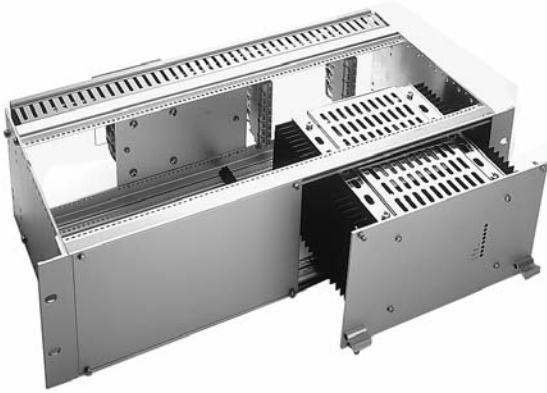


# Industrial Power Supplies

## C Series AC-DC & DC-DC Converters



- CE Marked LVD & EMC
- 1-4 Outputs
- 5-400 Volts Output
- Eurocassette or Wall Mount
- Parallel Redundant Operation
- Fully Wired Customised Racks
- Power Factor Correction Modules

### Specification

#### Input

|                       |  |
|-----------------------|--|
| DC Input Voltage      | • See Table  |
| AC Input Voltage      | • See Table  |
| Input Frequency       | • 47-440 Hz  |
| No-Load Input Current | • 3% of full load current typical  |
| Inrush Current        | • AC/DC limited by thermistor<br>DC/DC depends on impedance of supply line, see List of Options for Option 'I' |
| Earth Leakage         | • <3.5 mA at 230 VAC, to EN60950   |

#### Output

|                         |  |
|-------------------------|--|
| DC Output Voltages      | • See Table, for voltages above 250 VDC contact Sales Office   |
| Switch-On Time          | • 100 ms typical C300-C4700,<br>500 ms typical C5600-C5800   |
| Hold-Up Time            | • AC/DC increases with input voltage<br>15 ms typical at 230 VAC<br>DC/DC depends on input voltage (typical 2 ms at 12 VDC)        |
| Line Regulation         | • 0.1% ( $\pm 10\%$ change $V_{in}$ )  |
| Load Regulation         | • 0.2% (10-90% load)   |
| Transient Response      | • 6% maximum deviation 2ms<br>C300-C4700, 10ms C5600-C 5800<br>recovery time to within 1% for load change 20-100- 20% of full load |
| Ripple & Noise          | • $\leq 1\%$ +30 mV pk-pk<br>(0.5% typical lin. regulator auxiliary)   |
| Overvoltage Protection  | • Standard on single output models & main output on multi output units   |
| Overload Protection     | • Current limited at 105-110% of full load   |
| Temperature Coefficient | • 0.02%/°C typical   |
| Remote Sensing          | • Standard for main output   |

#### General

|                         |   |
|-------------------------|---|
| Efficiency at Full Load | • 60-95%, depending on model  |
| Isolation               | • EN60950 Class 1   |
| Switching Frequency     | • Approx. 33 KHz  |
| MTBF                    | • AC/DC & DC/DC approx 130,000 hrs at +25 °C  |
| Connector               | • H 15 DIN 41612 or studs for higher current outputs C300-C4700, studs only for C5600-C5800 |

#### Environmental

|                       |   |
|-----------------------|---|
| Operating Temperature | • -20 °C to +75 °C, derate from +55 °C at 2.5%/°C (Optional -40 °C to +75 °C) |
| Storage Temperature   | • -40 °C to +85 °C  |
| Relative Humidity     | • 5-95%, non-condensing   |

#### EMC & Safety

|                           |                         |
|---------------------------|-------------------------|
| RFI-Interference          | • EN 55032, Level A     |
| Construction (Safety)     | • EN62368-1             |
| Creepage Distance         | • VDE 0110, 4 mm        |
| Air Distance              | • VDE 0110, 3 mm        |
| High-Energy Pulses/Surges | • ENV 50142, Level 3    |
| Spike/Bursts              | • IEC 1000-4-4, Level 3 |

# Industrial Power Supplies

## C Series AC-DC & DC-DC Converters



### C300 Models, 150 Watt (3U x 14TE x 160 mm, 1 kg)

| INPUT VDC |                |       |       |       |        |         | Input VAC         | Output Current | OUTPUT VDC |       |
|-----------|----------------|-------|-------|-------|--------|---------|-------------------|----------------|------------|-------|
| 10-16     | Output Current | 18-36 | 36-75 | 45-90 | 80-160 | 160-320 | 93-138<br>185-264 |                | Min        | Max   |
| C 300     | 15.0 A         | C 320 | C 330 | C 340 | C 350  | C 370   | C 390             | 20.0 A         | 4.5        | 5.5   |
| C 301     | 10.0 A         | C 321 | C 331 | C 341 | C 351  | C 371   | C 391             | 15.0 A         | 8.0        | 10.0  |
| C 302     | 8.0 A          | C 322 | C 332 | C 342 | C 352  | C 372   | C 392             | 12.0 A         | 11.0       | 13.0  |
| C 303     | 6.5 A          | C 323 | C 333 | C 343 | C 353  | C 373   | C 393             | 10.0 A         | 14.0       | 16.0  |
| C 304     | 4.0 A          | C 324 | C 334 | C 344 | C 354  | C 374   | C 394             | 6.0 A          | 23.0       | 26.0  |
| C 305     | 3.5 A          | C 325 | C 335 | C 345 | C 355  | C 375   | C 395             | 5.0 A          | 26.0       | 30.0  |
| C 309     | 2.0 A          | C 329 | C 339 | C 349 | C 359  | C 379   | C 399             | 3.0 A          | 45.0       | 55.0  |
| C 306     | 1.6 A          | C 326 | C 336 | C 346 | C 356  | C 376   | C 396             | 2.3 A          | 58.0       | 68.0  |
| C 307     | 0.8 A          | C 327 | C 337 | C 347 | C 357  | C 377   | C 397             | 1.2 A          | 100.0      | 130.0 |
| C 308     | 0.4 A          | C 328 | C 338 | C 348 | C 358  | C 378   | C 398             | 0.6 A          | 200.0      | 250.0 |

Note: 12 TE available upon request - contact Sales Office.

### C500 Models, 250 Watt (3U x 21(24)TE x 160 mm, 2.1 kg)

| INPUT VDC |                |       |                |       |       |        | Input VAC | Output Current | OUTPUT VDC        |       |       |
|-----------|----------------|-------|----------------|-------|-------|--------|-----------|----------------|-------------------|-------|-------|
| 10-16     | Output Current | 18-36 | Output Current | 36-75 | 45-90 | 80-160 | 160-320   |                | 93-138<br>185-264 | Min   | Max   |
| C 500     | 25.0 A         | C 520 | 30.0 A         | C 530 | C 540 | C 550  | C 570     | C 590          | 35.0 A            | 4.5   | 5.5   |
| C 501     | 17.0 A         | C 521 | 20.0 A         | C 531 | C 541 | C 551  | C 571     | C 591          | 25.0 A            | 8.0   | 10.0  |
| C 502     | 14.0 A         | C 522 | 16.0 A         | C 532 | C 542 | C 552  | C 572     | C 592          | 20.0 A            | 11.0  | 13.0  |
| C 503     | 11.0 A         | C 523 | 13.0 A         | C 533 | C 543 | C 553  | C 573     | C 593          | 16.0 A            | 14.0  | 16.0  |
| C 504     | 7.0 A          | C 524 | 8.0 A          | C 534 | C 544 | C 554  | C 574     | C 594          | 10.0 A            | 23.0  | 26.0  |
| C 505     | 6.0 A          | C 525 | 7.0 A          | C 535 | C 545 | C 555  | C 575     | C 595          | 8.5 A             | 26.0  | 30.0  |
| C 509     | 3.5 A          | C 529 | 4.0 A          | C 539 | C 549 | C 559  | C 579     | C 599          | 4.5 A             | 45.0  | 55.0  |
| C 506     | 3.0 A          | C 526 | 3.5 A          | C 536 | C 546 | C 556  | C 576     | C 596          | 3.7 A             | 58.0  | 68.0  |
| C 507     | 1.5 A          | C 527 | 1.8 A          | C 537 | C 547 | C 557  | C 577     | C 597          | 2.0 A             | 100.0 | 130.0 |
| C 508     | 0.8 A          | C 528 | 0.9 A          | C 538 | C 548 | C 558  | C 578     | C 598          | 1.0 A             | 200.0 | 250.0 |

### C600 Models, 500 Watt (3U x 14 TE x 160 mm, 3.5 kg)

| INPUT VDC |                |       |                |       |       |        | Input VAC | Output Current | OUTPUT VDC        |       |       |
|-----------|----------------|-------|----------------|-------|-------|--------|-----------|----------------|-------------------|-------|-------|
| 10-16     | Output Current | 18-36 | Output Current | 36-75 | 45-90 | 80-160 | 160-320   |                | 93-138<br>185-264 | Min   | Max   |
| C 600     | 50.0 A         | C 620 | 70.0 A         | C 630 | C 640 | C 650  | C 670     | C 690          | 80.0 A            | 4.5   | 5.5   |
| C 601     | 30.0 A         | C 621 | 45.0 A         | C 631 | C 641 | C 651  | C 671     | C 691          | 50.0 A            | 8.0   | 10.0  |
| C 602     | 25.0 A         | C 622 | 35.0 A         | C 632 | C 642 | C 652  | C 672     | C 692          | 40.0 A            | 11.0  | 13.0  |
| C 603     | 20.0 A         | C 623 | 28.0 A         | C 633 | C 643 | C 653  | C 673     | C 693          | 32.0 A            | 14.0  | 16.0  |
| C 604     | 12.0 A         | C 624 | 18.0 A         | C 634 | C 644 | C 654  | C 674     | C 694          | 20.0 A            | 23.0  | 26.0  |
| C 605     | 10.0 A         | C 625 | 15.0 A         | C 635 | C 645 | C 655  | C 675     | C 695          | 17.0 A            | 26.0  | 30.0  |
| C 609     | 6.0 A          | C 629 | 8.0 A          | C 639 | C 649 | C 659  | C 679     | C 699          | 9.0 A             | 45.0  | 55.0  |
| C 606     | 5.0 A          | C 626 | 7.0 A          | C 636 | C 646 | C 656  | C 676     | C 696          | 7.5 A             | 58.0  | 68.0  |
| C 607     | 2.5 A          | C 627 | 3.5 A          | C 637 | C 647 | C 657  | C 677     | C 697          | 4.0 A             | 100.0 | 130.0 |
| C 608     | 1.2 A          | C 628 | 1.8 A          | C 638 | C 648 | C 658  | C 678     | C 698          | 2.0 A             | 200.0 | 250.0 |

### C1300 Models, 400 Watt (3U x 14TE x 160 mm, 3.5 kg)

| INPUT VDC |                |        |                |        |        |        | Input VAC | Output Current | OUTPUT VDC        |       |       |
|-----------|----------------|--------|----------------|--------|--------|--------|-----------|----------------|-------------------|-------|-------|
| 10-16     | Output Current | 18-36  | Output Current | 36-75  | 45-90  | 80-160 | 160-320   |                | 93-138<br>185-264 | Min   | Max   |
| C 1300    | 35.0 A         | C 1320 | 45.00 A        | C 1330 | C 1340 | C 1350 | C 1370    | C 1390         | 50.0 A            | 4.5   | 5.5   |
| C 1301    | 24.0 A         | C 1321 | 30.00 A        | C 1331 | C 1341 | C 1351 | C 1371    | C 1391         | 35.0 A            | 8.0   | 10.0  |
| C 1302    | 20.0 A         | C 1322 | 25.00 A        | C 1332 | C 1342 | C 1352 | C 1372    | C 1392         | 30.0 A            | 11.0  | 13.0  |
| C 1303    | 16.0 A         | C 1323 | 21.00 A        | C 1333 | C 1343 | C 1353 | C 1373    | C 1393         | 25.0 A            | 14.0  | 16.0  |
| C 1304    | 10.0 A         | C 1324 | 13.00 A        | C 1334 | C 1344 | C 1354 | C 1374    | C 1394         | 15.0 A            | 23.0  | 26.0  |
| C 1305    | 8.5 A          | C 1325 | 11.00 A        | C 1335 | C 1345 | C 1355 | C 1375    | C 1395         | 13.0 A            | 26.0  | 30.0  |
| C 1309    | 5.0 A          | C 1329 | 6.00 A         | C 1339 | C 1349 | C 1359 | C 1379    | C 1399         | 7.3 A             | 45.0  | 55.0  |
| C 1306    | 4.0 A          | C 1326 | 5.00 A         | C 1336 | C 1346 | C 1356 | C 1376    | C 1396         | 6.0 A             | 58.0  | 68.0  |
| C 1307    | 2.0 A          | C 1327 | 2.50 A         | C 1337 | C 1347 | C 1357 | C 1377    | C 1397         | 3.0 A             | 100.0 | 130.0 |
| C 1308    | 1.0 A          | C 1328 | 1.25 A         | C 1338 | C 1348 | C 1358 | C 1378    | C 1398         | 1.5 A             | 200.0 | 250.0 |

# Industrial Power Supplies

## C Series AC-DC & DC-DC Converters



### C1500 Models, 600 Watt (6U x 21(24)TE x 160 mm)

| INPUT VDC |                |        |                |        |        |        |         | Input VAC         | Output Current | OUTPUT VDC |       |
|-----------|----------------|--------|----------------|--------|--------|--------|---------|-------------------|----------------|------------|-------|
| 10-16     | Output Current | 18-36  | Output Current | 36-75  | 45-90  | 80-160 | 160-320 | 93-138<br>185-264 |                | Min        | Max   |
| C 1500    | 40.0 A         | C 1520 | 60.0 A         | C 1530 | C 1540 | C 1550 | C 1570  | C 1590            | 80.0 A         | 4.5        | 5.5   |
| C 1501    | 25.0 A         | C 1521 | 38.0 A         | C 1531 | C 1541 | C 1551 | C 1571  | C 1591            | 50.0 A         | 8.0        | 10.0  |
| C 1502    | 24.0 A         | C 1522 | 33.0 A         | C 1532 | C 1542 | C 1552 | C 1572  | C 1592            | 42.0 A         | 11.0       | 13.0  |
| C 1503    | 20.0 A         | C 1523 | 25.0 A         | C 1533 | C 1543 | C 1553 | C 1573  | C 1593            | 34.0 A         | 14.0       | 16.0  |
| C 1504    | 15.0 A         | C 1524 | 18.0 A         | C 1534 | C 1544 | C 1554 | C 1574  | C 1594            | 23.0 A         | 23.0       | 26.0  |
| C 1505    | 13.0 A         | C 1525 | 15.0 A         | C 1535 | C 1545 | C 1555 | C 1575  | C 1595            | 20.0 A         | 26.0       | 30.0  |
| C 1509    | 7.0 A          | C 1529 | 8.0 A          | C 1539 | C 1549 | C 1559 | C 1579  | C 1599            | 11.0 A         | 45.0       | 55.0  |
| C 1506    | 5.5 A          | C 1526 | 6.5 A          | C 1536 | C 1546 | C 1556 | C 1576  | C 1596            | 9.0 A          | 58.0       | 68.0  |
| C 1507    | 3.0 A          | C 1527 | 3.3 A          | C 1537 | C 1547 | C 1557 | C 1577  | C 1597            | 4.5 A          | 100.0      | 130.0 |
| C 1508    | 1.4 A          | C 1528 | 1.6 A          | C 1538 | C 1548 | C 1558 | C 1578  | C 1598            | 2.4 A          | 200.0      | 250.0 |

### C3500 Models, 800 Watt (6U x 21(24)TE x 220 mm, 5 kg)

| INPUT VDC |                |        |        |        |         |                        | Input VAC         | Output Current         | OUTPUT VDC |       |
|-----------|----------------|--------|--------|--------|---------|------------------------|-------------------|------------------------|------------|-------|
| 18-36     | Output Current | 36-75  | 45-90  | 80-160 | 160-320 | 320-380 <sup>(1)</sup> | 93-138<br>185-264 |                        | Min        | Max   |
| C 3520    | 80.0 A         | C 3530 | C 3540 | C 3550 | C 3570  | C 3580 Z               | C 3590            | 100.0 A <sup>(2)</sup> | 4.5        | 5.5   |
| C 3521    | 55.0 A         | C 3531 | C 3541 | C 3551 | C 3571  | C 3581 Z               | C 3591            | 65.0 A                 | 8.0        | 10.0  |
| C 3522    | 50.0 A         | C 3532 | C 3542 | C 3552 | C 3572  | C 3582 Z               | C 3592            | 56.0 A                 | 11.0       | 13.0  |
| C 3523    | 40.0 A         | C 3533 | C 3543 | C 3553 | C 3573  | C 3583 Z               | C 3593            | 45.0 A                 | 14.0       | 16.0  |
| C 3524    | 27.0 A         | C 3534 | C 3544 | C 3554 | C 3574  | C 3584 Z               | C 3594            | 30.0 A                 | 23.0       | 26.0  |
| C 3525    | 23.0 A         | C 3535 | C 3545 | C 3555 | C 3575  | C 3585 Z               | C 3595            | 27.0 A                 | 26.0       | 30.0  |
| C 3529    | 12.0 A         | C 3539 | C 3549 | C 3559 | C 3579  | C 3589 Z               | C 3599            | 14.0 A                 | 45.0       | 55.0  |
| C 3526    | 10.0 A         | C 3536 | C 3546 | C 3556 | C 3576  | C 3586 Z               | C 3596            | 12.0 A                 | 58.0       | 68.0  |
| C 3527    | 5.3 A          | C 3537 | C 3547 | C 3557 | C 3577  | C 3587 Z               | C 3597            | 6.5 A                  | 100.0      | 130.0 |
| C 3528    | 2.8 A          | C 3538 | C 3548 | C 3558 | C 3578  | C 3588 Z               | C 3598            | 3.5 A                  | 200.0      | 250.0 |

### C3700 Models, 1250 Watt (6U x 21(24)TE x 220 mm, 6.5 kg)

| INPUT VDC |                      |        |        |        |         |                        | Input VAC         | Output Current       | OUTPUT VDC |       |
|-----------|----------------------|--------|--------|--------|---------|------------------------|-------------------|----------------------|------------|-------|
| 18-36     | Output Current       | 36-75  | 45-90  | 80-160 | 160-320 | 320-380 <sup>(1)</sup> | 93-138<br>185-264 |                      | Min        | Max   |
| C 3720    | 120 A <sup>(2)</sup> | C 3730 | C 3740 | C 3750 | C 3770  | C 3780 Z               | C 3790            | 150 A <sup>(2)</sup> | 4.5        | 5.5   |
| C 3721    | 80 A                 | C 3731 | C 3741 | C 3751 | C 3771  | C 3781 Z               | C 3791            | 100 A                | 8.0        | 10.0  |
| C 3722    | 70 A                 | C 3732 | C 3742 | C 3752 | C 3772  | C 3782 Z               | C 3792            | 85 A                 | 11.0       | 13.0  |
| C 3723    | 56 A                 | C 3733 | C 3743 | C 3753 | C 3773  | C 3783 Z               | C 3793            | 70 A                 | 14.0       | 16.0  |
| C 3724    | 40 A                 | C 3734 | C 3744 | C 3754 | C 3774  | C 3784 Z               | C 3794            | 50 A                 | 23.0       | 26.0  |
| C 3725    | 35 A                 | C 3735 | C 3745 | C 3755 | C 3775  | C 3785 Z               | C 3795            | 42 A                 | 26.0       | 30.0  |
| C 3729    | 19 A                 | C 3739 | C 3749 | C 3759 | C 3779  | C 3789 Z               | C 3799            | 23 A                 | 45.0       | 55.0  |
| C 3726    | 15 A                 | C 3736 | C 3746 | C 3756 | C 3776  | C 3786 Z               | C 3796            | 18 A                 | 58.0       | 68.0  |
| C 3727    | 8 A                  | C 3737 | C 3747 | C 3757 | C 3777  | C 3787 Z               | C 3797            | 10 A                 | 100.0      | 130.0 |
| C 3728    | 4 A                  | C 3738 | C 3748 | C 3758 | C 3778  | C 3788 Z               | C 3798            | 5 A                  | 200.0      | 250.0 |

### C3600 Models, 1700 Watt (6U x 42TE x 220 mm)

| INPUT VDC |                        |        |        |        |         |                        | Input VAC         | Output Current       | OUTPUT VDC |       |
|-----------|------------------------|--------|--------|--------|---------|------------------------|-------------------|----------------------|------------|-------|
| 18-36     | Output Current         | 36-75  | 45-90  | 80-160 | 160-320 | 320-380 <sup>(1)</sup> | 93-138<br>185-264 |                      | Min        | Max   |
| C 3620    | 180.0 A <sup>(2)</sup> | C 3630 | C 3640 | C 3650 | C 3670  | C 3680 Z               | C 3690            | 150 A <sup>(2)</sup> | 4.5        | 5.5   |
| C 3621    | 120.0 A                | C 3631 | C 3641 | C 3651 | C 3671  | C 3681 Z               | C 3691            | 130 A                | 8.0        | 10.0  |
| C 3622    | 100.0 A                | C 3632 | C 3642 | C 3652 | C 3672  | C 3682 Z               | C 3692            | 115 A                | 11.0       | 13.0  |
| C 3623    | 80.0 A                 | C 3633 | C 3643 | C 3653 | C 3673  | C 3683 Z               | C 3693            | 90 A                 | 14.0       | 16.0  |
| C 3624    | 55.0 A                 | C 3634 | C 3644 | C 3654 | C 3674  | C 3684 Z               | C 3694            | 65 A                 | 23.0       | 26.0  |
| C 3625    | 48.0 A                 | C 3635 | C 3645 | C 3655 | C 3675  | C 3685 Z               | C 3695            | 55 A                 | 26.0       | 30.0  |
| C 3629    | 26.0 A                 | C 3639 | C 3649 | C 3659 | C 3679  | C 3689 Z               | C 3699            | 30 A                 | 45.0       | 55.0  |
| C 3626    | 21.0 A                 | C 3636 | C 3646 | C 3656 | C 3676  | C 3686 Z               | C 3696            | 25 A                 | 58.0       | 68.0  |
| C 3627    | 11.0 A                 | C 3637 | C 3647 | C 3657 | C 3677  | C 3687 Z               | C 3697            | 14 A                 | 100.0      | 130.0 |
| C 3628    | 5.5 A                  | C 3638 | C 3648 | C 3658 | C 3678  | C 3688 Z               | C 3698            | 7 A                  | 200.0      | 250.0 |

**Notes:**

1. Models supplied by external PFC module.
2. External fan recommended.

3. Three phase input versions available - contact Sales Office.

# Industrial Power Supplies

## C Series AC-DC & DC-DC Converters



### C4700 Models, 2500 Watt (6U x 28TE x 300 mm, 8 kg)

| INPUT VDC |                        |        |                      |        |        |                      |        |         | Input VAC              |                   | Output VDC           |       |       |
|-----------|------------------------|--------|----------------------|--------|--------|----------------------|--------|---------|------------------------|-------------------|----------------------|-------|-------|
| 10-16     | Output Current         | 20-32  | Output Current       | 40-64  | 50-80  | Output Current       | 80-160 | 160-320 | 320-380 <sup>(1)</sup> | 93-138<br>185-264 | Output Current       | Min   | Max   |
| C 4700    | 100.0 A <sup>(2)</sup> | C 4720 | 160 A <sup>(2)</sup> | C 4730 | C 4740 | 180 A <sup>(2)</sup> | C 4750 | C 4770  | C 4780 Z               | C 4790            | 180 A <sup>(2)</sup> | 4.5   | 5.5   |
| C 4701    | 60.0 A                 | C 4721 | 110 A <sup>(2)</sup> | C 4731 | C 4741 | 140 A <sup>(2)</sup> | C 4751 | C 4771  | C 4781 Z               | C 4791            | 150 A <sup>(2)</sup> | 8.0   | 10.0  |
| C 4702    | 55.0 A                 | C 4722 | 95 A <sup>(2)</sup>  | C 4732 | C 4742 | 120 A <sup>(2)</sup> | C 4752 | C 4772  | C 4782 Z               | C 4792            | 130 A <sup>(2)</sup> | 11.0  | 13.0  |
| C 4703    | 50.0 A                 | C 4723 | 80 A                 | C 4733 | C 4743 | 100 A <sup>(2)</sup> | C 4753 | C 4773  | C 4783 Z               | C 4793            | 110 A <sup>(2)</sup> | 14.0  | 16.0  |
| C 4704    | 32.0 A                 | C 4724 | 60 A                 | C 4734 | C 4744 | 70 A                 | C 4754 | C 4774  | C 4784 Z               | C 4794            | 80 A                 | 23.0  | 26.0  |
| C 4705    | 28.0 A                 | C 4725 | 50 A                 | C 4735 | C 4745 | 65 A                 | C 4755 | C 4775  | C 4785 Z               | C 4795            | 70 A                 | 26.0  | 30.0  |
| C 4709    | 16.0 A                 | C 4729 | 30 A                 | C 4739 | C 4749 | 40 A                 | C 4759 | C 4779  | C 4789 Z               | C 4799            | 40 A                 | 45.0  | 55.0  |
| C 4706    | 13.0 A                 | C 4726 | 25 A                 | C 4736 | C 4746 | 28 A                 | C 4756 | C 4776  | C 4786 Z               | C 4796            | 30 A                 | 58.0  | 68.0  |
| C 4707    | 7.0 A                  | C 4727 | 12 A                 | C 4737 | C 4747 | 18 A                 | C 4757 | C 4777  | C 4787 Z               | C 4797            | 20 A                 | 100.0 | 130.0 |
| C 4708    | 3.5 A                  | C 4728 | 6 A                  | C 4738 | C 4748 | 10 A                 | C 4758 | C 4778  | C 4788 Z               | C 4798            | 10 A                 | 200.0 | 250.0 |

**Notes:**

1. Models supplied by external PFC module.
2. External fan recommended.
3. Three phase input versions available - contact Sales Office.

### C4800 Models, 5000 Watt (6U x 56TE x 300 mm, 18 kg)

| INPUT VDC |                         |                       |                       |                         |                       |                       |                         | Input VAC             |                      | Output VDC |       |
|-----------|-------------------------|-----------------------|-----------------------|-------------------------|-----------------------|-----------------------|-------------------------|-----------------------|----------------------|------------|-------|
| 20-32     | Output Current          | 40-64                 | 50-80                 | Output Current          | 80-160                | 160-320               | 320-380 <sup>(1)</sup>  | 93-138<br>185-264     | Output Current       | Min        | Max   |
| C 4822    | 190 A <sup>(3)(4)</sup> | C 4832 <sup>(4)</sup> | C 4842 <sup>(4)</sup> | 240 A <sup>(3)(4)</sup> | C 4852 <sup>(4)</sup> | C 4872 <sup>(4)</sup> | C 4882 Z <sup>(4)</sup> | C 4892 <sup>(4)</sup> | 260 A <sup>(3)</sup> | 11.0       | 13.0  |
| C 4823    | 160 A <sup>(4)</sup>    | C 4833 <sup>(4)</sup> | C 4843 <sup>(4)</sup> | 200 A <sup>(4)</sup>    | C 4853 <sup>(4)</sup> | C 4873 <sup>(4)</sup> | C 4883 Z <sup>(4)</sup> | C 4893 <sup>(4)</sup> | 220 A <sup>(3)</sup> | 14.0       | 16.0  |
| C 4824    | 120 A <sup>(4)</sup>    | C 4834                | C 4844                | 150 A                   | C 4854                | C 4874                | C 4884 Z                | C 4894                | 160 A                | 23.0       | 26.0  |
| C 4825    | 100 A <sup>(4)</sup>    | C 4835                | C 4845                | 130 A                   | C 4855                | C 4875                | C 4885 Z                | C 4895                | 140 A                | 26.0       | 30.0  |
| C 4829    | 60 A <sup>(4)</sup>     | C 4839                | C 4849                | 80 A                    | C 4859                | C 4879                | C 4889 Z                | C 4899                | 80 A                 | 45.0       | 55.0  |
| C 4826    | 50 A <sup>(4)</sup>     | C 4836                | C 4846                | 56 A                    | C 4856                | C 4876                | C 4886 Z                | C 4896                | 60 A                 | 58.0       | 68.0  |
| C 4827    | 24 A <sup>(4)</sup>     | C 4837                | C 4847                | 36 A                    | C 4857                | C 4877                | C 4887 Z                | C 4897                | 40 A                 | 100.0      | 130.0 |
| C 4828    | 12 A <sup>(4)</sup>     | C 4838                | C 4848                | 20 A                    | C 4858                | C 4878                | C 4888 Z                | C 4898                | 20 A                 | 200.0      | 250.0 |

**Notes:**

1. Models supplied by external PFC module.
2. Three phase input versions available - contact Sales Office.
3. With temperature controlled fans.
4. Wall mount only (plug-in units on request) 360(450)x280(320)x310mm (HxWxD).

### C5640 Models, 6000 Watt (6/9U x 19" x 360/460 mm, up to 65 kg)

| INPUT VDC |        |                |        |         | Input VAC          |                    | Output VDC     |       |       |
|-----------|--------|----------------|--------|---------|--------------------|--------------------|----------------|-------|-------|
| 40-64     | 50-80  | Output Current | 80-160 | 160-320 | 3 x 200<br>160-230 | 3 x 480<br>400-530 | Output Current | Min   | Max   |
| C 5630    | C 5640 | 360 A          | C 5650 | C 5670  | C 5660 V           | C 5690 V           | 400 A          | 4.56  | 5.5   |
| C 5631    | C 5641 | 280 A          | C 5651 | C 5671  | C 5661 V           | C 5691 V           | 400 A          | 8.00  | 10.0  |
| C 5632    | C 5642 | 240 A          | C 5652 | C 5672  | C 5662 V           | C 5692 V           | 400 A          | 11.0  | 13.0  |
| C 5633    | C 5643 | 200 A          | C 5653 | C 5673  | C 5663 V           | C 5693 V           | 375 A          | 14.0  | 16.0  |
| C 5634    | C 5644 | 150 A          | C 5654 | C 5674  | C 5664 V           | C 5694 V           | 230 A          | 23.0  | 26.0  |
| C 5635    | C 5645 | 130 A          | C 5655 | C 5675  | C 5665 V           | C 5695 V           | 200 A          | 26.0  | 30.0  |
| C 5639    | C 5649 | 80 A           | C 5659 | C 5679  | C 5669 V           | C 5699 V           | 110 A          | 45.0  | 55.0  |
| C 5630    | C 5646 | 56 A           | C 5656 | C 5676  | C 5666 V           | C 5696 V           | 88 A           | 58.0  | 68.0  |
| C 5630    | C 5647 | 36 A           | C 5657 | C 5677  | C 5667 V           | C 5697 V           | 46 A           | 100.0 | 130.0 |
| C 5630    | C 5648 | 20 A           | C 5658 | C 5678  | C 5668 V           | C 5698 V           | 24 A           | 200.0 | 250.0 |

### C5700 Models, 8000 Watt (6/9U x 19" x 360/460 mm, up to 65 kg)

| INPUT VDC |        |                |        |         |          | Input VAC |                    |                    | Output VDC     |       |       |
|-----------|--------|----------------|--------|---------|----------|-----------|--------------------|--------------------|----------------|-------|-------|
| 40-64     | 50-80  | Output Current | 80-160 | 160-320 | 320-640  | 450-800   | 3 x 200<br>160-230 | 3 x 480<br>400-530 | Output Current | Min   | Max   |
| C 5730    | C 5740 | 400 A          |        |         |          |           |                    |                    |                | 4.5   | 5.5   |
| C 5731    | C 5741 | 400 A          |        |         |          |           |                    |                    |                | 8.0   | 10.0  |
| C 5732    | C 5742 | 360 A          |        |         |          |           |                    |                    |                | 11.0  | 13.0  |
| C 5733    | C 5743 | 300 A          | C 5753 | C 5773  | C 5773 G | C 5773 K  | C 5763 V           | C 5793 V           | 400 A          | 14.0  | 16.0  |
| C 5734    | C 5744 | 225 A          | C 5754 | C 5774  | C 5774 G | C 5774 K  | C 5764 V           | C 5794 V           | 310 A          | 23.0  | 26.0  |
| C 5735    | C 5745 | 195 A          | C 5755 | C 5775  | C 5775 G | C 5775 K  | C 5765 V           | C 5795 V           | 270 A          | 26.0  | 30.0  |
| C 5739    | C 5749 | 120 A          | C 5759 | C 5779  | C 5779 G | C 5779 K  | C 5769 V           | C 5799 V           | 145 A          | 45.0  | 55.0  |
| C 5736    | C 5746 | 84 A           | C 5756 | C 5776  | C 5776 G | C 5776 K  | C 5766 V           | C 5796 V           | 120 A          | 58.0  | 68.0  |
| C 5737    | C 5747 | 54 A           | C 5757 | C 5777  | C 5777 G | C 5777 K  | C 5767 V           | C 5797 V           | 62 A           | 100.0 | 130.0 |
| C 5738    | C 5748 | 30 A           | C 5758 | C 5778  | C 5778 G | C 5778 K  | C 5768 V           | C 5798 V           | 32 A           | 200.0 | 250.0 |

**Notes:**

1. C5640 & C5700 single phase input version available - contact Sales Office.

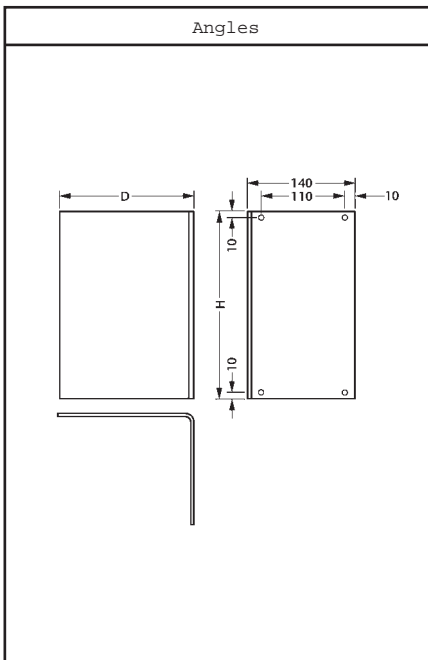
## C5800 Models, 12000 Watt (6/9U x 19" x 360/460 mm, up to 65 kg)

| Input VDC |         |          |          | Output Current | Input VAC          |                    | Output VDC |     |
|-----------|---------|----------|----------|----------------|--------------------|--------------------|------------|-----|
| 80-160    | 160-320 | 320-640  | 450-800  |                | 3 x 200<br>160-230 | 3 x 480<br>400-530 | Min        | Max |
| C 5854    | C 5874  | C 5874 G | C 5874 K | 400 A          | C 5864 V           | C 5894 V           | 23         | 26  |
| C 5855    | C 5875  | C 5874 G | C 5875 K | 400 A          | C 5865 V           | C 5895 V           | 26         | 30  |
| C 5859    | C 5879  | C 5874 G | C 5879 K | 220 A          | C 5869 V           | C 5899 V           | 45         | 55  |
| C 5856    | C 5876  | C 5874 G | C 5876 K | 180 A          | C 5866 V           | C 5896 V           | 58         | 68  |
| C 5857    | C 5877  | C 5874 G | C 5877 K | 92 A           | C 5867 V           | C 5897 V           | 100        | 130 |
| C 5858    | C 5878  | C 5874 G | C 5878 K | 48 A           | C 5868 V           | C 5898 V           | 200        | 250 |

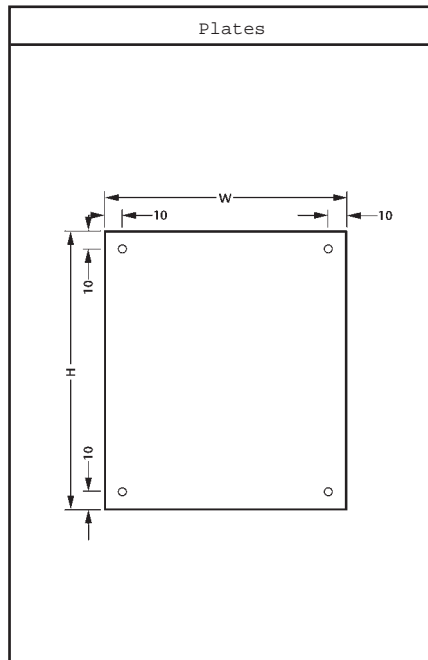
**Notes:**

1. Single phase input versions available - contact Sales Office.

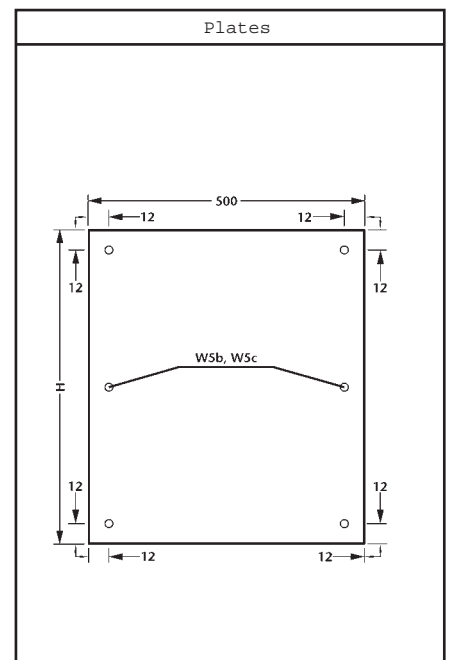
## Wall Mounting Options



| Option | Series              | Width  | Height | Depth  |
|--------|---------------------|--------|--------|--------|
| W1     | 300                 | 140 mm | 220 mm | 180 mm |
|        | 500                 |        |        |        |
| W1a    | 1300 <sup>(1)</sup> | 140 mm | 300 mm | 260 mm |
|        | 1500 <sup>(1)</sup> |        |        |        |
|        | 3500 <sup>(1)</sup> |        |        |        |
|        | 3700 <sup>(1)</sup> |        |        |        |
| W1b    | 1200                | 140 mm | 360 mm | 260 mm |
|        | 1300                |        |        |        |
|        | 1500                |        |        |        |
|        | 3500                |        |        |        |
| 3700   |                     |        |        |        |
| W1c    | 4700                | 140 mm | 360 mm | 340 mm |



| Option | Series | Width  | Height | Depth |
|--------|--------|--------|--------|-------|
| W2     | 600    | 220 mm | 220 mm | -     |
|        | 2600   |        |        |       |
| W3     | 3600   | 220 mm | 360 mm | -     |
| W4     | 3800   | 280 mm | 360 mm | -     |
|        | 4800   |        |        |       |



| Option | Series | Width  | Height | Depth |
|--------|--------|--------|--------|-------|
| W5a    | 5000   | 500 mm | 400 mm | -     |
| W5b    |        | 500 mm | 600 mm | -     |
| W5c    |        | 500 mm | 800 mm | -     |

**Notes:**

1. No space available for conductor underneath module.

2. The size of the module plate depends on model size and output power, and on any additional equipment to be included - contact Technical Sales.

### Options

| Options |  | Designation | C300 | C500 | C600 | C1300 | C1500 | C3500 | C3600 | C3700 | C4700 | C4800 | C5600 | C5700 | C5800 |
|---------|--|-------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Mech    | Tropical protection                    | T           | •    | •    | •    | •     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
|         | Extended temp. range                   | C           | •    | •    | •    | •     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
|         | Increased mech. strength               | MS          | •    | •    | •    | •     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
|         | Wall mounting                          | W           | •    | •    | •    | •     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
| Input   | Inrush current limiting <sup>(1)</sup> | I           | •    | *    | *    | *     | *     | *     | *     | *     | •     | •     | *     | *     | *     |
|         | Series diode                           | SD          | *    | *    | *    | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     |
|         | Anti-parallel diode                    | AD          | *    | *    | *    | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     |
|         | Autoranging                            | AU          | *    | *    | *    | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     |
| Output  | Decoupling diode                       | DD          | *    | *    | *    | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     |
|         | Active current sharing                 | CS          |      |      | *    | *     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
|         | Inhibit (to be specified)              | H           | *    | *    | *    | *     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
|         | Externally programmable                | E           | *    | *    | *    | *     | *     | *     | *     | *     | *     | *     | *     | *     | *     |
| Signals | Power fail                             | P           | •    | •    | •    | •     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
|         | DC-OK one output                       | D           | •    | •    | •    | •     | •     | •     | •     | •     | •     | •     | •     | •     | •     |
|         | Signals with relay                     | R           | *    | *    | *    | *     | *     | *     | *     | *     | •     | •     | •     | •     | •     |

**Notes:**

- 1. Standard for mains input model to Series C3700.
- Option is available in combination with other options.

\* Option is available with certain restrictions - contact Sales Office.

**Option T (Tropical protection):**

The unit is given additional protection by a heavy coat of varnish on the printed circuit board(s) and components.

**Option C (Extended temperature range):**

Units are designed & tested for operation at an ambient temperature down to -40 °C.

**Option MS (Increased mechanical strength):**

Screws are fastened by Lockite and heavy components are fastened by ties or glue to following specification.

Vibration: 2 – 2000 Hz at 2 G,

Shock: 10 G for 11 ms to DIN 40046 part 7.

**Option W (Wall mounting):**

Module is screwed to a mounting plate for installation within a cabinet.

**Option I (Inrush current limiting):**

A thermistor is connected in series with the input lines which changes its resistance from high to low when it gets hot. It does not reduce the current surge if the input power is interrupted for a short period of time not allowing the thermistor to cool down. Electronic inrush current limiting device is available upon request.

**Option SD (Series diode):**

A series diode is connected on the input of the module to protect the unit from reverse input polarity connection.

**Option AD (Parallel diode):**

A diode is provided in parallel to the input. Should the input to the module be reverse-connected, the input fuse (either internal or external fuse) will blow, protecting the unit.

**Option DD (Decoupling diode):**

For redundant operation the outputs of two or more units are paralleled behind de-coupling diodes so that an internal fault of one module does not affect the operation of the others. These diodes cause power losses. For high currents the de-coupling diode may have to be installed externally.

**Option SD, AD & DD:**

May need to be fitted externally - contact sales office.

**Option CS (Active current sharing):**

By means of an additional control circuit active current sharing is provided via an interconnecting wire between 2 or more units.

**Option AU (Auto-ranging):**

In standard dual AC input units (115/230 VAC) the range is selected by connecting the input line to different pins on the connector. With auto-ranging the unit senses the input voltage and automatically provides the correct connection.

**Option H (Inhibit):**

Operation of the unit is inhibited if a voltage signal (5 V/10 mA) is applied in reference to the negative line of the (main) output. Alternatively, a connector pin connected to the negative input line also shuts off the converter (to be specified). This can also be used in conjunction with a thermal trip which shuts unit down.

**Option E (Programmable by ext. signal):**

An ext. signal applied with reference to the negative output line programs the output voltage.

**Option P (Power fail):**

A signal (logic or relay) is given if the input voltage drops below the specified limit. In AC input units we sense the rectified input voltage so that a power fail alarm can be avoided if at light load mains power returns before the input capacitors are substantially discharged.

**Option D (DC-OK, one output):**

A signal (logic or relay) is given if the voltage of the main output is below the specified limit. In multi-output systems the main output is monitored.

**Option M (DC-OK, all outputs):**

In multi-output systems a signal is provided if the voltage of any output is below the specified limit.

**Option AC (AC-OK)**

A logic signal is given if the output voltage of an inverter is below the specified limit.

**Option R (Relay):**

Options P, D and M are available in conjunction with option R. A relay is provided for indication instead of a logic signal with a N.O., N.C. or changeover contact (to be specified).

**Option 'Y' (Sys-reset):**

This logic signal is a combination of power fail and DC-OK as specified for VME systems.

# Industrial Power Supplies

## C Series AC-DC & DC-DC Converters



### C6400 Models, 22 kW PSU



- High Power Density
- 45-800 Volts Output
- 19" Rack Mounting
- Parallel Redundant Operation
- Temperature Controlled Fans

### Specification

#### Input

- Input Voltage • 320-800 VDC or 400/480 VAC
- Input Frequency • 47-440 Hz

#### Output

- Output Voltage • Up to 800 VDC
- Output Current • Up to 360 A
- Output Power • Up to 22 kW
- Line Regulation • 0.1% (±10%)
- Load Regulation • 0.2% (10-90%)
- Ripple & Noise • 0.5% rms
- Overload Protection • Current limited to 105%-110% of full load
- Overvoltage Protection • OVP switches off module with automatic return to operation
- Remote Sense • Up to 3 V per wire

#### General

- Efficiency • 90% typical
- Input/Output Isolation Voltage • Input to Output 3500 VDC  
Input to Earth 3500 VDC  
Output to Earth <60-700 VDC  
<60-250 V - 2100 VDC  
>250 V - 3500 V DC
- Connector • Terminals/copper bars
- Dimensions • 8U x 19" x 600mm (355 x 483 x 600 mm)
- Weight • 90 kg

#### Environmental

- Operating Temperature • -10 °C to +50 °C
- Storage Temperature • -40 °C to +85 °C

#### EMC & Safety

- Emissions • EN55022, Class A
- EFT/Burst • EN61000-4-4 Level 3
- Surges • EN61000-4-5 Level 3
- Safety • EN60950, Class 1

| Input VDC   |             | Input VAC             |                       | Output Current | Output VDC |         |
|-------------|-------------|-----------------------|-----------------------|----------------|------------|---------|
| 320-640 VDC | 450-800 VDC | 3 x 400 VAC (320-460) | 3 x 480 VAC (400-530) |                | Minimum    | Maximum |
| C 6479 G    | C 6479 K    | C 6489 V              | C 6499 V              | 360 A          | 45         | 55      |
| C 6476 G    | C 6476 K    | C 6486 V              | C 6496 V              | 320 A          | 58         | 68      |
| C 6477 G    | C 6477 K    | C 6487 V              | C 6497 V              | 170 A          | 100        | 130     |
| C 6477 GJ   | C 6477 KJ   | C 6487 VJ             | C 6497 VJ             | 110 A          | 190        | 200     |
| C 6478 G    | C 6478 K    | C 6488 V              | C 6498 V              | 88 A           | 200        | 250     |
| C 6478 GJ   | C 6478 KJ   | C 6488 VJ             | C 6498 VJ             | 55 A           | 380        | 400     |
| C 6477 GH   | C 6477 KH   | C 6487 VH             | C 6497 VH             | 36 A           | 570        | 600     |
| C 6478 GH   | C 6478 KH   | C 6488 VH             | C 6498 VH             | 27 A           | 760        | 800     |

#### Notes:

1. For input voltage <400 VDC output power available reduces by 20%.

### Options

- Inrush current limiting
- Input polarity protection for DC input
- Output decoupling diode for redundant/parallel operation (depending on output current)
- Active current sharing for parallel operation
- Remote ON/OFF (inhibit)
- Monitoring of input and output voltage
- Output programmable via analogue signal
- RS232 or IEEE488 interface
- Automatic/manual selection of charging voltage
- Digital V- and A- meter
- Tropical protection

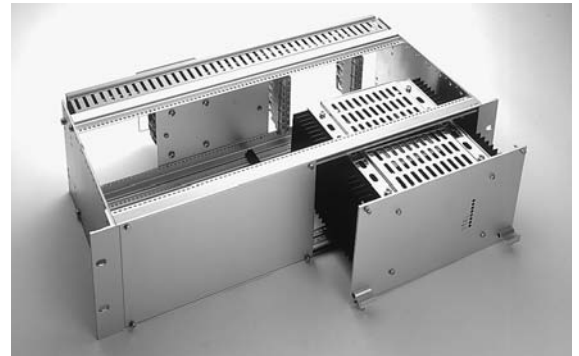
## C Series Versatility

With over 3000 standard modules and many more modified and custom-built units available, the C Series of AC-DC and DC-DC Converters can be used in a wide variety of applications and environments.



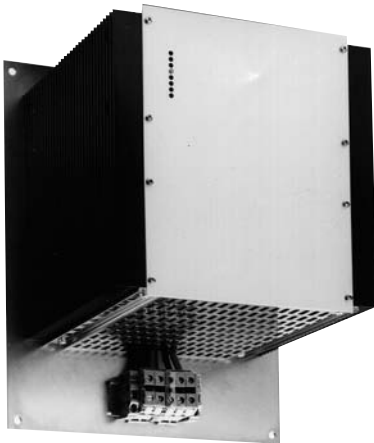
## Standard Modules

Standard modules are supplied in either Euro-Cassette or 19" rack mount formats depending on power rating.



## Sub-Racks

Fully wired sub-racks can be configured as 3U, 6U or 9U allowing any mix of units - including 'hot swap redundant systems complete with alarms, monitoring and controls.



## Wall Plates

For customers looking to install units in their own cabinets the C Series can be supplied to a wall plate (W option). Units come fitted to a vertical mounting plate complete with screw terminals.

## Customer Specific

In addition to the 'W' option, units can be configured into complete stand-alone systems. The picture opposite shows a switchmode battery charger specifically designed for installation into a lighthouse. It has been mounted in a stainless steel cabinet to withstand a salt water environment.

