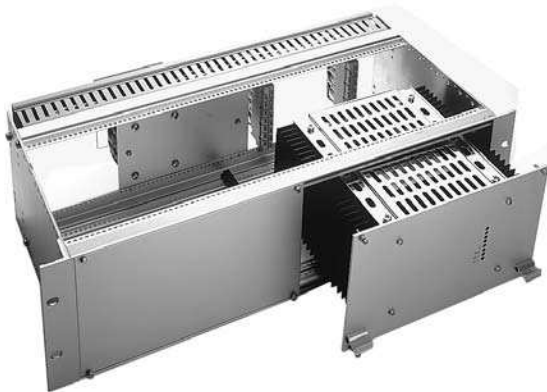


50-22 kWatts UPS/INVERTERS C (AC-DC) Series



www.powersolve.co.uk



- 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 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, 500 ms typical C5600-C5800
Hold-Up Time	• AC/DC increases with input voltage 15 ms typical at 230 VAC 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 C300-C4700, 10ms C5600-C 5800 recovery time to within 1% for load change 20-100- 20% of full load
Ripple & Noise	• $\leq 1\%$ +30 mV pk-pk (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	• VDE 0878, EN 55022, Level A
Construction (Safety)	• EN60950 Class 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

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	93-138 185-264		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 VDC	
10-16	Output Current	18-36	Output Current	36-75	45-90	80-160	160-320	93-138 185-264	Output Current	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 VDC	
10-16	Output Current	18-36	Output Current	36-75	45-90	80-160	160-320	93-138 185-264	Output Current	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 VDC	
10-16	Output Current	18-36	Output Current	36-75	45-90	80-160	160-320	93-138 185-264	Output Current	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

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	93-138 185-264		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 ⁽¹⁾	93-138 185-264		Min	Max
C 3520	80.0 A	C 3530	C 3540	C 3550	C 3570	C 3580 Z	C 3590	100.0 A ⁽²⁾	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 ⁽¹⁾	93-138 185-264		Min	Max
C 3720	120 A ⁽²⁾	C 3730	C 3740	C 3750	C 3770	C 3780 Z	C 3790	150 A ⁽²⁾	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 ⁽¹⁾	93-138 185-264		Min	Max
C 3620	180.0 A ⁽²⁾	C 3630	C 3640	C 3650	C 3670	C 3680 Z	C 3690	150 A ⁽²⁾	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.

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 ⁽¹⁾	93-138 185-264	Output Current	Min	Max
C 4700	100.0 A ⁽²⁾	C 4720	160 A ⁽²⁾	C 4730	C 4740	180 A ⁽²⁾	C 4750	C 4770	C 4780 Z	C 4790	180 A ⁽²⁾	4.5	5.5
C 4701	60.0 A	C 4721	110 A ⁽²⁾	C 4731	C 4741	140 A ⁽²⁾	C 4751	C 4771	C 4781 Z	C 4791	150 A ⁽²⁾	8.0	10.0
C 4702	55.0 A	C 4722	95 A ⁽²⁾	C 4732	C 4742	120 A ⁽²⁾	C 4752	C 4772	C 4782 Z	C 4792	130 A ⁽²⁾	11.0	13.0
C 4703	50.0 A	C 4723	80 A	C 4733	C 4743	100 A ⁽²⁾	C 4753	C 4773	C 4783 Z	C 4793	110 A ⁽²⁾	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 ⁽¹⁾	93-138 185-264	Output Current	Min	Max
C 4822	190 A ⁽³⁾⁽⁴⁾	C 4832 ⁽⁴⁾	C 4842 ⁽⁴⁾	240 A ⁽³⁾⁽⁴⁾	C 4852 ⁽⁴⁾	C 4872 ⁽⁴⁾	C 4882 Z ⁽⁴⁾	C 4892 ⁽⁴⁾	260 A ⁽³⁾	11.0	13.0
C 4823	160 A ⁽⁴⁾	C 4833 ⁽⁴⁾	C 4843 ⁽⁴⁾	200 A ⁽⁴⁾	C 4853 ⁽⁴⁾	C 4873 ⁽⁴⁾	C 4883 Z ⁽⁴⁾	C 4893 ⁽⁴⁾	220 A ⁽³⁾	14.0	16.0
C 4824	120 A ⁽⁴⁾	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 ⁽⁴⁾	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 ⁽⁴⁾	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 ⁽⁴⁾	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 ⁽⁴⁾	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 ⁽⁴⁾	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	Output VDC		
40-64	50-80	Output Current	80-160	160-320	3 x 200 160-230	3 x 480 400-530	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	Output VDC		
40-64	50-80	Output Current	80-160	160-320	320-640	450-800	3 x 200 160-230	3 x 480 400-530	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.

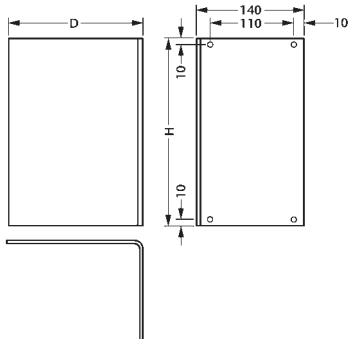
C5800 Models, 12000 Watt (6/9U x 19" x 360/460 mm, up to 65 kg)

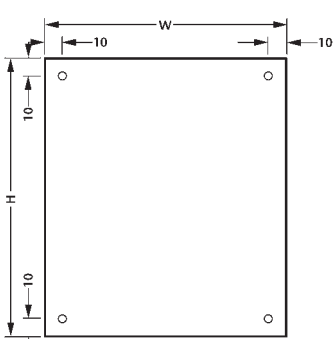
Input VDC					Input VAC		Output VDC	
80-160	160-320	320-640	450-800	Output Current	3 x 200 160-230	3 x 480 400-530	Min	Max
C 5854	C 5874	C 5874 G	C 5874 K	400 A	C 5864 V	C 5894 V	23	26
C 5855	C 5875	C 5874 G	C 5875 K	400 A	C 5865 V	C 5895 V	26	30
C 5859	C 5879	C 5874 G	C 5879 K	220 A	C 5869 V	C 5899 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

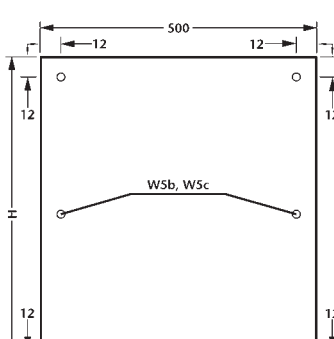
Notes:

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

Wall Mounting Options

Angles				
				
Option	Series	Width	Height	Depth
W1	300	140 mm	220 mm	180 mm
	500			
W1a	1300 ⁽¹⁾	140 mm	300 mm	260 mm
	1500 ⁽¹⁾			
	3500 ⁽¹⁾			
	3700 ⁽¹⁾			
W1b	1200	140 mm	360 mm	260 mm
	1300			
	1500			
	3500			
W1c	4700	140 mm	360 mm	340 mm

Plates				
				
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			

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

Notes:

- No space available for conductor underneath module.
- 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 ⁽¹⁾	I	•	*	*	*	*	*	*	*	•	•	*	*	*
	Series diode	SD	*	*	*	*	*	*	*	*	*	*	*	*	*
	Anti-parallel diode	AD	*	*	*	*	*	*	*	*	*	*	*	*	*
	Auto-ranging	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.

C640 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

- | | |
|---|---|
| <ul style="list-style-type: none"> • 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) | <ul style="list-style-type: none"> • 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.

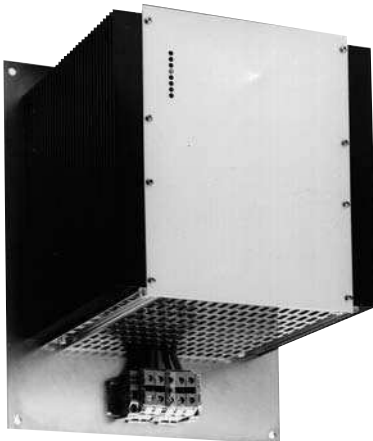
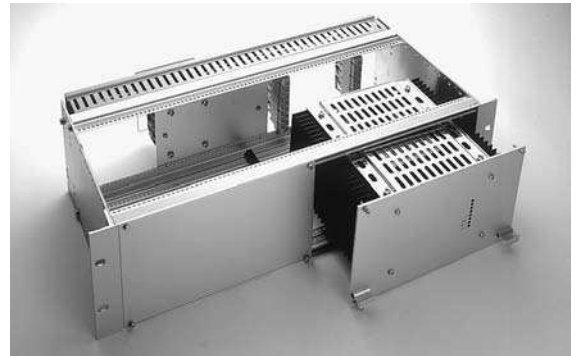


Standard Modules

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.

