

# Lead-acid accumulator chargers NB series



Charger is intended for charging of lead-acid accumulators in covered rooms, in environments without risk of explosion.

Ensures charging of accumulator according to the characteristics IU, or IUu.

**Protection IP20** 

Accumulator charger X NB Y.Z is intended for charging of lead-acid accumulators. It ensures the behaviour of charging according to characteristics IU, or IUu. At the beginning the accumulator is charged with constant current equal to  $I_{\text{nom}}$  (nominal value of current of the charger). When the voltage on the accumulator reaches the value of 2,4 V / cell, charging then continues in mode with constant voltage and the charging current decreases gradually. In this condition the signal LED glows with red color. When the charging current decreases to approximately 4/10 of nominal value of current of the charger, the LED changes color to green. This allows informative determination of accumulator charging condition. When using charger X NB Y . 1, during the switch of charging mode, the output voltage also decreases to value of 2,3 V / cell, which prevents overcharging of accumulator and its subsequent damaging. Interruption of safety fuse (for example when poles on accumulator clamps are accidentally changed) is signalized with turned off LED.

#### Marking of chargers X NB Y.Z

- X nominal voltage of accumulator = number of cells × 2 V
- Y nominal current of charger
- Z basic models and functions

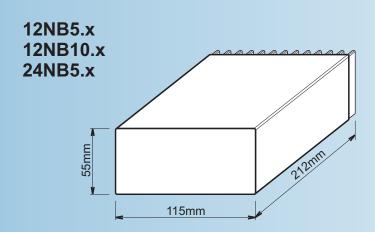
| TECHNICAL SPECIFICATION       |                        |  |
|-------------------------------|------------------------|--|
| Input voltage                 |                        | 230 VAC ± 10 % / 50 Hz                                       |
| Maximum input power           |                        | 340 VA (170 VA)  |
| Maximum output voltage        | in charging mode       | 2,4 V / cell ± 1 %   |
|                               | in trickle charge mode | 2,3 V / cell ± 1 %   |
| Maximum output current (Inom) |                        | 10 A (5 A)   |
| Output voltage switches at    |                        | 4/10 I <sub>nom</sub> ± 7 %                                  |
| Safety class                  |                        | I  |
| Operating conditions          | temperature            | +5 °C to +35 °C  |
|                               | max. relative humidity | 75%  |
| Reference conditions          | temperature            | +23 °C ± 1 °C  |
|                               | input voltage          | 230 V / 50 Hz  |
|                               |                        |  |
| Electrical safety standard    |                        | EN 60335-1+A11:1997, EN 60335-2-29                           |
|                               |                        |  |
| EMC                           |                        | EN 55022-B, EN 61000-3-2:2002, EN 61000-3-3:2000+A1:2003     |
|                               |                        | EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5       |
|                               |                        | EN 61000-4-6, EN 61000-4-8, EN 61000-4-11, EN 61000-6-1:2003 |
|                               |                        | EN 61000-6-3:2001  |

### S PoweR product s.r.o.



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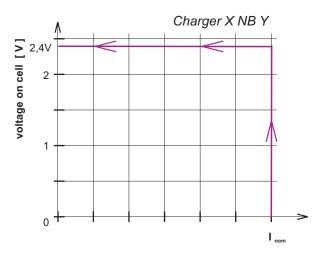
### .Z basic models and functions

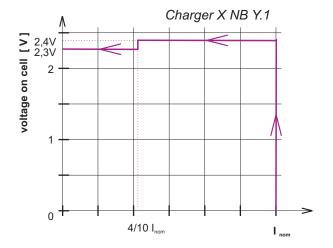
## Without marking

Charging characteristics according to Pic. 1

.1

Charging characteristics according to Pic. 2





Pic. 1 Pic. 2