



Specifications

Onshore Hydro Electric Turbine

This skid-mounted drive-train is currently installed at the European Marine Energy Centre (EMEC) in Orkney, Scotland.

The plant was grid-connected in June 2012 until the test programme ended in 2015.

Generator	ABB
Type	AMI 400L2L BAFH
Year	2011
Connection	D
IP	55
Phases	3
Insul. Class	F
IC	81w
Number	4617793
Duty	S1
Weight	3310 kg
IM	1001
Cooling Water Flow	8,4 m ³ /h

S1 CONVERTER SUPPLY ACS

542	1300	0	0	0	kw
289	690	0	0	0	V
1240	1240	0	0	0	A
0,87	0,87	0	0	0	PF
25,3	60,3	0	0	0	Hz
1540,1	3640,4	0	0	0	rpm

Energy Recovery Turbine	CALDER A Flowserve Company
ERT Type	HPG-380-100-4
Serial No.	C211003/1
Job No.	A3838 (C211003)
Tag No.	N/A
Mass (kg)	2100
Hydr. Test Press. (Bar)	180
Inlet Flange	8" ANSI Class 900RF
Date Of Construction	09/2011
Outlet Flange	Rect. 875x825 Drilling
Rated Temp. (°C)	30
Rated Press. (Bar)	50-120
Rated Capacity (m ³ /h)	Max. 936
Rated Power	Max. 2745
Rated Speed (rpm)	1500-3600

Transformer	ABB
Type	CTMP/M 12 HA 1600
Year	2009
Connection	Dyn11
Frequency	50 Hz
Load	1600 kVA
Phases	3
Insul. Level	LI 75 AC 28 / AC 8
Cooling	KNAN
Number	1LF1415143
Stand	IEC 60076
Total Weight	5110 kg
Weight Of Oil	1110 kg
Core & Winding	2744 kg
11,000V +2x2.5%	80.0 - 84.0 - 88.4 A
690V	1338.8 A

Onshore Hydro Electric Turbine

**HPU Unit For Bearing
Lubrication**



Spear Valve



Transformer



Flywheel Coupling



Spear Valve



Spear Valve

