The Pulsed Power Converter and Septum Magnet System for Injection into the Electron Storage Ring at ESRF, J.-P. PERRINE, ESRF; M. THIVENT and F. VÖLKER, CERN - At ESRF, the European Synchrotron Radiation Facility in Grenoble/F, electrons are accelerated, via a 200 MeV Linac and a 6 GeV Synchrotron Booster, and injected into the Storage Ring at 10 Hz rate. Two thin septum blade magnets (S1- S2) and an eddy current sheet type septum magnet (S3) provide the final deflection of the injected beam. The operational requirements of the e⁻ injection scheme and the resulting demanding hardware specifications are recalled. The pulsed septum magnets are briefly described. The design, circuit layout and construction of the power converters are related with emphasis on innovative aspects of general interest. Results of tests, during development and commissioning, as well as operation records are reported.