Battery Undervoltage Controller

Function

The Battery Undervoltage Controller BUW is a releasing time-delay relay which draws its operating voltage from the measuring voltage. If the battery voltage gets the right range voltage above the setting voltage, the output relay will be switch on (contact 2 – 3 close) and both light diodes are burning. If the voltage drops below the setting voltage, first the left LED goes off and after delay of setting time the relay switches off, the right LED goes off and the output contact switch into off-position (contact 2 – 3 open). After a complete drop of measuring voltage the relay is switch off without time delay. After voltage return and reaching the setting voltage value the relay will be switch on without delay and the LED’s are both burning to monitor the right voltage of battery.

Application

The unit is mainly used in emergency power supplies for monitoring the voltage of starter batteries and control batteries.

Functional Circuits

- Functional circuit for undervoltage (left poti), setting range BUW112: 10 - 14 V BUW124: 20 - 28 V
- Functional circuit for delay (right poti), setting range 0.5 - 100 seconds
- Output terminals: One change over contact

Technical Data

Type Battery Undervoltage Controller BUW112, BUW124
Construction Plastic housing on 35 mm hat rail as per DIN EN 50022
Material of Housing Bayblend FR 1439/0240 modified ABS with burning protection UL 94 VO
Dimension, weight 55x68x110mm (WxHxD), appr. 0.2 kg
Input voltage 0 - 35 VDC
Adjustment range BUW112: 10 - 14 VDC, BUW124: 20 - 28 VDC
Output duration 0,5 - 100 sec.
Repeat accuracy 1%
Power consumption Appr. 80 mA
On period 100 %
Terminal load 5A/250VAC, 5A/30VDC, 0.015 Ohm contact resistance, 105 life time
Voltage protection 3000V (coil-contact), 1000V (open contact)
Connecting terminals For wire connection up to 2,5 mm², potentialfree input terminal
Type of protection Housing IP 40, terminals IP 20 (or. VDE 0106T100/VBG4)
Operating temp. range -10 °C bis +55°C, 95% Humidity
General regulations EN 50 178 (electrical units in power installation)
Noise suppression EN 55 022/B
EMV EN 61000 und EN V 50 140
Installation position beliebig
Maintenance Maintenancefree