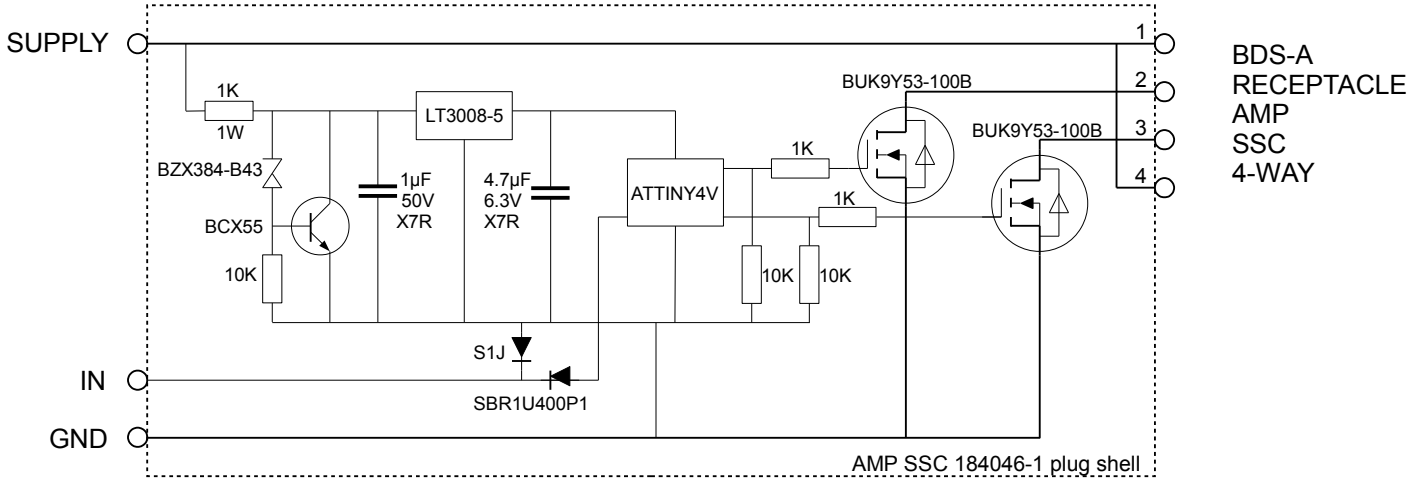
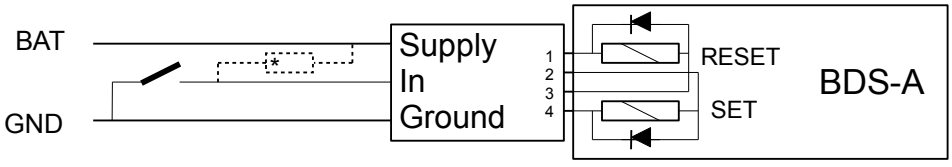
Monostable relay type control for bistable contactor Tyco BDS-A

The relay is open when the input is high or open, closed when the input is shorted to ground.
The operation of the controlled relay differs from that of a common monostable relay in some respects.

1. **Very low input switched current (100 µA) → use a logic type switch with gold plated contacts**
2. **Needs power present while opening → evaluate progressive system power-down**
3. **Non-zero current draw when open (5 µA) → ignore**
4. **Very low current draw when closed (0.4 mA) → ignore**
5. **Switching frequency is limited to 0.4 Hz → ignore**



Normal operation requirements and properties							
		Quantity	Min	Typ	Max	Unit	Req
Pin	SUPPLY	Volts	6	12		V	x
		Pulse current 50ms		2.7	5	A	x
		Current (off) @25 ºC		5	7	µA	
		Current (off) @65 ºC			25	µA	
		Current (on) including input current		0.4		mA	
	IN	Open (off) – volts	3.0		400	V	
		Open (off) – current sourced			30	µA	x
		Closed (on) – volts			1.0	V	x
		Closed (on) – current sourced	90		250	µA	
Timing		Switch debounce period		20		ms	
		Pulse period		50		ms	
		Dead time after Set coil pulse (off→on)		200		ms	
		Dead time after Reset coil pulse (on→off)		2000		ms	



* a pull-up resistor can be added if either:
1. a mechanical switch is used that does not have gold plated contacts and needs “wetting current”
2. an electronic switch is used with more than 30 µA internal leakage at 3V