

Curtis single-stage with reduction gear

STEAM TURBINES

RB7



GENERAL CHARACTERISTICS

Item	Model	RB7
Max. output	(kW)	3000
Max. speed (turbine shaft)	(rpm)	6000
Speed (output shaft)	(rpm)	1500 , 1800
Rotation of output shaft		CCW facing turbine toward driven machine
Max. inlet steam pressure	(MPaG)	3.3
Max. inlet steam temperature	(°C)	350
Max. exhaust steam pressure	(MPaG)	0.5
Steam inlet bore	(mm)	200
Steam exhaust bore	(mm)	500
Lubrication system		Forced lubrication
Main LO pump	(m³/h x MPaG)	16 × 0.8
Prim. LO pump	(m³/h x MPaG)	7.5 × 0.35
Control system		3 valves nozzle control
Governor		Woodward UG-25+
Gland seal		Labyrinth packing
Weight (without generator)	(kg)	9800

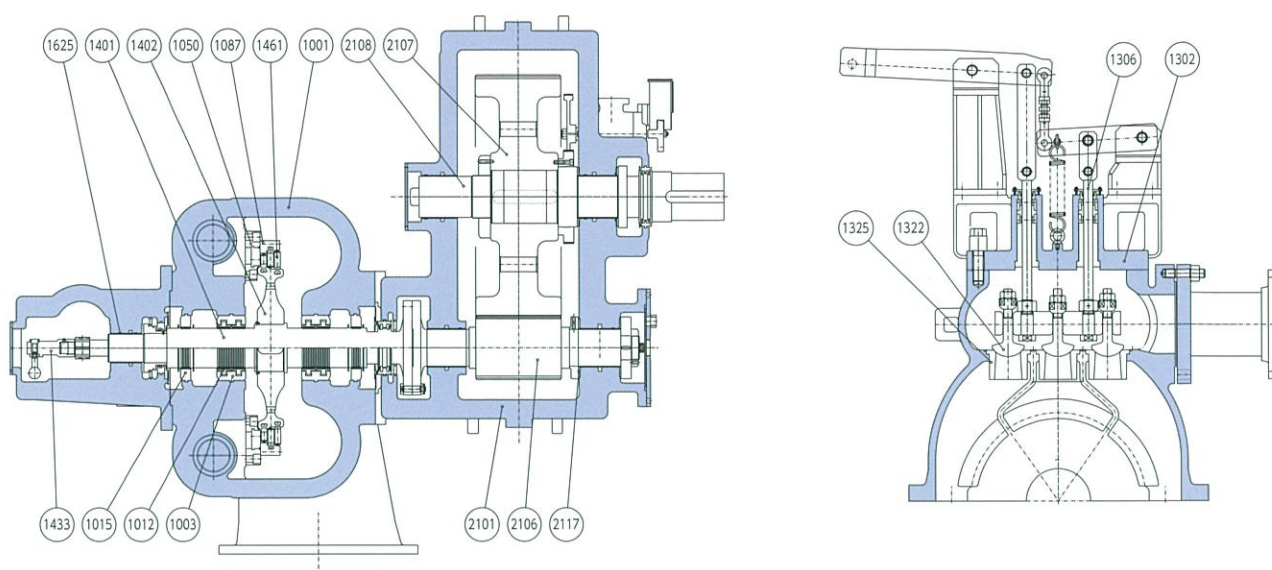
Governor

Max. speed regulation 0.5% , 0~4%
 Max. speed variation ±0.25%
 Max. speed rise 7%
 Speed range +5% ~ - 50%
 NEMA class D

Emergency Trip Device

Overspeed trip 115% of rated speed
 Low LO pressure trip Below 0.05 MPaG
 Turbine rotor axial movement trip ±0.7mm

DESIGN & MATERIALS



PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 TURBINE	PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 TURBINE
		NAME	JIS				NAME	JIS	
1001	TURBINE CASING	CAST STEEL	SCPH2	1SET	1401	TURBINE SHAFT	FORGED STEEL	SF540A	1
1003	PACKING CASE	CARBON STEEL	S35C	1SET	1402	DISC ROTOR	Ni-Cr STEEL	SNC836	1
1012	LABYRINTH PACKING	Ni-Br CASTING		4SETS	1433	OVERSPEED TRIP DEVICE	CARBON STEEL	S35C	1
1015	STEAM GUARD	Ni-Br CASTING		1SET	1461	MOVING BLADE	STAINLESS STEEL	SUS410J1	1SET
1050	NOZZLE	STAINLESS STEEL	SUS403	1	1625	BEARING METAL	AL-ALLOY METAL WITH CARBON STEEL		1SET
1087	STATIONARY BLADE SEAT	CARBON STEEL	S25C	1	2101	REDUCTION GEAR CASING	CAST IRON	FC200	1SET
1302	GOVERNOR VALVE CASING COVER	CAST STEEL	SCPH2	1	2106	PINION	Ni-Cr-Mo STEEL	SNCM439	1
1306	GOVERNOR VALVE STEM	Al-Cr-Mo STEEL	SACM645	2	2107	WHEEL	Cr-Mo STEEL	SCM440	1
1322	GOVERNOR VALVE	STAINLESS STEEL	SUS420J2	3	2108	OUTPUT SHAFT	FORGED STEEL	SF540A	1
1325	GOVERNOR VALVE SEAT	STAINLESS STEEL	SUS420J2	3	2117	THRUST BEARING METAL	WHITE METAL WITH CARBON STEEL	WJ2 S25C	1SET

OUTLINE DIMENSIONS

Dimensions : mm

