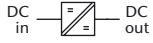


Series C / B 3800

Features

- DC input: 18 - 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



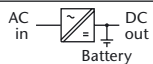
DC / DC Converters

▶ 2000 W			▶ 2500 W								
Input VDC										Output VDC	
18-36 VDC	Output Amps	36-75 VDC	45-90 VDC	80-160 VDC	160-320 VDC	320-380 ¹⁾ VDC	320-640 ³⁾ VDC	450-800 ³⁾ VDC	Output Amps	Adj.	Range
C 3822	120 ²⁾	C 3832	C 3842	C 3852	C 3872	C 3882 Z	C 3872 G	C 3872 K	160 ²⁾³⁾	12	11- 13
C 3823	100	C 3833	C 3843	C 3853	C 3873	C 3883 Z	C 3873 G	C 3873 K	130 ²⁾	15	14- 16
C 3824	75	C 3834	C 3844	C 3854	C 3874	C 3884 Z	C 3874 G	C 3874 K	100	24	23- 26
C 3825	65	C 3835	C 3845	C 3855	C 3875	C 3885 Z	C 3875 G	C 3875 K	85	28	26- 30
C 3829	38	C 3839	C 3849	C 3859	C 3879	C 3889 Z	C 3879 G	C 3879 K	45	48	45- 55
C 3826	30	C 3836	C 3846	C 3856	C 3876	C 3886 Z	C 3876 G	C 3876 K	36	60	58- 68
C 3827	15	C 3837	C 3847	C 3857	C 3877	C 3887 Z	C 3877 G	C 3877 K	20	110	100- 130
C 3827 J	10	C 3837 J	C 3847 J	C 3857 J	C 3877 J	C 3887 ZJ	C 3877 GJ	C 3877 KJ	12	200	190- 200
C 3828	8	C 3838	C 3848	C 3858 J	C 3878 J	C 3888 Z	C 3878 G	C 3878 K	10	220	200- 250
C 3828 J	5	C 3838 J	C 3848 J	C 3858 J	C 3878 J	C 3888 ZJ	C 3878 GJ	C 3878 KJ	6	400	380- 400



AC / DC Converters

▶ 2500 W											
Input VAC, 1-Phase			Input VAC, 3-Phase			Output Amps	Output VDC				
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	3x200 ^{+15%} _{-20%}	3x400 ^{+15%} _{-20%}	3x480 ^{+10%} _{-15%}		Adj.	Range			
C 3862	C 3882	C 3892	C 3862 V	C 3882 V	C 3892 V	160 ²⁾³⁾	12	11- 13			
C 3863	C 3883	C 3893	C 3863 V	C 3883 V	C 3893 V	130 ²⁾	15	14- 16			
C 3864	C 3884	C 3894	C 3864 V	C 3884 V	C 3894 V	100	24	23- 26			
C 3865	C 3885	C 3895	C 3865 V	C 3885 V	C 3895 V	85	28	26- 30			
C 3869	C 3889	C 3899	C 3869 V	C 3889 V	C 3899 V	45	48	45- 55			
C 3866	C 3886	C 3896	C 3866 V	C 3886 V	C 3896 V	36	60	58- 68			
C 3867	C 3887	C 3897	C 3867 V	C 3887 V	C 3897 V	20	110	100- 130			
C 3867 J	C 3887 J	C 3897 J	C 3867 VJ	C 3887 VJ	C 3897 VJ	12	200	190- 200			
C 3868	C 3888	C 3898	C 3868 V	C 3888 V	C 3898 V	10	220	200- 250			
C 3868 J	C 3888 J	C 3898 J	C 3868 VJ	C 3888 VJ	C 3898 VJ	6	400	380- 400			



Battery Chargers

▶ 2500 W											
Input VAC, 1-Phase			Input VAC, 3-Phase			Output Amps	Output VDC				
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	3x200 ^{+15%} _{-20%}	3x400 ^{+15%} _{-20%}	3x480 ^{+10%} _{-15%}		Nom. Battery Voltage	Range			
B 3861	B 3881	B 3891	B 3861 V	B 3881 V	B 3891 V	150 ²⁾	12	12- 16			
B 3862	B 3882	B 3892	B 3862 V	B 3882 V	B 3892 V	80	24	24- 32			
B 3864	B 3884	B 3894	B 3864 V	B 3884 V	B 3894 V	45	48	48- 64			
B 3866	B 3886	B 3896	B 3866 V	B 3886 V	B 3896 V	35	60	60- 80			
B 3867	B 3887	B 3897	B 3867 V	B 3887 V	B 3897 V	20	110	110- 145			
B 3868	B 3888	B 3898	B 3868 V	B 3888 V	B 3898 V	10	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.

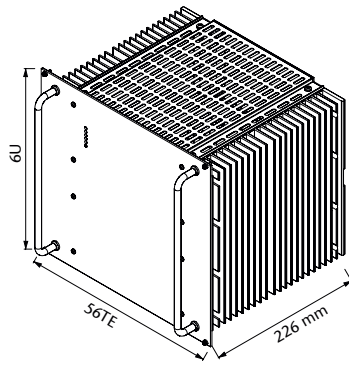
For example:

- 1 input voltage = 650 VDC
- 2 output voltage = 48 VDC @ 45 A
- 3 results in a C 3879 K module.

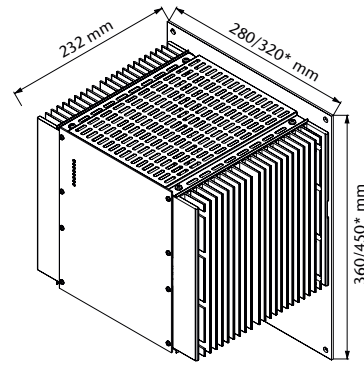
¹⁾ input supply from PFC also suitable

²⁾ external fan recommended

³⁾ suited for wall-mount, alternatives upon request



Eurocassette / approx. 13.0 kg
(pluggable module for 19" sub-rack)



Wall mount / approx. 16.0 kg
(*) applicable to models ≥ 150 A output current

Specifications

Input

Voltage range see table, unit switches off at under- and overvoltage
 No-load input power. 5 - 6 W
 Switch-on time 1 - 2 s
 Inrush current AC input: limited by thermistor
 Hold-up time AC input: 10 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 $\pm 1\%$ 2 - 3 ms
 Turn-on rise time Soft-start, 100 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
 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 for DC input
- Reverse polarity protection for DC input
- Autoranging for 115 / 230 VAC 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 card RS232 or IEEE488 (external)

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