

Advantages of Thyristor switches over contactor switching

	Thyristor switches	Electromechanical contactor
Over currents during switching operations	No (transient free)	Yes, upto $100 I_n$ according to IEC 60831, in practice measured up to $200 I_n$
Over voltages during switching operations	No.(transient free)	Yes, up to $2\sqrt{2} U_n$
Time delay for switching	20 ms (typical)	10 to 50 s
Presence of mobile electrical contacts	No	Yes
Expected service life of contacts (switching On/off)	Almost unlimited	Typically 100.000 operations)