VOTRONIC Peripheral Units

Indispensable Aids in the Background

Battery Controller – Undervoltage Protection for Board Battery and Starter Battery

Battery Protector 40 Battery Protector 40 Motor according to DIN 1789 **Battery Protector 100** according to DIN 1789

The VOTRONIC units Battery Protector 40 and Battery Protector 100 are connected between supply battery and consumers, and they are suitable for all types and brands of lead batteries (acid, gel, AGM). The units protect the battery from dangerous total discharge and the consumers and equipment from undervoltage and overvoltage. Apart from that, they can be used as remote-controlled battery main switch by means of an external switch.

Battery Protector 40:

- Switching current 40 A, short-time overload up to 60 A is admissible, display of the switching state is visible from outside
- EMERGENCY ON function by switch at the unit; remote control is possible by external switch
- Automatic reset, as soon as the battery voltage is again in the normal range (charging)
- · Separate sensor cable and switching thresholds with hysteresis and timer function for trouble-free operation
- Bi-stable power relay, very low own consumption: less than 3 mA (according to EN 13976)
- No own consumption after disconnection by external switch, such as remote control as battery main switch
- Solid terminal screws for battery and load cable cross sections up to 10 mm²

Battery Protector 40 Motor:

• Execution "Motor" with higher disconnection thresholds keeps the starting ability of intervention vehicles with only one battery circuit according to DIN EN 1789

Battery Protector 100 additional standard equipment:

- High switching current 100 A, short-time overload up to 180 A is admissible, can be switched over to 12 V/24 V board mains supply
- Based on programmed characteristic diagrams of battery, the intelligent automatic switching threshold always calculates the disconnection point "empty" being appropriate for optimized capacity utilization and safe protection of the battery from powerful consumers (low switching threshold at shorter response time) to very small loads (e. g. "hidden" current consumers with response times over days/months with high response threshold)
- Operation with 3 defined disconnection thresholds can be (manually) adjusted
- The higher set values are keeping the starting ability of intervention vehicles with only one battery circuit (according to DIN EN 1789)
- The preliminary alarm with visual (LED) and audible indication (beeper, can be switched-off), as well as a separate warning terminal (PNP, plus output, 0.2 A) allow to the user to take countermeasures in time (such as to disconnect consumers, which are not required)
- Solid threaded battery connections for cable lugs M6, protection caps included in the standard delivery

Unit Type	Order No.	Operating Voltage	Switching Current Continuous/Short-	Switching Threshold Undervoltage	Reset Point Undervoltage	Overvoltage OFF/ON	Temp. Range	Dimensions* (WxDxH)	Weight	Execution
		٧	time A	V	V	V	°C	mm	g	
Battery Protector 40 ¹	3075	12	40/60	10.7	12.5	15.5/15.0	-20/+50	90x60x38	97	Α
Battery Protector 40 Motor ¹	3073	12	40/60	11.8	12.8	15.5/15.0	-20/+50	90x60x38	97	Α
Battery Protector 40 / 24 ¹	6075	24	40/60	21.4	25.0	31.0/30.0	-20/+50	90x60x38	97	Α
Battery Protector 40 / 24 Motor ¹	6073	24	40/60	23.6	25.6	31.0/30.0	-20/+50	90x60x38	97	Α
Battery Protector 100 ²	3078	12 and 24	100/180	10.6/11.5/11.8** 9.5-12.2*** **	12.4/12.5/12.8** 12.5*** **	15.5/15.0**	-20/+50	105x70x37	180	В

^{**} In case of 24 V operation values x $\,2\,$ *** Automatic Switching Threshold

Mark of Conformity: CE, E Test (EMV/Automotive Regulations)

Delivery Scope¹: Manual Delivery Scope²: Manual, 2 pcs. protection caps * Dimensions incl. mounting flanges, without connections

Execution A



Remote Control is possible with a simple ON / OFF switch as battery main switch

Execution B











