64.20



**Warning:** up to > 4 mm air and/or creepage distances must be kept to other components/devices without additional isolation !!!

#### Measurement of radio interference

