

Series C / B 300

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



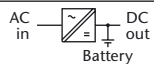
DC / DC Converters

▶ 100 W			▶ 150 W							
Input VDC								Output VDC		
10-16 VDC	Output Amps	18-36 VDC	36-75 VDC	45-90 VDC	80-160 VDC	160-320 VDC	320-380 ¹⁾ VDC	Output Amps	Adj.	Range
C 300	15	C 320	C 330	C 340	C 350	C 370	C 380 Z	20	5	4.5- 5.5
C 301	10	C 321	C 331	C 341	C 351	C 371	C 381 Z	15	9	8- 10
C 302	8	C 322	C 332	C 342	C 352	C 372	C 382 Z	12	12	11- 13
C 303	6.5	C 323	C 333	C 343	C 353	C 373	C 383 Z	10	15	14- 16
C 304	4	C 324	C 334	C 344	C 354	C 374	C 384 Z	6	24	23- 26
C 305	3.5	C 325	C 335	C 345	C 355	C 375	C 385 Z	5	28	26- 30
C 309	2	C 329	C 339	C 349	C 359	C 379	C 389 Z	3	48	45- 55
C 306	1.6	C 326	C 336	C 346	C 356	C 376	C 386 Z	2.3	60	58- 68
C 307	0.8	C 327	C 337	C 347	C 357	C 377	C 387 Z	1.2	110	100- 130
C 308	0.4	C 328	C 338	C 348	C 358	C 378	C 388 Z	0.6	220	200- 250



AC / DC Converters

▶ 150 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 ^{+15%} / _{-20%}	115 ±20% / 230 ^{+15%} / _{-20%}	Output Amps	Adj.	Range
C 360	C 380	C 390	20	5	4.5- 5.5
C 361	C 381	C 391	15	9	8- 10
C 362	C 382	C 392	12	12	11- 13
C 363	C 383	C 393	10	15	14- 16
C 364	C 384	C 394	6	24	23- 26
C 365	C 385	C 395	5	28	26- 30
C 369	C 389	C 399	3	48	45- 55
C 366	C 386	C 396	2.3	60	58- 68
C 367	C 387	C 397	1.2	110	100- 130
C 368	C 388	C 398	0.6	220	200- 250



Battery Chargers

▶ 150 W					
Input VAC, 1-Phase				Output VDC	
115 ±20%	230 ^{+15%} / _{-20%}	115 ±20% / 230 ^{+15%} / _{-20%}	Output Amps	Nom. Battery Voltage	Range
B 361	B 381	B 391	10	12	12- 16
B 362	B 382	B 392	5	24	24- 32
B 364	B 384	B 394	2.5	48	48- 64
B 366	B 386	B 396	2	60	60- 80
B 367	B 387	B 397	1.1	110	110- 145
B 368	B 388	B 398	0.5	220	220- 290

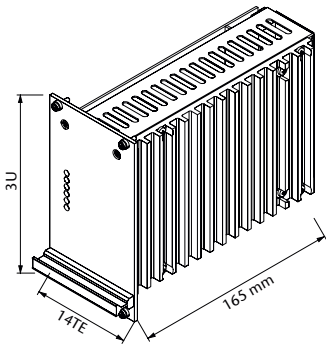
Assistance in table use:

- 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.

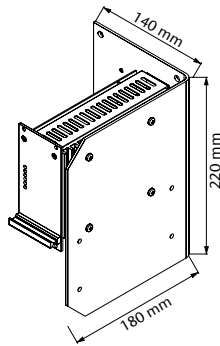
For example:

- 1 input voltage = 12 VDC
- 2 output voltage = 60 VDC @ 1.6 A
- 3 results in a C 306 module.

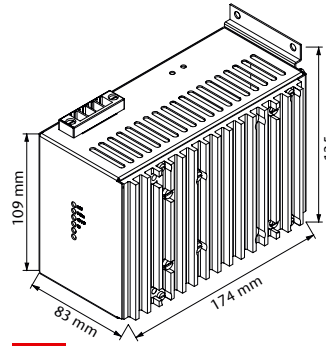
¹⁾ input supply from PFC also suitable



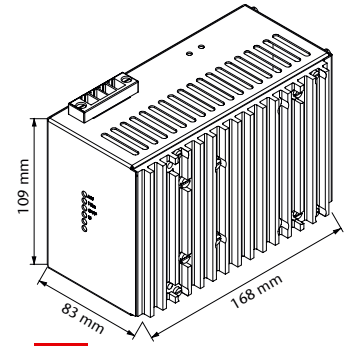
Eurocassette / approx. 1.0 kg
(pluggable module for 19" sub-rack)



Wall mount / approx. 2.5 kg



NEW
Chassis mount / approx. 1.4 kg



NEW
DIN rail mount / approx. 1.35 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 - 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. 140,000 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 $-40\text{ }^\circ\text{C}$