

Data Sheet

Machine: Generator Manufacturer ABB

Model WY21Z

Serial number

Year 2000

Rated Power 177500 kVA

Rated Frequency 50 Hz \pm 2,5%

Rated Current 6832 A

Rated Voltage 15000 V \pm 10%

Power factor 0,85

Number of poles 2

Number of phases 3

Number of main terminals 6

Velocity 3000 rpm

Type of excitation Static

Cooling System air

Stator/Rotor insulation class F/F

Protection Degree IP55

Unsaturated direct synchronous reactance (X_d) 189% not saturated

Direct axis transient reactance at rated voltage ($X'd_v$) 21% not saturated

Direct axis subtransient reactance at rated voltage ($X''d_v$) 17% 13% not saturated

Direct axis transient short-circuit time constant ($t'd$) 1,01 sec

Direct axis subtransient short-circuit time constant ($t'd$) 0,022 sec

Direct axis transient open-circuit time constant ($t'd0$) 9,22 sec

Rated Voltage Excit.

$4WR^2$ of the generator 21920 kgm²

Rated Current Excit. 1287 A

Weight of the rotor 41000 kg

Operating hours

Last major overhaul 2009