COMPACT

MURR ELEKTRONIK
stay connected

EMPARRO® 1~

SIMPLY THE BEST

The 1-phase power supplies by Murrelektronik will win you over with their impressive efficiency rate of up to 95 %. This reduces power loss to a minimum and lowers energy consumption which will have positive effects on your wallet.



- **Efficiency up to 95 %**
- **150 % Power Boost for at least 4 seconds**
- **Metal housing with optimum EMC characteristics**
- **No derating from -40 to +60°C**
- **Very small width**
- **High mains failure bridging time**
- **18 models – the solution for many applications**

EMPARRO FEATURES...

- Integrated device protection
- Push-in terminals
- Alarm contact
- Long lifetime
- Low power loss



PUSH-IN TERMINALS

The vibration resistant push-in terminals make installation tool free so connection maintenance becomes a thing of the past.

Emparro power supplies are UL listed and UR recognized.

c UL us Listed

c UR us

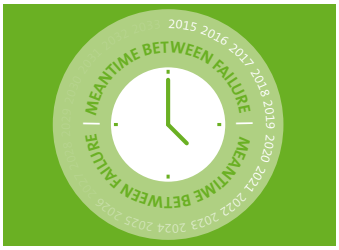
DNV·GL

COMPACT

Power Supplies for Maximum RELIABILITY

Reliable power supplies are an essential component to ensure maximum availability of machines and systems. Therefore, reliability was a high priority during development of these new 1-phase units.





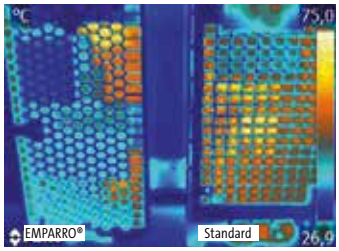
MTBF OF UP TO 700,000 HOURS

Achieving this MTBF is possible because of our highquality components, the modern and slim circuit board design and the processor-controlled electronics.



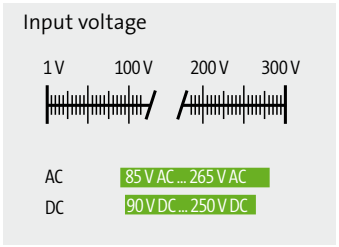
INTEGRATED GAS DISCHARGE VALVE PROTECTS FROM INTERFERENCE PULSES

An integrated gas discharge valve protects the power supply from interfering pulses up to 6 kV. Therefore, overvoltage coming from the mains, EMC interference (as caused by frequency converters) or contact bounces cannot cause any damage.



EFFICIENCY – HIGHLY EFFICIENT

Emparro 1-phase has such a long life span because of its efficiency rating of up to 95 %. The resulting power loss is very low which exposes the components to less thermal stress.



THE GLOBAL PLAYER

The wide input voltage range of 85 to 265 V AC (or 90 to 250 V DC) makes Emparro suitable for worldwide use.

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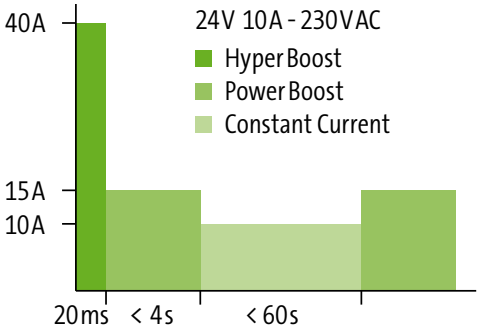
Power Supplies for OPTIMUM PERFORMANCE

Emparro 1-phase power supply units have a special feature: integrated reserve power.

2,5 A	EMPARRO® 1~ 48 V DC	3 A
5 A	EMPARRO® 1~ 24 / 48 V DC	6 A
10 A	EMPARRO® 1~ 12 / 24 / 48 V DC	12 A
20 A	EMPARRO® 1~ 24 V DC	24 A



20% MORE POWER!

Emparro 1-phase power supply units can be operated with up to 20 % overload in ambient temperatures of up to 45°C. The 5 A models continuously supply 6 A, 10 A models 12 A, 20 A models 24 A and 40 A models 48 A.

HYPER AND POWER BOOST

Emparro 1-phase features 2 different boost functions: power boost and hyper boost. The Power Boost supplies 150 % more current for up to 5 seconds while the Hyper Boost provides up to 400 % more power for up to 20 ms.



EMPARRO VS. STANDARD POWER SUPPLY

EMPARRO COMPETITIVE COMPARISON...

The comparison based on the same input current shows: Emparro (left) emits significantly less heat energy than conventional switch mode power supply units. The device itself remains cooler which protects the components installed near the unit. This increases their lifetime.

EMPARRO® 1~

Single phase, primary switched

– short circuit and overload protected (Current-Limiter)

– Power-Boost 150 %

	Emparro 24 V DC, 120 W	**Emparro** 24 V DC, 240 W	**Emparro** 24 V DC, 480 W
			
Ordering data			
	85440	85441	85442
Input			
Input voltage	85...265 V AC / 90...250 V DC		
Input current	0,6 A at 240 V A	1,1 A at 240 V AC	2,3 A at 240 V AC
Inrush current (I_{eff})	1,2 A	1,8 A	3,5 A
Output			
Output voltage	adjustable, 24...28 V DC		
Power Boost	150 % for at least 4 sec		
Efficiency	up to 95 %		
Protection	short-circuit and overload protected (output), Current-Limiter		
General data			
MTBF	up to 700.000 h		
Mains failure bridging	> 30 ms at 230 V AC		
Status display	LED green/red		
Standards	EN 60950-1, EN 61204-3, EN 55011 B, EN 61000-3-2		
Temperature range	-40...+60 °C / 60...70 °C Derating (storage temperature-40...+85 °C)		
Dimensions (H x W x D)	123 x 50 x 138 mm	123 x 65 x 138 mm	123 x 85 x 138 mm
Other	relay alarm contact for short-circuit, overload and over-temperature		
Approvals	UL listed, UL recognized and DNV-GL		

Further variants

	12 V DC		24 V DC			48 V DC		
	DIN rail mounting	screw mounting	DIN rail mounting	screw mounting	lacquered PCB	DIN rail mounting	screw mounting	lacquered PCB
2.5 A	–	–	–	–	–	85437	85722	–
5 A	–	–	85440	85702	9000-11112-0921111	85438	85723	–
10 A	85434	85712	85441	85703	9000-11112-1221111	85439	85724	85439
20 A	–	–	85442	85704	9000-11112-1421111	–	–	–

FOR INCREASED REQUIREMENTS



For tough requirements like vibrations and shock resistance Emparro® can not only be mounted on DIN rail, it can also be fastened with screws. Versions with coated circuit boards offer better protection against temperature fluctuation, as well as dust and dirt.

↘ Emparro® 1~

Further technical information can be found in our online shop.

FSC Product group from well-managed forest and other controlled sources www.fsc.org Zert.-Nr. FSC C006765 © 1996 Forest Stewardship Council

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