

Hydraulic Layout Data Sheet

Name:	Typical Layout H_{Gr} max 3,5 m
Country:	
Type:	HYDROMATRIX
Units:	

Preliminary Main Hydraulic Layout Data

Main Data

Runner Diameter	1320 [mm]
Number of Runner Blades	3,0 [-]
Number of Wicket Gates	11,0 [-]
Synchronous Speed	214,3 [rpm]
Runaway Speed	460,0 [rpm]
Gross Head max.	3,5 [m]
Gross Head min.	1,1 [m]
Maximum Plant Output	0,0 [MW]
Max. Plant Discharge	0 [m ³ /s]

Data of one Turbine

Max. Turbine Output (P_{max})	282 [kW]
Discharge per Turbine at P_{max}	10,6 [m ³ /s]
Min. Turbine Output (P_{min})	22 [kW]
Discharge per Turbine at P_{min}	8,1 [m ³ /s]
Axial Thrust	39 [kN]
Bottom Elevation	- [m]
Min. Submergence	0,3 [m]

Annual Energy Calculation

Annual Energy	[GWh]
Average Unit Output	[kW]
Capacity Factor (Energy) (> 40%)	[%]
Theoretical Operation Hours	[h]
Plant Operation Hours	[h]
Capacity Factor (Time) (> 40%)	[%]

Electrical Data

Design Output	297 [kW]
Generator Voltage	- [kV]
Frequency	50,00 [Hz]
Frequency Converter	-

Expected Performance Curve

