

Switchmode Power Supplies PSU05-045. PSU24-075. PSU24-240. PSU48-240. PSU48-800. PSU48-1000. PSU48-1500.



A full range of highly efficient switchmode powersupplies ideally suited for supplying the entire range of JVL integrated MAC motors and JVL stepmotor drivers.

You can choose between power supplies with 5, 24 or 48 Volts output and current ratings from 5A to 19A for driving a single or several motors at the same time.

The Power supplies offer very low ripple noise and includes a comprehensive range of protection facilities.

The supplies are all CE and UL etc. approved and can be connected to 110, 230VAC etc. for worldwide use.

The smaller types are designed for direct installation on DIN rails as commonly used in control cabinets, while the two bigger types are in their own separately cooled cabinets.



PSU05-045



PSU24-075



PSU24-240 PSU48-240



PSU48-800



PSU48-1000



PSU48-1500

Switchmode Power Supply PSU05-045, 5V, 5A and Switchmode Power Supply PSU24-075, 24V, 3.2A

- Universal AC input/Full range
- UL508 approved
- Installed on DIN rail TS35 / 7.5 or 15
- Protections: short circuit / over load / over voltage / over temperature
- Fixed switching frequency at 100kHz (PSU05-045), 50kHz (PSU024-075)
- Approvals: UL / TUV / CB / CE
PSU024-075 also CUL
- LED indicator for power on
- Cooling by free air convection
- 100% full load burn-in test



Switchmode Power Supply PSU24-240, 24V, 10A and Switchmode Power Supply PSU48-240, 48V, 5A

- Universal AC input/Full range
- UL508 approved
- $PF \geq 0.98 @ 115VAC$;
 $\geq 0.95 @ 230VAC$
- Installed on DIN rail TS35 / 7.5 or 15
- Protections: short circuit / over load / over voltage / over temperature
- Fixed switching frequency at 100kHz (PSU05-045), 100kHz (PSU024-075)
- Approvals: UL / CUL / TUV / CB / CE
- LED indicator for power on
- Cooling by free air convection
- 100% full load burn-in test



Switchmode Power Supply PSU48-800, 48V, 16A and

Switchmode Power Supply PSU48-1000, 48V, 19A

Switchmode Power Supply PSU48-1500, 48V, 28.5A

PSU48-800

- AC 180-260V input only
- PF $\geq 0.98@230VAC$
- Protections: short circuit / over load / over voltage / over temperature
- Built-in remote sense function
- Built-in remote On/Off control
- Built-in power good signal output
- Can adjust from 25-100% output voltage by external control 1-5V
- Forced air cooling by built-in DC fan



PSU48-1000, PSU 48-1500

- Universal AC input / Full range(PSU48-1000)
- AC input 176-264V (PSU 48-1500)
- PF $\geq 0.98@115VAC$; (PSU48-1000) $\geq 0.95@230VAC$ (PSU48-1000/1500)
- Current sharing up to 2000W (1+1) (PSU48-1000)
- Built-in remote sense function
- Built-in remote On/Off control



- Protections: short circuit / over load / over voltage / over- temperature
- Forced air cooling by built-in

- DC fan
- Approvals: UL / CUL / TUV / CB / CE

Applications










Power Supply



MAC motor

Several MAC motors can be supplied from the same power supply. Please consult the power supply chapter in the MAC motor manual for further details.

Specifications

Type	PSU05-045	PSU024-075	PSU24-240	PSU48-240	PSU48-0800	PSU48-1000	PSU48-1500
Output	5V, 0-5A	24V, 0-3.2A	24V, 0-10A	48V, 0-5A	48V, 0-16A	48V, 0-19A	48V, 0-28.5A
Tolerance	±2%	±2%	±1%	±1%	±1%	±1%	±1%
R&N	100mV	100mV	80mV	150mV	480mV	200mV	150mV
Efficiency	72%	76%	84%	85%	89%	86%	86%
AC input voltage	85-264VAC; 120-370VDC				180-260VAC, 47-63Hz	90-264VAC; 127-370VDC	176-264VAC; 248-370VDC
AC inrush current	Cold start, 30A at 115VAC, 60 at 230VAC		Cold start, 30A at 115VAC, 50 at 230VAC		4.5A@230VAC		
DC adjustment range	-5, +10% of rated output voltage	+10% of rated output voltage	+10% of rated output voltage		±5% of rated output voltage	-5+10% of rated output voltage	
Over load protection	105%-150% constant current limiting, auto-recovery					115%-140% constant current limiting, auto-recovery	
Over voltage protection	115-135% of rated output voltage	120-140% of rated output voltage	120-150% of rated output voltage		110-135% of rated output voltage	115-140% of rated output voltage	
Setup, rise, hold up time	800ms, 60ms, 50ms at full load and 230VAC	100ms, 60ms, 50ms at full load and 230VAC	800ms, 40ms, 20ms at full load and 230VAC			1500ms, 50ms, 15ms at full load and 230VAC	
Withstand voltage	I/P-O/P:3kVAC, I/P-FG: 1.5kVAC, 1 minute						
Working temperature	0-45°C@100%, 50°C@80% load	-10-50°C@100%, 60°C@60% load	-10-55°C@100%, 70°C@60% load		-10-50°C@100%, 65°C@50% load	0-45°C@100%, 60°C@70% load	0-50°C@100%, 60°C@80% load
Safety standards	UL508, TUV EN60950 approved				UL60950, EN60950 approved	UL1950, EN60950 approved	
EMC standards	EN55022 classB, ENG1000-3-2, 3, EN50082-2, EN61000-4-2,3,4,5,6,8,11, ENV50204	EN55022/EN55011 classB, EN61000-3-2, 3, EN61000-6-2, EN61000-4-2,3,4,5,6,8,11, ENV50204	EN55022/EN55011 classB, EN61000-3-2, 3, EN61000-6-2, EN61000-4-2,3,4,5,6,8,11, ENV50204		EN55022 classA, EN61000-3-2, 3, EN61000-4-2,3,4,5,6,8,11, ENV50204	EN55022 classB, EN61000-3-2, 3, EN61000-4-2,3,4,5,6,8,11, ENV50204	
Connection	I/P: 3 poles, O/P: 4 poles screw DIN terminal						
Dimensions	93x78x67mm	100x55.5x125.2mm	125x100x125.2mm	125x100x125.2mm	291x120x68mm	278x129x127mm	278x129x190.5mm
Weight	0.31 kg	0.6 kg	1.2kg	1.2kg	2.3kg	5.2kg	7.4kg
No. of MAC050*	-	2	2-4	2-4	6-14	7-17	12-28
No. of MAC140*	-	(1)	1-2	1-2	3-7	4-8	6-14
							

* Depends on velocity and torque load. Please consult user manual.



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