

CP DC UPS 24V 40A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



The UPS control unit together with the associated battery module and the power supply unit form a complete DC UPS system. In normal operation, the input voltage from the UPS control unit is connected directly to the load. In the event of a mains failure (drop of the DC input voltage) the system switches instantly to battery operation.

Once the mains supply has been restored, the system switches back to normal operation and the battery is fully recharged by the integrated charger.

Three relay outputs, as well as three additional active transistor outputs and a control input to lock battery operation, provide full remote control by means of SPS or DCS control. Numerous modes of operation and an easy-to-use status display provide rapid fault diagnosis and optimum customisation to the application.

General ordering data

Version	UPS control unit
Order No.	1370040010
Type	CP DC UPS 24V 40A
GTIN (EAN)	4050118202342
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	150 mm	Depth (inches)	5.905 inch
Height	130 mm	Height (inches)	5.118 inch
Net weight	1,051.8 g	Width	66 mm
Width (inches)	2.598 inch		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...70 °C
Humidity	5...95 %, no condensation		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Battery module

Parallel connection option	Yes, max. 2	Rated voltage	24 V
Storage medium	3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah, Selectable with rotary switch		

Integrated battery charger

Battery availability test	every minute	Charging current	0.15 CA
Charging feature	IU characteristic curve	Charging voltage (temperature compensated)	27, 48 V @ 20°C
Temperature coefficient	- 48 mV / °C		

Operating interfaces and control inputs

DIP switch	Inversion of transistor outputs, Operation without temperature probe	Remote disconnection (Interlock)	Yes
Selector switch battery	3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah, No Battery, Service	Selector switch buffer times	0.5 min, 1 min, 3 min, 5 min, 10 min, 20 min, 30 min, 45 min, ∞, ∞ w/0
Temperature probe	NTC 100 kΩ		

Input

DC current consumption	max. 200 mA (without battery), max. 0.5 A (with fully charged battery)	DC input voltage range	20...30 V DC
Input current	≤ 43 A	Input fuse (internal)	Yes
Max. approved input current	52 A	Wire connection method	Screw connection

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Output

Nominal output current for U_{nom}	40 A @ 60 °C	Output current, max.	48 A
Output voltage	$V_o = V_{in} - 0.2$ V normal operation (I_{max}), $V_o = V_{in} - 0.3$ V battery supply (I_{max})	Output voltage, note	$V_o = V_{in} - 0.2$ V normal operation (I_{max}), $V_o = V_{in} - 0.3$ V battery supply (I_{max})
Overload protection	Yes	Parallel connection option	Yes, max. 2, Yes, with diode module
Protection against inverse voltage	Yes	Rated output voltage	24 V DC \pm 1 %
Residual ripple, breaking spikes	< 50 mV _{PP} @ 24 V DC, I_N	Temperature coefficient	- 48 mV / °C
Temperature probe	NTC 100 k Ω	Wire connection method	Screw connection

General data

Buffer times	Depending on the connected battery	Clip-in foot	metal
Current limiting	> 120% I_N	Degree of efficiency	\geq 96% normal mode, battery is being charged, \geq 98% normal mode, battery is charged, \geq 98% buffer mode
Housing version	Metal, corrosion resistant	Humidity	5...95 %, no condensation
MTBF	> 500,000 h in accordance with IEC 61709 (SN29500)	Mounting position, installation notice	Horizontal on TS35 mounting rail. 50 mm of clearance at top & bottom for air circ. Can mount side by side with no space in between.
Operating temperature	-25 °C...70 °C	Power loss	< 10 W
Protection against reverse voltages from the load	32...34 V DC	Short-circuit protection	Yes
Storage medium	3.4 Ah, 7.2 Ah, 12 Ah, 17 Ah, Selectable with rotary switch	Surge voltage category	III

EMC / shock / vibration

Interference immunity test acc. to	EN 61000-4-2 (ESD) EN 61000-4-3 and EN 61000-4-8 (fields) EN 61000-4-4 (burst) EN 61000-4-5 (surge) EN 61000-4-6 (conducted) EN 61000-4-11 (dips)	Noise emission in accordance with EN55032	Class B
Shock resistance IEC 60068-2-27	30 g in all directions	Vibration resistance IEC 60068-2-6	2.3 g

Insulation coordination

Insulation voltage	1 kV DC	Pollution severity	2
Protection class	III, with no ground connection, for SELV	Surge voltage category	III
electrical isolation, input-earth	1 kV	electrical isolation, output-earth	1 kV

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Electrical safety (applied standards)

Electrical machine equipment	Acc. to EN60204	For use with electronic equipment	Acc. to EN50178 / VDE0160
Protection against dangerous shock currents	Acc. to VDE0106-101	Protective separation / protection against electrical shock	VDE0100-410 / acc. to DIN57100-410
Safety transformers for switch-mode power supplies	According to EN 61558-2-16		

Connection data (input)

Conductor cross-section, AWG/kcmil , max.	6	Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , min.	0.5 mm ²	Conductor cross-section, rigid , max.	16 mm ²
Conductor cross-section, rigid , min.	0.5 mm ²	Reverse polarity protection	Yes
Wire connection cross section, flexible (input), max.	16 mm ²		

Connection data (output)

Conductor cross-section, AWG/kcmil , max.	6	Conductor cross-section, AWG/kcmil , min.	26
Conductor cross-section, flexible , max.	16 mm ²	Conductor cross-section, flexible , min.	0.5 mm ²
Conductor cross-section, rigid , max.	16 mm ²	Conductor cross-section, rigid , min.	0.6 mm ²
Reverse polarity protection	Yes		

Connection data (signal)

Wire connection method	Screw connection	Wire cross-section, AWG/kcmil , max.	15
Wire cross-section, AWG/kcmil , min.	30	Wire cross-section, solid , max.	1.5 mm ²
Wire cross-section, solid , min.	0.2 mm ²		

Signalling

Floating contact	Yes	Status indicator	, Green/yellow LED: normal / buffering, Yellow/red LED: temperature alarm / alarm, Yellow/red LED: switch-off / battery fault
Status relay (max. load)	Fault (alarm) (30 V AC/DC 0.1 A), Battery operation (buff.) (30 V AC/DC 0.1 A), Laden (Charg.) (30V AC/DC 0,1A)		

Approvals

Certificate No. (GERMLLOYD)	61934-14	Certificate no. (cULus)	E258476
Institute (GERMLLOYD)	GERMLLOYD	Institute (cULus)	CULUS

Classifications

ETIM 6.0	EC002850	ETIM 7.0	EC002850
ECLASS 9.0	27-04-06-92	ECLASS 9.1	27-04-92-01
ECLASS 10.0	27-04-06-92	ECLASS 11.0	27-04-06-92

Data sheet

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Approvals

Approvals



ROHS	Conform
UL File Number Search	E258476

Downloads

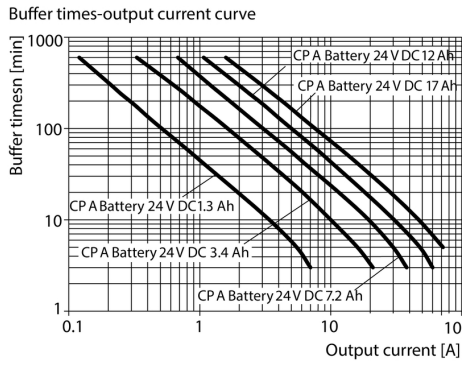
Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	EPLAN_WSCAD
User Documentation	Operating instructions

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Drawings



Buffer Time