

Series C / B 500

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



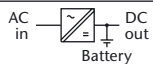
DC / DC Converters

▶ 180 W		▶ 200 W		▶ 250 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 500	25	C 520	30	C 530	C 540	C 550	C 570	C 580 Z	35	5	4.5– 5.5
C 501	17	C 521	20	C 531	C 541	C 551	C 571	C 581 Z	25	9	8– 10
C 502	14	C 522	16	C 532	C 542	C 552	C 572	C 582 Z	20	12	11– 13
C 503	11	C 523	13	C 533	C 543	C 553	C 573	C 583 Z	16	15	14– 16
C 504	7	C 524	8	C 534	C 544	C 554	C 574	C 584 Z	10	24	23– 26
C 505	6	C 525	7	C 535	C 545	C 555	C 575	C 585 Z	8.5	28	26– 30
C 509	3.5	C 529	4	C 539	C 549	C 559	C 579	C 589 Z	4.5	48	45– 55
C 506	3	C 526	3.5	C 536	C 546	C 556	C 576	C 586 Z	3.7	60	58– 68
C 507	1.5	C 527	1.8	C 537	C 547	C 557	C 577	C 587 Z	2	110	100– 130
C 508	0.8	C 528	0.9	C 538	C 548	C 558	C 578	C 588 Z	1	220	200– 250



AC / DC Converters

▶ 250 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Output Amps	Adj.	Range
C 560	C 580	C 590	35	5	4.5– 5.5
C 561	C 581	C 591	25	9	8– 10
C 562	C 582	C 592	20	12	11– 13
C 563	C 583	C 593	16	15	14– 16
C 564	C 584	C 594	10	24	23– 26
C 565	C 585	C 595	8.5	28	26– 30
C 569	C 589	C 599	4.5	48	45– 55
C 566	C 586	C 596	3.7	60	58– 68
C 567	C 587	C 597	2	110	100– 130
C 568	C 588	C 598	1	220	200– 250



Battery Chargers

▶ 250 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Output Amps	Nom. Battery Voltage	Range
B 561	B 581	B 591	16	12	12– 16
B 562	B 582	B 592	8	24	24– 32
B 564	B 584	B 594	4	48	48– 64
B 566	B 586	B 596	3.2	60	60– 80
B 567	B 587	B 597	2	110	110– 145
B 568	B 588	B 598	1	220	220– 290

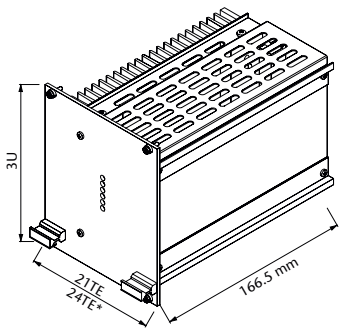
Assistance in table use:

- 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.

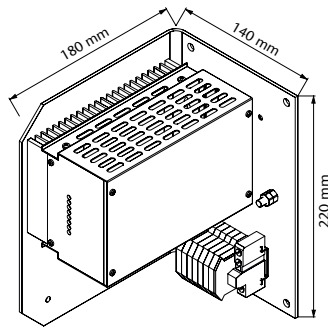
For example:

- 1 input voltage = 115 VAC
- 2 output voltage = 28 VDC @ 8.5 A
- 3 results in a C 565 module.

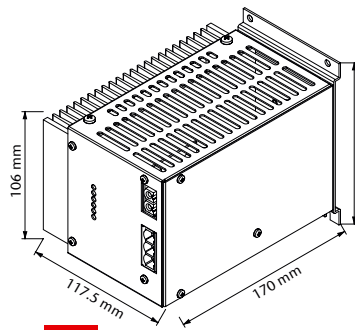
¹⁾ input supply from PFC also suitable



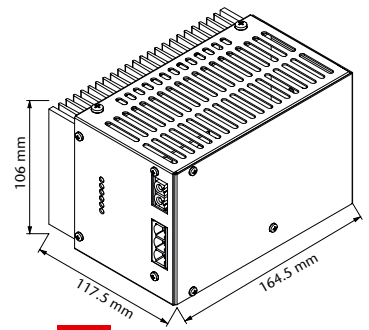
Eurocassette / approx. 1.7 kg
(pluggable module for 19" sub-rack)
) applicable to 5 V output models



Wall mount / approx. 3.2 kg



NEW
Chassis mount / approx. 2.1 kg



NEW
DIN rail mount / approx. 2.05 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. $\leq 1\% + 30\text{ mV}_{\text{p-p}}$

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 $< 60\text{ VDC}$, up to 6 V for output $> 60\text{ VDC}$

General

Efficiency 70 - 90 %

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)

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 $-40\text{ }^\circ\text{C}$