

Rack & Cabinet Mounting Converters

C SERIES

150-12 k Watts



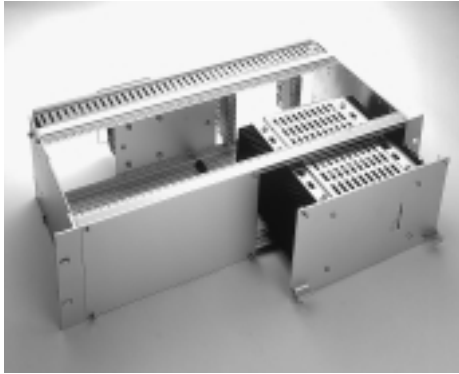
- CE Marked - LVD & EMC
- Over 1700 Different Models
- DC Inputs 10 - 900 Volts
- Single & Multi Outputs
- Fully Wired Customised Racks
- Parallel Redundant Systems
- Euro Cassette or Wall Mount

Specification

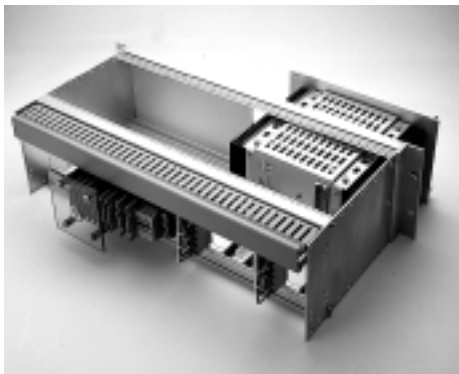
Voltage Range	• See Tables of models, unit switches off at under- and overvoltage
No-Load input current	• 3% of full load current typical
Switch-on time	• 100 ms typical - C300-C4700, 500 ms typical - C5600-C5800
Hold-up time	• Depends on input voltage (typ. 2 ms at 12 V DC)
Inrush current	• Depends on impedance of supply line, see list of options for option 'I'
High-energy pulses/surges	• ENV 50142 (level 3)
Spikes/bursts	• Acc. to IEC 1000-4-4 (level 3)
Line regulation ($\pm 10\%$)	• 0.1%
Load regulation (10-90%)	• 0.2%
Ripple	• $\leq 1\% + 30 \text{ mV p-p}$ (0.5% typical lin. reg. aux.)
Load transient (20-100-20%)	• 6% typical
Response time to $\pm 1\%$	• 2 ms typical - C300-C4700, 10 ms typical - C5600-C5800
Overload protection	• Current limited at 105-110% of full load (See Technical Notes s/c protection)
Overvoltage protection	• Standard on single output models and main output on multi output units OVP switches off module with automatic restart
Remote sensing	• Standard on main output and all single outputs
Temperature coefficient	• 0.02%/°C typical
Operating temperature	• $-20 \text{ }^\circ\text{C}$ to $+75 \text{ }^\circ\text{C}$ derate from $+55 \text{ }^\circ\text{C}$ at 2.5%/°C (Optional $-40 \text{ }^\circ\text{C}$ to $+75 \text{ }^\circ\text{C}$)
Storage temperature	• $-40 \text{ }^\circ\text{C}$ to $+85 \text{ }^\circ\text{C}$
Relative Humidity	• 5 to 95% Non Condensing
Efficiency at full load	• 60-90%, depending on model
Switching frequency	• Approx. 33 kHz
Isolation Voltage	• Acc. to EN 60950 class 1
EMC	• Acc. to EN 55022, level A, conducted and radiated
M.T.B.F.	• Approx. 100,000 hrs at $40 \text{ }^\circ\text{C}$
Construction (safety)	• Acc. to EN 60950 to class 1
Creepage distance	• Acc. to VDE 0110, 4 mm
Air distance	• Acc. to VDE 0110, 3 mm
Connector	• H 15 DIN 41612 or studs for higher current outputs C300-C4700, studs only C5600-C5800

19" Subracks & Redundant Systems

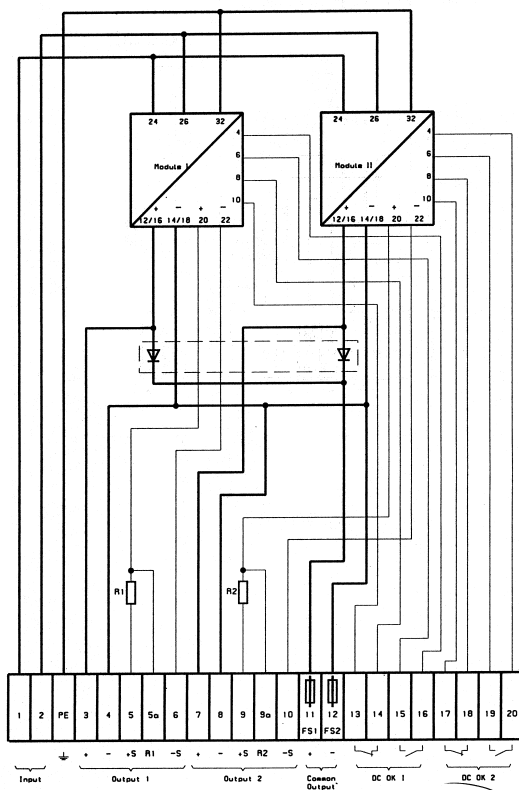
Front View



Rear View



Sample Schematic



The above demonstrates a typical schematic as supplied with each system. It shows two units connected in parallel incorporating options DD (Decoupling Diodes) and DR (DC-OK Relay).

Description

In addition to a complete range of individual power supplies we are able to offer a 'total solution' to your power requirements.

Subracks can be configured as 3U, 6U or 9U and multiples thereof, allowing any mix of units including 'hot swap' redundant systems.

The wide range of options available include input fuses, circuit breakers, decoupling diodes, RFI filters, front panels and full system wiring.

Outputs are via DIN rail screw terminals and are configured to customers requirements to incorporate DC OK relay contacts, input and output connections and any other options.

Please contact the sales office for a quotation.

Example

The photographs show a typical system containing a C624-DD.DR which could be configured with another unit to provide a dual redundant system. i.e. Specification could be:

DC Input: 18-36 V

DC Output: 24 V @ 18 A, dual redundant

Each unit is rated at 18 Amps and is connected in parallel via decoupling diodes and set up to current share. In the event of a psu failure the DC OK alarm relay trips, the failed psu can be identified by its front panel LED and the psu replaced without power shut down i.e. 'Hot Swap'.

A full system schematic is provided with each system as shown below, the size and orientation of connectors can be specified by the customer.

Standard Options - see over for integral psu options

3U subrack, 215 or 275 mm deep
 6U subrack, 215 or 275 mm deep
 6U subrack, configured as 2 x 3U
 9U subrack, configured as 3 x 3U
 9U subrack, configured as 1 x 3U, 1 x 6U
 H15 mating connectors and wiring
 DIN rail terminal strip at rear
 Input Fuse

up to 25 A
 up to 63 A

MCB, single pole

up to 25 A
 up to 40 A
 up to 63 A

MCB, dual pole

up to 25 A
 up to 40 A
 up to 63 A

Decoupling Diodes on Heatsink

2 x 50 A
 2 x 80 A

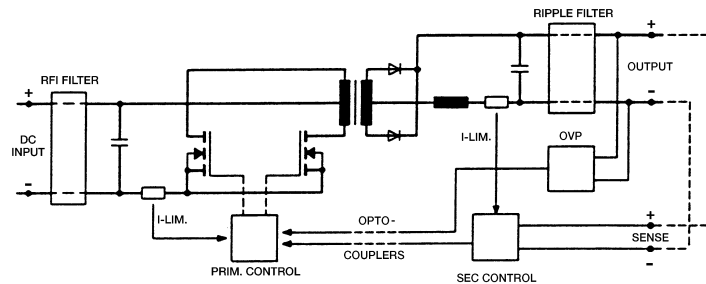
RFI filter, 20-40 dB reduction

up to 10 A
 up to 20 A

Front panels, plain or drilled all sizes

General Technical Information

This shows the block diagram of a converter with low voltage DC input and single output. The switching system is a push-pull circuit. The MOSFET transistors are alternately conducting with variable pulse-width. At the secondary side, after rectification and filtering, the output voltage is sensed and compared with a reference. The error signal controls via an opto-coupler the primary circuit.



No load operation

The converters operate properly at no external load (a small base load is internally provided to keep the converter in operation). **Multi-output modules** however, require a minimum load of 10...20% at the main output in order to generate sufficient voltage for the additional outputs. Optionally an automatic base load can be provided which provides just enough load on the main output to generate sufficient voltage for the additional outputs under the existing loading conditions.

Short circuit protection

The output of a single-output unit (main output of a multi-output unit) is fully short circuit-protected as the secondary current limit circuit overrides voltage control if the programmed current limit level is reached. Additional outputs with **integrated linear regulators** have a fixed but not precisely defined current limit and thermal protection of the regulator. Additional outputs with **discrete regulators** have current limit with fold-back characteristic. Additional outputs with **switchmode regulators** have current limit at an adjustable current level.

Overvoltage protection

An additional circuit operating independently from the voltage control circuit senses overvoltage internally and turns off via an opto-coupler the primary switching circuit and automatically returns to operation. In **multi-output systems** the main output is overvoltage-protected.

Soft-start/Inrush current

When the unit is connected to input power the primary control circuit gradually turns the converter on so that the output capacitors are gradually charged. The primary capacitors however, will be quickly charged when the unit is connected to power resulting in a very short but high inrush current. This current peak can be avoided by a thermistor in the input line. It will not limit the current after a short interruption of input power not allowing the thermistor to cool down. The thermistor can be ordered under option "I". This option is not available for some higher input current units and an alternative inrush circuit may be provided - consult office.

Spike suppression

High input voltage spikes generated in the supply system that could disturb operation of the unit or cause damage will be absorbed by a varistor across the input lines. (Standard on all units).

Parallel operation

Single-output modules can operate in parallel. The individual currents can be balanced to some extent by carefully adjusting the output voltages of the units. With option "CS" a circuit for **active current sharing** can be ordered that senses via an interconnecting wire the currents of the other converters and corrects the output voltage towards optimum current balance.

If a larger number of modules is connected in parallel **de-coupling diodes** should be used to protect the secondary circuit of one module in case of a failure against a fault current from all the others. De-coupling diodes improve current balancing as the output voltage is sensed partially before and partially behind the de-coupling diode.

In multi-output units with just the main outputs paralleled it is important that each main output carries enough load to generate sufficient voltage for the additional outputs.

Redundant operation

For redundant operation **de-coupling diodes** are required to avoid a failure in the output circuit of one module affecting the voltage of the other. The de-coupling diodes, as mentioned above, improve current balancing.

Logic Signals

In many cases it is required that a signal (power ok, DC ok, etc) is given by an "open collector" of an NPN transistor, with the emitter connected to the negative line of the main output. Unless requested otherwise the transistor will be energised in the ok-status ("low active"). These signals are also available via a relay contact.

Construction and combination of modules

Nearly all modules are designed for insertion in **19"-racks**. There are also provisions available to mount them against a vertical plate which may be installed in a cabinet. It should be pointed out that two modules size 500 can easily be combined to a size 600 unit and that two modules size 600 (one of them may already be the combination of two size 500 units) can be combined to a 6U high module with common heat sinks 6U high. This could be a practical solution if two modules operate in parallel or redundancy or if one module is the inverter and the other one the pre-connected DC/DC converter.

NOTE: For options available see AC-DC C Series.

Output Voltage & Current Ratings - 150 Watts C300 Models									
Input (V DC)	10-16 V	Output	18-36 V	36-75 V	45-90 V	80-160 V	160-320 V	Output	
Output	Models	Rating	Models	Models	Models	Models	Models	Models	Rating
5 V (4.5 – 5.5 Adj)	C300	15.0 A	C320	C330	C340	C350	C370	C370	20.0 A
9 V (8 – 10 Adj)	C301	10.0 A	C321	C331	C341	C351	C371	C371	15.0 A
12 V (11 – 13 Adj)	C302	8.0 A	C322	C332	C342	C352	C372	C372	12.0 A
15 V (14 – 16 Adj)	C303	6.5 A	C323	C333	C343	C353	C373	C373	10.0 A
24 V (23 – 26 Adj)	C304	4.0 A	C324	C334	C344	C354	C374	C374	6.0 A
28 V (26 – 30 Adj)	C305	3.5 A	C325	C335	C345	C355	C375	C375	5.0 A
48 V (45 – 55 Adj)	C309	2.0 A	C329	C339	C349	C359	C379	C379	3.0 A
60 V (58 – 68 Adj)	C306	1.6 A	C326	C336	C346	C356	C376	C376	2.3 A
110 V (100 – 130 Adj)	C307	0.8 A	C327	C337	C347	C357	C377	C377	1.2 A
220 V (200 – 250 Adj)	C308	0.4 A	C328	C338	C348	C358	C378	C378	0.6 A

Note:

Multi output versions available - contact sales office (M300 Series).

Output Voltage & Current Ratings - 250 Watts C500 Models									
Input (V DC)	10-16 V	Output	18-36 V	Output	36-75 V	45-90 V	80-160 V	160-320 V	Output
Output	Models	Rating	Models	Rating	Models	Models	Models	Models	Rating
5 V (4.5 – 5.5 Adj)	C500	25.0 A	C520	30.0 A	C530	C540	C550	C570	35.0 A
9 V (8 – 10 Adj)	C501	17.0 A	C521	20.0 A	C531	C541	C551	C571	25.0 A
12 V (11 – 13 Adj)	C502	14.0 A	C522	16.0 A	C532	C542	C552	C572	20.0 A
15 V (14 – 16 Adj)	C503	11.0 A	C523	13.0 A	C533	C543	C553	C573	16.0 A
24 V (23 – 26 Adj)	C504	7.0 A	C524	8.0 A	C534	C544	C554	C574	10.0 A
28 V (26 – 30 Adj)	C505	6.0 A	C525	7.0 A	C535	C545	C555	C575	8.5 A
48 V (45 – 55 Adj)	C509	3.5 A	C529	4.0 A	C539	C549	C559	C579	4.5 A
60 V (58 – 68 Adj)	C506	3.0 A	C526	3.5 A	C536	C546	C556	C576	3.7 A
110 V (100 – 130 Adj)	C507	1.5 A	C527	1.8 A	C537	C547	C557	C577	2.0 A
220 V (200 – 250 Adj)	C508	0.8 A	C528	0.9 A	C538	C548	C558	C578	1.0 A

Note:

Multi output versions available - contact sales office (M500 Series).

Output Voltage & Current Ratings - 350 Watts S600 Models									
Input (V DC)	10-16 V	Output	18-36 V	Output	36-75 V	45-90 V	80-160 V	160-320 V	Output
Output	Models	Rating	Models	Rating	Models	Models	Models	Models	Rating
5 V (4.5 – 5.5 Adj)	S600	30.0 A	S620	50.0 A	S630	S640	S650	S670	50.0 A
9 V (8 – 10 Adj)	S601	20.0 A	S621	30.0 A	S631	S641	S651	S671	32.0 A
12 V (11 – 13 Adj)	S602	15.0 A	S622	24.0 A	S632	S642	S652	S672	26.0 A
15 V (14 – 16 Adj)	S603	12.0 A	S623	20.0 A	S633	S643	S653	S673	22.0 A
24 V (23 – 26 Adj)	S604	8.0 A	S624	12.0 A	S634	S644	S654	S674	14.0 A
28 V (26 – 30 Adj)	S605	7.0 A	S625	10.0 A	S635	S645	S655	S675	12.0 A
48 V (45 – 55 Adj)	S609	4.4 A	S629	6.0 A	S639	S649	S659	S679	6.5 A
60 V (58 – 68 Adj)	S606	3.6 A	S626	5.0 A	S636	S646	S656	S676	5.2 A
110 V (100 – 130 Adj)	S607	1.8 A	S627	2.5 A	S637	S647	657	S677	3.0 A
220 V (200 – 250 Adj)	S608	0.9 A	S628	1.25 A	S638	S648	S658	S678	1.5 A

Note:

Multi output versions available - contact sales office (SM600 Series).

Output Voltage & Current Ratings - 400 Watts C1300 Models									
Input (V DC)	10-16 V	Output	18-36 V	Output	36-75 V	45-90 V	80-160 V	160-320 V	Output
Output	Models	Rating	Models	Rating	Models	Models	Models	Models	Rating
5 V (4.5 – 5.5 Adj)	C1300	35.0 A	C1320	45.0 A	C1330	C1340	C1350	C1370	50.0 A
9 V (8 – 10 Adj)	C1301	24.0 A	C1321	30.0 A	C1331	C1341	C1351	C1371	35.0 A
12 V (11 – 13 Adj)	C1302	20.0 A	C1322	25.0 A	C1332	C1342	C1352	C1372	30.0 A
15 V (14 – 16 Adj)	C1303	16.0 A	C1323	21.0 A	C1333	C1343	C1353	C1373	25.0 A
24 V (23 – 26 Adj)	C1304	10.0 A	C1324	13.0 A	C1334	C1344	C1354	C1374	15.0 A
28 V (26 – 30 Adj)	C1305	8.5 A	C1325	11.0 A	C1335	C1345	C1355	C1375	13.0 A
48 V (45 – 55 Adj)	C1309	5.0 A	C1329	6.0 A	C1339	C1349	C1359	C1379	7.3 A
60 V (58 – 68 Adj)	C1306	4.0 A	C1326	5.0 A	C1336	C1346	C1356	C1376	6.0 A
110 V (100 – 130 Adj)	C1307	2.0 A	C1327	2.5 A	C1337	C1347	C1357	C1377	3.0 A
220 V (200 – 250 Adj)	C1308	1.0 A	C1328	1.25 A	C1338	C1348	C1358	C1378	1.5 A

Note:

Multi output versions available - contact sales office (M1300 Series).

Output Voltage & Current Ratings - 500 Watts C600 Models									
Input (V DC)	10-16 V Models	Output Rating	18-36 V Models	Output Rating	36-75 V Models	45-90 V Models	80-160 V Models	160-320 V Models	Output Rating
5 V (4.5 – 5.5 Adj)	C600	50.0 A	C620	70.0 A	C630	C640	C650	C670	80.0 A
9 V (8 – 10 Adj)	C601	30.0 A	C621	45.0 A	C631	C641	C651	C671	50.0 A
12 V (11 – 13 Adj)	C602	25.0 A	C622	35.0 A	C632	C642	C652	C672	40.0 A
15 V (14 – 16 Adj)	C603	20.0 A	C623	28.0 A	C633	C643	C653	C673	32.0 A
24 V (23 – 26 Adj)	C604	12.0 A	C624	18.0 A	C634	C644	C654	C674	20.0 A
28 V (26 – 30 Adj)	C605	10.0 A	C625	15.0 A	C635	C645	C655	C675	17.0 A
48 V (45 – 55 Adj)	C609	6.0 A	C629	8.0 A	C639	C649	C659	C679	9.0 A
60 V (58 – 68 Adj)	C606	5.0 A	C626	7.0 A	C636	C646	C656	C676	7.5 A
110 V (100 – 130 Adj)	C607	2.5 A	C627	3.5 A	C637	C647	C657	C677	4.0 A
220 V (200 – 250 Adj)	C608	1.2 A	C628	1.8 A	C638	C648	C658	C678	2.0 A

Note:

Multi output versions available - contact sales office (M600 Series).

Output Voltage & Current Ratings - 600 Watts C1500 Models									
Input (V DC)	10-16 V Models	Output Rating	18-36 V Models	Output Rating	36-75 V Models	45-90 V Models	80-160 V Models	160-320 V Models	Output Rating
5 V (4.5 – 5.5 Adj)	C1500	40.0 A	C1520	60.0 A	C1530	C1540	C1550	C1570	80.0 A
9 V (8 – 10 Adj)	C1501	25.0 A	C1521	38.0 A	C1531	C1541	C1551	C1571	50.0 A
12 V (11 – 13 Adj)	C1502	24.0 A	C1522	33.0 A	C1532	C1542	C1552	C1572	42.0 A
15 V (14 – 16 Adj)	C1503	20.0 A	C1523	25.0 A	C1533	C1543	C1553	C1573	34.0 A
24 V (23 – 26 Adj)	C1504	15.0 A	C1524	18.0 A	C1534	C1544	C1554	C1574	23.0 A
28 V (26 – 30 Adj)	C1505	13.0 A	C1525	15.0 A	C1535	C1545	C1555	C1575	20.0 A
48 V (45 – 55 Adj)	C1509	7.0 A	C1529	8.0 A	C1539	C1549	C1559	C1579	11.0 A
60 V (58 – 68 Adj)	C1506	5.5 A	C1526	6.5 A	C1536	C1546	C1556	C1576	9.0 A
110 V (100 – 130 Adj)	C1507	3.0 A	C1527	3.3 A	C1537	C1547	C1557	C1577	4.5 A
220 V (200 – 250 Adj)	C1508	1.4 A	C1528	1.6 A	C1538	C1548	C1558	C1578	2.4 A
190 – 200 V	C1507J	2.0 A	C1527J	2.5 A	C1537J	C1547J	C1557J	C1577J	3.0 A
380 – 400 V	C1508J	1.0 A	C1528J	1.3 A	C1538J	C1548J	C1558J	C1578J	1.5 A

NOTES:

5 V output units are 24TE (40 mm radiator).

Output Voltage & Current Ratings - 800 Watts C2600 Models							
Input (V DC)	18-36 V Models	Output Rating	36-75 V Models	45-90 V Models	80-160 V Models	160-320 V Models	Output Rating
5 V (4.5 – 5.5 Adj)	C2620	85.0 A	C2630	C2640	C2650	C2670	100.0 A
9 V (8 – 10 Adj)	C2621	65.0 A	C2631	C2641	C2651	C2671	75.0 A
12 V (11 – 13 Adj)	C2622	50.0 A	C2632	C2642	C2652	C2672	60.0 A
15 V (14 – 16 Adj)	C2623	42.0 A	C2633	C2643	C2653	C2673	50.0 A
24 V (23 – 26 Adj)	C2624	25.0 A	C2634	C2644	C2654	C2674	30.0 A
28 V (26 – 30 Adj)	C2625	22.0 A	C2635	C2645	C2655	C2675	27.0 A
48 V (45 – 55 Adj)	C2629	12.0 A	C2639	C2649	C2659	C2679	15.0 A
60 V (58 – 68 Adj)	C2626	10.0 A	C2636	C2646	C2656	C2676	12.0 A
110 V (100 – 130 Adj)	C2627	5.0 A	C2637	C2647	C2657	C2677	6.5 A
220 V (200 – 250 Adj)	C2628	2.5 A	C2638	C2648	C2658	C2678	3.2 A

Note:

Multi output versions available - contact sales office (M2600 Series).

Output Voltage & Current Ratings - 850 Watts C3500 Models							
Input (V DC)	18-36 V Models	Output Rating	36-75 V Models	45-90 V Models	80-160 V Models	160-320 V Models	Output Rating
5 V (4.5 – 5.5 Adj)	C3520	80.0 A ⁽²⁾	C3530	C3540	C3550	C3570	100.0 A ⁽²⁾
9 V (8 – 10 Adj)	C3521	55.0 A	C3531	C3541	C3551	C3571	65.0 A
12 V (11 – 13 Adj)	C3522	50.0 A	C3532	C3542	C3552	C3572	56.0 A
15 V (14 – 16 Adj)	C3523	40.0 A	C3533	C3543	C3553	C3573	45.0 A
24 V (23 – 26 Adj)	C3524	27.0 A	C3534	C3544	C3554	C3574	30.0 A
28 V (26 – 30 Adj)	C3525	23.0 A	C3535	C3545	C3555	C3575	27.0 A
48 V (45 – 55 Adj)	C3529	12.0 A	C3539	C3549	C3559	C3579	14.0 A
60 V (58 – 68 Adj)	C3526	10.0 A	C3536	C3546	C3556	C3576	12.0 A
110 V (100 – 130 Adj)	C3527	5.3 A	C3537	C3547	C3557	C3577	6.5 A
220 V (200 – 250 Adj)	C3528	2.8 A	C3538	C3548	C3558	C3578	3.5 A
190 – 200 V	C3527J	3.5 A	C3537J	C3547J	C3557J	C3577J	4.0 A
380 – 400 V	C3528J	1.7 A	C3538J	C3548J	C3558J	C3578J	2.0 A

NOTES:

- Models ending in J, output supply to inverter I series.
- 5 V outputs are 24TE (40 mm radiator), external fan recommended.

Output Voltage & Current Ratings - 1250 Watts C3700 Models							
Input (V DC)	18-36 V Models	Output Rating	36-75 V Models	45-90 V Models	80-160 V Models	160-320 V Models	Output Rating
5 V (4.5 – 5.5 Adj)	C3720	120.0 A ⁽²⁾	C3730	C3740	C3750	C3770	150.0 A ⁽²⁾
9 V (8 – 10 Adj)	C3721	80.0 A	C3731	C3741	C3751	C3771	100.0 A
12 V (11 – 13 Adj)	C3722	70.0 A	C3732	C3742	C3752	C3772	85.0 A
15 V (14 – 16 Adj)	C3723	56.0 A	C3733	C3743	C3753	C3773	70.0 A
24 V (23 – 26 Adj)	C3724	40.0 A	C3734	C3744	C3754	C3774	50.0 A
28 V (26 – 30 Adj)	C3725	35.0 A	C3735	C3745	C3755	C3775	42.0 A
48 V (45 – 55 Adj)	C3729	19.0 A	C3739	C3749	C3759	C3779	23.0 A
60 V (58 – 68 Adj)	C3726	15.0 A	C3736	C3746	C3756	C3776	18.0 A
110 V (100 – 130 Adj)	C3727	8.0 A	C3737	C3747	C3757	C3777	10.0 A
220 V (200 – 250 Adj)	C3728	4.0 A	C3738	C3748	C3758	C3778	5.0 A
190 – 200 V	C3727J	5.0 A	C3737J	C3747J	C3757J	C3777J	6.0 A
380 – 400 V	C3728J	2.5 A	C3738J	C3748J	C3758J	C3778J	3.0 A

NOTES:

- Models ending in J, output supply to inverter I series.
- External fan recommended.

Output Voltage & Current Ratings - 1700 Watts C3600 Models									
Input (V DC)	18-32 V Models	Output Rating	36-75 V Models	45-90 V Models	80-160 V Models	160-320 V Models	320-640 V Models	450-900 V Models ⁽⁵⁾	Output Rating
5 V (4.5 – 5.5 Adj)	C3620	180.0 A ⁽¹⁾	C3630	C3640	C3650	C3670	C3670G	C3670K	200.0 A ⁽¹⁾
9 V (8 – 10 Adj)	C3621	120.0 A	C3631	C3641	C3651	C3671	C3671G	C3671K	130.0 A
12 V (11 – 13 Adj)	C3622	100.0 A	C3632	C3642	C3652	C3672	C3672G	C3672K	115.0 A
15 V (14 – 16 Adj)	C3623	80.0 A	C3633	C3643	C3653	C3673	C3673G	C3673K	90.0 A
24 V (23 – 26 Adj)	C3624	55.0 A	C3634	C3644	C3654	C3674	C3674G	C3674K	65.0 A
28 V (26 – 30 Adj)	C3625	48.0 A	C3635	C3645	C3655	C3675	C3675G	C3675K	55.0 A
48 V (45 – 55 Adj)	C3629	26.0 A	C3639	C3649	C3659	C3679	C3679G	C3679K	30.0 A
60 V (58 – 68 Adj)	C3626	21.0 A	C3636	C3646	C3656	C3676	C3676G	C3676K	25.0 A
110 V (100 – 130 Adj)	C3627	11.0 A	C3637	C3647	C3657	C3677	C3677G	C3677K	14.0 A
220 V (200 – 250 Adj)	C3628	5.5 A	C3638	C3648	C3658	C6378	C6378G	C6378K	7.0 A
190 – 200 V	C3627J	7.0 A	C3637J	C3647J	C3657J	C3677J	C3677GJ	C3677KJ	8.5 A
380 – 400 V	C3628J	3.5 A	C3638J	C3648J	C3658J	C6378J	C6378GJ	C6378KJ	4.3 A

NOTES:

- External fan recommended.
- Models ending in J, output supply to inverter I series.
- Wall mount only.

Output Voltage & Current Ratings - 2500 Watts C3800 Models							
Input (V DC)	18-32 V Models	Output Rating	36-75 V Models	45-90 V Models	80-160 V Models	160-320 V Models	Output Rating
24 V (23 – 26 Adj)	C3824	75.0 A	C3834	C3844	C3854	C3874	100.0 A
28 V (26 – 30 Adj)	C3825	65.0 A	C3835	C3845	C3855	C3875	85.0 A
48 V (45 – 55 Adj)	C3829	38.0 A	C3839	C3849	C3859	C3879	45.0 A
60 V (58 – 68 Adj)	C3826	30.0 A	C3836	C3846	C3856	C3876	36.0 A
110 V (100 – 130 Adj)	C3827	15.0 A	C3837	C3847	C3857	C3877	20.0 A
220 V (200 – 250 Adj)	C3828	8.0 A	C3838	C3848	C3858	C3878	10.0 A
90 – 200 V	C3827J	10.0 A	C3857J	C3847J	C3857J	C3877J	12.0 A
380 – 400 V	C3828J	5.0 A	C3858J	C3848J	C3858J	C3878J	6.0 A

NOTES:

- Models ending in J, output supply to inverter I series.

Output Voltage & Current Ratings - 2500 Watts C4700 Models												
Input (V DC)	10-16 V Models	Output Rating	20-32 V Models	Output Rating	40-64 V Models	50-80 V Models	Output Rating	80-160 V Models	160-320 V Models	320-640 V Models	450-900 V Models ⁽²⁾	Output Rating
5 V (4.5 – 5.5 Adj)	C4700	100 A ⁽¹⁾	C4720	160 A ⁽¹⁾	C4730	C4740	180 A ⁽¹⁾	C4750	C4770	C4770G	C4770K	180 A ⁽¹⁾
9 V (8 – 10 Adj)	C4701	60 A	C4721	110 A	C4731	C4741	140 A	C4751	C4771	C4771G	C4771K	150 A
12 V (11 – 13 Adj)	C4702	55 A	C4722	95 A	C4732	C4742	120 A	C4752	C4772	C4772G	C4772K	130 A
15 V (14 – 16 Adj)	C4703	50 A	C4723	80 A	C4733	C4743	100 A	C4753	C4773	C4773G	C4773K	110 A
24 V (23 – 26 Adj)	C4704	32 A	C4724	60 A	C4734	C4744	75 A	C4754	C4774	C4774G	C4774K	80 A
28 V (26 – 30 Adj)	C4705	28 A	C4725	50 A	C4735	C4745	65 A	C4755	C4775	C4775G	C4775K	70 A
48 V (45 – 55 Adj)	C4709	16 A	C4729	30 A	C4739	C4749	40 A	C4759	C4779	C4779G	C4779K	40 A
60 V (58 – 68 Adj)	C4706	13 A	C4726	25 A	C4736	C4746	28 A	C4756	C4776	C4776G	C4776K	30 A
110 V (100 – 130 Adj)	C4707	7 A	C4727	12 A	C4737	C4747	18 A	C4757	C4777	C4777G	C4777K	20 A
220 V (200 – 250 Adj)	C4708	3.5 A	C4728	6 A	C4738	C4748	10 A	C4758	C4778	C4778G	C4778K	10 A
Output for Supply of Inverter Series 'I'												
190 – 200 V	C4707J	4.5 A	C4727J	7 A	C4737J	C4747J	10 A	C4757J	C4777J	C4777GJ	C4777KJ	10 A
380 – 400 V	C4708J	2.3 A	C4728J	3.5 A	C4738J	C4748J	5 A	C4758J	C4778J	C4778GJ	C4778KJ	5 A

NOTES:

- External fan recommended.
- Wall mount only.
- Models ending in J, output supply to inverter I series.

Output Voltage & Current Ratings - Up To 6 k Watts C5600 Models																	
Output	Input (V DC)	10-16 V		20-32 V		40-64 V		50-80 V		80-160 V		160-320 V		320-640 V		450-800 V	
		Models	Output Rating	Models	Output Rating	Models	Models	Output Rating	Models	Models	Output Rating	Models	Models	Output Rating	Models	Models	Output Rating
5 V	(4.5 – 5.5 Adj)	C5600	200 A	C5620	320 A	C5630	C5640	360 A	C5650	C5670	C5670G	C5670K	400 A				
9 V	(8 – 10 Adj)	C5601	120 A	C5621	220 A	C5631	C5641	280 A	C5651	C5671	C5671G	C5671K	400 A				
12 V	(11 – 13 Adj)	C5602	110 A	C5622	190 A	C5632	C5642	240 A	C5652	C5672	C5672G	C5672K	400 A				
15 V	(14 – 16 Adj)	C5603	100 A	C5623	160 A	C5633	C5643	200 A	C5653	C5673	C5673G	C5673K	355 A				
24 V	(23 – 26 Adj)	C5604	64 A	C5624	120 A	C5634	C5644	150 A	C5654	C5674	C5674G	C5674K	230 A				
28 V	(26 – 30 Adj)	C5605	56 A	C5625	100 A	C5635	C5645	130 A	C5655	C5675	C5675G	C5675K	200 A				
48 V	(45 – 55 Adj)	C5609	32 A	C5629	60 A	C5639	C5649	80 A	C5659	C5679	C5679G	C5679K	110 A				
60 V	(58 – 68 Adj)	C5606	26 A	C5626	50 A	C5636	C5646	56 A	C5656	C5676	C5676G	C5676K	88 A				
110 V	(100 – 130 Adj)	C5607	14 A	C5627	24 A	C5637	C5647	36 A	C5657	C5677	C5677G	C5677K	46 A				
220 V	(200 – 250 Adj)	C5608	7 A	C5628	12 A	C5638	C5648	20 A	C5658	C5678	C5678G	C5678K	24 A				
Output for Supply of Inverter Series 'I'																	
190 – 200 V		C5607J	9.0 A	C5627J	14 A	C5637J	C5647J	20 A	C5657	C5677J	C5677GJ	C5677KJ	30 A				
380 – 400 V		C5608J	4.6 A	C5628J	7 A	C5638J	C5648J	10 A	C5658	C5678J	C5678GJ	C5678KJ	15 A				

NOTES:

1. All C5xxx are fitted with temperature controlled fans.
2. Models ending in J, output supply to Inverter 'I' series.
3. 360-400 V DC input version available consult office.

Output Voltage & Current Ratings - Up To 8 k Watts C5700 Models																	
Output	Input (V DC)	20-32 V		40-64 V		50-80 V		80-160 V		160-320 V		320-380 V		320-640V		450-900 V	
		Models	Output Rating	Models	Models	Output Rating	Models	Output Rating	Models	Models	Output Rating	Models	Models	Output Rating	Models	Models	Output Rating
5 V	(4.5 – 5.5 Adj)	C5720	400	C5730	C5740	400 A	-	-	-	-	-	-	-	-	-	-	-
9 V	(8 – 10 Adj)	C5721	330	C5731	C5741	400 A	C5751	400 A	-	-	-	-	-	-	-	-	-
12 V	(11 – 13 Adj)	C5722	285	C5732	C5742	360 A	C5752	400 A	-	-	-	-	-	-	-	-	-
15 V	(14 – 16 Adj)	C5723	240	C5733	C5743	300 A	C5753	385 A	C5773	C5783Z	C5773G	C5773K	400 A				
24 V	(23 – 26 Adj)	C5724	180	C5734	C5744	225 A	C5754	250 A	C5774	C5784Z	C5774G	C5774K	325 A				
28 V	(26 – 30 Adj)	C5725	150	C5735	C5745	195 A	C5755	215 A	C5775	C5785Z	C5775G	C5775K	280 A				
48 V	(45 – 55 Adj)	C5729	90	C5739	C5749	120 A	C5759	115 A	C5779	C5789Z	C5779G	C5779K	155 A				
60 V	(58 – 68 Adj)	C5726	75	C5736	C5746	84 A	C5756	95 A	C5776	C5786Z	C5776G	C5776K	125 A				
110 V	(100 – 130 Adj)	C5727	36	C5737	C5747	54 A	C5757	50 A	C5777	C5787Z	C5777G	C5777K	65 A				
220 V	(200 – 250 Adj)	C5728	18	C5738	C5748	30 A	C5758	26 A	C5778	C5788Z	C5778G	C5778K	34 A				
Output for Supply of Inverter Series 'I'																	
190 – 200 V		C5727J	21	C5737J	C5747J	30 A	C5757	32 A	C5777J	C5787J	C5777GJ	C5777KJ	42 A				
380 – 400 V		C5728J	10.5	C5738J	C5748J	15 A	C5758	16 A	C5778J	C5788J	C5778GJ	C5778KJ	21 A				

NOTES:

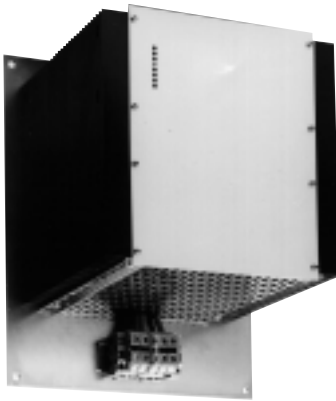
1. All C5xxx are fitted with temperature controlled fans.
2. Models ending in J, output supply to Inverter 'I' series.
3. 360-400 V DC input version available consult office.

Output Voltage & Current Ratings - Up To 12 k Watts C5800 Models						
Output	Input (V DC)	80-160 V	160-320 V	320-640V	450-800 V	Output Rating
		Models	Models	Models	Models	
9 V	(8-10 Adj)	-	-	-	-	-
12 V	(11-13 Adj)	-	-	-	-	-
15 V	(14-16 Adj)	-	-	-	-	-
24 V	(23 – 26 Adj)	C5854	C5874	C5874G	C5874K	400 A
28 V	(26 – 30 Adj)	C5855	C5875	C5875G	C5875K	400 A
48 V	(45 – 55 Adj)	C5859	C5879	C5879G	C5879K	220 A
60 V	(58 – 68 Adj)	C5856	C5876	C5876G	C5876K	180 A
110 V	(100 – 130 Adj)	C5857	C5877	C5877G	C5877K	96 A
220 V	(200 – 250 Adj)	C5858	C5878	C5878G	C5878K	50 A
Output for Supply of Inverter Series 'I'						
190 – 200 V		C5857J	C5877J	C5877GJ	C5877KJ	62 A
380 – 400 V		C5858J	C5878J	C5878GJ	C5878KJ	31 A

NOTES:

1. All C5xxx are fitted with temperature controlled fans.
2. Models ending in J, output supply to Inverter 'I' series.
3. 360-400 V DC input version available consult office.

Wall Mounting Options



For installation in a cabinet all modules are available with option "W" (wall mount), screwed against a vertical mounting plate and wired to a terminal block. The tables below show the dimensions of the standard plates as recommended for the different module sizes. For narrow but deep modules an angle is provided (Fig. 1) so that the view is towards the front of the module.

In addition Inverters and Battery Chargers - See "Energy Systems" section, can be mounted on wall plates for commonality of system design.

Wall Mounting Options

Angles - See Fig.1				
Option No.	For Series	Dimensions (mm)		
		Width	Height	Depth
W1	300	140	220	180
	500			
W1a	1300*	140	300	260
	1500*			
	3500*			
	3700*			
W1b	1200	140	360	260
	1300			
	1500			
	3500			
W1c	4700	140	360	340

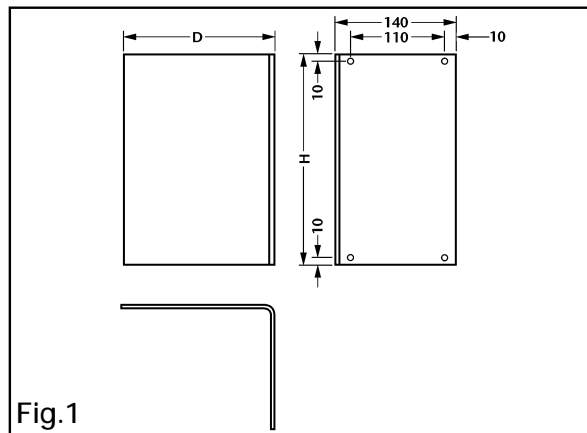


Fig.1

Plates - See Fig. 2				
Option No.	For Series	Dimensions (mm)		
		Width	Height	Depth
W2	600	220	220	-
	2600			
W3	3600	220	360	-
W4	3800	280	360	-
	4800			
Plates - See Fig. 3				
W5a	5000**	500	400	-
W5b		500	600	-
W5c		500	800	-

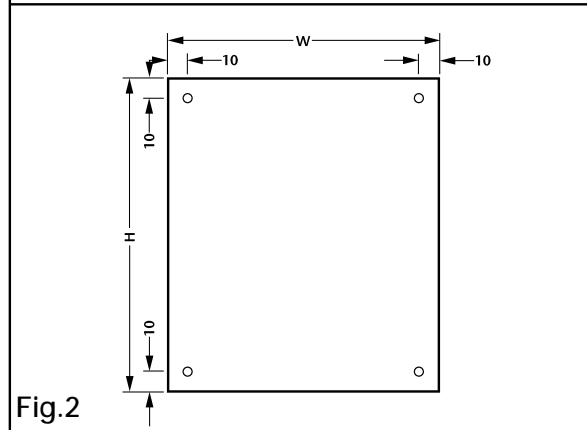


Fig.2

Dimensions - All Series			
Series	Dimensions		
	Height (U)	Width (TE)	Depth (mm)
300	3	14	160
500	3	21(24)	160
600	3	42	160
2600	3	42	220
1300	6	14	160
1500	6	21(24)	160
3500	6	21(24)	220
3700	6	28	220
3600	6	42	220
3800	6	56	220
4700	6	28	300
5600	6/9	19"	360/460
5700	6/9	19"	360/460
5800	6/9	19"	360/460

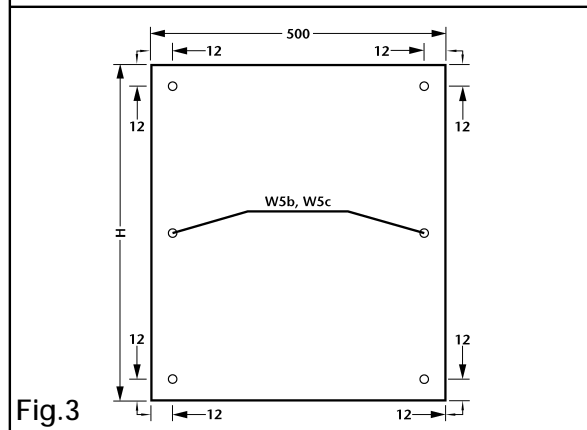


Fig.3

* No space available for connector underneath module.

** The size of the mounting plate depends on model size and output power and on additional equipment to be included - contact technical sales.