

# Series C / B I200

## 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



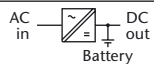
## DC / DC Converters

▶ 120 W		▶ 150 W		▶ 200 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 <sup>1)</sup> VDC	Output Amps	Adj.	Range
C 1200	20	C 1220	25	C 1230	C 1240	C 1250	C 1270	C 1280 Z	30	5	4.5– 5.5
C 1201	12	C 1221	15	C 1231	C 1241	C 1251	C 1271	C 1281 Z	18	9	8– 10
C 1202	10	C 1222	12.5	C 1232	C 1242	C 1252	C 1272	C 1282 Z	15	12	11– 13
C 1203	8	C 1223	10	C 1233	C 1243	C 1253	C 1273	C 1283 Z	12	15	14– 16
C 1204	5	C 1224	6	C 1234	C 1244	C 1254	C 1274	C 1284 Z	7.5	24	23– 26
C 1205	4	C 1225	5	C 1235	C 1245	C 1255	C 1275	C 1285 Z	6.5	28	26– 30
C 1209	2.4	C 1229	3	C 1239	C 1249	C 1259	C 1279	C 1289 Z	3.6	48	45– 55
C 1206	2	C 1226	2.5	C 1236	C 1246	C 1256	C 1276	C 1286 Z	3	60	58– 68
C 1207	1	C 1227	1.2	C 1237	C 1247	C 1257	C 1277	C 1287 Z	1.5	110	100– 130
C 1208	0.5	C 1228	0.6	C 1238	C 1248	C 1258	C 1278	C 1288 Z	0.8	220	200– 250



## AC / DC Converters

▶ 200 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 <sup>+15%</sup> <sub>-20%</sub>	115 ±20% / 230 <sup>+15%</sup> <sub>-20%</sub>	Output Amps	Adj.	Range
C 1260	C 1280	C 1290	30	5	4.5– 5.5
C 1261	C 1281	C 1291	18	9	8– 10
C 1262	C 1282	C 1292	15	12	11– 13
C 1263	C 1283	C 1293	12	15	14– 16
C 1264	C 1284	C 1294	7.5	24	23– 26
C 1265	C 1285	C 1295	6.5	28	26– 30
C 1269	C 1289	C 1299	3.6	48	45– 55
C 1266	C 1286	C 1296	3	60	58– 68
C 1267	C 1287	C 1297	1.5	110	100– 130
C 1268	C 1288	C 1298	0.8	220	200– 250



## Battery Chargers

▶ 200 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 <sup>+15%</sup> <sub>-20%</sub>	115 ±20% / 230 <sup>+15%</sup> <sub>-20%</sub>	Output Amps	Nom. Battery Voltage	Range
B 1261	B 1281	B 1291	12	12	12– 16
B 1262	B 1282	B 1292	6	24	24– 32
B 1264	B 1284	B 1294	3	48	48– 64
B 1266	B 1286	B 1296	2.6	60	60– 80
B 1267	B 1287	B 1297	1.4	110	110– 145
B 1268	B 1288	B 1298	0.7	220	220– 290

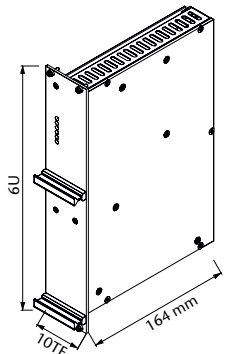
### Assistance in table use:

- 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.

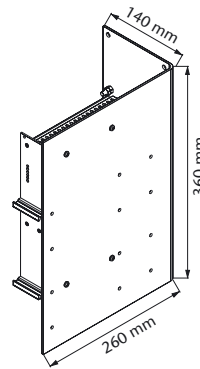
### For example:

- 1 input voltage = 12 VDC
- 2 output voltage = 110 VDC @ 1 A
- 3 results in a C 1207 module.

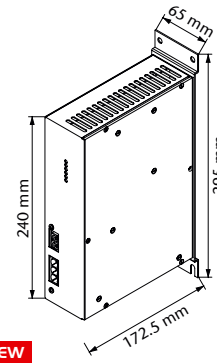
<sup>1)</sup> input supply from PFC also suitable



**Eurocassette / approx. 1.7 kg**  
(pluggable module for 19" sub-rack)



**Wall mount / approx. 4.7 kg**



**NEW**  
**Chassis mount / approx. 2.1 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  $< 60\text{ VDC}$ , 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)
- 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 (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
- Increased mechanical strength
- Tropical protection
- Extended temperature range to  $-40\text{ }^\circ\text{C}$