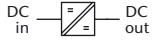


Features

- DC input: 10 - 800 V
- AC input: 1 or 3-phase, 47 - 400 Hz
- 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



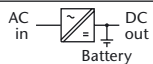
DC / DC Converters

▶ 900 W		▶ 1200 W		▶ 1600 W									
Input VDC												Output VDC	
10-16 VDC	Output Amps	20-32 VDC	Output Amps	40-64 VDC	50-80 VDC	80-160 VDC	160-320 VDC	320-380 ¹⁾ VDC	320-640 ³⁾ VDC	450-800 ³⁾ VDC	Output Amps	Adj.	Range
C 4501	60	C 4521	90	C 4531	C 4541	C 4551	C 4571	C 4581 Z	C 4571 G	C 4571 K	110	9	8- 10
C 4502	50	C 4522	80	C 4532	C 4542	C 4552	C 4572	C 4582 Z	C 4572 G	C 4572 K	96	12	11- 13
C 4503	42	C 4523	65	C 4533	C 4543	C 4553	C 4573	C 4583 Z	C 4573 G	C 4573 K	80	15	14- 16
C 4504	32	C 4524	45	C 4534	C 4544	C 4554	C 4574	C 4584 Z	C 4574 G	C 4574 K	56	24	23- 26
C 4505	28	C 4525	40	C 4535	C 4545	C 4555	C 4575	C 4585 Z	C 4575 G	C 4575 K	50	28	26- 30
C 4509	16	C 4529	22	C 4539	C 4549	C 4559	C 4579	C 4589 Z	C 4579 G	C 4579 K	30	48	45- 55
C 4506	14	C 4526	18	C 4536	C 4546	C 4556	C 4576	C 4586 Z	C 4576 G	C 4576 K	24	60	58- 68
C 4507	7.2	C 4527	10	C 4537	C 4547	C 4557	C 4577	C 4587 Z	C 4577 G	C 4577 K	13	110	100- 130
C 4507 J	4.4	C 4527 J	6	C 4537 J	C 4547 J	C 4557 J	C 4577 J	C 4587 ZJ	C 4577 GJ	C 4577 KJ	8	200	190- 200
C 4508	3.6	C 4528	5	C 4538	C 4548	C 4558	C 4578	C 4588 Z	C 4578 G	C 4578 K	6.5	220	200- 250
C 4508 J	2.2	C 4528 J	3	C 4538 J	C 4548 J	C 4558 J	C 4578 J	C 4588 ZJ	C 4578 GJ	C 4578 KJ	4	400	380- 400



AC / DC Converters

▶ 1600 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 4561	C 4581	C 4591	C 4561 V	C 4581 V	C 4591 V	110	9	8- 10	
C 4562	C 4582	C 4592	C 4562 V	C 4582 V	C 4592 V	96	12	11- 13	
C 4563	C 4583	C 4593	C 4563 V	C 4583 V	C 4593 V	80	15	14- 16	
C 4564	C 4584	C 4594	C 4564 V	C 4584 V	C 4594 V	56	24	23- 26	
C 4565	C 4585	C 4595	C 4565 V	C 4585 V	C 4595 V	50	28	26- 30	
C 4569	C 4589	C 4599	C 4569 V	C 4589 V	C 4599 V	30	48	45- 55	
C 4566	C 4586	C 4596	C 4566 V	C 4586 V	C 4596 V	24	60	58- 68	
C 4567	C 4587	C 4597	C 4567 V	C 4587 V	C 4597 V	13	110	100- 130	
C 4567 J	C 4587 J	C 4597 J	C 4567 VJ	C 4587 VJ	C 4597 VJ	8	200	190- 200	
C 4568	C 4588	C 4598	C 4568 V	C 4588 V	C 4598 V	6.5	220	200- 250	
C 4568 J	C 4588 J	C 4598 J	C 4568 VJ	C 4588 VJ	C 4598 VJ	4	400	380- 400	



Battery Chargers

▶ 1600 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 4561	B 4581	B 4591	B 4561 V	B 4581 V	B 4591 V	80	12	12- 16	
B 4562	B 4582	B 4592	B 4562 V	B 4582 V	B 4592 V	46	24	24- 32	
B 4564	B 4584	B 4594	B 4564 V	B 4584 V	B 4594 V	25	48	48- 64	
B 4566	B 4586	B 4596	B 4566 V	B 4586 V	B 4596 V	20	60	60- 80	
B 4567	B 4587	B 4597	B 4567 V	B 4587 V	B 4597 V	12	110	110- 145	
B 4568	B 4588	B 4598	B 4568 V	B 4588 V	B 4598 V	6	220	220- 290	

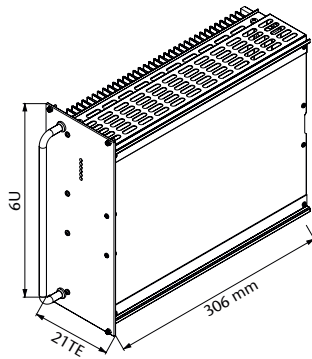
Assistance in table use:

- 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.

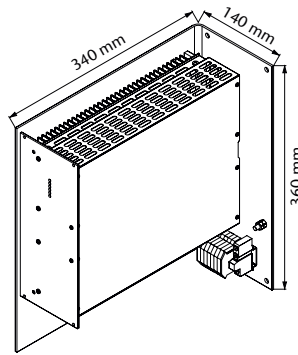
For example:

- 1 input voltage = 60 VDC
- 2 output voltage = 15 VDC @ 70 A
- 3 results in a C 4543 module.

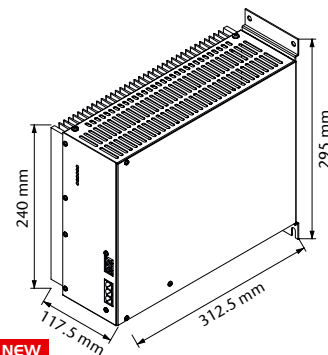
¹⁾ input supply from PFC also suitable
³⁾ suited for wall-mount, alternatives upon request



Eurocassette / approx. 6.5 kg
(pluggable module for 19" sub-rack)



Wall mount / approx. 10.0 kg



NEW
Chassis mount / approx. 7.5 kg

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. $\leq 1\% + 30\text{ mV}_{p-p}$

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 - 95 %

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 (external fan recommended)

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. 100,000 h @ $40\text{ }^\circ\text{C}$ acc. to MIL - HDBK - 217 E (notice 1)

Connector for eurocassette - std. design H15 and high current connector for $I > 50\text{ A}$

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
- Chassis mount
- Increased mechanical strength
- Tropical protection
- Extended temperature range to $-40\text{ }^\circ\text{C}$