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1. Technical Data



Oil cooling:

- Cooling coil
- Oil cooler

Type:

- Oil filter
- Type: PI 2202-124
- Oil filter fine-meshed 25 micron

Water / oil connections:

Nominal width: 65 mm
Nominal pressure: 16 bar

Oil cooler for:

- Fresh water
- Sea water
- Sewage water

Cooling water pressure max.: bar
Quantity of cooling water min.: m³/h
Temperature for cooling water: °C
Cooling water chamber:
Cooling water tube insert:

Oil pressure:

Normal: 7 bar
Minimal: 6,5 bar

Oil temperature:

Normal: 50 °C
Maximal: 60 °C

Oil filling:

- In base plate, content: ~ 2500 dm³
- In governor, content: ~ dm³
- In gear box, content: ~ dm³
- In separate oil container: ~ dm³
- Lubrication oil: DIN 51515 L-TD 68

Oil heating in the oil container:

- Type:
- Steam
 - Electric

Shaft sealing / blade wheel case:

- Carbon
- Labyrinth
- Leaking steam connection pipe: 2"

- Conveyance of sealing steam only for exhaust steam pressure under 14 lb/sq in abs.

Governor valve sealing:

- Labyrinth
- Stuffing box

Speed governor:

Type: Woodward 505E

- Hydraulic
- Electric

Governor action:

-

Speed regulation:

- By hand
- Pneumatic
- Control air pressure: bar
- Electric
- Voltage: 24
- Amperage:

Governor lubrication:

- Together with turbine
- Separately

Additional governor:

Type:

Steam inlet valve (start/emergency stop):

- Mechanical
- Hydraulic
- Piston diameter: 180 mm

Emergency stop release at:

- Overspeed
- Rising backpressure
- Rising oil temperature
- Rising temperature in the bearing
- Loss of oil
- Axial displacement



Limit switch:

- With
- Without
- At emergency stop valve
- Overspeed release valve

Starting device:

- Hand oil pump
 - Auxiliary turbo oil pump
 - Auxiliary electric oil pump
- Type: R65/250
Execution: gear wheel
Switching points: On: 5,5 bar
Off: 8,5 bar
- Pre-heating time when starting
- Yes
 - No
- Quick action start in less than 30 sec.
- Yes
 - No
- Lubrication time when switching off: 8 hours

Remote control:

- Mechanical
- Electric, for start and stop
- Hydraulically
- Pneumatically

Shaft bearing:

- Plain bearing: 1+1 radial 1+41 axial
 - Ball bearing: radial axial
- Measurements of journal for coupling
Ø 85 m6, L = 130 mm
Fitting key according to DIN 6885 Bl. 1

Tachometer:

- Local
 - Remote control
 - Contact tachometer
 - Pneumatic indication
 - Hydraulic indication
- Casing with heat insulation
surface temperature < 50 °C

Manual draining valve:

- Quick action stop valve (- piece)
- Initial steam chanal (- piece)
- Exhaust steam chamber (- piece)
- Pressure stage (- piece)

Manual stop valve:

- For inlet steam trap (- piece)
- For exhaust steam trap (3- piece)
- For quick action stop steam trap(3- piece)
- For pressure stage steam trap(12- piece)

Steam trap:

- Steam inlet (- piece)
- Type:
- Exhaust steam (1- piece)
- Type: UNA25vAO22
- Quick action stop (1- piece)
- Type: BK28
- Pressure stage (4- piece)
- Type: UNA25A002+UNA25A022

Device of rotation of blade wheel:

- By hand
- Electric
- Hydraulic

Warning safety valve:

- Type:
- With
 - Without
- Release pressure bar

Inspection society:

Total weight of turbine: 15000 kg

Consumption of energy for auxiliary drive: 11 kW

Own consumption of turbine: kW

Remarks: Required tightening torque of locking assembly screws: $M_A =$ Nm

