



DC-UPS

NBPG0901G01***
VdS-Nummer G209169
0786-CPD-20873

1 Short Description

The accumulator buffered DC supply works according to the standby parallel principle and guarantees, in connection with a lead accumulator and for a certain amount of time, a safe backup operation of the DC supply in case of a mains failure. The overall output current is split up between consumer supply and lead accumulator charge.

The power supply is characterized by the following properties:

- Primary switched power supply with I/U charging characteristic
- Active power factor correction (PFC)
- Micro-controller supported lead accumulator management
- RS232 for monitoring and parameterization
- Temperature tracking of the charging voltage with external temperature sensor

2 Technical Data

Nominal input voltage	230 V AC ($\pm 15\%$)
Input voltage range for charging operation	195,5 V ... 264,5 V
Nominal frequency	47 Hz ... 63 Hz
Power consumption	380 VA
Self current consumption	75 mA @ 24 V
Max. nominal input current	1,8 A
Max. inrush current	35 A / 2 ms
Max. nominal output current	12 A
Nominal output voltage (in mains operation)	24 V DC
Output voltage range (with temperature tracking)	26,4 V ... 28,6 V DC $\pm 0,4\%$
Charging characteristics	I/U DIN41773
Charging end voltage without temp.-Sensor	26,4 V DC $\pm 0,4\%$
Deep discharge protection and load shedding	20,4 V DC $\pm 0,4\%$
Max power loss ,worst-case'	40 W
Efficiency	89% @ ($U_e=230$ V; $U_a=26.4$ V DC; $I_a=I_{Nenn}$)
Residual Ripple	< 150 mV eff.
Internal device protection	2,5 A (T), 250 V
Fuse DC-output circuit (external)	15 A (T, UL-248)
Fuse DC-battery circuit (external)	15 A (T, UL-248)
Connection in parallel	yes
Connection in series	no
Max. signal contact load (Mains operation ¹)	30 V/ 0,5 A potentialfree relay contact
Max. signal contact load (Bat-OK ¹)	30 V/ 0,5 A potentialfree relay contact
Max. signal contact load (general error ¹)	30 V/ 0,5 A potentialfree relay contact

¹ The message contacts are coupled with LED-displays. The illumination of a LED effects the activation of the corresponding relay.

Technical Datasheet

AKKUTEC 2424 VdS P



J. Schneider
Elektrotechnik

Max. signal contact load (Shut-Down)	24 V DC (6 – 45 V DC) floating switching input
Battery type	Pb-accumulator, maintenance-free, max. 170 Ah
Back-up time	Battery specific
Protective system	IP54
Operational temperature	-10°C ... 50°C
Storage temperature	-10°C ... 50°C
Rel. humidity	≤95% no condensation
Max. mounting height (without load reduction)	2000 above sea level
dimensions (HxWxD)	1000 mm; 800 mm 300 mm
weight	64,5 Kg

3 Norms and regulations

Power supplies for fire alarm systems are subject to rigorous regulations; the power supply unit of the fire alarm system is tested according to the European Product Standards EN 54-4 and VdS 2541. The power supply is **VdS approved** and is listed under No.: G209169.

EMC	EN 55011, limit value class B EN 62040-2, limit value class C1 EN 61000-6-2 EN 61000-6-4 EN 50130-4+A1+A2
Overall unit	2014/30/EU+A1+A2 EN 50178 EN 54-4+A1+A2 EN 12101-10+B1 VdS 2541 VdS 2344
Optocoupler for guaranteeing a safe primary / secondary separation	EN 60747-5-1, complies with SELV / PELV
Power HF-transmitter to ensure the safe separation of primary and secondary.	EN 61558 2-16, complies with SELV / PELV