

Series C / B 600

Features

- DC input: 10 - 380 V
- AC input: 115 / 230 V, 47 - 400 Hz
- DC output: 5 / ... / 250 V
- Continuous short circuit protection
- Overvoltage protection with auto restart
- Industrial grade components
- Compact and robust design



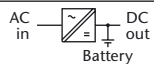
DC / DC Converters

▶ 300 W		▶ 450 W		▶ 500 W							
Input VDC										Output VDC	
10-16 VDC	Output Amps	18-36 VDC	Output Amps	36-75 VDC	45-90 VDC	80-160 VDC	160-320 VDC	320-380 ¹⁾ VDC	Output Amps	Adj.	Range
C 600	50	C 620	70	C 630	C 640	C 650	C 670	C 680 Z	80	5	4.5- 5.5
C 601	30	C 621	45	C 631	C 641	C 651	C 671	C 681 Z	50	9	8- 10
C 602	25	C 622	35	C 632	C 642	C 652	C 672	C 682 Z	40	12	11- 13
C 603	20	C 623	28	C 633	C 643	C 653	C 673	C 683 Z	32	15	14- 16
C 604	12	C 624	18	C 634	C 644	C 654	C 674	C 684 Z	20	24	23- 26
C 605	10	C 625	15	C 635	C 645	C 655	C 675	C 685 Z	17	28	26- 30
C 609	6	C 629	8	C 639	C 649	C 659	C 679	C 689 Z	9	48	45- 55
C 606	5	C 626	7	C 636	C 646	C 656	C 676	C 686 Z	7.5	60	58- 68
C 607	2.5	C 627	3.5	C 637	C 647	C 657	C 677	C 687 Z	4	110	100- 130
C 608	1.2	C 628	1.8	C 638	C 648	C 658	C 678	C 688 Z	2	220	200- 250



AC / DC Converters

▶ 500 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Output Amps	Adj.	Range
C 660	C 680	C 690	80	5	4.5- 5.5
C 661	C 681	C 691	50	9	8- 10
C 662	C 682	C 692	40	12	11- 13
C 663	C 683	C 693	32	15	14- 16
C 664	C 684	C 694	20	24	23- 26
C 665	C 685	C 695	17	28	26- 30
C 669	C 689	C 699	9	48	45- 55
C 666	C 686	C 696	7.5	60	58- 68
C 667	C 687	C 697	4	110	100- 130
C 668	C 688	C 698	2	220	200- 250



Battery Chargers

▶ 500 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Output Amps	Nom. Battery Voltage	Range
B 661	B 681	B 691	32	12	12- 16
B 662	B 682	B 692	16	24	24- 32
B 664	B 684	B 694	8	48	48- 64
B 666	B 686	B 696	6.4	60	60- 80
B 667	B 687	B 697	3.5	110	110- 145
B 668	B 688	B 698	1.8	220	220- 290

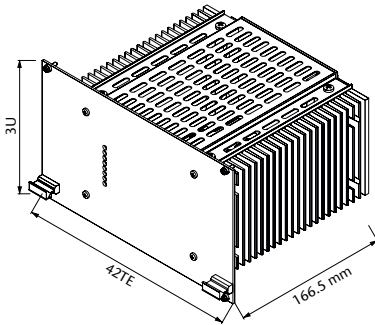
Assistance in table use:

- 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.

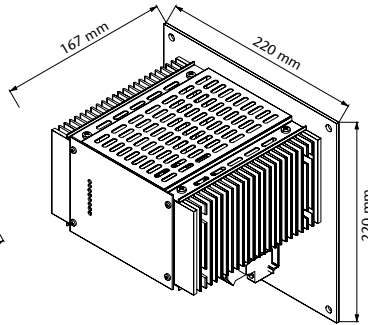
For example:

- 1 input voltage = 24 VDC
- 2 output voltage = 48 VDC @ 8 A
- 3 results in a C 629 module.

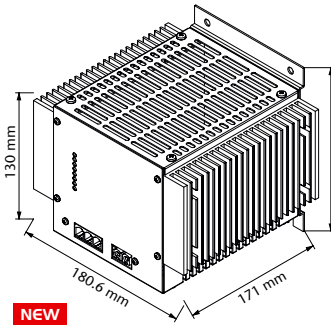
¹⁾ input supply from PFC also suitable



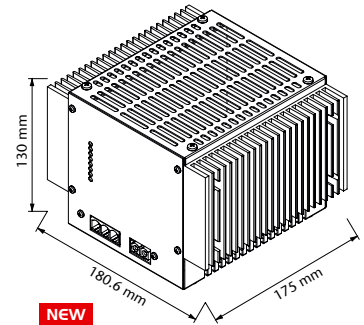
Eurocassette / approx. 3.5 kg
(pluggable module for 19" sub-rack)



Wall mount / approx. 4.5 kg



NEW
Chassis mount / approx. 4.0 kg



NEW
DIN rail mount / approx. 3.9 kg

Specifications

Input

Voltage range see table, unit switches off at under- and overvoltage
 No-load input power. 5 - 6 W
 Switch-on time 500 ms typical
 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. $\leq 1\% + 30\text{ mV}_{p-p}$
 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 - 92 %
 Operating temperature. -20 to $+75\text{ }^\circ\text{C}$
 Load derating 2.5 % / $^\circ\text{C}$ from $+55\text{ }^\circ\text{C}$
 Storage temperature -40 to $+85\text{ }^\circ\text{C}$
 Humidity up to 95 % RH, non-condensing
 Cooling natural convection
 Temperature coefficient 0.02 % / $^\circ\text{C}$ 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. 120,000 h @ $40\text{ }^\circ\text{C}$
 acc. to MIL - HDBK - 217 E (notice 1)
 Connector for eurocassette - std. design H 15
 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
 - external potentiometer
 - analog signal
 - interface card RS232 or IEEE488 (external)

Battery charger

- Temperature compensated charging voltage
- Automatic / manual selection of charging characteristic (external)

Monitoring

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

Mechanics / environment:

- 19" sub-rack for eurocassette
- Wall mount
- Chassis mount
- DIN rail mount
- Increased mechanical strength
- Tropical protection
- Extended temperature range to $-40\text{ }^\circ\text{C}$