



CHARGE MANAGER

EN 54-4

Emergency power supply

- ✓ *Emergency power supply for use in certified Voice Alarm systems according EN 54-16: 2008 and EN 50849: 2017*
- ✓ *Approved according EN 54-4: 1997/A1:2002/A2:2006 (Fire detection and fire alarm systems – Part 4: Power supply equipment)*

CHARGER 6 / CHARGER 12

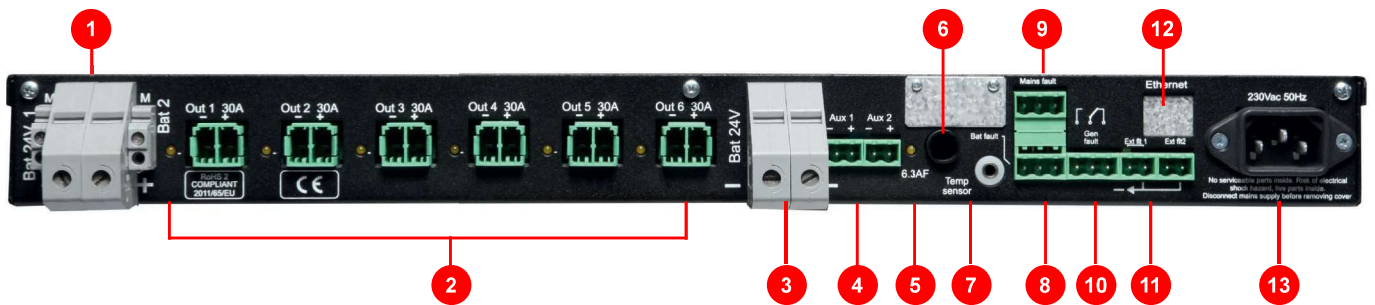
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Emergency power supply



CHARGER 6 front panel: equal for CHARGER 12

- | | | |
|-----------------------|----------------------|-------------|
| 1. Display Indicators | 3. Selection button | 5. USB-port |
| 2. LC-display | 4. Status Indicators | |



CHARGER 6 rear panel: equal for CHARGER 12

- | | | |
|---------------------------|---------------------------------|------------------------------|
| 1. Battery connection (+) | 6. Mains power fuse | 11. Remote control (in/out) |
| 2. Main DC outputs | 7. Temperature sensor connector | 12. Optional Ethernet port |
| 3. Battery connection (-) | 8. 24VDC error contact | 13. 230VAC Mains power input |
| 4. Auxiliary DC outputs | 9. 230VAC error contact | |
| 5. Status LED fuse | 10. General error contact | |

CHARGER 6 / CHARGER 12 according EN 54-4

Microprocessor controlled emergency power supply according EN 54-4 (fire alarm systems Part 4: Power supply equipment), used to realize a secondary backup power source in an Emergency Warning or Voice Alarm System (VAS).

Key features:

- The CHARGER 6 can supply up to six, while the CHARGER 12 can supply up to 12 power amplifiers with 24VDC. In addition two/four 24VDC Auxiliary outputs are available to power system controllers or other pre-amplifiers
- Both CHARGER units include mandatory indications at the front panel for; 230 VAC operation, Battery operation, Charging condition and Error status. In addition, a USB connection is available at the front to configure the emergency power supply
- The rear panel features terminals to connect four/eight batteries, a connection for a temperature sensor and error contacts to forward the error status
- All primary and secondary input voltages are constantly monitored
- Network connection (Ethernet) for additional external monitoring of the system status (optional)
- The open architecture allows connection of non emergency related devices also

CHARGER 6 / CHARGER 12

TECHNICAL SPECIFICATIONS

	CHARGER 6	CHARGER 12
Power factor	0.94 (in operating mode)	0.94 (in operating mode)
Efficiency	84% (during charging process)	84% (during charging process)
Output voltage stability	0,5%	0,5%
Leak-current (earth conductor)	< 1.5 mA	< 3 mA
AC power consumption	2,7A (max.)	5,4A (max.)
Rated voltage	External battery: 24V Buffer mode @ 250C: 27,1V Quick charging @ 250C: 28,3V	External battery: 24V Buffer mode @ 250C: 27,1V Quick charging @ 250C: 28,3V
Temperature compensation factor at buffer and fast charging mode	-48mV/°C	-48mV/°C
Battery capacity	430Ah *2 (max.)	860Ah *2 (max.)
Charge current	16A	32A
Internal battery resistance *1	25m ohm (max.)	25m ohm (max.)
No. of connected battery banks	2	4
Load / Output current	6 x 30ADC / 1 x 6ADC	12 x 30ADC / 2 x 6ADC
Power consumption from battery for internal power supply	< 400mA	< 800mA
Power consumption after activation of deep discharge protection	< 5mA	< 5mA
DC output voltage range *3	21,0V-28,8V	21,0V-28,8V
Maximum available current, after the mains power is disconnected	90A (max.)	90A (max.)
Relative humidity	80% (max.)	80% (max.)
Operating temperature	Class 3K5 according EN 60721-3-3; -5°C to +45°C	Class 3K5 according EN 60721-3-3; -5°C to +45°C
Operating voltage	230VAC (+10% -15%); 50 Hz	230VAC (+10% -15%); 50 Hz
Housing & color	Steel, black	Steel, black
Dimensions (WxHxD)	485x44x320mm (19"; 1U)	485x80x320mm (19"; 2U)
Weight	5,1 kg	8,8 kg
Article no.	ART05119	ART05133

* 1 Guaranteed Internal resistance of battery for which the indication of a failure for each battery connection is activated.

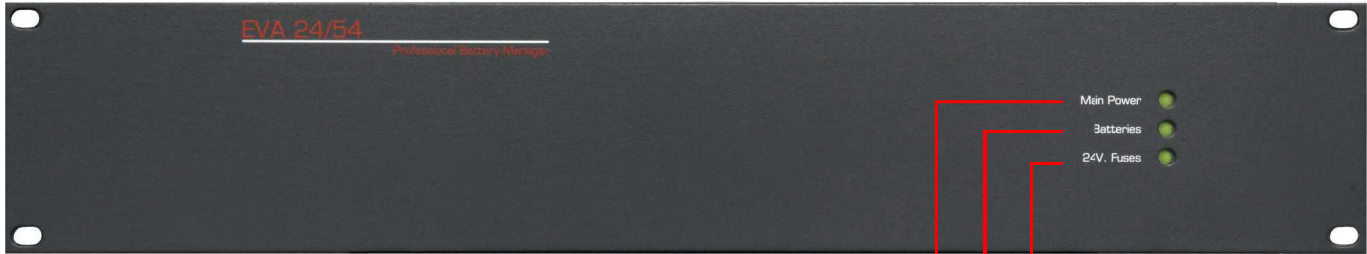
* 2 The mentioned battery capacities are without power consumption by the Voice Alarm system on any of the 24 V connections.

* 3 The mentioned output voltage range shows the voltage range between discharged batteries (at the end of the operating cycle) and the voltage during quick charge taking the temperature compensation into account.

EVA 24/54

EN 54-4

Emergency power supply



EVA 24/54 front panel:

1. Mains faults: Green is OK, yellow indicates multiple types of errors
2. Battery faults: Green is OK, yellow indicates multiple types of errors
3. Output voltage: Green is OK, yellow indicates multiple types of errors



EVA 24/54 rear panel:

1. Mains power input 230VAC
2. Auxiliary outputs 24VDC (5A)
3. Error contacts
4. Main 24VDC outputs 1 – 3
5. Main 24VDC utputs 4 – 6
6. Temperature sensor input
7. Battery connection

Emergency power supply EVA 24/54

Rugged uninterruptible emergency power supply according EN 54-4 (fire alarm systems Part 4: Power supply equipment), used to realize a secondary backup power source in an Emergency Warning or Voice Alarm System (VAS).

- All primary and secondary input voltages are constantly monitored
- The open architecture allows connection of non emergency related devices also

Key features:

- EVA 24/54 allows connection of up to 6 power amplifiers having 24VDC power supply inputs. In additional 3 auxiliary outputs are available to connect system controllers and other pre-amplifiers
- EVA 24/54 features norm conform indicators at the front for mains- & battery power operation, charging condition and error status.
- Rear located connections for (2) batteries, temperature sensor and error contacts to forward error status

EVA 24/54

TECHNICAL SPECIFICATIONS

EVA 24/54	
Input	Mains input voltage (single-phase): 195VAC to 264VAC Frequency: 47 to 63Hz Class I protection, Neutral and earth system: TT, TN, IT Primary current @ 195VAC: 2A max. use of a 2-pole circuit breaker (D curve) is required
Output	Rated output voltage: 24VDC; floating voltage (half load): 27,2VDC /- 5% 6 Main outputs; 40A max. 3 Auxiliary; 5A max. Output current all outputs: 150A max. Power supply operation without load current: I _{min} = 0A Grounding of the DC-circuit is possible through the positive or negative pole of the battery Rated output current of the rectifier: 12A
Operating relative humidity	20%-95%; without condensation
Operating temperature	-5°C to +45°C at 12A load; over 2000m height, the max. operating temperature will decrease with 5°C every 1000m
Operating voltage	230VAC / 50-60Hz; 24VDC
Maximum available current, after the mains power is disconnected	150A (max.)
Relative humidity	80% (max.)
Operating temperature	Class 3K5 according EN 60721-3-3; -5°C to +45°C
Operating voltage	230VAC (+10% -15%) / 50Hz
Housing & color	Steel, black
Dimensions (WxHxD)	483x88x395mm (19"; 2U)
Weight	6,7 kg
Article no.	ART02827