



# 48 V ON/OFF CONTROL USING REMOTE CONTROL (RC) PIN



DESIGN NOTE 015

Ericsson Power Modules

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In some applications it is necessary to have a precise turn on and turn off level.  
The circuit below is useful for setting turn on and turn off in the range of 36-75 V.

The voltage level for turn off is set by resistors R1 and R2.

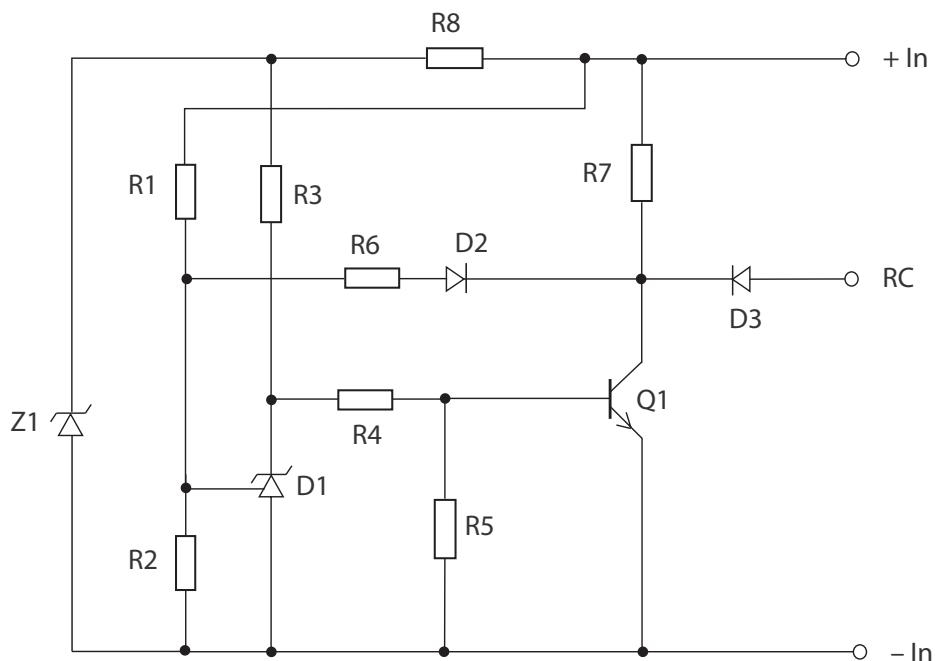
The turn on level is given by R2 in parallel with R6. A lower value on R6 will increase the hysteresis and a higher value will decrease it.

$$V_{off} = 2.495 \times \frac{(R1 + R2)}{R2}$$

The following values were used to set turn on at 43 V and turn off at 41 V:

R1, R6	39 kΩ
R2	2.53 kΩ
R3, R5, R8	15 kΩ
R4	220 kΩ
R7	560 kΩ
D1	TL 431 programmable reference diode
D2, D3	1N4148 or similar
Z1	33 V zener 0.25 W
Q1	2N5551 or similar

Resistors 0.25 W unless otherwise stated.



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