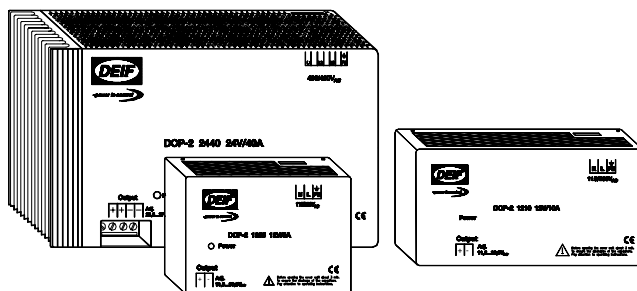


Type DCP2

Battery chargers

4189320008D (UK)



- *Easy installation - DIN-rail mounting*
- *Automatic recovery from overload conditions*
- *5-10-20-40A types*
- *Switch mode power technology*
- *Extremely low ripple <100mV*





General data

Input voltage:	3 x 400/480V AC $\pm 15\%$	Type: DCP2-2420 and DCP2-2440
	1 x 230V AC $\pm 15\%$	Type: DCP2-1210, DCP2-2410 and DCP2-2420
	1 x 115V AC $\pm 15\%$	Type: DCP2-2410/115V
	1 x 230V AC $\pm 15\%$	Type: DCP2-1205 and DCP2-2405
Output voltage:	23.5-27.5V DC (type DCP2-24XX and -2410/115V)	
	11.8-13.8V DC (type DCP2-12XX)	
Output current:	DCP2-XX05: 5A (typical current limit 6A)	
	DCP2-XX10 and -2410/115V: 10A (typical current limit 12.5A)	
	DCP2-2420: 20A (typical current limit 25A)	
	DCP2-2440: 40A (typical current limit 45A)	
Terminals:	DCP2-1205, -1210, -2405, -2410 and -2410/115V:	
	Primary max.	2.5 mm ²
	Secondary	2.5 mm ²
	DCP2-2420:	
	Primary max.	2.5 mm ²
	Secondary	4.0 mm ²
DCP2-2440:		
Primary max.	2.5 mm ²	
Secondary	10.0 mm ²	
Indication:	Green LED – operating indication	
Housing:	Materials:	All plastic parts are self-extinguishing to UL94 (V0) DCP2-2440 is encapsulated in a metal housing
	Dimensions:	147 x 123 x 86 mm (DCP2-1205, -2405) L x W x H 205 x 123 x 86 mm (DCP2-1210, -2410, -2410/115V) (Appendix) 240 x 153 x 86 mm (DCP2-2420) 292 x 185 x 130 mm (DCP2-2440)
Distance for con- vection:	100 mm above and below the DCP2, 30 mm to each side	
Mounting:	DIN-rail, EN 50022-35	

Safety: VDE0805/EN60950/IEC950

Protection: Class I

Deg. of protection: IP20

Leakage current: <0.75mA (47-63Hz line frequency)
(DCP2-2420 3-phase supply and DCP2-2440: <3.5mA)

Weight:	DCP2-1205	approx. 0.8 kg
	DCP2-2405	approx. 0.8 kg
	DCP2-1210	approx. 1.2 kg
	DCP2-2410	approx. 1.2 kg
	DCP2-2410/115V	approx. 1.2 kg
	DCP2-2420	approx. 1.9 kg
	DCP2-2440	approx. 3.6 kg

Functions and settings

Besides the output terminals (secondary side) the DCP2 has a trim potentiometer for setting of the output voltage. By means of an insulated slotted screwdriver or adjusting pin the output voltage can be set in the range 23.5-27.5V respectively 11.8-13.8V.

Setting:

Lower output voltage = Counterclockwise rotation

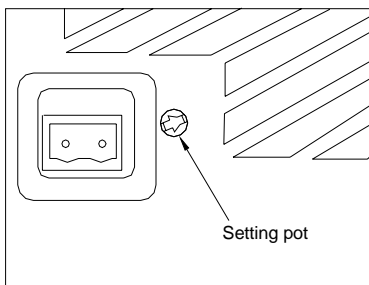
Higher output voltage = Clockwise rotation

The LED on the front indicates that the unit is operational.

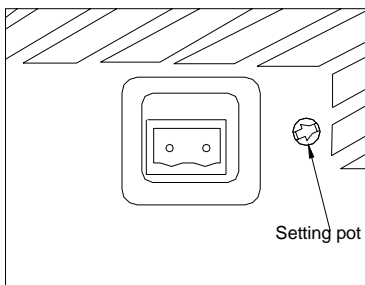
Illustration:

Terminals of the secondary side and setting potentiometer for output voltage.

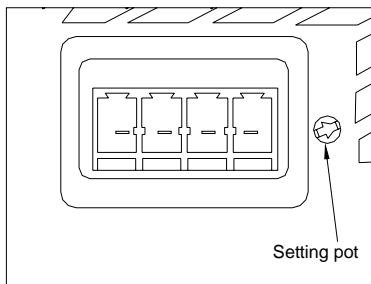
DCP2-XX05



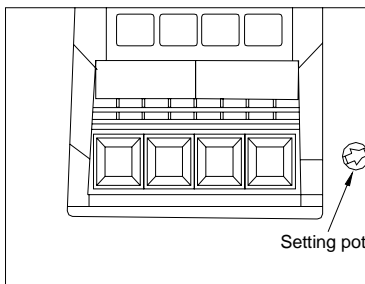
DCP2-XX10 and -XX10/115V



DCP2-2420



DCP2-2440



CAUTION:

For DCP2-2420 and DCP2-2440 the plugs on the secondary side have two terminals for each pole (+/-). The current can be drawn by one single terminal for each pole. DEIF recommends to use both terminals for each pole to avoid any unnecessary heating of the connection.

Mounting

To obtain optimum cooling it is imperative to comply with the specified installation position, where the input terminals (L1, L2, L3, PE or L1, N, PE) are placed at the top and the output terminals (+/-) at the bottom.

Distance:

Above and below the DCP2 100 mm
To each side 30 mm

The permissible ambient temperature must not be exceeded:

-10...70°C (operating, free convection)

-25...85°C (storage)

Connection:

See the cover of the unit (imprint). The phase sequence is indifferent.

Protection:

Units supplied by 1 x 230V AC are internally protected by a fuse and can be connected directly to line.

The power cords for 3 x 400/480V AC units must be protected by a three-pole C-fuse or a three-pole motor circuit breaker (only DCP2-2420 and DCP2-2440). Operating with a disconnected phase is not permissible.

Fuse:

DCP2-1205, -2405:
5 x 20 mm T3.15A/250V internal

DCP2-1210, -2410, -2410/115V:
5 x 20 mm T6.3A/250V internal

DCP2-2420:
5 x 20 mm T10A/250V internal

DCP2-2420, -2440:
Three poles, C-fuse or motor circuit breaker
Switch - external (setting 3A)

CE marking

All variants of the DCP2 are CE marked to the EMC Directive and the Low Voltage Directive. However, the following comments concerning EN 61000-3-2 (limits for harmonic current emissions) apply and must be observed upon installation of the 10A and 20A variants:

If the 10A and 20A variants are used as part of an apparatus which has a rated AC power of 1kW or more, there is no requirement for compliance with EN 61000-3-2.

If the 10A and 20A variants are used as part of an apparatus which has a rated AC power less than 1kW, compliance with EN 61000-3-2 must be ensured by the maker of the apparatus. In this case the maker of the apparatus containing the DCP2 must

carry out CE marking to the EN 61000-3-2 himself. All other parts of the CE marking provided by DEIF A/S are still valid.

Alternatively, permission to connect the 10A and 20A variants must be given by the local power supply authority of the place of installation of the DCP2, as stipulated by EN 61000-3-2, clause 4. In this case the entire CE marking provided by DEIF A/S, including to EN 61000-3-2, is valid.

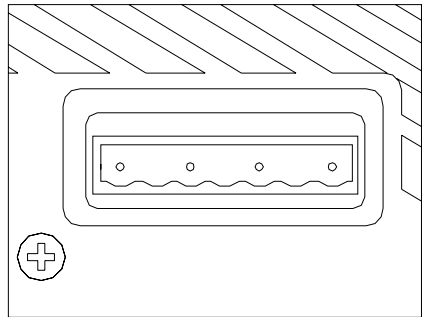
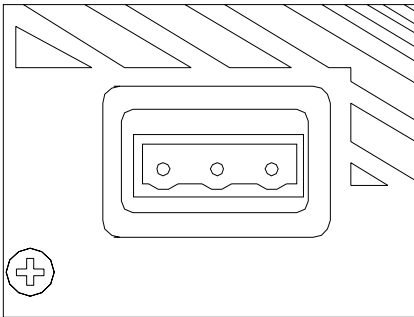
The protective earth (PE) of the DCP2 must be connected to the protective earth of the switchboard.

Illustration:

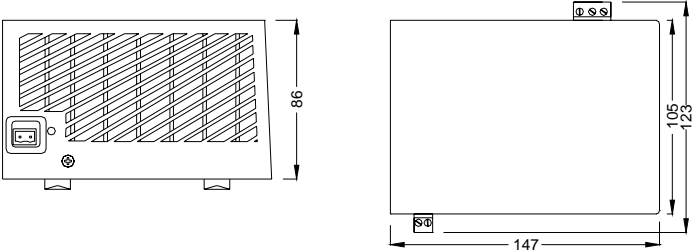
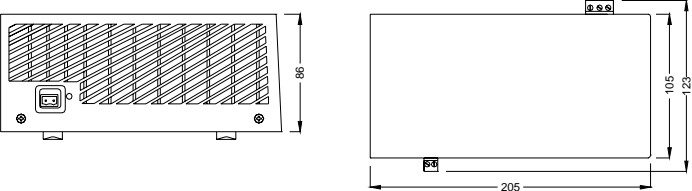
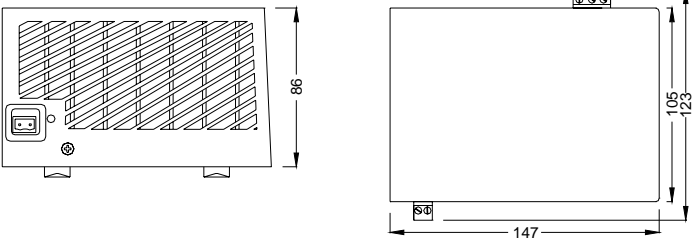
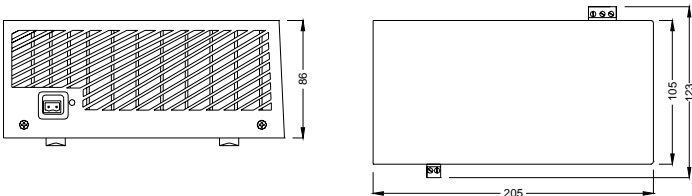
Grid connection.

DCP2-XX05, DCP2-XX10, -XX10/115V
and DCP2-2420

DCP2-2420 and DCP2-2440



Appendix

Type	Dimensions
DCP2-1205	 <p>Front view: A rectangular unit with a height of 86. The top surface is covered in diagonal hatching. A control panel is located on the left side. The bottom edge features two small feet. The back view shows a width of 147 and a depth of 105, with a total depth of 123. Mounting holes are indicated by small squares with 'S' and 'D' labels.</p>
DCP2-1210	 <p>Front view: A rectangular unit with a height of 86. The top surface is covered in diagonal hatching. A control panel is located on the left side. The bottom edge features two small feet. The back view shows a width of 205 and a depth of 105, with a total depth of 123. Mounting holes are indicated by small squares with 'S' and 'D' labels.</p>
DCP2-2405	 <p>Front view: A rectangular unit with a height of 86. The top surface is covered in diagonal hatching. A control panel is located on the left side. The bottom edge features two small feet. The back view shows a width of 147 and a depth of 105, with a total depth of 123. Mounting holes are indicated by small squares with 'S' and 'D' labels.</p>
DCP2-2410 and -2410/115V	 <p>Front view: A rectangular unit with a height of 86. The top surface is covered in diagonal hatching. A control panel is located on the left side. The bottom edge features two small feet. The back view shows a width of 205 and a depth of 105, with a total depth of 123. Mounting holes are indicated by small squares with 'S' and 'D' labels.</p>

Type	Dimensions
DCP2-2420	<p>Technical drawing of the DCP2-2420 device. The front view shows a rectangular panel with a width of 240 and a total height of 153. A section of 130 is indicated at the top. The rear view shows a height of 86.</p>
DCP2-2440	<p>Technical drawing of the DCP2-2440 device. The front view shows a rectangular panel with a width of 264 and a total height of 160. A section of 176 is indicated at the top. The rear view shows a height of 130 and a width of 264/292.</p>