Series C / B 3600

Features

- DC input: 18 - 800 V
- AC input: 1 or 3-phase, 47 - 400 Hz
- DC output: 5 / ... / 400 V
- Continuous short circuit protection
- Overvoltage protection with auto restart
- Thermal shutdown with auto restart
- Industrial grade components
- Compact and robust design

DC / DC Converters

► 1400 W ► 1700 W

Input VDC									Output VDC		
18–36 VDC	Output Amps	36–75 VDC	45–90 VDC	80–160 VDC	160–320 VDC	320–380 [1] VDC	320–640 [3] VDC	450–800 [3] VDC	Output Amps	Adj.	Range
C 3620	180 [2][3]	C 3630	C 3640	C 3650	C 3670	C 3680 Z	C 3670 G	C 3670 K	200 [2][3]	5	4.5 – 5.5
C 3621	120	C 3631	C 3641	C 3651	C 3671	C 3681 Z	C 3671 G	C 3671 K	130	9	8 – 10
C 3622	100	C 3632	C 3642	C 3652	C 3672	C 3682 Z	C 3672 G	C 3672 K	115	12	11 – 13
C 3623	80	C 3633	C 3643	C 3653	C 3673	C 3683 Z	C 3673 G	C 3673 K	90	15	14 – 16
C 3624	55	C 3634	C 3644	C 3654	C 3674	C 3684 Z	C 3674 G	C 3674 K	65	24	23 – 26
C 3625	48	C 3635	C 3645	C 3655	C 3675	C 3685 Z	C 3675 G	C 3675 K	55	28	26 – 30
C 3629	26	C 3639	C 3649	C 3659	C 3679	C 3689 Z	C 3679 G	C 3679 K	30	48	45 – 55
C 3626	21	C 3636	C 3646	C 3656	C 3676	C 3686 Z	C 3676 G	C 3676 K	25	60	58 – 68
C 3627	11	C 3637	C 3647	C 3657	C 3677	C 3687 Z	C 3677 G	C 3677 K	14	110	100 – 130
C 3627 J	7	C 3637 J	C 3647 J	C 3657 J	C 3677 J	C 3687 ZJ	C 3677 GJ	C 3677 KJ	8.5	200	190 – 200
C 3628	5.5	C 3638	C 3648	C 3658	C 3678	C 3688 Z	C 3678 G	C 3678 K	7	220	200 – 250
C 3628 J	3.5	C 3638 J	C 3648 J	C 3658 J	C 3678 J	C 3688 ZJ	C 3678 GJ	C 3678 KJ	4.3	400	380 – 400

AC / DC Converters

► 1700 W

Input VAC, 1-Phase			Input VAC, 3-Phase			Output Amps	Output VDC	
115 ±20%	$230^{+15\%}_{-20\%}$	115 ±20% / $230^{+15\%}_{-20\%}$	$3x200^{+15\%}_{-20\%}$	$3x400^{+15\%}_{-20\%}$	$3x480^{+10\%}_{-15\%}$		Adj.	Range
C 3660	C 3680	C 3690	C 3660 V	C 3680 V	C 3690 V	200 [2][3]	5	4.5 – 5.5
C 3661	C 3681	C 3691	C 3661 V	C 3681 V	C 3691 V	130	9	8 – 10
C 3662	C 3682	C 3692	C 3662 V	C 3682 V	C 3692 V	115	12	11 – 13
C 3663	C 3683	C 3693	C 3663 V	C 3683 V	C 3693 V	90	15	14 – 16
C 3664	C 3684	C 3694	C 3664 V	C 3684 V	C 3694 V	65	24	23 – 26
C 3665	C 3685	C 3695	C 3665 V	C 3685 V	C 3695 V	55	28	26 – 30
C 3669	C 3689	C 3699	C 3669 V	C 3689 V	C 3699 V	30	48	45 – 55
C 3666	C 3686	C 3696	C 3666 V	C 3686 V	C 3696 V	25	60	58 – 68
C 3667	C 3687	C 3697	C 3667 V	C 3687 V	C 3697 V	14	110	100 – 130
C 3667 J	C 3687 J	C 3697 J	C 3667 VJ	C 3687 VJ	C 3697 VJ	8.5	200	190 – 200
C 3668	C 3688	C 3698	C 3668 V	C 3688 V	C 3698 V	7	220	200 – 250
C 3668 J	C 3688 J	C 3698 J	C 3668 VJ	C 3688 VJ	C 3698 VJ	4.3	400	380 – 400

Battery Chargers

► 1700 W

Input VAC, 1-Phase			Input VAC, 3-Phase			Output Amps	Output VDC	
115 ±20%	$230^{+15\%}_{-20\%}$	115 ±20% / $230^{+15\%}_{-20\%}$	$3x200^{+15\%}_{-20\%}$	$3x400^{+15\%}_{-20\%}$	$3x480^{+10\%}_{-15\%}$		Nom. Battery Voltage	Range
B 3661	B 3681	B 3691	B 3661 V	B 3681 V	B 3691 V	100	12	12 – 16
B 3662	B 3682	B 3692	B 3662 V	B 3682 V	B 3692 V	55	24	24 – 32
B 3664	B 3684	B 3694	B 3664 V	B 3684 V	B 3694 V	30	48	48 – 64
B 3666	B 3686	B 3696	B 3666 V	B 3686 V	B 3696 V	24	60	60 – 80
B 3667	B 3687	B 3697	B 3667 V	B 3687 V	B 3697 V	14	110	110 – 145
B 3668	B 3688	B 3698	B 3668 V	B 3688 V	B 3698 V	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 = 3 x 480 VAC
2. output voltage = 110 VDC @ 14 A
3. results in a C 3697 V module.

[1] input supply from PFC also suitable
[2] external fan recommended
[3] suited for wall-mount, alternatives upon request

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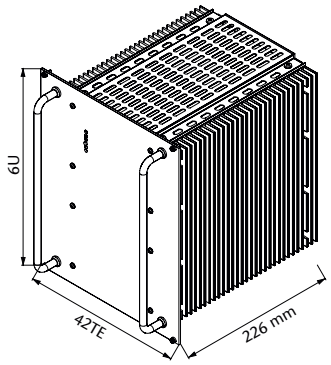
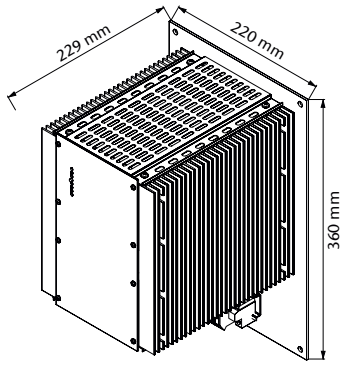


Eurocassette / approx. 10.0 kg
(pluggable module for 19“ sub-rack)



Wall mount / approx. 12.5 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 (±10 %)	0.1 %
Load regulation (10 - 90 %)	0.2 %
Load transient (10-90-10 %)	6 % typical
Response time to ±1 %	2 - 3 ms
Turn-on rise time	Soft-start, 100 ms typical
Ripple	≤ 1 % + 30 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 - 95 %
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. 100,000 h @ 40°C acc. to MIL - HDBK - 217 E (notice 1)
Connector for eurocassette - std. design	H15 and high current connector for I > 50 A
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

Monitoring

- Input / output voltage or current via
  - analog signal
  - interface card RS232 or IEEE488 (external)

Mechanics / environment:

- 19” sub-rack for eurocassette
- Wall mount
- Increased mechanical strength
- Tropical protection
- Extended temperature range to –40 °C