Your automation should be permanently supplied Our compact PROeco power supplies offer that as part of an economical concept Let's connect.



# Find the cost-effective solution for your power supply

PROeco combines all of the basic functions in a compact design

You are looking for a reliable power supply with basic functionality? With PROeco, we are offering you a series of switched-mode power supply units that deliver a high degree of efficiency and system suitability. Let's connect.

Even in series machine construction, switched-mode power supply units can create a real competitive edge thanks to above-average performance values. The efficient PROeco series offers all of the basic functions and delivers impressively high performance and flexibility.

Our PROeco switched-mode power supply units are characterised by their compact design, a high degree of efficiency and the fact that they are extremely easy to service. Thanks to over temperature protection, short-circuit and overload protection, they can be universally used in all applications.

Solutions featuring PROeco are characterised by extensive safety functions and compatibility with our diode modules, capacity modules and UPS components for setting up a redundant power supply.



# High performance and failure protection thanks to comprehensive range of expansion modules

Redundant switched-mode power supply units, uninterruptible power supplies and capacity modules increase system reliability and prevent costly machine downtimes. The extensive range of expansion modules satisfies your requirements down to the smallest detail. For an uninterruptible power supply, we offer UPS devices, buffer modules and batteries for bridging from a few ms to several hours. The diode and redundancy modules combine two power supplies, in order to satisfy increased performance requirements or compensate for a device failing. The capacity module offers energy reserves, for example, to cover a short-term power requirement for a motor start-up. Furthermore, the capacity module can be provided with enough power to selectively trigger circuit breakers in the event of a short circuit. A DC/DC converter isolates a power supply galvanically, so as to prevent voltage losses or ground loops, for instance.





# In your automation, you have to be able to count on every cm

Our new PROeco switched-mode power supply units have extremely compact designs and outstanding performance features

The new switched-mode power supply units of the PROeco series fit optimally in machine construction applications where space, user friendliness and efficiency are the top priorities. Direct parallel connection option, a status relay and an adjustable output voltage are basic features required for every application. A visual display indicates the upper load limit from 90 %, and makes servicing and integrating the PROeco modules particularly easy. With an extremely low depth of just 100 mm, the devices are ideal for use in the smallest of applications, such as field switch-cabinets and flat distributor boxes. The 93 % efficiency level is considerably higher than conventional power supplies in this class and, thanks to the associated reduced heat development, supports use in small switchgears.

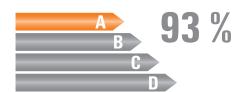






# **Noticeably energy-saving**

A high degree of efficiency of up to 93 % and minimal no-load losses ensure low energy consumption and a long service life.



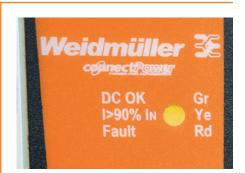
# Robust and reliable

PROeco power packs work reliably in a wide temperature range from  $-25\,^{\circ}\text{C}$  to  $+70\,^{\circ}\text{C}$  and boast a high MTBF value of more than 500.000 hours.



# Rapid status diagnosis

The tricolour LED display and an integrated status relay make it easier to analyse statuses and errors during commissioning and operation.



### **Extremely compact**

With a depth of 100 mm, PROeco power supplies even fit into small cabinets. The compact design also saves up to 50 %space in the cabinet.





# Power supply solution

Together with the uninterruptible DC UPS, the diode modules or CAP modules, you can create a power supply solution that is tailored to your requirements.

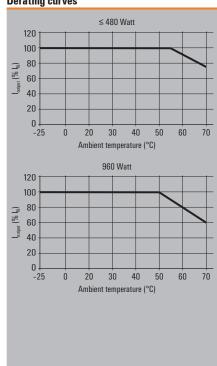


# PROeco power supplies with basic functionality and a high level of reliability

- · Single- and three-phase switched-mode power supply units
- Slim design
- $\bullet$  Large temperature range from -25 °C to 70 °C
- The output voltage can be precisely adjusted via the potentiometer on the front
- · Remote monitoring via integrated status relay
- Three-coloured LED indicators for simple error detection
- Advanced visual warning at 90 % rated output current
- · International approvals



# **Derating curves**



### **Technical data**

### General technical data

Efficiency

Earth discharge current

Ambient temp. operating / storage temperature

Max. perm. air humidity (operation)

Degree of protection

Class of protection

Pollution degree

Insulation voltage input/output

MTBF

Parallel connection option

Housing version

Mounting position, installation notice

Short-circuit protection

Overload protection

Overtemperature protection

Input

AC frequency range

Input fuse (internal)

Ramp-up time / residual ripple, switching peaks

Capacity load

### Signalling DC OK

Alarm

Frror

Voltage monitoring / no-voltage contact / contact load

# EMC / shock / vibration

Noise emission acc. to EN55022 Noise immunity tests acc. to

Limiting of mains voltage harmonic currents

Resistance against vibration and shock

# Electrical safety (applied standards)

Electrical equipment of machines

Safety transformers for switched-mode power units

Machinery with electronic equipment

Safety extra-low voltage

Protective separation / protection against electrical shock

Protection against dangerous shock currents

ıın	tn	q2	0/0	

< 1 mA

-25 °C...+70 °C / -40 °C... +85 °C

5 %...95 % RH IP 20

I, with PE connection

3 kV I/O / 2 kV E/earth / 0,5 kV A/earth

> 500.000 h acc. to IEC 1709 (SN29500)

Yes, max. 5 without diode module

Metal, corrosion resistant

Horizontal on mounting rail TS35, 50 mm spacing

top and bottom for free air circulation

Yes, automatic restart

Yes, IU characteristic curve

Yes automatic restart

47 ... 63 Hz

Yes

 $< 100 \text{ ms} / < 50 \text{ mVSS} @ 24 \text{ V DC, I}_N$ 

Unrestricted

LED green ( $U_{output} > 90\% U_{N}$ )

LED yellow (I $_{\rm output}$  > 90 % I $_{\rm N}$  )

LED red (Overload, overtemperature, short-circuit,  $U_{\text{output}}$  < 20.4 V DC)

Yes / NO contact / max. 30 V AC/DC 1 A

Output voltage > 21.6 V DC / < 20.4 V DC

Class B

EN61000-4-2 (ESD), EN61000-4-3 and EN61000-4-8 (Fields),

EN61000-4-4 (Burst), EN61000-4-5 (Surge),

EN61000-4-6 (conducted), EN61000-4-11 (Dips)

Acc. to EN61000-3-2

1 g acc. to EN50178, shock: 15 g in all directions

Acc. to EN60204

Acc. to EN61558-2-17

Acc. to EN50178 / VDE0160

SELV acc. to EN60950-1, PELV acc. to EN60204-1

VDE0100-410 / acc. to DIN57100-410  $\,$ 

Acc. to VDE0106-101

		Input			Output			Additional features					Dimensions			
		Single phase	Three phase	AC (V)	DC (V)	DC (V)	Rated output current (A)	Rated power (W)	Status relay	Parallel connection option	LED DC OK	LED prewarning	LED fault	H W X H X D mm	Approvals/marks	Order code
	Product name									1100					CE; TÜV	
	PRO ECO 72W 24V 3A	X		85264	80370	24	3	72	X	yes, max. 5	X	X	Х	34 x 125 x 100	(EN/IEC 60950-1); cULus	1469470000
	PRO ECO 120W 24V 5A	X		85264	80370	24	5	120	X	max. 5	X	X	X	40 x 125 x 100	(EN/IEC 60950-1); cULus	1469480000
	PRO ECO 240W 24V 10A	Х		85264	80370	24	10	180	Х	max. 5	Х	Х	Х	60 x 125 x 100	(EN/IEC 60950-1); cULus	1469490000
PROeco	PRO ECO 480W 24V 20A	Х		85264	80370	24	20	240	Х	yes, max. 3	Х	Х	Х	100 x 125 x 120	CE; TÜV (EN/IEC 60950-1); cULus	1469510000
	PRO ECO 960W 24V 40A	X		85264	80370	24	40	480	Х	yes, max. 3	Х	X	Х	160 x 125 x 120	CE; TÜV (EN/IEC 60950-1); cULus	1469520000
	PRO ECO3 120W 24V 5A		Х	340575	450870	24	5	960	Х	yes, max. 5	Х	X	Х	40 x 125 x 100	CE; TÜV (EN/IEC 60950-1); cULus	1469530000
	PRO ECO3 240W 24V 10A		Х	340575	450870	24	10	240	Х	yes, max. 5	Х	X	Х	60 x 125 x 100	CE; TÜV (EN/IEC 60950-1); cULus	1469540000
	PRO ECO3 480W 24V 20A		Х	340575	450870	24	20	120	Х	yes, max. 3	Х	Х	Х	100 x 125 x 120	CE; TÜV (EN/IEC 60950-1); cULus	1469550000
	PRO ECO3 960W 24V 40A		Х	340575	450870	24	40	240	Х	yes, max. 3	Х	Х	Х	160 x 125 x 120	CE; TÜV (EN/IEC 60950-1); cULus	1469560000
	PRO ECO 72W 12V 6A	Х		85264	80370	12	6	72	Х	yes, max. 5	X	Х	Х	34 x 125 x 100	CE; TÜV (EN/IEC 60950-1); cULus	1469570000
	PRO ECO 120W 12V 10A	Х		85264	80370	12	10	120	Х	yes, max. 5	Х	Х	Х	40 x 125 x 100	CE; TÜV (EN/IEC 60950-1); cULus	1469580000
	PRO ECO 240W 48V 5A	Х		85264	80370	48	5	240	Х	yes, max. 5	Χ	Х	Χ	100 x 125 x 120	CE; TÜV (EN/IEC 60950-1); cULus	1469590000
	PRO ECO 480W 48V 10A	Χ		85264	80370	48	10	480	Х	yes, max. 3	Χ	Х	Χ	160 x 125 x 120	CE; TÜV (EN/IEC 60950-1); cULus	1469610000
Description																
	CP DM 10 (diode module)	Diode module 10A for redundancy power			1040	U <sub>IN</sub> - 0.7								55.5 x 125 x 110	CE; TÜV; cURus; cULus;	8710620000
Extension Modules	CP DM 20 (diode module)	Diode module 20A for redundancy power		1040	U <sub>IN</sub> - 0.7								55.5 x 125 x 110	CE; TÜV; cURus; cULus;	8768650000	
	CP M DM40 (diode module)	Diode module 40A for redundancy power		1830	U <sub>IN</sub> - 0.7			Х		Χ			60 x 130 x 150	CE; TÜV; cURus; cULus; GL	1222220000	
	CP M CAP (capacity module)	Capacitor module for MCB tripping		1830	U <sub>IN</sub>			Х		Χ			34 x 130 x 150	CE; TÜV; cURus; cULus; GL	1222240000	
	CP DC UPS 24V 20A/10A (uninterruptible power supply)	DC UPS for 10/20 A		2030	U <sub>IN</sub> - 0.2/0.3	10/20	240/480	Х	yes, max. 2	Χ	Х	Х	66 x 130 x 150	CE; TÜV; cURus; cULus; GL	1370050010	
	CP DC UPS 24V 40A (uninterruptible power supply)	DC UPS for 40 A		2030	U <sub>IN</sub> - 0.2/0.3	40	960	Χ	yes, max. 2	Χ	Х	Х	66 x 130 x 150	CE; TÜV; cURus; cULus; GL	1370040010	
Accessories	MTA 30 MF	DIN-rail metall foot small with 30 mm width													1251320000	
	MTA 45 MF	DIN-rail metall foot big with 45 mm width													1251310000	
	MTA 30 BK	DIN-rail plastics foot small with 30 mm width													1168970000	
	MTA 45 BK	DIN-rail plastics foot big with 45 mm width													1962250000	
	CP A WALLADAPTER 30 MM	Wall-mounting brackets with 30 mm width													1461870000	
	CP A WALLADAPTER 45 MM			g brackets m width												1461850000

# Weidmüller - Your partner in Industrial Connectivity

As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and know the technological challenges of tomorrow. We are therefore continuously developing innovative, sustainable and useful solutions for their individual needs. Together we set standards in Industrial Connectivity.

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