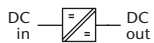


# Series C / B 4800

## Features

- DC input: 10 - 800 V
- AC input: 1 or 3-phase, 47 - 400 Hz
- DC output: 12 / ... / 400 V
- Continuous short circuit protection
- Overvoltage protection with auto restart
- Thermal shutdown with auto restart
- Industrial grade components
- Compact and robust design



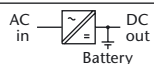
## DC / DC Converters

▶ 2.4 kW		▶ 3.5 kW		▶ 5 kW		▶ 5 kW								
Input VDC												Output VDC		
10-16 <sup>3)</sup> VDC	Output Amps	20-32 <sup>3)</sup> VDC	Output Amps	40-64 VDC	50-80 VDC	Output Amps	80-160 VDC	160-320 VDC	320-380 <sup>1)</sup> VDC	320-640 <sup>3)</sup> VDC	450-800 <sup>3)</sup> VDC	Output Amps	Adj.	Range
C 4802	136	C 4822	190	C 4832	C 4842	240 <sup>3)</sup>	C 4852	C 4872	C 4882 Z	C 4872 G	C 4872 K	260 <sup>3)</sup>	12	11- 13
C 4803	116	C 4823	160	C 4833	C 4843	200 <sup>3)</sup>	C 4853	C 4873	C 4883 Z	C 4873 G	C 4873 K	220 <sup>3)</sup>	15	14- 16
C 4804	92	C 4824	120	C 4834	C 4844	150	C 4854	C 4874	C 4884 Z	C 4874 G	C 4874 K	160	24	23- 26
C 4805	80	C 4825	100	C 4835	C 4845	130	C 4855	C 4875	C 4885 Z	C 4875 G	C 4875 K	140	28	26- 30
C 4809	44	C 4829	60	C 4839	C 4849	76	C 4859	C 4879	C 4889 Z	C 4879 G	C 4879 K	80	48	45- 55
C 4806	36	C 4826	50	C 4836	C 4846	62	C 4856	C 4876	C 4886 Z	C 4876 G	C 4876 K	66	60	58- 68
C 4807	20	C 4827	26	C 4837	C 4847	36	C 4857	C 4877	C 4887 Z	C 4877 G	C 4877 K	40	110	100- 130
C 4807 J	12	C 4827 J	14	C 4837 J	C 4847 J	20	C 4857 J	C 4877 J	C 4887 ZJ	C 4877 GJ	C 4877 KJ	20	200	190- 200
C 4808	10	C 4828	14	C 4838	C 4848	20	C 4858	C 4878	C 4888 Z	C 4878 G	C 4878 K	20	220	200- 250
C 4808 J	6	C 4828 J	7	C 4838 J	C 4848 J	10	C 4858 J	C 4878 J	C 4888 ZJ	C 4878 GJ	C 4878 KJ	10	400	380- 400



## AC / DC Converters

▶ 4 kW		▶ 5 kW						
Input VAC, 1-Phase		Input VAC, 3-Phase			Output Amps	Output VDC		
115 ±20%	Output Amps	230 <sup>+15%</sup> -20%	3x200 <sup>+15%</sup> -20%	3x400 <sup>+15%</sup> -20%		3x480 <sup>+10%</sup> -15%	Adj.	Range
C 4862	260 <sup>3)</sup>	C 4882	C 4862 V	C 4882 V	C 4892 V	260 <sup>3)</sup>	12	11- 13
C 4863	220 <sup>3)</sup>	C 4883	C 4863 V	C 4883 V	C 4893 V	220 <sup>3)</sup>	15	14- 16
C 4864	150	C 4884	C 4864 V	C 4884 V	C 4894 V	160	24	23- 26
C 4865	130	C 4885	C 4865 V	C 4885 V	C 4895 V	140	28	26- 30
C 4869	72	C 4889	C 4869 V	C 4889 V	C 4899 V	80	48	45- 55
C 4866	60	C 4886	C 4866 V	C 4886 V	C 4896 V	66	60	58- 68
C 4867	30	C 4887	C 4867 V	C 4887 V	C 4897 V	40	110	100- 130
C 4867 J	16	C 4887 J	C 4867 VJ	C 4887 VJ	C 4897 VJ	20	200	190- 200
C 4868	16	C 4888	C 4868 V	C 4888 V	C 4898 V	20	220	200- 250
C 4868 J	8	C 4888 J	C 4868 VJ	C 4888 VJ	C 4898 VJ	10	400	380- 400



## Battery Chargers

▶ 4 kW		▶ 5 kW						
Input VAC, 1-Phase		Input VAC, 3-Phase			Output Amps	Output VDC		
115 ±20%	Output Amps	230 <sup>+15%</sup> -20%	3x200 <sup>+15%</sup> -20%	3x400 <sup>+15%</sup> -20%		3x480 <sup>+10%</sup> -15%	Nom. Battery Voltage	Range
B 4861	220 <sup>3)</sup>	B 4881	B 4861 V	B 4881 V	B 4891 V	220 <sup>3)</sup>	12	12- 16
B 4862	122	B 4882	B 4862 V	B 4882 V	B 4892 V	140	24	24- 32
B 4864	62	B 4884	B 4864 V	B 4884 V	B 4894 V	70	48	48- 64
B 4866	50	B 4886	B 4866 V	B 4886 V	B 4896 V	60	60	60- 80
B 4867	28	B 4887	B 4867 V	B 4887 V	B 4897 V	34	110	110- 145
B 4868	14	B 4888	B 4868 V	B 4888 V	B 4898 V	18	220	220- 290

### Assistance in table use:

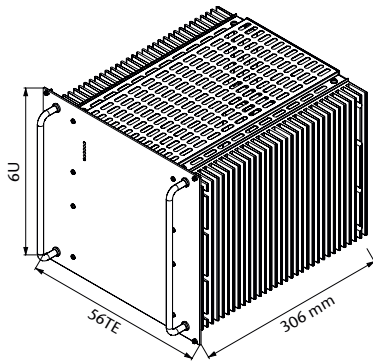
- 1 Select the column for input voltage range.
- 2 Select the row for the appropriate output voltage.
- 3 The intersection of both results in the module required.

### For example:

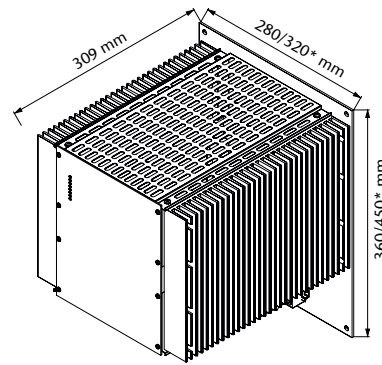
- 1 input voltage = 115 VAC
- 2 output voltage = 400 VDC @ 8 A
- 3 results in a C 4868 J module.

<sup>1)</sup> input supply from PFC also suitable

<sup>3)</sup> suited for wall-mount, alternatives upon request



**Eurocassette / approx. 16.0 kg**  
(pluggable module for 19" sub-rack)



**Wall mount / approx. 19.0 kg**  
\*) applicable to models  $\geq 150$  A output current

## Specifications

### Input

Voltage range . . . . . see table, unit switches off at under- and overvoltage  
 No-load input power. . . . . 15 W typical  
 Switch-on time . . . . . 1 - 2 s  
 Inrush current . . . . . 230 VAC and 3-phase input: limited by thermistor  
 Hold-up time . . . . . AC input: 5 ms typical

### Immunity

- ESD. . . . . acc. to DIN / EN 61000-4-2 level 3  
 - Fast transients . . . . . acc. to DIN / EN 61000-4-4 level 3  
 - Surges . . . . . acc. to DIN / EN 61000-4-5 level 3

### Output

Line regulation ( $\pm 10\%$ ) . . . . . 0.1 %  
 Load regulation (10 - 90 %) . . . . . 0.2 %  
 Load transient (10-90-10 %) . . . . . 6 % typical  
 Response time to  $\pm 1\%$  . . . . . 5 - 10 ms  
 Turn-on rise time . . . . . Soft-start, 100 - 300 ms typical  
 Ripple. . . . .  $\leq 1\%$   
 Overload protection . . . . . current limited to 105 - 110 % of  $I_{nom}$   
 Overvoltage protection. . . . . OVP switches off module with automatic return to operation  
 Remote sense. . . . . standard for C series, up to 10 % of  $U_{nom}$  for output < 60 VDC, up to 6 V for output > 60 VDC

### General

Efficiency . . . . . 70 - 95 %  
 Operating temperature. . . . .  $-20$  to  $+75$  °C  
 Load derating . . . . . 2.5 % / °C from  $+55$  °C  
 Storage temperature . . . . .  $-40$  to  $+85$  °C  
 Humidity . . . . . up to 95 % RH, non-condensing  
 Cooling . . . . . natural convection (external fan recommended)  
 Temperature coefficient . . . . . 0.02 % / °C typical  
 Safety / Construction. . . . . acc. to DIN / EN 60950-1: 2003  
 Protection category. . . . . IP 20, others or NEMA upon request  
 EMI. . . . . acc. to EN 55022, class A, optionally class B  
 MTBF . . . . . approx. 100,000 h @  $40$  °C acc. to MIL - HDBK - 217 E (notice 1)  
 Connector for eurocassette - std. design . . . . . H15 and high current connector for  $I > 50$  A  
 Marking . . . . . CE

## Options

### Input

- Inrush current limiting
- Reverse polarity protection for DC input

### Output

- Parallel operation
- Redundant operation
- Inhibit (remote on / off)

### Signals

via open collector or relay contacts

- Power ok (input)
- DC ok (output)
- Sys-reset

### Programming

- Output voltage or current via
  - potentiometer
  - analog signal
  - interface RS232 or IEEE488

### Battery charger

- Temperature compensated charging voltage
- Automatic / manual selection of charging characteristic

### Monitoring

- Input / output voltage or current via
  - analog signal
  - interface card RS232 or IEEE488 (external)

### Mechanics / environment:

- 19" sub-rack for eurocassette
- Wall mount
- Increased mechanical strength
- Tropical protection
- Extended temperature range to  $-40$  °C