

single, double, triple
up to 40 Watt

UC/DC-wide range-
power supplies isolated



- **Universal range 110/220/400/440V_{AC} and 110/220/450V_{DC} without switch-over**
- **CE-conformity declaration on request**
- **EN 55011.B - EN61000-4-4/5 level 4**
- **Short circuit, no-load, over load protected**
- **Functional independent outputs**
- **6,5 mm air and creepage distances**
- **Hold-up time**
- **Active transient protection filter**
(SYKO patent no. 3804074 and 0402367)

for ship, industry, instrumentation applications



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Series ROS 06

Main points:

Outputs:

- Accuracy absolute $\pm 1\%$
- Regulation $\pm 1\% \sum(U_{in} / I_{out} / T_U)$
- Short circuit proof
- No-load, static over load protected
- Ripple $< 10 \text{ mV}$ (const. over T_U)
- Spikes $< 50 \text{ mV}_{pp}$ ($T 1:1/50\text{MHz}$)
- Response time $\Delta I = 50\% \leq 250 \mu\text{s}$
- Output filter
- Functional independent and isolated outputs

Input:

- Universal input voltage range DC and AC
- Input filter EN 55011 curve B
- Disturbance protection
EN61000-4-4 (Burst) level 4
EN61000-4-5 (Surge) level 4
- Active transient protection (SYKO-patent)
- Active Inrush current limitation
- network interruption
Hold-up time = $f(U_{in})$
- Network frequency 50/60 Hz
- Option: long-term transient 1065V/2ms
- Option: 400 Hz

General:

- Isolation test voltage
Input - output 3,75 KV AC
Input - Ground 2,50 KV AC
Output - Ground 2,50 KV AC
Output - Output 0,50 KV AC
- CE-conformity on request
- Ambient temperature $-20^\circ\text{C} / +70^\circ\text{C}$
- Free air convection
- MTBF on request
- Weight approx. 380g without front panel
- Style: Euro card 160 x 100 mm²
- Style: 3U / 8 TE front panel
- Option: Front panel (1TE displaced !!!)
- Connector DIN 41612, 15-pol., style H
- Open build-up,
security distance customer sided
- Input fuse customer sided

<u>U_{in}</u> V		<u>U_{out}</u> V	<u>I_{out}</u> A	Model number
82 - 528 V AC 75 - 560 V DC 740 Vs	single	5,1	8,0	ROS 06-U24-05-080
		12	3,3	ROS 06-U24-12-033
		15	2,6	ROS 06-U24-15-026
		24	1,6	ROS 06-U24-24-016
82 - 528 V AC 75 - 560 V DC 740 Vs	double	5,1-12	3,0-1,5	ROS 06-B24-05-12-30-15
		5,1-15	3,0-1,2	ROS 06-B24-05-15-30-12
		5,1-24	3,0-0,7	ROS 06-B24-05-24-30-07
		12-12	1,6-1,6	ROS 06-B24-12-12-16-16
	15-15	1,3-1,3	ROS 06-B24-15-15-13-13	
82 - 528 V AC 75 - 560 V DC 740 Vs	triple	5,1	1,0	
		15	0,7	
		24	0,7	ROS 06-T24-05-15-24
		5,1	1,5	
		12	0,7	
		12	0,7	ROS 06-T24-05-12-12

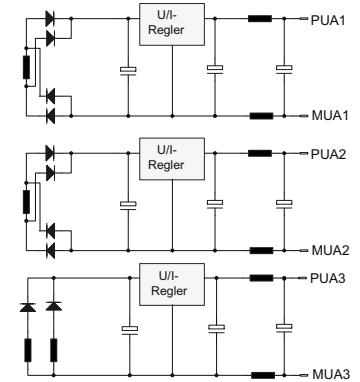
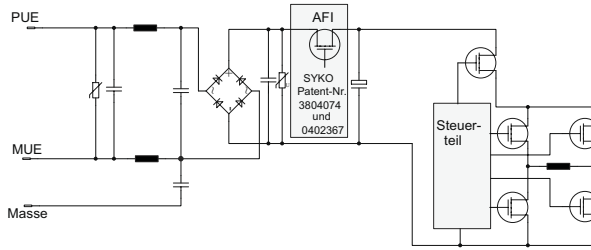
Modification costs for possible changes above values: on request
Higher output power by limited input voltage range and derating: on request
Front panel 8TE (mounted 1TE displaced) on request

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The **ROS06** series is developed with universal input voltage range of 82 – 528 V AC and 75-560 V DC (without switch-over) for the global use on ships with 440 V-networks and instrumentation with 110/230 V AC as well as the use on 110/220/450 V battery or fuel cell applications. Special effort was put on the shock and vibration strength and the ambient temperatures needed for applications in Nato-ships.



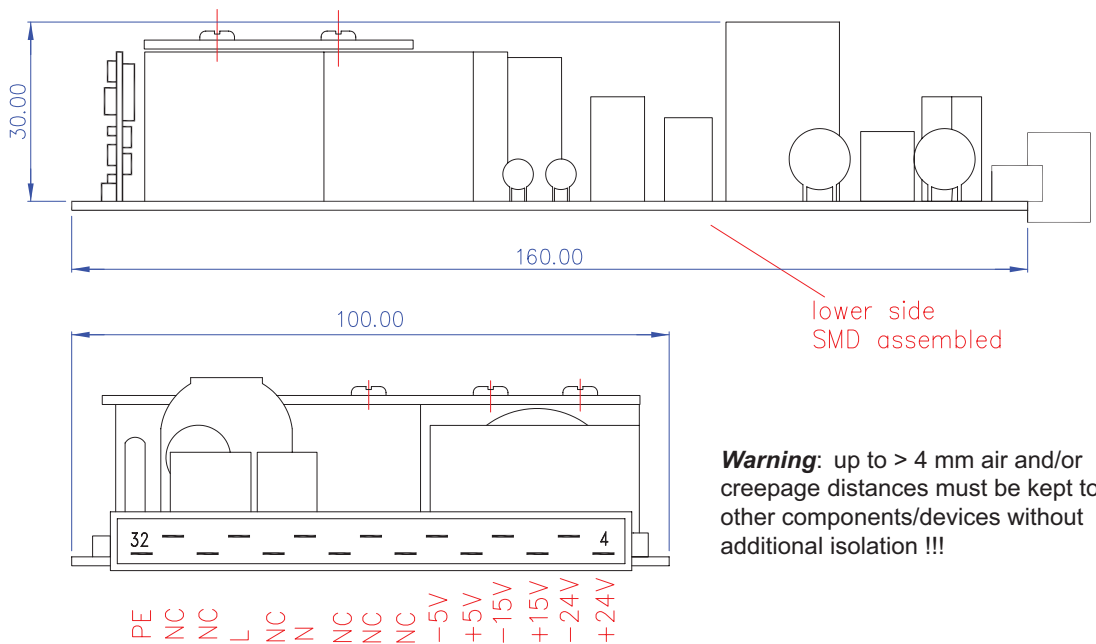
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An input sided active transient protection filter (SYKO-patent DE 3804 074 C2) prevents the breakthrough of dynamical (du/dt) switch-on flanks to the hold-up electrolytic capacitor. At the same time long-term transients (optionally 1065 V/2 ms V6 STANAG 1008) are absorbed. Extreme short-term transients (lightning protection) are controlled (4 kV/50 μ s/2 Ω). SYKO's switching topology allows any quantity of isolated and separate regulated, short circuit proof outputs with amplitudes up to 110V by very wide input voltage ranges. The standard supply is equipped with three isolated, regulated and short circuit proof outputs 5,1 V / 15 V / 24 V.

Pin assignment

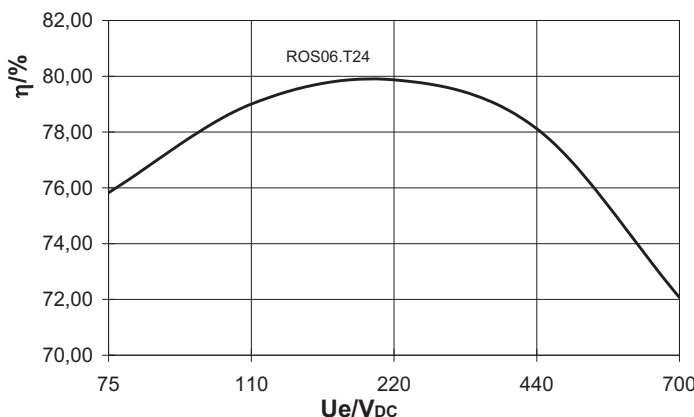
+Uo1	4
-Uo1	6
+Uo2	8
-Uo2	10
+Uo3	12
-Uo3	14
-Ui (N)	22
+Ui (L)	26
Ground	32

Mechanics



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

Efficiency



Measurement of radio interference

