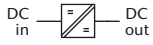


**Features**

- DC input: 320 - 800 V
- AC input: 3-phase, 47 - 63 Hz
- DC output: 48 / ... / 800 V
- Continuous short circuit protection
- Overvoltage protection
- Thermal shutdown with auto restart
- Industrial grade components
- High efficiency through ZVS topology
- High power density
- Compact and robust design



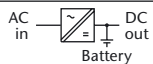
**DC / DC Converters**

▶ 22 KW				
Input VDC			Output VDC	
320–640 <sup>1)</sup> VDC	450–800 VDC	Output Amps	Adj.	Range
C 6479 G	C 6479 K	360	48	45– 55
C 6476 G	C 6476 K	320	60	58– 68
C 6477 G	C 6477 K	170	110	100– 130
C 6477 GJ	C 6477 KJ	110	200	190–200
C 6478 G	C 6478 K	88	220	200–250
C 6478 GJ	C 6478 KJ	55	400	380–400
C 6477 GH	C 6477 KH	36	tba <sup>2)</sup>	570–600
C 6478 GH	C 6478 KH	27	tba <sup>2)</sup>	760–800



**AC / DC Converters**

▶ 22 KW				
Input VAC, 3-Phase		Output Amps	Output VDC	
3x400 <sup>+15%</sup> –20%	3x480 <sup>+10%</sup> –15%		Adj.	Range
C 6489 V	C 6499 V	360	48	45– 55
C 6486 V	C 6496 V	320	60	58– 68
C 6487 V	C 6497 V	170	110	100– 130
C 6487 VJ	C 6497 VJ	110	200	190–200
C 6488 V	C 6498 V	88	220	200–250
C 6488 VJ	C 6498 VJ	55	400	380–400
C 6487 VH	C 6497 VH	36	tba <sup>2)</sup>	570–600
C 6488 VH	C 6498 VH	27	tba <sup>2)</sup>	760–800



**Battery Chargers**

▶ 22 KW				
Input VAC, 3-Phase		Output Amps	Output VDC	
3x400 <sup>+15%</sup> –20%	3x480 <sup>+10%</sup> –15%		Nom. Battery Voltage	Range
B 6484 V	B 6494 V	310	48	48– 64
B 6486 V	B 6496 V	270	60	60– 80
B 6487 V	B 6497 V	150	110	110–145
B 6488 V	B 6498 V	75	220	220–290

**Assistance in table use:**

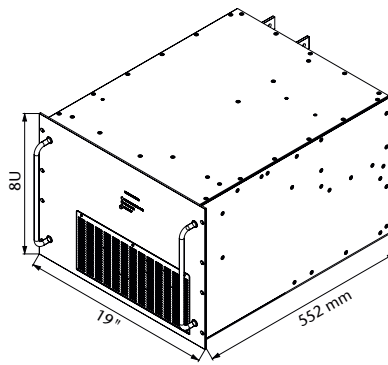
- 1 Select the column for input voltage range.
- 2 Select the row for the appropriate output voltage.
- 3 The intersection of both results in the module required.

**For example:**

- 1 input voltage = 3 x 480 VAC
- 2 output voltage = 48 VDC @ 360 A
- 3 results in a C 6499 V module.

<sup>1)</sup> for input voltage < 400 VDC the output power needs to be reduced by 20%

<sup>2)</sup> tba = to be advised



19" Plug-in module / approx. 90.0 kg

## Specifications

### Input

Voltage range . . . . . narrowing of input voltage range optimizes the efficiency (pls. specify), unit switches off at under- and overvoltage  
 No-load input power. . . . . 30 W typical  
 Switch-on time . . . . . 1 s 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  $\pm 1\%$  . . . . . 10 ms typical  
 Turn-on rise time . . . . . Soft-start, 300 ms typical  
 Ripple. . . . . 0.5 % rms  
 Overload protection . . . . . current limited to 105 - 110 % of  $I_{nom}$   
 Overvoltage protection. . . . . OVP switches off module with automatic return to operation, after 5 seconds, the unit will remain latched off  
 Remote sense. . . . . standard for C series up to 150 V output, compensation up to 6 V

### General

Efficiency . . . . . 90 - 95 %  
 Operating temperature. . . . .  $-20$  to  $+50$  °C  
 Storage temperature . . . . .  $-40$  to  $+85$  °C  
 Humidity . . . . . up to 95 % RH, non-condensing  
 Cooling . . . . . with fans  
 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. 70,000 h @  $40$  °C  
 acc. to MIL - HDBK - 217 E (notice 1)  
 Connector . . . . . terminals / bolts / bars  
 Marking . . . . . CE

## Options

### Input

- Inrush current limiting
- Reverse polarity protection for DC input

### Output

- Parallel operation
- Redundant operation
- Inhibit (remote on / off)
- Reducing of current limiting at high ambient temperature

### 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 RS232 or IEEE488

### Battery charger

- Temperature compensated charging voltage
- Automatic / manual selection of charging characteristic

### Monitoring

- Input / output voltage or current via
  - analog signal
  - interface RS232 or IEEE488

### Mechanics / environment:

- Digital V- and A-meter (see photo)
- Cooling via temperature controlled fans
- Tropical protection
- Extended temperature range to  $-40$  °C