

## 67 & 67HYBRID



The Emparro suite includes the Emparro67 and the 67Hybrid power supplies. Both include qualities such as single-phase power accommodation and an IP67 housing for placement outside the cabinet, but what that really means is that monetary and space costs will be minimized while maximizing the efficiency of power conversion. This maximized efficiency is also the reason these devices generate less heat than other switching power supplies on the market, and as a result, Emparro power supplies and surrounding devices in the installation live longer.

Two built in channels of circuit monitoring and an IO-Link interface further enhance the Emparro67 Hybrid. Just as 'cost-effective' should be important to any system, 'power-effective' is important to power supplies, and both describe Murrelektronik's Emparro67 and 67Hybrid.



### Related MURRELEKTRONIK Products

Cube67+



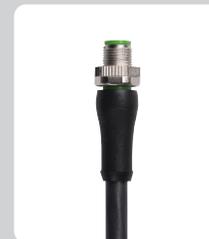
MVK



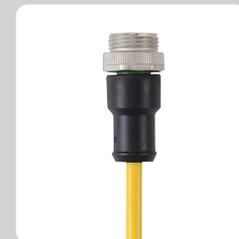
IP67 Switch



M12 Power Cable



Mini (7/8") Cable



## EMPARRO67

Emparro67 power supplies are designed for applications outside the control cabinet. They are able to withstand fluctuations in environmental conditions and are able to be installed in the field, next to the load.

Power loss is kept to a minimum, because the voltage is converted from 230V AC to 24V DC directly at the load. This reduces energy costs and allows builders to use smaller cabinets.



## EMPARRO67 HYBRID

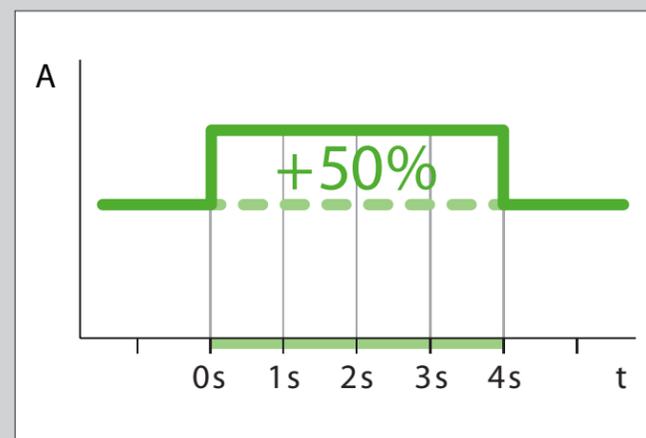
The innovative Emparro67 Hybrid is a switch mode power supply with many powerful features. It not only allows you to relocate the power supply from the control cabinet to the field but it also monitors currents using two integrated 24V DC load circuit monitoring channels to ensure system reliability. An IO-Link interface permits extensive and transparent communication.



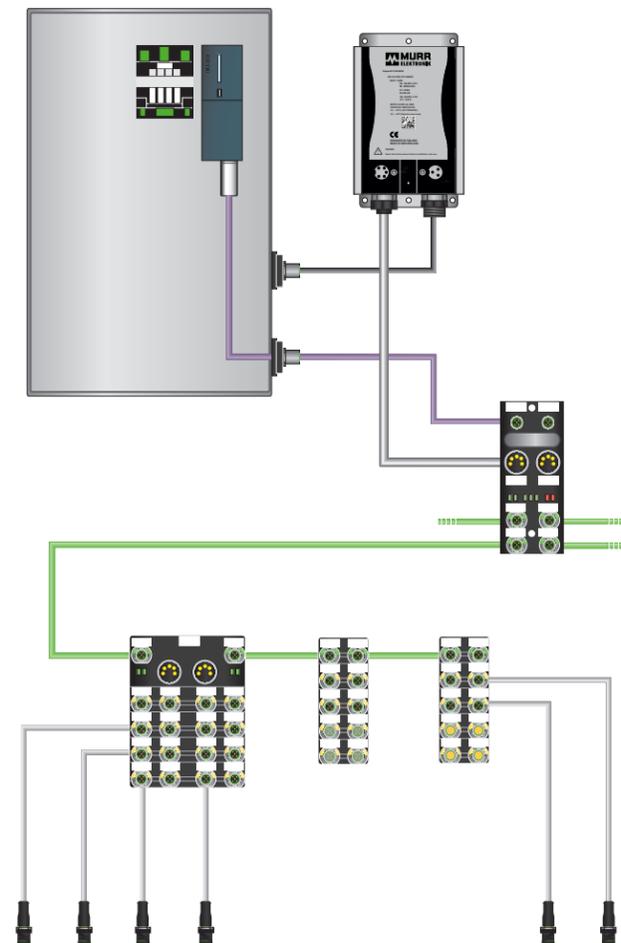
### Features

- Minimal Power Loss
- 94.2% Efficient
- IP67 Rated
- Active PFC
- Ambient Temp: up to 85°C
- Safe to Touch - Even at Full Load
- Compact Design

### Power Boost Function



### Topology



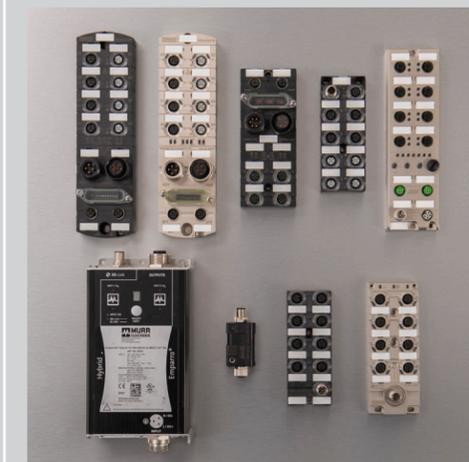
### A new dimension of decentralized power supply

- 93.8% Efficiency Rating
- Voltage conversion (from 230V AC - 24V DC) takes place at the load
- Minimum power loss = lower energy costs
- Relocation of the power supply means smaller control cabinets or possibly no cabinet at all
- Robust Metal Housing



### IO-Link Interface

- M12 Connection (IO-Link Interface)
- Communicates as device with a superior IO-Link master
- Use in fully-networked, intelligent applications
- Extensive diagnostic data and operating characteristics collected
- Lifetime monitoring and predictive maintenance functions



### MICO (Electronic Current Monitoring) Built In

- Electronic current monitoring for 2 channels
- Separate monitoring of sensor, module and actuator supplies
- Short circuit and overload protection
- Tripping happens "as late as possible, as early as necessary"
- 90% early warning signal
- Switch-on again via button or signal



Single Phase Primary Switched	Emparro67 4A			Emparro67 8A	
Article Number	9000-11112-1862020	9000-11112-1962020	9000-11112-2062020		
<b>Input</b>					
Input Voltage	90 - 265V AC/ V DC				
Input Current	.5A at 240V AC		.9A at 240V AC		
<b>Output</b>					
Output Voltage	24.1V DC $\pm$ 2%				
Power Boost	150% for up to 4 seconds				
Efficiency	up to 92.1%	up to 92.3%	up to 94.2%		
Protection	Short Circuit, Overload and Temperature				
<b>General Data</b>					
Mains Failure Bridging	>80ms at 230V AC	> 45ms at 230V AC	> 35ms at 230V AC		
Standards	EN 60950-1, EN 61204-3, EN 55011 B, EN 61000-3-2				
Temperature Range	-40 to +60°C (Storage Temperature -40 to +85°C)/with derating up to 85°C				
Connection	In: 3p 7/8" Male, Out: 4p 7/8" Fem		In: 3p 7/8" Male, Out: 5p 7/8" Fem		
	PELV		SELV/PELV*		
Dimensions (H x W x D)	141 x 111 x 53mm	140 x 109 x 51mm	175 x 109 x 51mm		

Emparro67 Hybrid				
Article Number	85676	85677	85678	85679
<b>Input</b>				
Input Voltage	90 - 265V AC/VDC			
Input Current	1.1 A at 230VAC	1.2A at 240V AC		
<b>Output</b>				
Output Voltage	24.1V DC $\pm$ 2%			
MICO Outputs	2, 2-pole switching			
Output Current	max. 8A / channel, max. 10A total			max. 3.8A/channel
Efficiency	up to 93.8%	up to 92.8%		
<b>IO-Link</b>				
Parameter	ON/OFF; setting tripping current, setting output voltage, and many more			
Diagnostics	Output current, alarm, life cycle, and many more			
<b>General</b>				
Holdup Time	> 20ms at 230V AC			
Standards	EN 60950-1, EN 61204-3, EN 55022, EN 61000-3-2			
MTBF	430,000 h			
Temperature Range	-25 to +50 °C (storage temperature -25 to +85 °C)			
Connection	In: 3p 7/8" Male, Out: 5p 7/8" Fem	In: 3p 7/8" Male, Out: 4p 7/8" Fem	In: 3p 7/8" Male, Out: L-code M12	In: 3p 7/8" Male, Out: 4p 7/8" Fem
	SELV/PELV*			PELV
Dimensions (HxWxD)	212 x 109 x 51mm	216 x 110 x 53mm		

\* For PELV requirements according to EN60204-1 §6.4.1: Connect either + or - terminal to protective earth (PE)