

Single Extraction Steam Turbine

Specifications & Range

Model No. SE-CF-50 SE-CF-60 SE-CF-135 Unit Output 50 60 135 MW Speed 3000 3000 3000 rpm Rated Steam Parameters - - - - Flow 233.5 325 450 t/h Pressure 8.33 8.83 13.24 MPa.a Temperature 535 535 535 °C Rated Extraction Conditions - - - - Flow 160 160 70 t/h Pressure 0.981 0.981 0.981 MPa.a Temperature 260 256.7 402.3 °C Max. Extraction Flow 200 200 120 t/h Exhaust Pressure 3.81 4.3 4.9 kPa.a Steam Rate - - - - Design Condition 5.74 5.34 3.33 kg/kW.h
Speed 3000 3000 3000 rpm Rated Steam Parameters Rated Steam Parameters V
Rated Steam Parameters Flow 233.5 325 450 t/h Pressure 8.33 8.83 13.24 MPa.a Temperature 535 535 535 °C Rated Extraction Conditions ************************************
Flow 233.5 325 450 t/h Pressure 8.33 8.83 13.24 MPa.a Temperature 535 535 \$C Rated Extraction Conditions 535 \$535 \$C Flow 160 160 70 t/h Pressure 0.981 0.981 0.981 MPa.a Temperature 260 256.7 402.3 °C Max. Extraction Flow 200 200 120 t/h Exhaust Pressure 3.81 4.3 4.9 kPa.a Steam Rate
Pressure 8.33 8.83 13.24 MPa.a Temperature 535 535 535 °C Rated Extraction Conditions °C Flow 160 160 70 t/h Pressure 0.981 0.981 0.981 MPa.a Temperature 260 256.7 402.3 °C Max. Extraction Flow 200 200 120 t/h Exhaust Pressure 3.81 4.3 4.9 kPa.a Steam Rate
Temperature 535 535 °C Rated Extraction Conditions Temperature 200 200 120 120 t/h
Rated Extraction ConditionsFlow16016070t/hPressure0.9810.9810.981MPa.aTemperature260256.7402.3°CMax. Extraction Flow200200120t/hExhaust Pressure3.814.34.9kPa.aSteam Rate5.745.343.33kg/kW.h
Flow 160 160 70 t/h Pressure 0.981 0.981 0.981 MPa.a Temperature 260 256.7 402.3 °C Max. Extraction Flow 200 200 120 t/h Exhaust Pressure 3.81 4.3 4.9 kPa.a Steam Rate Design Condition 5.74 5.34 3.33 kg/kW.h
Pressure 0.981 0.981 MPa.a Temperature 260 256.7 402.3 °C Max. Extraction Flow 200 200 120 t/h Exhaust Pressure 3.81 4.3 4.9 kPa.a Steam Rate
Temperature 260 256.7 402.3 °C Max. Extraction Flow 200 200 120 t/h Exhaust Pressure 3.81 4.3 4.9 kPa.a Steam Rate Design Condition 5.74 5.34 3.33 kg/kW.h
Max. Extraction Flow200200120t/hExhaust Pressure3.814.34.9kPa.aSteam Rate </td
Exhaust Pressure3.814.34.9kPa.aSteam Rate5.745.343.33kg/kW.h
Steam RateDesign Condition5.745.343.33kg/kW.h
Design Condition 5.74 5.34 3.33 kg/kW.h
Condensing Condition 3.7 3.75 N/A kg/kW.h
Heat Rate
Design Condition 6436 6780 7533 kg/kW.h
Condensing Condition 9657 9630 N/A kg/kW.h
Feed Water Temperature220225.4246°C
Weight of Turbine 113 113 405 ton
Weight of Upper Half 27 27 N/A ton
Weight of Turbine Rotor 17.5 17.5 N/A ton
External Dimension 8.3 x 5.6 x 4.6 8.3 x 5.6 x 4.6 8.3 x 5.6 x 4.6 m
Center Height of Turbine 800 800 800 mm

Note:

- (1) The rotational direction of all turbines is clockwise viewed downstream.
- (2) The above data represent the maximum values of the specification of the machine.
- (3) The vendor reserves the right to make changes to the specifications in order to improve the products.







Single Extraction Steam Turbine



The principle design features of the extraction steam turbines are all structurally impulse, non-reheating, single cylinder type for power plants. The steam extracted from the steam turbine can be used for industrial process or heating purposes. The extraction pressure, flow and generating electricity power can be adjusted according to the specific requirements of the customers, due to excellent operating flexibility of the extraction steam turbines. The turbines use the advance 3-D technology for through flow path. The operating units are quite compact in structural size, but with high performance.

These steam turbines are fully CNC controlled through the internal hydraulic system. The products are equipped with protective monitoring system, which would ensure the safety and reliability of the steam turbines.

