

Ag102 Single Pole Relay Change-Over Circuits



This document describes how to use a single pole relay to change-over between the input supply and the battery back-up. Figure 1 below, is the simplest method however this does have the slight disadvantage of having a momentary break in the output supply when the relay switches off (see Figure 2).

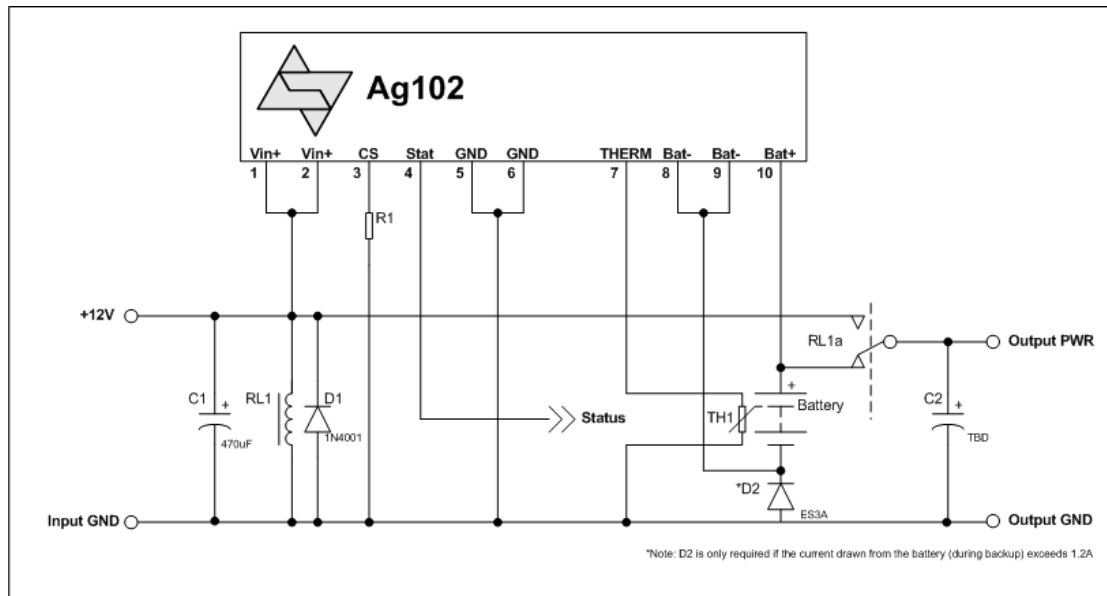


Figure 1: Simple change-over circuit

If this is not practical and the output needs to be supplied continuously, then this can be achieved with the addition of only three extra components.

Figure 3 shows the addition of a zener, a transistor and a resistor, this increases the relay switch off threshold. In this example ZD1 is an 8V2 zener, which will result in the relay switching off when the supply rail drops to ~9V.

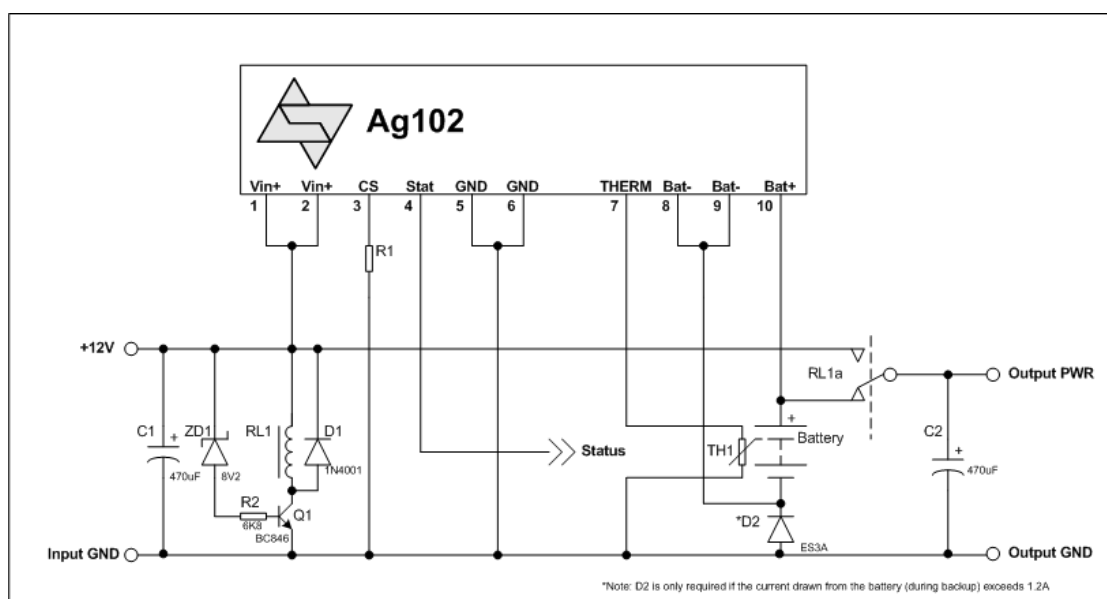


Figure 3: Improved change-over circuit