

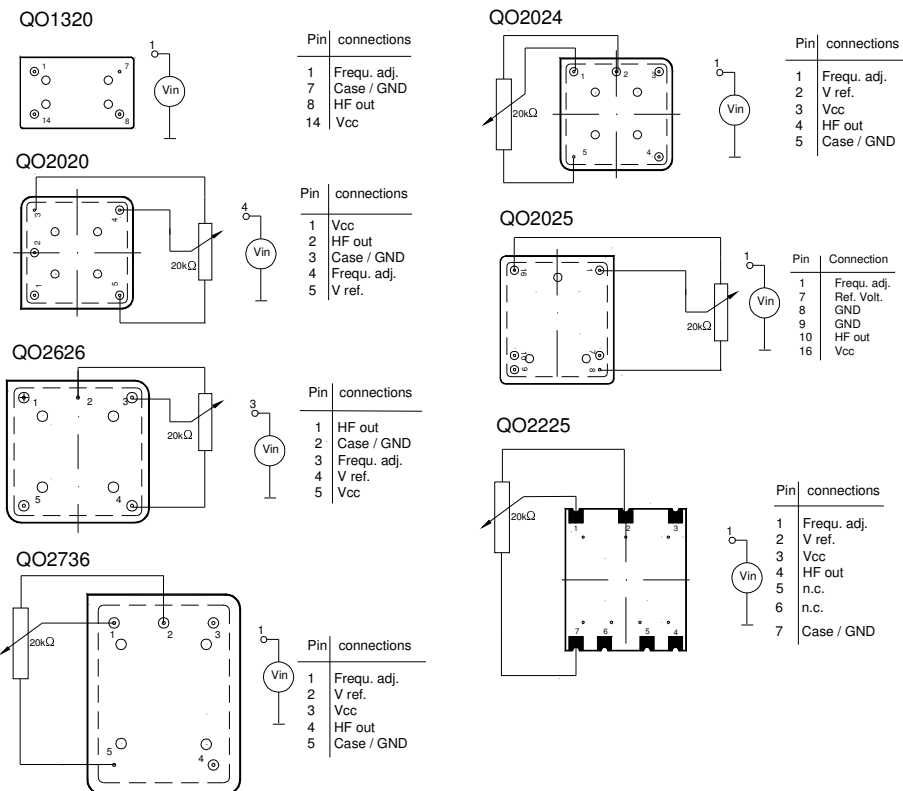
## Electrical Frequency Control

To compensate the long-term stability (aging) or in case of frequency-modulation, the output frequency of the crystal oscillator is electronically adjustable by a certain amount.

The external circuit is either a voltage divider made with a potentiometer or fixed resistors or an external voltage supply or DAC.

The internal reference voltage ( $V_{ref}$ ) for a standard Oscillator-supply-voltage of 5 V is  $4V \pm 1\%$  and can supply the power (10 mW max!) to the resistors or a DAC. The advantage of the internal reference is the same thermal management as used for the crystal stabilisation.

The figure besides shows the basic set-up for EFC using an external power supply or a voltage divider made with a potentiometer for the various models of QUINTENZ- OEXOs.



All potentiometers should be 10 turns type (minimum) and with temperature coefficient < 50ppm/°C

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