

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



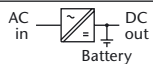
DC / DC Converters

| ▶ 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 |

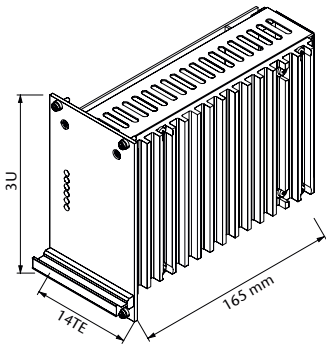
Assistance in table use:

- 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.

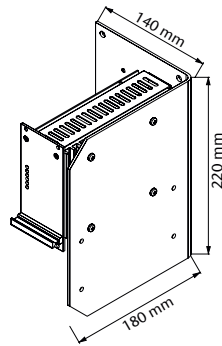
For example:

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

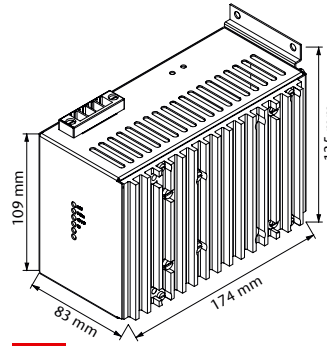
¹⁾ input supply from PFC also suitable



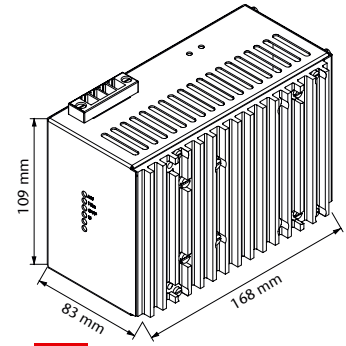
Eurocassette / approx. 1.0 kg
(pluggable module for 19" sub-rack)



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 °C
 Load derating 2.5 % / °C from +55 °C
 Storage temperature -40 to +85 °C
 Humidity up to 95 % RH, non-condensing
 Cooling natural convection
 Temperature coefficient 0.02 % / °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 °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 °C