

CP DC UPS 24V 40A

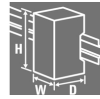
Weidmüller Interface GmbH & Co. KG

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
Width	66 mm	Width (inches)	2.598 inch
Net weight	1,051.8 g		

Temperatures

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

Probability of failure

SIL in compliance with IEC 61508	None
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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

Function 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/O
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, 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 kΩ
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
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
ETIM 8.0	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		

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Catalogue status 10.09.2021 / We reserve the right to make technical changes.

Data sheet

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Approvals

Approvals



ROHS	Conform
UL File Number Search	E258476

Downloads

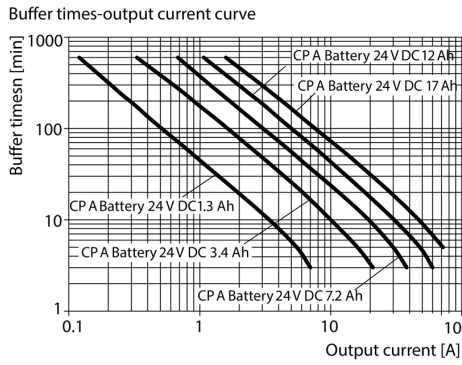
Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Operating instructions
Catalogues	Catalogues in PDF-format

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Drawings



Buffer Time

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Accessories

Installation



Due to the wide range of variants with output voltages of 5, 12, 24, and 48 V and extensive international approvals, they are suitable for use in many applications. The power range extends from 35 W to 350 W. The individual adaptability makes PRO-PM the right choice for many standard machines.

General ordering data

Type	MTA 45 MF	Version
Order No.	1251310000	Electronics housings, Mounting flange
GTIN (EAN)	4050118042719	
Qty.	1 pc(s).	

Temperature probe



Due to the wide range of variants with output voltages of 5, 12, 24, and 48 V and extensive international approvals, they are suitable for use in many applications. The power range extends from 35 W to 350 W. The individual adaptability makes PRO-PM the right choice for many standard machines.

General ordering data

Type	CP DC UPS TF25
Order No.	1444540000
GTIN (EAN)	4050118249880
Qty.	1 pc(s).
Type	CP DC UPS TF05
Order No.	1444480000
GTIN (EAN)	4050118249767
Qty.	1 pc(s).

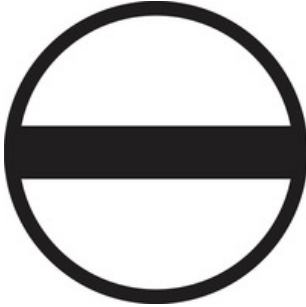
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Accessories

Slotted screwdriver



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

Type	SDIS SL 0.6X3.5X100	Version
Order No.	1274660000	Screwdriver, Mounting tool
GTIN (EAN)	4050118072631	
Qty.	1 pc(s).	
Type	SDIS SL 1.0X5.5X125	Version
Order No.	1274680000	Screwdriver, Mounting tool
GTIN (EAN)	4050118073263	
Qty.	1 pc(s).	

W-Series



Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

General ordering data

Type	WEW 35/2 V0 GF SW	Version
Order No.	1479000000	W-Series, End bracket
GTIN (EAN)	4050118286779	
Qty.	100 pc(s).	
Type	WEW 35/1 V0 GF SW	Version
Order No.	1478990000	W-Series, End bracket
GTIN (EAN)	4050118286892	
Qty.	50 pc(s).	

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Accessories

Crosshead screwdriver, Pozidrive



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

Type	SDIK PZ2 SL	Version
Order No.	1274740000	Screwdriver, Mounting tool
GTIN (EAN)	4050118073218	
Qty.	1 pc(s).	

Mouser Electronics

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