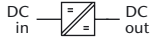


Series C / B 1500

Features

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



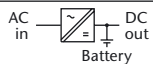
DC / DC Converters

▶ 400 W		▶ 500 W		▶ 600 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 1500	40	C 1520	60	C 1530	C 1540	C 1550	C 1570	C 1580 Z	80	5	4.5- 5.5
C 1501	25	C 1521	38	C 1531	C 1541	C 1551	C 1571	C 1581 Z	50	9	8- 10
C 1502	24	C 1522	33	C 1532	C 1542	C 1552	C 1572	C 1582 Z	42	12	11- 13
C 1503	20	C 1523	25	C 1533	C 1543	C 1553	C 1573	C 1583 Z	34	15	14- 16
C 1504	15	C 1524	18	C 1534	C 1544	C 1554	C 1574	C 1584 Z	23	24	23- 26
C 1505	13	C 1525	15	C 1535	C 1545	C 1555	C 1575	C 1585 Z	20	28	26- 30
C 1509	7	C 1529	8	C 1539	C 1549	C 1559	C 1579	C 1589 Z	11	48	45- 55
C 1506	5.5	C 1526	6.5	C 1536	C 1546	C 1556	C 1576	C 1586 Z	9	60	58- 68
C 1507	3	C 1527	3.3	C 1537	C 1547	C 1557	C 1577	C 1587 Z	4.5	110	100- 130
C 1507 J	2	C 1527 J	2.5	C 1537 J	C 1547 J	C 1557 J	C 1577 J	C 1587 ZJ	3	200	190-200
C 1508	1.4	C 1528	1.6	C 1538	C 1548	C 1558	C 1578	C 1588 Z	2.4	220	200-250
C 1508 J	1	C 1528 J	1.3	C 1538 J	C 1548 J	C 1558 J	C 1578 J	C 1588 ZJ	1.5	400	380-400



AC / DC Converters

▶ 600 W						
Input VAC, 1-Phase				Output VDC		
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Output Amps	Adj.	Range	
C 1560	C 1580	C 1590	80	5	4.5- 5.5	
C 1561	C 1581	C 1591	50	9	8- 10	
C 1562	C 1582	C 1592	42	12	11- 13	
C 1563	C 1583	C 1593	34	15	14- 16	
C 1564	C 1584	C 1594	23	24	23- 26	
C 1565	C 1585	C 1595	20	28	26- 30	
C 1569	C 1589	C 1599	11	48	45- 55	
C 1566	C 1586	C 1596	9	60	58- 68	
C 1567	C 1587	C 1597	4.5	110	100- 130	
C 1567 J	C 1587 J	C 1597 J	3	200	190-200	
C 1568	C 1588	C 1598	2.4	220	200-250	
C 1568 J	C 1588 J	C 1598 J	1.5	400	380-400	



Battery Chargers

▶ 600 W						
Input VAC, 1-Phase				Output VDC		
115 ±20%	230 ^{+15%} _{-20%}	115 ±20% / 230 ^{+15%} _{-20%}	Output Amps	Nom. Battery Voltage	Range	
B 1561	B 1581	B 1591	34	12	12- 16	
B 1562	B 1582	B 1592	18	24	24- 32	
B 1564	B 1584	B 1594	9	48	48- 64	
B 1566	B 1586	B 1596	7.5	60	60- 80	
B 1567	B 1587	B 1597	4	110	110- 145	
B 1568	B 1588	B 1598	2	220	220- 290	

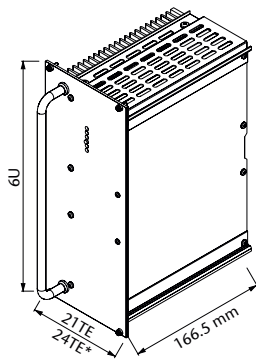
Assistance in table use:

- 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.

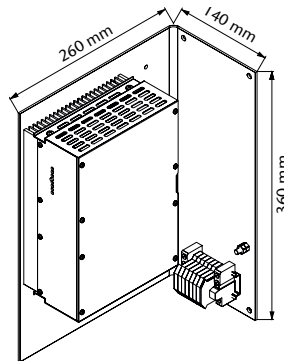
For example:

- 1 input voltage = 48 VDC
- 2 output voltage = 220 VDC @ 2.4 A
- 3 results in a C 1538 module.

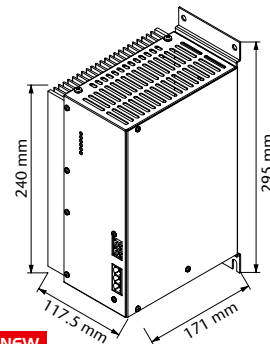
¹⁾ input supply from PFC also suitable



Eurocassette / approx. 3.3 kg
(pluggable module for 19" sub-rack)
) applicable to 5 V output models



Wall mount / approx. 6.3 kg



NEW
Chassis mount / approx. 3.8 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
 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
 - 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 $-40\text{ }^\circ\text{C}$