

## Primärschaltregler



Allgemein haben unsere Primärschaltregler folgende Merkmale:

- ✓ Hoher Wirkungsgrad, Dauerkurzschlussfest und dauerleerlauffest.
- ✓ Absolut Kompakt und Platzsparend mit sehr geringes Gewicht
- ✓ 24V<sub>DC</sub> Ausgang, 1,25- 40A
- ✓ Sicherheit nach VDE 0805/ EN 60950/IEC 950
- ✓ Funkentstört nach EN 55011 / EN 55022 Klasse B
- ✓ Störfestigkeit nach EN 50082-1/-2
- ✓ Betriebsanzeige durch LEDs
- ✓ Weltweit zugelassen
- ✓ Auch für labile Netze geeignet
- ✓ Schutzart IP20, Schutzklasse I, II



## Primary switching controllers



In general our primary switching controllers have the following features:

- ✓ High efficiency, permanently no-load and short-circuit protected.
- ✓ A very compact case to save space and very low weight.
- ✓ 24V<sub>DC</sub> Output, 1,25- 40A
- ✓ Electrical safety according to VDE 0805/ EN 60950/IEC 950
- ✓ Interference suppression according to EMV EN 55011 / EN 55022 Class B
- ✓ Immunity to disturbance according to EN 50082-1/-2
- ✓ Operating indicator: LEDs
- ✓ Worldwide certification
- ✓ Also suitable for unstable mains
- ✓ Type of protection IP20, class of protection I, II

**Primary switching controller 24 V/ 1,25 A**

High efficiency, permanently no-load and short circuit protected, compact case.

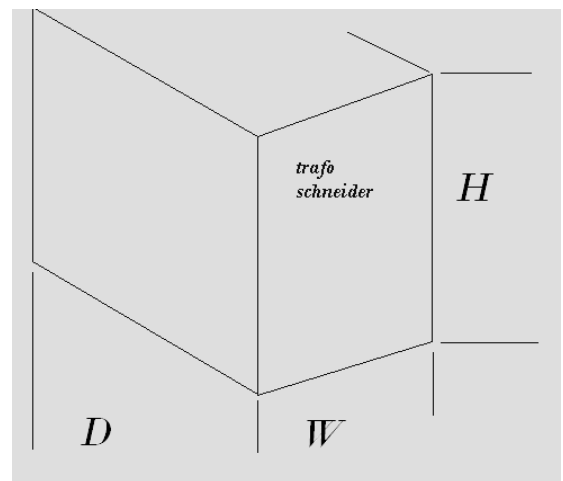
- ✓ Power: **30 W**
- ✓ Input voltage range: **94 – 265 V<sub>AC</sub>**
- ✓ Output Voltage: **24 V<sub>DC</sub> ±3%**
- ✓ Weight: approx. 0.2kg
- ✓ Fastening: on mounting rails DIN EN 50022-35

Technical Data	
Input <sub>AC</sub>	
Rated Voltage	105 – 250V <sub>AC</sub> 47 – 63 Hz without switching
Input voltage range	94 - 265 V <sub>AC</sub> , 47 – 63 Hz
Input rated current	0,35 A at 230 V <sub>AC</sub> 0,60 A at 115 V <sub>AC</sub>
Inrush current	< 30A
Fuse	T 1,0 A / 250V intern
Power factor Cos $\ell$	0,43 Capacitive at 230 V <sub>AC</sub> 0,53 Capacitive at 115 V <sub>AC</sub>
Output <sub>DC</sub>	
Output Voltage	24 V <sub>DC</sub> ±3%
Output direct current	0 – 1,25A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	1,5 A
Parallel operation	yes
efficiency (typ.)	<b>85%</b>
Hold-up time	> 80 ms / 230 V <sub>AC</sub> > 8 ms / 115 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	45 x 105 x 72
Weight [kg]	approx. 0,2

Ordering Data	
Part number	Appellation
PSG 240125	Primärschaltregler 24 V/ 1,25A



**Primary switching controller 24 V/ 2A**

High efficiency, permanently no-load and short-circuit protected, compact case.

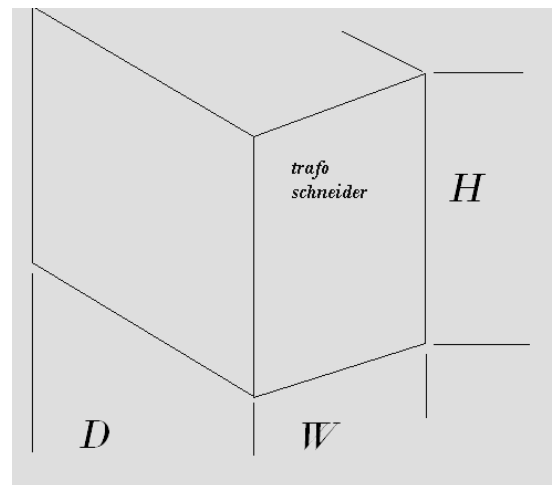
- ✓ Power: **48W**
- ✓ Input voltage range: **94 – 265 V<sub>AC</sub>**
- ✓ Output voltage range: **24 V<sub>DC</sub> ±3%**
- ✓ Weight: approx. 0,2kg
- ✓ Fastening: on mounting rails DIN EN 50022-35

Technical Data	
<b>Input AC</b>	
Rated Voltage	110 – 250V <sub>AC</sub> 47 – 63 Hz
Input voltage range	94 - 265 V <sub>AC</sub> , 47 – 63 Hz
Input rated current	0,6 A at 230 V <sub>AC</sub> 1,1 A at 115 V <sub>AC</sub>
Inrush current	$I^2 t < 1,5 A^2 s$
Fuse	T 2,5 A / 250 V intern
Power Factor Cos $\ell$	0,45 Capacitive at 230 V <sub>AC</sub> 0,50 Capacitive at 115 V <sub>AC</sub>
<b>Output DC</b>	
Output Voltage	24 V <sub>DC</sub> ±3%
Output direct current	0 – 2A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	2,5 A
Parallel operation	yes
Efficiency (typ.)	<b>89%</b>
Hold-up time	> 70 ms / 230 V <sub>AC</sub> > 10 ms / 115 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	45 x 105 x 72
Weight [kg]	approx. 0.2

Ordering Data	
Part number	Appellation
PSG 240200	Primärschaltregler 24 V/ 2A



**Primary switching controller 24 V/ 2,5 A**

High efficiency, permanently no-load and short circuit protected, compact case.

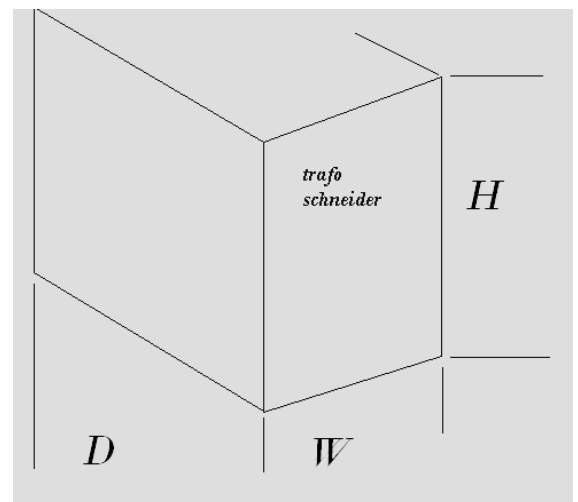
- ✓ Power: **60W** (max. power with setting on 27 V<sub>DC</sub> max. 2,2 A)
- ✓ Input voltage range: **94 – 265 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 27 V<sub>AC</sub>**
- ✓ Weight: **approx. 0,6kg**

Technical Data	
<b>Input <sub>AC</sub></b>	
Rated Voltage	105 – 250V <sub>AC</sub> 47 – 63 Hz without switching
Input voltage range	94 - 265 V <sub>AC</sub> , 47 – 63 Hz
Input rated current	0,6 A at 230 V <sub>AC</sub>
Inrush current	< 30 A
Fuse	T 2,5 A / 250 V intern
Power factor Cos $\ell$	0,52 Capacitive at 230 V <sub>AC</sub>
<b>Output <sub>DC</sub></b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 27 V <sub>DC</sub>
Output direct current	0 – 2,5 A
Residual ripple	< 100 mV <sub>pp</sub>
Current limitation typical	3 A
Parallel operation	yes
Efficiency (typ.)	<b>86%</b>
Hold-up time	> 80 ms / 230 V <sub>AC</sub> > 15 ms / 115 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	108 x 65 x 123
Weight [kg]	approx. 0,6

Ordering Data	
Part number	Appellation
PSG 240250	Primärschaltregler 24 V/ 2,5 A



**Primary switching controller 24 V/ 5 A**

High efficiency, permanently no-load and short-circuit protected, compact case.

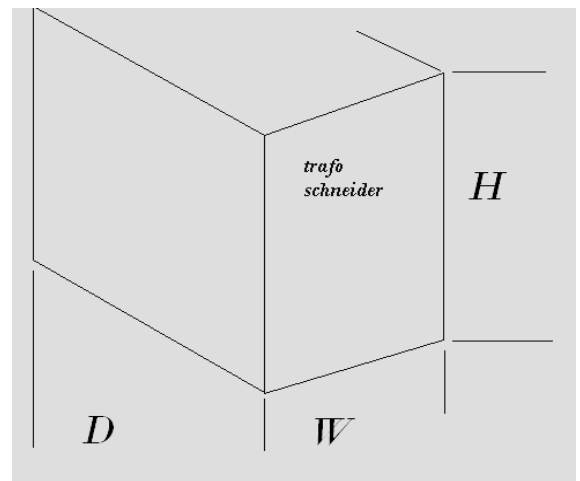
- ✓ Power: **120W** (max. power with setting on 30 V<sub>DC</sub> max. 4 A)
- ✓ Input voltage range: **97 – 265 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 27 V<sub>AC</sub>**
- ✓ Weight: **approx. 0,8kg**

Technical Data	
<b>Input AC</b>	
Rated voltage	105 – 250V <sub>AC</sub> 47 – 63 Hz without switching
Input voltage range	97 - 265 V <sub>AC</sub> , 47 – 63 Hz
Input rated current	1,23 A at 230 V <sub>AC</sub>
Inrush current	< 30 A
Fuse	5 x 20mm T 3,15 A / 250 V intern
Power factor Cos $\ell$	0,52 Capacitive at 230 V <sub>AC</sub>
PFC-NORM (harmonic)	EN 61000-3-2
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 27 V <sub>DC</sub>
Output direct current	0 – 5 A
Residual ripple	< 100 mV <sub>pp</sub>
Current limitation typical	6 A
Parallel operation	yes
Efficiency (typ.)	<b>86%</b>
Hold-up time	> 80 ms / 230 V <sub>AC</sub> > 15 ms / 115 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	147 x 86 x 123
Weight [kg]	approx. 0,8

Ordering Data	
Part number	Appellation
PSG 240500	Primärschaltregler 24 V/ 5 A



**Primary switching controller 24 V/ 5 A COSMO**

High efficiency, permanently no-load and short-circuit protected, compact case: **only 70 mm wide.**

- ✓ Power: **120W** (max. power with setting on 30 V<sub>DC</sub> max. 4 A)
- ✓ Input voltage range: **115/ 230 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 30 V<sub>AC</sub>**
- ✓ Fastening: Vertical, on mounting rails DIN EN 50022-35

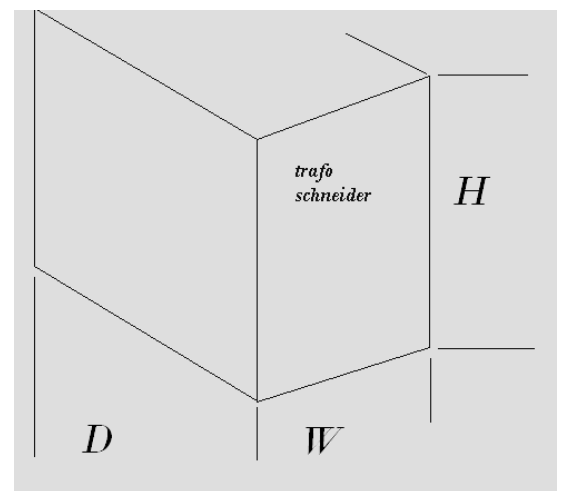
Technical Data	
<b>Input AC</b>	
Rated Voltage	115 – 230 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	93 - 132 V <sub>AC</sub> , 187 – 265 V <sub>AC</sub> 47 – 63 Hz
Input rated current	0,9 A at 230 V <sub>AC</sub> 2,2 A at 115 V <sub>AC</sub>
Inrush current	< 30 A
Fuse	T 3,15 A / 250 V intern
Power factor Cos $\ell$	0,58 Capacitive at 115 V <sub>AC</sub>
PFC-NORM (harmonic)	EN 61000-3-2
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 30 V <sub>DC</sub>
Output direct current	0 – 5 A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	6 A
Parallel operation	yes
Efficiency (typ.)	<b>89%</b>
Hold-up time	> 20 ms / 230 V <sub>AC</sub> > 15 ms / 115 V <sub>AC</sub>



For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	70 x 139 x 132
Weight [kg]	approx. 0.9

Ordering Data	
Part number	Appellation
PSG 240500- COSMO	Primärschaltregler 24 V/ 5 A



**Primary switching controller 24 V/ 10 A COSMO**

High efficiency, permanently no-load and short-circuit protected, compact case, **only 70 mm wide**.

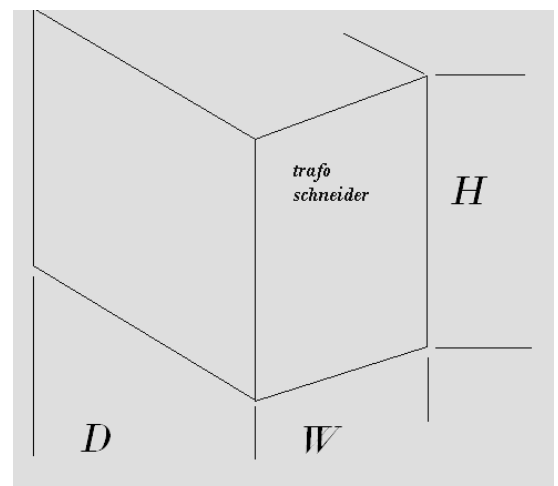
- ✓ Power: **240W** (max. power with setting on 30 V<sub>DC</sub> max. 8 A)
- ✓ Input voltage range: **115/ 230 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 30 V<sub>AC</sub>**
- ✓ Fastening: Vertical, on mounting rails DIN EN 50022-35

Technical Data	
<b>Input AC</b>	
Rated voltage	115 – 230 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	93 - 132 V <sub>AC</sub> , 187 – 265 V <sub>AC</sub> 47 – 63 Hz
Input rated current	1,8 A at 230 V <sub>AC</sub> 4,2 A at 115 V <sub>AC</sub>
Inrush current	< 30 A
Fuse	T 6,3 A / 250 V intern
Power factor Cos $\phi$	0,50 Capacitive at 230 V <sub>AC</sub> 0,58 Capacitive at 115 V <sub>AC</sub>
PFC-NORM (harmonic)	EN 61000-3-2
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 30 V <sub>DC</sub>
Output direct current	0 – 10 A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	12A
Parallel operation	yes
Efficiency (typ.)	<b>90%</b>
Hold-up time	> 35 ms / 230 V <sub>AC</sub> > 30 ms / 115 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	70 x 164 x 147,5
Weight [kg]	approx. 1.2

Ordering Data	
Part number	Appellation
PSG 241000- COSMO	Primärschaltregler 24 V/ 10 A



**Primärschaltregler**  
**primary switching controller**

**einphasig**  
**single phase**

**COMPETENT**  
**COMPETENT**

**Primary switching controller 24 V/ 10 A**

High efficiency, permanently no-load and short-circuit protected, compact case.

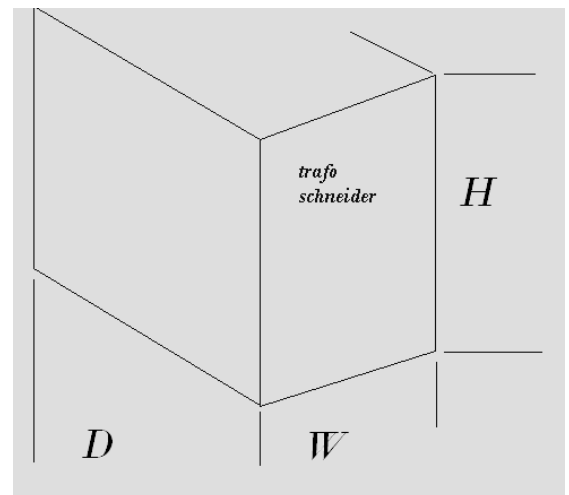
- ✓ Power: **240W** (max. power with setting on 27V<sub>DC</sub> max. 8,8 A)
- ✓ Input voltage range: **115/ 230 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 27 V<sub>AC</sub>**
- ✓ Weight: **approx. 1.2kg**

Technical Data	
<b>Input AC</b>	
Rated voltage	105 – 125 V <sub>AC</sub> / 210- 250V <sub>AC</sub> 47 – 63 Hz
Input voltage range	97 - 132 V <sub>AC</sub> / 195 - 265 V <sub>AC</sub> 47 – 63 Hz switchable via a solder bridge
Input rated current	4 A at 115V <sub>AC</sub> / 2,2 A 230 V <sub>AC</sub>
Inrush current	< 30 A
Fuse	5 x 20mm T 6,3 A / 250V intern
Power factor Cos $\ell$	0,52 Capacitive at 230 V <sub>AC</sub>
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 27 V <sub>DC</sub>
Output direct current	0 – 10 A
Residual ripple	< 100 mV <sub>pp</sub>
Current limitation typical	12,5 A
Parallel operation	yes
Efficiency (typ.)	<b>89%</b>
Hold-up time	> 15 ms / 230 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	205 x 86 x 123
Weight [kg]	approx. 1,2

Ordering Data	
Part number	Appellation
PSG 241000	Primärschaltregler 24 V/ 10 A





**Primary switching controller 24 V/ 10 A, 3-ph, 81mm**

High efficiency, permanently no-load and short-circuit protected, compact case.

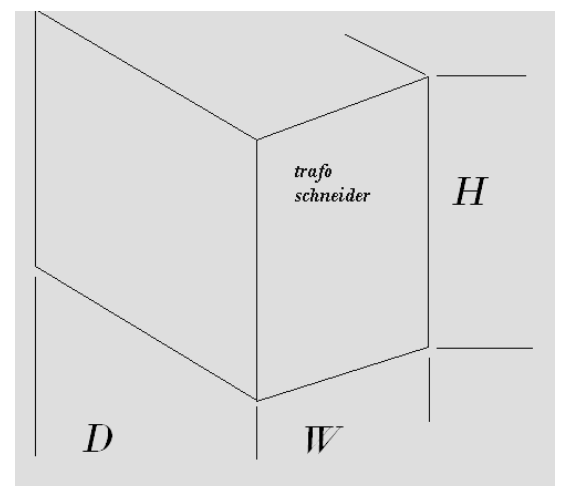
- ✓ Power: **240W** (max. power with setting on 30 V<sub>DC</sub> max. 8 A)
- ✓ Input voltage range: **3 x 380 -500 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 30 V<sub>AC</sub>**
- ✓ Fastening: **Vertical**, on mounting rails DIN EN 50022-35

Technical Data	
<b>Input AC</b>	
Rated voltage	3 x 380 – 500 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	3 x 340 - 550 V <sub>AC</sub> 47 – 63 Hz
Input rated current	3 x 0,7 A at 400 V <sub>AC</sub>
Inrush current	< 50 A
Fuse	T 6,3 A / 250 V intern
Power factor Cos $\ell$	0,60 Capacitive at 400 V <sub>AC</sub>
PFC-NORM (harmonic)	EN 61000-3-2, class A
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 30 V <sub>DC</sub>
Output direct current	0 – 10 A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	12,5A
Parallel operation	yes
Efficiency (typ.)	<b>90%</b>
Hold-up time	> 5 ms / 400 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	<b>81 x 160 x 153</b>
Weight [kg]	approx. 1,4

Ordering Data	
Part number	Appellation
PSG 241000- 400	Primärschaltregler 24 V/ 10 A- 3ph



**Primary switching controller 24 V/ 10 A Cosmo 400/70mm**

High efficiency, permanently no-load and short-circuit protected, compact case, **only 70 mm wide.**

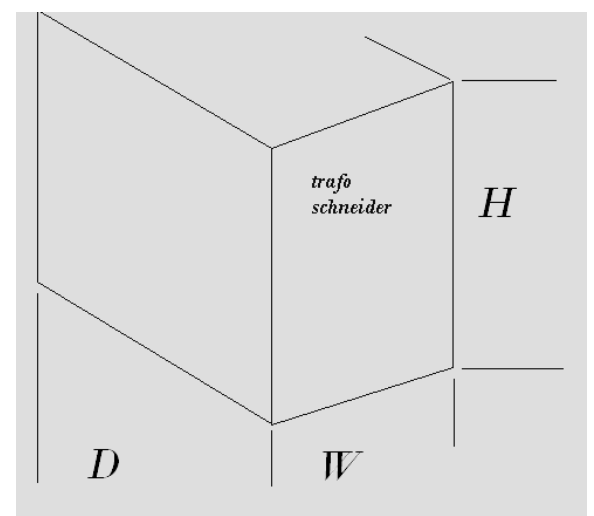
- ✓ Power: **240W** (max. power with setting on 30 V<sub>DC</sub> max. 8 A)
- ✓ Input voltage range: **230/400 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 30 V<sub>AC</sub>**
- ✓ Fastening: **Vertical**, on mounting rails DIN EN 50022-35
- ✓ Width: **70mm**

<b>Technical Data</b>	
<b>Input AC</b>	
Rated voltage	230/400 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	195 - 500 V <sub>AC</sub> 47 – 63 Hz
Input rated current	1 A at 400 V <sub>AC</sub>
Inrush current	< 50 A
Fuse	T 3,15 A / 400V <sub>AC</sub> intern
Power factor Cos $\ell$	0,7 Capacitive at 400 V <sub>AC</sub>
PFC-NORM (harmonic)	EN 61000-3-2, class A
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 30 V <sub>DC</sub>
Output direct current	0 – 10 A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	12A
Parallel operation	yes
Efficiency (typ.)	<b>89%</b>
Hold-up time	> 10 ms /195 V <sub>AC</sub>

For other technical data, please ask!

<b>Mechanical Data</b>	
Dimensions W x D x H [mm]	70 x 141 x 151
Weight [kg]	approx. 1,2

<b>Ordering Data</b>	
Part number	Appellation
PSG 241000-COSMO 400	Primärschaltregler 24 V/ 10 A



**Primärschaltregler**  
**primary switching controller**

**dreiphasig**  
**three phase**

**COMPETENT**  
**COMPETENT**

**Primary switching controller 24 V/ 20 A, 3-ph**

High efficiency, permanently no-load and short-circuit protected, compact case.

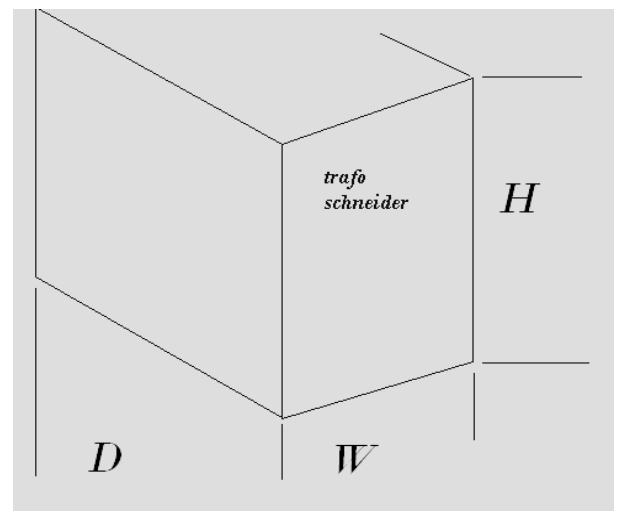
- ✓ Power: **480W** (max. power with setting on 27 V<sub>DC</sub> max. 17,7 A)
- ✓ Input voltage range: **3 x 400/ 500 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 27 V<sub>AC</sub>**

<b>Technical Data</b>	
<b>Input AC</b>	
Rated voltage	3 x 380 – 500 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	3 x 340 - 550 V <sub>AC</sub> 47 – 63 Hz
Input rated current	3 x 1,5 A at 3 x 400 V <sub>AC</sub>
Inrush current	< 50 A
Fuse	
Power factor Cos $\ell$	0,60 Capacitive at 400 V <sub>AC</sub>
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 27 V <sub>DC</sub>
Output direct current	0 – 20 A
Residual ripple	< 100 mV <sub>pp</sub>
Current limitation typical	25A
Parallel operation	yes
Efficiency (typ.)	<b>90%</b>
Hold-up time	> 5 ms / 400 V <sub>AC</sub>

For other technical data, please ask!

<b>Mechanical Data</b>	
Dimensions W x D x H [mm]	240 x 86 x 153
Weight [kg]	approx. 1,9

<b>Ordering Data</b>	
Part number	Appellation
PSG 242000- 400	Primärschaltregler 24 V/ 20 A- 3ph



**Primärschaltregler  
primary switching controller**

**dreiphasig  
three phase**

**COMPETENT  
COMPETENT**

**Primary switching controller 24 V/ 20 A**

High efficiency, permanently no-load and short-circuit protected, compact case.

- ✓ Power: **480W** (max. power with setting on 27V<sub>DC</sub> max. 17,7 A)
- ✓ Input voltage range: **230 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 27 V<sub>AC</sub>**

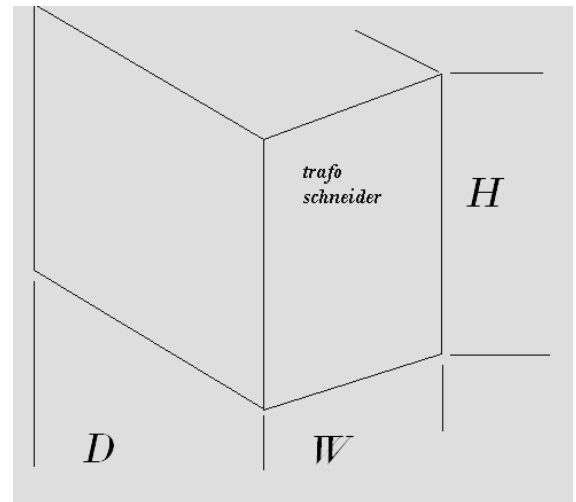
Technical Data	
<b>Input AC</b>	
Rated voltage	210- 250V <sub>AC</sub> 47 – 63 Hz
Input voltage range	195 - 265 V <sub>AC</sub> 47 – 63 Hz
Input rated current	4,2 A at 230 V <sub>AC</sub>
Inrush current	< 30 A
Fuse	5 x 20 mm T 10 A / 250V intern
Power factor Cos $\ell$	0,53 Capacitive at 230 V <sub>AC</sub>
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 27 V <sub>DC</sub>
Output direct current	0 – 20 A
Residual ripple	< 100 mV <sub>pp</sub>
Current limitation typical	25 A
Parallel operation	yes
Efficiency (typ.)	<b>88%</b>
Hold-up time	> 15 ms / 230 V <sub>AC</sub>



For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	240 x 86 x 153
Weight [kg]	approx. 1,9

Ordering Data	
Part number	Appellation
PSG 242000	Primärschaltregler 24 V/ 20 A



**Primary switching controller 24 V/ 20 A COSMO**

High efficiency, permanently no-load and short-circuit protected, compact case, **only 86 mm wide.**

- ✓ Power: **480W** (max. power with setting on 29 V<sub>DC</sub> max. 16,6 A)
- ✓ Input voltage range: **230 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 29 V<sub>AC</sub>**
- ✓ Fastening: **Vertical**, on mounting rails DIN EN 50022-35

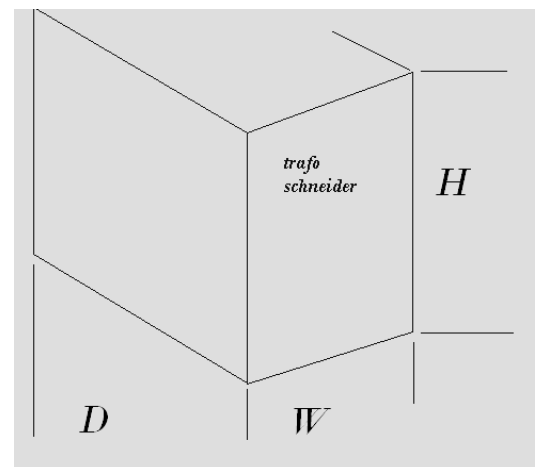
Technical Data	
<b>Input <sub>AC</sub></b>	
Rated voltage	230 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	190- 265 V <sub>AC</sub> 47 – 63 Hz
Input rated current	3 A at 230 V <sub>AC</sub>
Inrush current	< 30 A
Fuse	
Power factor Cos $\ell$	0,82 Capacitive at 230 V <sub>AC</sub>
PFC-NORM (harmonic)	EN 61000-3-2
<b>Output <sub>DC</sub></b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 29 V <sub>DC</sub>
Output direct current	0 –20 A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	22 A
Parallel operation	yes
Efficiency (typ.)	<b>89%</b>
Hold-up time	> 20 ms / 230 V <sub>AC</sub>



For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	86 x 173 x 227
Weight [kg]	approx. 2,0

Ordering Data	
Part number	Appellation
PSG 242000- COSMO	Primärschaltregler 24 V/ 20 A



**Primary switching controller 24 V/ 20A-Cosmo- 3ph**

High efficiency, permanently no-load and short-circuit protected, compact case.

- ✓ Power: **480W** (max. power with setting on 29 V<sub>DC</sub> max. 16,6 A)
- ✓ Input voltage range: **3 x 400 - 500 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 29 V<sub>AC</sub>**
- ✓ Fastening: **Vertical**, on mounting rails DIN EN 50022-35
- ✓ Width: **86 mm**

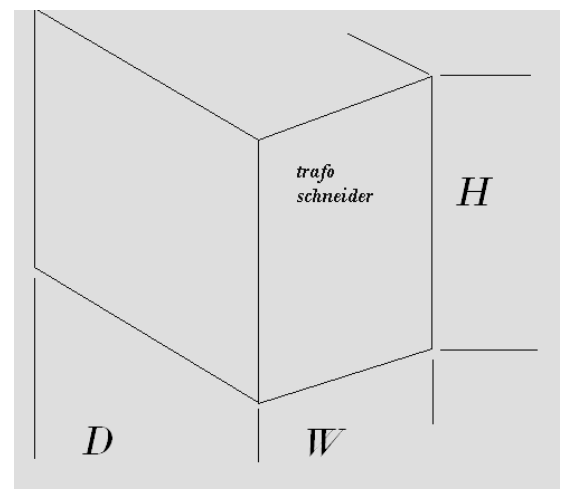
<b>Technical Data</b>	
<b>Input AC</b>	
Rated voltage	3 x 380 – 500 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	3 x 340 - 550 V <sub>AC</sub> 47 – 63 Hz
Input rated current	3 x 1,5 A at 400 V <sub>AC</sub>
Inrush current	< 40 A
Fuse	
Power factor Cos $\ell$	0,61 Capacitive
PFC-NORM (harmonic)	EN 61000-3-2
<b>Output DC</b>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 29 V <sub>DC</sub>
Output direct current	0 –20 A
Residual ripple	< 50 mV <sub>pp</sub>
Current limitation typical	22A
Parallel operation	yes
Efficiency (typ.)	<b>89%</b>
Hold-up time	> 5 ms /400V <sub>AC</sub>



For other technical data, please ask!

<b>Mechanical Data</b>	
Dimensions W x D x H [mm]	86 x 173 x 227
Weight [kg]	approx. 2,0

<b>Ordering Data</b>	
Part number	Appellation
PSG 242000-COSMO 400	Primärschaltregler 24 V / 20 A- 3ph



**Primärschaltregler**  
**primary switching controller**

**dreiphasig**  
**three phase**

**COMPETENT**  
**COMPETENT**

**Primary switching controller 24 V/ 40 A-3ph**

High efficiency, permanently no-load and short-circuit protected, compact case.

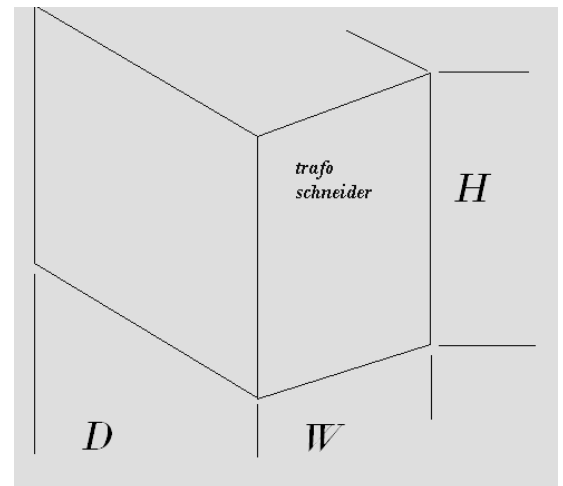
- ✓ Power: **960W** (max. power with setting on 27 V<sub>DC</sub> max. 35,5 A)
- ✓ Input voltage range: **3 x 400/ 500 V<sub>AC</sub>**
- ✓ Output voltage range: **23 – 27 V<sub>AC</sub>**

Technical Data	
Input <sub>AC</sub>	
Rated voltage	3 x 380 – 500 V <sub>AC</sub> 47 – 63 Hz
Input voltage range	3 x 340 - 550 V <sub>AC</sub> 47 – 63 Hz
Input rated current	3 x 3 A at 3 x 400 V <sub>AC</sub>
Inrush current	< 50 A
Fuse	
Power factor Cos $\ell$	0,53 Capacitive at 400 V <sub>AC</sub>
Output <sub>DC</sub>	
Output voltage	24 V <sub>DC</sub> $\pm$ 1%
Adjustable range (typ.)	23 – 27 V <sub>DC</sub>
Output direct current	0 – 40 A
Residual ripple	< 100 mV <sub>pp</sub>
Current limitation typical	45A
Parallel operation	yes
Efficiency (typ.)	<b>90%</b>
Hold-up time	> 5 ms / 400 V <sub>AC</sub>

For other technical data, please ask!

Mechanical Data	
Dimensions W x D x H [mm]	292 x 130 x 185
Weight [kg]	approx. 3,6

Ordering Data	
Part number	Appellation
PSG 244000- 400	Primärschaltregler 24 V/ 40 A- 3ph



## TECHNICAL DATA (PRIMARY SWITCHING CONTROLLERS) - ENGLISH

<p><b>DERATING/ Output power</b></p> <p style="text-align: center;">Umgebungstemperatur</p> <p>(Ambient temperature)</p> <p>Current-limiting characteristic 1,25 A / 2 A Output voltage</p>	<p><b>Regulation</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Mains regulation</td><td>&lt; 0,2% at <math>U_{Ein} \pm 15\%</math></td></tr> <tr><td>Load regulation</td><td>&lt; 1% at <math>0 A \rightarrow I_{rated}</math></td></tr> <tr><td>Dynamic</td><td>&gt; 2 ms at <math>10 \leftrightarrow 90\% I_{rated}</math></td></tr> <tr><td>Overshoot</td><td>&lt; 2%</td></tr> </table> <p><b>Protection and Monitoring</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Current limitation</td><td>Permanently short-circuit proof (see diagram)</td></tr> <tr><td>Overload-proof</td><td>yes</td></tr> <tr><td>No-load proof</td><td>yes</td></tr> <tr><td>Output overvoltage switch-off</td><td>yes</td></tr> </table>	Mains regulation	< 0,2% at $U_{Ein} \pm 15\%$	Load regulation	< 1% at $0 A \rightarrow I_{rated}$	Dynamic	> 2 ms at $10 \leftrightarrow 90\% I_{rated}$	Overshoot	< 2%	Current limitation	Permanently short-circuit proof (see diagram)	Overload-proof	yes	No-load proof	yes	Output overvoltage switch-off	yes									
Mains regulation	< 0,2% at $U_{Ein} \pm 15\%$																									
Load regulation	< 1% at $0 A \rightarrow I_{rated}$																									
Dynamic	> 2 ms at $10 \leftrightarrow 90\% I_{rated}$																									
Overshoot	< 2%																									
Current limitation	Permanently short-circuit proof (see diagram)																									
Overload-proof	yes																									
No-load proof	yes																									
Output overvoltage switch-off	yes																									
<p style="text-align: center;">Ausgangsstrom</p> <p>Current-limiting characteristic 1,25 A / 2 A Output voltage</p> <p>automatischer Restart hicc-up mode</p>	<p><b>Safety</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Output</td><td>VDE 0805/EN 60950/IEC 950/UL 1950 Safety-low voltage (SELV) EN 60950</td></tr> <tr><td>Class of protection</td><td>Class I / Class II at</td></tr> <tr><td>Degree of protection</td><td>IP 20</td></tr> <tr><td>Leakage current (1,25A/2A)</td><td>&lt; 0,25 mA (47-63 Hz mains frequency)</td></tr> <tr><td>Leakage current (5A/10A)</td><td>&lt; 0,75 mA (47-63 Hz mains frequency)</td></tr> <tr><td>Leakage current (20A/40A)</td><td>&lt; 3,50 mA (47-63 Hz mains frequency) (does not apply to DC/DC-converters)</td></tr> </table> <p><b>EMV CE – certified</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Interference suppression</td><td>EN 55011/EN 55022 Class B</td></tr> <tr><td>Static discharge ESD IEC 1000-4-2</td><td>8 kV contact discharge 15 kV air discharge</td></tr> <tr><td>Electromagnetic fields IEC 1000-4-3</td><td>10 V/m</td></tr> <tr><td>Burst IEC 1000-4-6</td><td>4 kV Input 2 kV Output / capacitive coupled</td></tr> <tr><td>Surge IEC 1000-4-5</td><td>4 kV asymmetrical 4 kV symmetrical</td></tr> <tr><td>Conducted interference ENV 50141 IEC 1000-4-6</td><td>10 V, 150 kHz...80 MHz</td></tr> </table>	Output	VDE 0805/EN 60950/IEC 950/UL 1950 Safety-low voltage (SELV) EN 60950	Class of protection	Class I / Class II at	Degree of protection	IP 20	Leakage current (1,25A/2A)	< 0,25 mA (47-63 Hz mains frequency)	Leakage current (5A/10A)	< 0,75 mA (47-63 Hz mains frequency)	Leakage current (20A/40A)	< 3,50 mA (47-63 Hz mains frequency) (does not apply to DC/DC-converters)	Interference suppression	EN 55011/EN 55022 Class B	Static discharge ESD IEC 1000-4-2	8 kV contact discharge 15 kV air discharge	Electromagnetic fields IEC 1000-4-3	10 V/m	Burst IEC 1000-4-6	4 kV Input 2 kV Output / capacitive coupled	Surge IEC 1000-4-5	4 kV asymmetrical 4 kV symmetrical	Conducted interference ENV 50141 IEC 1000-4-6	10 V, 150 kHz...80 MHz	<p>EN 55011, EN 50082-1/-2</p>
Output	VDE 0805/EN 60950/IEC 950/UL 1950 Safety-low voltage (SELV) EN 60950																									
Class of protection	Class I / Class II at																									
Degree of protection	IP 20																									
Leakage current (1,25A/2A)	< 0,25 mA (47-63 Hz mains frequency)																									
Leakage current (5A/10A)	< 0,75 mA (47-63 Hz mains frequency)																									
Leakage current (20A/40A)	< 3,50 mA (47-63 Hz mains frequency) (does not apply to DC/DC-converters)																									
Interference suppression	EN 55011/EN 55022 Class B																									
Static discharge ESD IEC 1000-4-2	8 kV contact discharge 15 kV air discharge																									
Electromagnetic fields IEC 1000-4-3	10 V/m																									
Burst IEC 1000-4-6	4 kV Input 2 kV Output / capacitive coupled																									
Surge IEC 1000-4-5	4 kV asymmetrical 4 kV symmetrical																									
Conducted interference ENV 50141 IEC 1000-4-6	10 V, 150 kHz...80 MHz																									
<p style="text-align: center;">Ausgangsstrom</p> <p>Current-limiting characteristic 5 / 10 / 20 / 40 A Output voltage</p> <p>automatischer Restart hicc-up mode</p>	<p><b>Operating data</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Temperature range</td><td>-10°C to +70°C, with free convection</td></tr> <tr><td>Power derating</td><td>2,5%/ K from +60°C (see diagram)</td></tr> <tr><td>Storage temperature</td><td>-25°C to +85°C</td></tr> </table> <p><b>Installation</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Mounting</td><td>Plastic slider for fastening on mounting rail DIN EN 50022-35</td></tr> <tr><td>Installation position</td><td>wall mounted Input terminals at the top Output terminals at the bottom</td></tr> </table>	Temperature range	-10°C to +70°C, with free convection	Power derating	2,5%/ K from +60°C (see diagram)	Storage temperature	-25°C to +85°C	Mounting	Plastic slider for fastening on mounting rail DIN EN 50022-35	Installation position	wall mounted Input terminals at the top Output terminals at the bottom															
Temperature range	-10°C to +70°C, with free convection																									
Power derating	2,5%/ K from +60°C (see diagram)																									
Storage temperature	-25°C to +85°C																									
Mounting	Plastic slider for fastening on mounting rail DIN EN 50022-35																									
Installation position	wall mounted Input terminals at the top Output terminals at the bottom																									