

Title (en)
COGENERATION FACILITY

Title (de)
KRAFT-WÄRME-GEKOPPELTE EINRICHTUNG

Title (fr)
DISPOSITIF À COUPLAGE FORCE-CHALEUR

Publication
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Application
EP 10795210 A 20101013

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Abstract (en)
[origin: WO2011044895A2] The invention relates to a further improved cogeneration facility for supplying buildings and facilities with thermal energy and electrical energy. According to the present invention, the CHP installation is located in a closed enclosure (12), which is permanently under negative pressure during operation, wherein the negative pressure in the enclosure (12) is controlled by means of a partial exhaust-gas recirculation (4) into the intake channel of the internal combustion engine (1) and an additional external flow resistor (6) that is provided in the closed enclosure (12), and a frequency converter (10) capable of backfeed is connected to the generator (2) in an advantageous manner. Highly efficient heat recovery is achieved by means of the invention, wherein the heat losses are substantially minimized and, in combination with the exhaust-gas recirculation and the frequency converter capable of backfeed, very high power modulation is achieved while the exhaust-gas pollutants such as CO, HC, and NO_x are simultaneously minimized.

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