

3-phase switching power supply 400-500 Vac output power 960 W

- Three-phase input 340...550 Vac or two-phase with derating
- Short circuit, overload, over temperature, input and output overvoltage protections
- High outrush current to guarantee downstream overcurrent protections selectivity and to start-up heavy loads
- High efficiency and low dissipated power
- Suitable for applications in SELV and PELV circuits
- Input protected by ASSIL circuit (Surge Suppressor and Inrush Limiter)

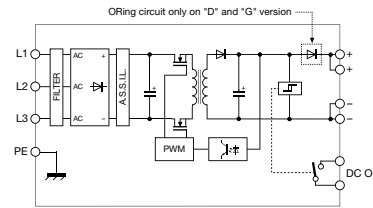


NOTES

The depth dimension includes the DIN rail clamp.

- (3) Over 50°C (122°F) apply a derating of about 18 W/°C
- (4) For this peak current, the output voltage does not drop more than 10% of the nominal value, but the current value, provided by the power supply also depends on the total line resistance.
- (5) Version CSG960G is not suitable for SELV applications

BLOCK DIAGRAM



VERSIONS

- Output 24 Vdc 40 A
- Output 12...15 Vdc 80 A
- Output 48 Vdc 20 A redundant version
- Output 72 Vdc 13.3 A redundant version

Cod. XCSG960C Cod. XCSG960D Cod. XCSG960G

CSG960C	—	CSG960D	CSG960G (5)
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INPUT TECHNICAL DATA

Input rated voltage	3x 400–500 Vac (range 340...550 Vac)
Frequency	47...63 Hz
Current @ Iout max. (Uin 400 / 500 Vac)	2.2 A / 1.1 A
Inrush peak current	< 20 A
Power factor	> 0.65
Internal protection fuse	—
External protection on AC line	circuit breaker: 3x 10 A C characteristic - fuse: 3x T 6.3 A

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—
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OUTPUT TECHNICAL DATA

Output rated voltage	24 Vdc	48 Vdc	72 Vdc
Output adjustable range	24...28 Vdc	45...55 Vdc	72...85 Vdc
Continuous current	40 A @ 50°C (3)	20 A @ 50°C (3)	13.3 A @ 50°C (3)
Overload limit	60 A for >5 s with Uout >90% Un (4)	30 A for >5 s with Uout >90% Un (4)	18.6 A for >5 s with Uout >90% Un (4)
Short circuit peak current	>90 A for 5 s (4)	>80 A for 5 s (4)	>30 A for 5 s (4)
Load regulation	< 1%	< 1%	< 1%
Ripple @ nominal ratings	100 mVpp	≤ 250 mVpp	≤ 100 mVpp
Hold up time (Uin 400 / 500 Vac)	>10 ms / >15 ms	>10 ms / >15 ms	>15 ms / >18 ms
Overload / short circuit protections	hiccup at the overload limit with auto reset / over temperature protection		
Status display	"DC OK" green LED / "DC OK" alarm contact/ "Overload" red LED		
Alarm contact threshold	<21.6 Vdc	<43.2 Vdc	<21.6 Vdc
Parallel connection	possible possible with external ORing diode	possible factory provided with internal ORing diode	possible factory provided with internal ORing diode
Redundant parallel connection			

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24...28 Vdc	45...55 Vdc	72...85 Vdc
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>90 A for 5 s (4)	>80 A for 5 s (4)	>30 A for 5 s (4)
< 1%	< 1%	< 1%
100 mVpp	≤ 250 mVpp	≤ 100 mVpp
>10 ms / >15 ms	>10 ms / >15 ms	>15 ms / >18 ms
hiccup at the overload limit with auto reset / over temperature protection		
"DC OK" green LED / "DC OK" alarm contact/ "Overload" red LED		
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GENERAL TECHNICAL DATA

Efficiency (Uin 400 / 500 Vac)	>94% / >94%
Dissipated power (Uin 400 / 500 Vac)	61 W / 61 W
Operating temperature range	-20...+60°C, with derating over 50°C / over temperature protection (3)
Input/output isolation	3 kVac / 60 s SELV output (5)
Input/ground isolation	2 kVac / 60 s
Output/ground isolation	0.5 kVac / 60 s
Standard/approvals	EN50178, EN61558, EN60950, IEC950, UL508
EMC Standards	EN61000-6-2, EN61000-6-4, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-11
MTBF @ 25°C @ nominal ratings	>500'000 h acc. to SN 29500 / >150'000 h acc. to MIL Std. HDBK 217F
Overvoltage category/Pollution degree	II / 2
Protection degree	IP 20 IEC 529, EN60529
Connection terminal	6 mm² fixed screw type
Housing material	aluminium
Approx. weight	1.2 Kg (70.55 oz)
Mounting information	vertical on rail, allow 10 mm spacing between adjacent components

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MOUNTING ACCESSORIES

- Mounting rail type according to IEC60715/TH35-7.5
- Mounting rail type according to IEC60715/G32

PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB

PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB
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