

Series C 5600 / 5700 with low input voltage

Features

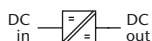
- DC input: 10 - 80 V
- DC output: 5 / ... / 400 V
- Continuous short circuit protection
- Overvoltage protection with auto restart
- Thermal shutdown with auto restart
- Industrial grade components
- Compact and robust design



DC / DC Converters

▶ 2.4 kW		▶ 3.4 kW		▶ 5 kW				
Input VDC							Output VDC	
10–16 VDC	Output Amps	20–32 VDC	Output Amps	40–64 VDC	50–80 VDC	Output Amps	Adj.	Range
C 5600	200	C 5620	320	C 5630	C 5640	360	5	4.5– 5.5
C 5601	160	C 5621	220	C 5631	C 5641	280	9	8– 10
C 5602	136	C 5622	190	C 5632	C 5642	240	12	11– 13
C 5603	116	C 5623	160	C 5633	C 5643	200	15	14– 16
C 5604	92	C 5624	120	C 5634	C 5644	150	24	23– 26
C 5605	80	C 5625	100	C 5635	C 5645	130	28	26– 30
C 5609	44	C 5629	60	C 5639	C 5649	76	48	45– 55
C 5606	36	C 5626	50	C 5636	C 5646	62	60	58– 68
C 5607	20	C 5627	26	C 5637	C 5647	36	110	100– 130
C 5607 J	12	C 5627 J	14	C 5637 J	C 5647 J	20	200	190– 200
C 5608	10	C 5628	14	C 5638	C 5648	20	220	200– 250
C 5608 J	6	C 5628 J	7	C 5638 J	C 5648 J	10	400	380– 400

Series C 5600 and C 4800 are electrically identical up to 80 VDC input.



DC / DC Converters

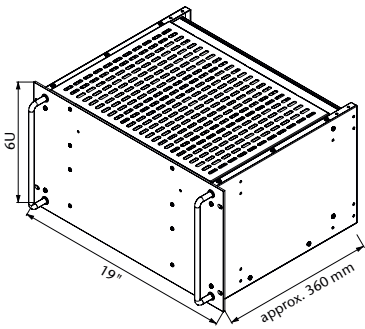
▶ 3.6 kW		▶ 5.1 kW		▶ 7.5 kW				
Input VDC							Output VDC	
10–16 VDC	Output Amps	20–32 VDC	Output Amps	40–64 VDC	50–80 VDC	Output Amps	Adj.	Range
C 5700	300	C 5720	320	C 5730	C 5740	500	5	4.5– 5.5
C 5701	240	C 5721	220	C 5731	C 5741	400	9	8– 10
C 5702	204	C 5722	190	C 5732	C 5742	360	12	11– 13
C 5703	174	C 5723	160	C 5733	C 5743	300	15	14– 16
C 5704	138	C 5724	120	C 5734	C 5744	225	24	23– 26
C 5705	120	C 5725	100	C 5735	C 5745	195	28	26– 30
C 5709	66	C 5729	60	C 5739	C 5749	114	48	45– 55
C 5706	54	C 5726	50	C 5736	C 5746	93	60	58– 68
C 5707	30	C 5727	26	C 5737	C 5747	54	110	100– 130
C 5707 J	18	C 5727 J	14	C 5737 J	C 5747 J	30	200	190– 200
C 5708	15	C 5728	14	C 5738	C 5748	30	220	200– 250
C 5708 J	9	C 5728 J	7	C 5738 J	C 5748 J	15	400	380– 400

Assistance in table use:

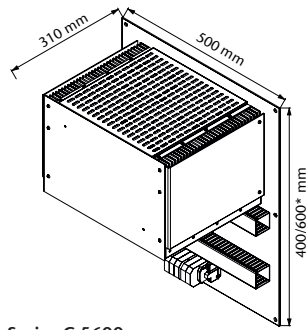
- 1 Select the column for input voltage range.
- 2 Select the row for the appropriate output voltage.
- 3 The intersection of both results in the module required.

For example:

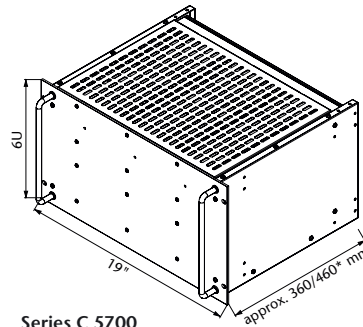
- 1 input voltage = 24 VDC
- 2 output voltage = 12 VDC @ 190 A
- 3 results in a C 5722 module.



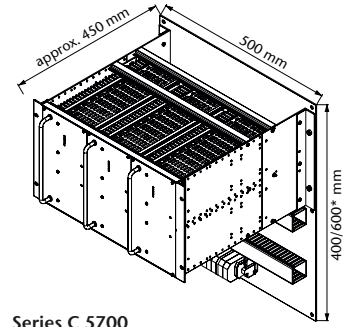
Series C 5600
19" Plug-in module / approx. 23.0 kg



Series C 5600
Wall mount / approx. 28.5 kg
*) applicable to models ≥ 150 A output current



Series C 5700
19" Plug-in module / approx. 32.0 kg
*) applicable to models ≥ 150 A output current



Series C 5700
Wall mount / approx. 36.5 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. 15 - 20 W
Switch-on time 1 - 2 s

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. $\leq 1\% + 30$ mV_{p-p}
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 with temperature controlled fans
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. 70,000 h @ 40°C acc. to MIL - HDBK - 217 E (notice 1)
Connector terminals / bolts / bars
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 RS232 or IEEE488

Mechanics / environment:

- Wall mount
- Increased mechanical strength
- Tropical protection
- Extended temperature range to -40 °C