

PULS

Efficient Power Supplies for a Greener World



**Protect the environment
and save money
at the same time.**

WE NEED TO TAKE FULL RESPONSIBILITY FOR THE FUTURE TO ENSURE THAT OUR CHILDREN WILL BE ABLE TO CONTINUE TO ENJOY LIFE ON THIS PLANET.



Efficient Power Supplies
for a Greener World



DID YOU KNOW, ...

... that using just one highly efficient PULS 24V, 20A device can save up to 250kg CO₂ per year.

POWER SUPPLIES WITH **DUAL BENEFITS**

PROTECT THE ENVIRONMENT AND

EFFICIENCY IS MEASURABLE

There is no doubt that the best contribution we can make to actively protect the environment and climate is to avoid unnecessary energy consumption and to use resources responsibly.

Advanced technologies in the design of power supply units allow the construction of highly efficient devices with reduced levels of loss and wasted heat. PULS consistently utilizes, develops and offers these technologies to users in various forms.

This pays off for the everyone: The environment is protected and reducing energy and system expenses means that you often save a great deal of money.

ENERGY CONSUMPTION

Efficiency measurements of various manufacturers of 24VDC, 20A power supplies

Low energy consumption	Manufacturer
< 30W* A	① ⑩ PULS
< 40W* B	② ⑪ PULS
< 50W* C	③ ④ ⑫ ⑬ ⑭ ⑮
< 60W* D	⑤ ⑥ ⑦ ⑧ ⑯
< 70W* E	⑨ ⑰

High energy consumption

Measured at 230VAC or 3 x 400VAC and a load of 24 VDC, 20A. Values for other input voltages or power classes available on request.

Device type:

1-phase devices

- ① PULS: QS20.244
- ② PULS: QS20.241
- ③ Phoenix: Quint 20 SFB
- ④ Phoenix: Trio 20
- ⑤ ABB: CP-C24/20.0
- ⑥ Chinfa: DRA480-24
- ⑦ Murr Elektronik: MCS20
- ⑧ Siemens: Sitop 20 Modular
- ⑨ MeanWell: DRP480-24

3-phase devices

- ⑩ PULS: QT20.241
- ⑪ PULS: SL20.310
- ⑫ Phoenix: Quint 20
- ⑬ Murr Elektronik: MCS20
- ⑭ Phoenix: Trio 20
- ⑮ Siemens: Sitop 20 Modular
- ⑯ Astec: ADN20-24-3PM
- ⑰ MeanWell: DRT480-24

*) Power dissipation of the device

$$\text{EFFICIENCY} = \frac{\text{PROFIT}}{\text{EFFORT}}$$

SAVE MONEY AT THE SAME TIME

POTENTIAL SAVINGS WITH PULS

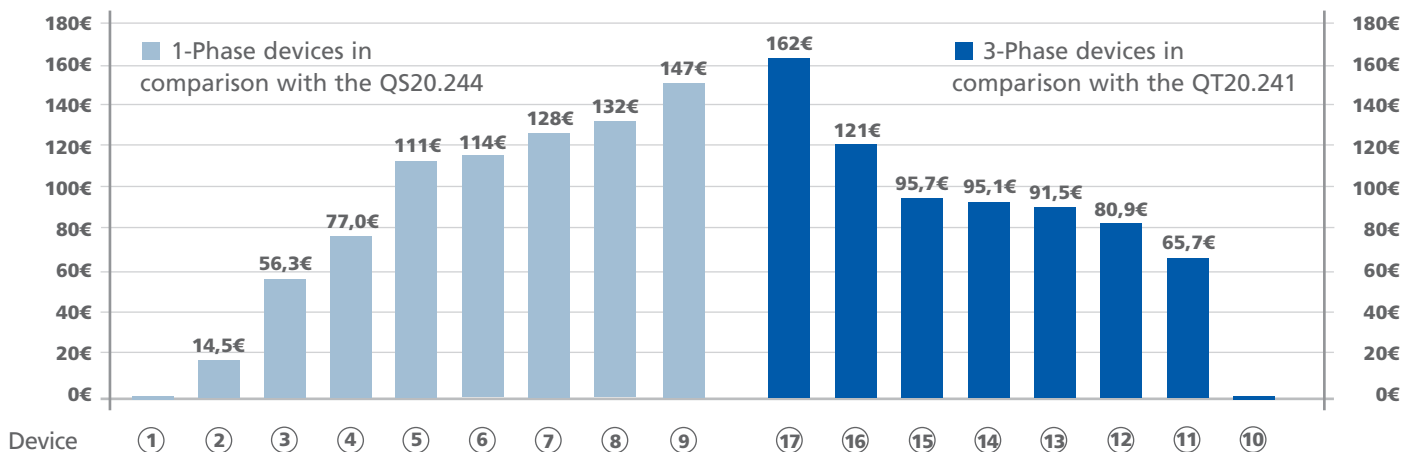


1.

REDUCE YOUR ENERGY COSTS

The overall improved efficiency of PULS devices decreases power consumption and reduces energy costs. This means that over time you will be able to make significant savings, which could even exceed the purchasing costs.

Additional energy costs* in comparison to PULS devices



*Additional costs forecast over 5 years on the basis of 24/7 operation at an energy cost of 10.5 ct/kWh



2.

REDUCE INSTALLATION COSTS

The compact design of the PULS power supplies means that a lot of space is saved on the DIN-rail and it also makes handling easier. You will also benefit from the fact that the cabinets can become smaller.

	Device	Space required in the cabinet*		
20A 1-phase	① PULS: QS20.244	70x124mm	0%	Reference
	② PULS: QS20.241	82x124mm	+ 17%	
	③ Phoenix: Quint 20 SFB	90x130mm	+ 35%	
	⑦ Murr Elektronik: MCS20	84x170mm	+ 65%	
	④ Phoenix: Trio 20	115x130mm	+ 72%	
	⑧ Siemens: Sitop 20 Modular	160x125mm	+ 130%	
	⑥ Chinfa: DRA480-24	175x125mm	+ 152%	
	⑤ ABB: CP-C24/20.0	180x130mm	+ 170%	
	⑨ MeanWell: DRP480-24	227x125mm	+ 227%	
20A 3-phase	⑩ PULS: QT20.241	65x124mm	0%	Reference
	⑬ Murr Elektronik: MCS20	84x170mm	+ 77%	
	⑭ Phoenix: Trio 20	115x130mm	+ 85%	
	⑪ PULS: SL20.310	150x124mm	+ 131%	
	⑯ Astec: ADN20-24-3PM	150x124mm	+ 131%	
	⑮ Siemens: Sitop 20 Modular	160x125mm	+ 148%	
	⑫ Phoenix: Quint 20	160x130mm	+ 158%	
	⑰ MeanWell: DRT480-24	227x125mm	+ 252%	

*) Device width x device height

3.

REDUCE THE AMOUNT OF COOLING AND EXTEND THE SERVICE LIFE

The high level of efficiency means that significantly less heat is produced. Lower temperatures puts less stress on components so the service life of all the devices in the cabinet or in the machine is extended.

	Device	Efficiency	Losses*		
20A 1-phase	① PULS: QS20.244	94,4%	28,3W	0%	Ref.
	② PULS: QS20.241	93,9%	31,4W	+ 11%	
	③ Phoenix: Quint 20 SFB	92,2%	40,5W	+ 43%	
	④ Phoenix: Trio 20	91,4%	45,0W	+ 59%	
	⑤ ABB: CP-C24/20.0	90,2%	52,4W	+ 86%	
	⑥ Chinfa: DRA480-24	90,0%	53,1W	+ 88%	
	⑦ Murr Elektronik: MCS20	89,6%	56,0W	+ 98%	
	⑧ Siemens: Sitop 20 Modular	89,4%	56,9W	+ 101%	
	⑨ MeanWell: DRP480-24	88,8%	60,3W	+ 113%	
20A 3-phase	⑩ PULS: QT20.241	95,0%	25,3W	0%	Ref.
	⑪ PULS: SL20.310	92,4%	39,6W	+ 56%	
	⑫ Phoenix: Quint 20	91,8%	42,9W	+ 69%	
	⑬ Murr Elektronik: MCS20	91,4%	45,2W	+ 79%	
	⑭ Phoenix: Trio 20	91,3%	46,0W	+ 82%	
	⑮ Siemens: Sitop 20 Modular	91,2%	46,1W	+ 82%	
	⑯ Astec: ADN20-24-3PM	90,3%	51,6W	+ 104%	
	⑰ MeanWell: DRT480-24	88,8%	60,6W	+ 139%	

*) Losses = Amount of waste heat produced



SUCCESS WITH INNOVATION AND QUALITY

PULS is the only organisation solely focused on DIN-Rail power supplies. This allows Bernhard Erdl and his experienced team to develop premium pioneered products. International honours such as the Frost & Sullivan Technology Leadership Award confirms that PULS is on the right track. The high quality of the units is ensured by the company's own factories in the Czech Republic and China.

If you cannot find standard units for your needs in the PULS offering, then please contact our subsidiary company MGV. MGV has been a member of the PULS Group since 2004 and the MGV team would be happy to help with customer-specific solutions.

PULS GmbH

Arabellastrasse 15
81925 Munich
Germany
Tel. +49 89 9278-0
contact-muc@pulspower.com

www.pulspower.com

Your partner for customer-specific solutions:

MGV Stromversorgungen GmbH

Bayernwaldstrasse 27
81737 Munich
Germany
Tel. 089 678090-0
info@mgv.de
www.mgv.de

PULS worldwide:

Austria

PULS in Rohrbach/NÖ
Tel. +43 2764 32 13
www.pulspower.at

China

PULS in Suzhou
Tel. +86 512 62881820
www.puls-power.cn

France

PULS in Limonest/Lyon
Tél. +33 4 78 66 89 41
www.pulspower.fr

North America

PULS in St. Charles/Illinois
Tel. +1 630 587 9780
www.pulspower.us

Switzerland

PULS in Oberflachs/Aargau
Tel. +41 56 450 18 10
www.pulspower.ch

United Kingdom

PULS in Bedfordshire
Tel. +44 845 130 1080
www.pulspower.co.uk