



### DC-UPS

**NBPG0812G01\*\*\***  
**VdS-Number G209167**  
**0786-CPD-20871**

#### 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 time interval, a safe upkeep 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:

- Switching power supply with I/U charging characteristic
- aktiv power factor correction (PFC)
- Micro-controller supported lead accumulator management
- RS232 for monitoring and parameterization
- Temperature adjustment of the charging voltage by an external sensor

#### 2 Technical Data

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|---|--|
| Nominal input voltage                                     | 230 V AC ( $\pm 15\%$ )                                |
| Min. nominal input voltage for charging operation         | 195.5 v ... 264.5 V                                    |
| Nominal frequency   | 47 hZ ... 63 Hz  |
| Power consumption   | 380 VA   |
| Self-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   |
| Final charging voltage without temperature sensor         | 26.4 V DC $\pm 0.4\%$                                  |
| Deep discharge protection and load rejection              | 20.4 V DC $\pm 0.4\%$                                  |
| Max power loss ,worst-case'                               | 40 W   |
| efficiency ( $U_e=230V$ ; $U_a=26.4V$ DC; $I_a=I_{Nom}$ ) | 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                                      | Yes  |
| Max. signal contact load (mains-OK)                       | 30 V/ 0.5 A<br>potential free relay - contact          |
| Max. signal contact load (Bat-OK)                         | 30 V/ 0.5 A<br>potential-free relay - contact          |

# Technical Datasheet

## AKKUTEC 2412 VdS C



**J. Schneider**  
Elektrotechnik

|   |   |
|---|---|
| Max. signal contact load (General error)            | 30 V/ 0.5 A<br>potential-free relay - contact   |
| Max. signal contact load (Shut-Down)                | 24 V DC (6-45 V DC)<br>floating switching input |
| Accumulator type                                    | Pb-Akku, maintenance-free,<br>max 130 Ah        |
| Back-up time  | accumulator specific                            |
| Protective system                                   | IP31  |
| Operating temperature                               | -10°C ... 50°C                                  |
| Storage temperature                                 | -10°C ... 50°C                                  |
| Rel. humidity                                       | ≤95% no condensation                            |
| Max. installation altitude (without load reduction) | 2000 above sea level                            |
| Dimensions (H x W x D)                              | 608 mm, 464 mm, 213 mm                          |
| Weight  | 12.5 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.: G209167.

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