NON-PRESSURE BRAKING RESISTOR

JEVI design and produce load banks for freshwater and seawater (also other media). This load bank is mainly for the oil & gas industry and can be used at drill ships, FPSO, jack-ups, or cable ships. It can be used to dump electrical braking energy from drawworks, top drives, thrusters, cranes, and other electrical systems into a cooling media.

According to your requirements, we can supply this system with instrumentation. This includes temperature sensor(s), flow sensor, level switch, pressure transmitter, pressure gauge, thermostats and drain valve.

SPECIFICATIONS

Type:
- Freshwater cooled without any aggressive additive
- Seawater cooled with aggressive additive

Classification:
- Safe area, non-Atex

Voltage:
- 3-690V AC. Max 1200V DC

Power:
- 856kW at 16 step. Max power is approx 1500kW each insert

Junction box:
- AISI 316L

Protection class:
- IP66

Resistor elements:
- Incoloy 825 if the media is fresh water
- Titanium if the media is sea water

Temperature inlet:
- 0°C

Temperature outlet:
- 65°C (max 95°C) by fresh water. Max 60°C by sea water

Safety thermostat:
- One 113°C thermostat for protection of the resistor elements is mounted. This is with manual reset in the junction box of the resistor

Dimension:
- 3500 x 180 x 400mm

Design/construction:
- The design and construction of the tank is for non-pressure system. There will be 3.1 material certification on the tank. But non welding certificate. By seawater all material in contact with the media is coated

Material:
- AISI 316 stainless steel in 5mm

Test pressure:
- 4000mm water column

Sensor for outlet temperature:
- One PT-100 sensor with 4-20mA amplifier/transmitter at the outlet

Level sensor:
- Level switch placed in the top of the tank, to secure water in the tank before the resistor is in use

Drain flange:
- The tank is with drain flange, without valve

Flange:
- All flanges can be made customized. Normal it is DN or ANSI
OTHERS:

Anodes:
- Freshwater cooled is without anodes
- Seawater cooled is with anodes

Temperature sensor:
- 16 pcs. PT-100 sensor from each step of the resistor.
  Connected to terminals in the common junction box

Instrument junction box:
- 2 instrumentation junction boxes are placed on the tank.
  These junction boxes are for all signals - temperature sensor,
  level switch, safety thermostat and other

Cable ladder:
- On the side of the tank there is placed a cable ladder in AISI
  316 for each resistor

Ladder:
- A “service” ladder is mounted on the tank for entering the
  top of the tank

Cabling for signal:
- Cabling from all signal to common junction box after IEC
  60092. With cable and cable ladder

Cable glands:
- Supplied by client