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1AC/1AC/750 VA uninterruptible energy supply with integrated energy storage, lead AGM, VRLA technology, 24 V DC, 3.4 Ah for 120 V AC applications.

Product Description

UPS modules with integrated energy storage are particularly space saving: UPS module and energy storage are combined in one housing. The TRIO AC-UPS ensures seamless transition to battery operation thanks to the pure sine curve. Connected industrial PCs can be shut down safely via the integrated USB interface.

Your advantages

- Smooth transition, thanks to the pure sine curve: the sine generated in battery operation is synchronous with the mains previously used for supply
- ☑ Space saving: UPS module and energy storage combined in one housing
- Intersection of the section of th
- ☑ USB interface for connection to higher-level controllers such as industrial PCs
- Startup from energy storage possible, even without mains input



Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 007397
GTIN	4055626007397
Weight per Piece (excluding packing)	6,120.000 g
Custom tariff number	85044030
Country of origin	Germany

Technical data

Dimensions



Technical data

Dimensions

Width	210 mm
Height	170 mm
Depth	136 mm
Installation distance right/left	0 mm / 0 mm
Installation distance top/bottom	50 mm / 50 mm

Ambient conditions

Ambient temperature (operation)	0 °C 40 °C
Ambient temperature (storage/transport)	-15 °C 40 °C (with charged energy storage device)
Max. permissible relative humidity (operation)	\leq 95 % (25 °C, non-condensing)
Maximum altitude	\leq 3000 m (> 2000 m, observe derating)
Vibration (operation)	5 Hz 100 Hz, 0.7g (EN 60068-2-6)
Shock	20g in all directions (EN 60068-2-27)
	30g in each space direction with UWA 130
Degree of pollution	2
Climatic class	3K3 (in acc. with EN 60721)

Input data

Nominal input voltage	120 V AC
Input voltage range	96 V AC 138 V AC
Frequency range	45 Hz 55 Hz
	55 Hz 65 Hz
Current consumption	6 A
Permissible backup fuse	B10 B16 Listed breaker

Connection data, input

Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	10 mm

Output data

Apparent power	750 VA
Rated Power (Real Power)	600 W



Technical data

Output data

Power factor (cos phi)	0.8
Crest factor	2.8
Switch-over time	< 10 ms
Classification according to IEC 62040-3	VFD-SS-311

Output data (mains operation)

Nominal output voltage (U _N)	120 V AC
Nominal output current (I_N)	6 A (750 VA)

Output data (battery operation)

Nominal output voltage (U_N)	120 V AC
Nominal output current (I _N)	6 A (750 VA)
Form of output voltage	Pure sine
Frequency (after automatic detection in mains operation)	50 Hz
	60 Hz

Connection data, output

Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	10 mm

General data

Efficiency	> 95 % (with charged energy storage device)
MTBF (IEC 61709, SN 29500)	> 206000 h (40 °C)
Degree of protection	IP20
Protection class	1
Type of housing	DX51D+AZ (steel sheet / Galvalume)
Hood version	PC + ABS
Input fuse	10 A 400 V gRL
Weight	5.7 kg

Energy storage

Battery technology	Lead rechargeable battery module
Accumulator type	2x Panasonic UP-VW1220P1

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Technical data

Energy storage

Capacity	3.4 Ah
Battery fuse	40 A, 32 V
Charging time	7 h
Service life	6 Years 9 Years (20 °C)
Latest startup	6 Months (0 °C 20 °C)
Buffer period	20 min. (100 W)
	4 min. (300 W)
	1 min. (600 W)
Can be extended with external battery	1x 24 V 3.4 Ah

Connection data for the external battery

Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	10 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	6 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	8
Stripping length	15 mm

Status and diagnostics indicator / signal outputs - Alarm

Switching output	Transistor output, active
Output voltage	24 V (SELV)
Continuous load current	≤ 20 mA
Status display	LED red

Status and diagnostics indicator / signal outputs - Battery Mode

Switching output	Transistor output, active
Output voltage	24 V (SELV)
Continuous load current	≤ 20 mA
Status display	Yellow LED

Status and diagnostics indicator / signal outputs - Ready

Switching output	Transistor output, active
Output voltage	24 V (SELV)
Continuous load current	≤ 20 mA



Technical data

Status and diagnostics indicator / signal outputs - Battery Charge

Charge	
Status display	Yellow LED
Status and diagnostics indicator / signal outputs - AC OK, P>Pn, Remote	
Status display	Green LED
Status and diagnostics indicator /signal outputs - Service	
Status display	LED red
Connection data for signaling	
Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm
Remote control	
Designation	Remote
Low signal	Connection to SGnd with < 2.7 k Ω
High signal	Open (> 35 k Ω between remote and SGnd)
Battery-operated start (bat. start)	
Low signal	Connection to SGnd with < 2.7 k Ω
High signal	Open (> 200 k Ω between bat. start and SGnd)
Interfaces	
Interface	MINI-USB type B
Device combinations	
UPS connection in parallel	no
UPS connection in series	no
Standards	
Standard uninterruptible power supply systems	EN 62040-1
Conformance/approvals	
UL approvals	UL/C-UL Recognized UL 1778

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Technical data

EMC data

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Low Voltage Directive	Conformance with Low Voltage Directive 2014/35/EC
Electrostatic discharge	EN 61000-4-2
Contact discharge	6 kV (Test Level 3)
Discharge in air	8 kV (Test Level 3)
Electromagnetic HF field	EN 61000-4-3
Frequency range	80 MHz 3 GHz
Test field strength	10 V/m
Comments	Criterion A
Fast transients (burst)	EN 61000-4-4
Input	2 kV (Test Level 3 - asymmetrical)
	2 kV (Test Level 3 - asymmetrical)
Output	2 kV (Test Level 3 - asymmetrical)
Signal	2 kV (Test Level 3 - asymmetrical)
	2 kV (Test Level 3 - asymmetrical)
Comments	Criterion A (B for USB)
Surge voltage load (surge)	EN 61000-4-5
Input	1 kV (Test Level 2 - symmetrical)
	2 kV (Test Level 3 - asymmetrical)
Output	1 kV (Test Level 2 - symmetrical)
	2 kV (Test Level 3 - asymmetrical)
Signal	1 kV (Test Level 2 - asymmetrical)
Comments	Criterion A
Conducted interference	EN 61000-4-6
Frequency range	0.15 MHz 80 MHz
Voltage	10 V
Comments	Criterion A
Power frequency magnetic field	EN 61000-4-8
Frequency	60 Hz
Test field strength	100 A/m
Comments	Criterion A
Criterion A	Normal operating behavior within the specified limits.
Criterion B	Temporary impairment to operational behavior that is corrected by the device itself.

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 3
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Technical data

Environmental Product Compliance

		For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"
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