PRESSURE BRAKING RESISTOR

The modular resistor from JEVI is designed for use in the offshore environment on, for example drill ships, FPSO, jack-ups, or cable ships. The resistor can be used to dump electrical braking energy from drawworks, top drives, thrusters, cranes, and other electrical systems into a cooling media.

The resistor is very compact and requires less space than the traditional resistor design with one big vessel. The design also ensures short delivery time on new resistors and spare parts.

JEVI can supply this system with instrumentation and with valves according to customer requirements. This includes temperature sensor(s), flow sensor, level switch, pressure transmitter, pressure gauge, thermostats, shut off valve, pressure safety valve, air eliminator, and drain valve.

JEVI can also deliver the modular resistor in racks with up to 8 resistors on a common manifold and common instrument junction box. The rack system reduces the requirements for engineering at our customers and at the yard. This ensures quick and problem free installation at the yard.

TECHNICAL DATA

Rated power:
• 200kW-1600 kW

Rated voltage:
• Up to 1200 VDC

Ohm value:
• To customer request

Ingress protection:
• IP66

Ambient temperature:
• -25°C to 55°C

Cooling media:
• Freshwater and seawater

Flow:
• 7.2m³/h for each 200 kW module

Design pressure:
• 10 bar

Test pressure:
• 21 bar

Junction boxes:
• AISI 316L (1.4404)

Frame:
• AISI 316L (1.4404)

Wetted parts:
• AISI 316L (1.4404)

CONFORMITY STANDARDS

• ABS
• DNV
• EN 13445 (European Pressurized equipment standard)
• CR13 (Brazilian Pressurized equipment standard)
• IEC 60092 (Electrical Installations on ships)
• ATEX/IECEx
• CCS
• EAC

See advantages compared to traditional resistor on page 2
ADVANTAGES COMPARED TO TRADITIONAL RESISTOR DESIGN

- Reduction of foot print including service space by 30-50% depending on configuration
- Weight reduction of approx. 20%
- Reduced down time in case of unplanned service due to new bus-bar design
- Improved quality due to the effect of scale (standardized concept)
- Delivery time on spare resistor modules reduced by 80%
- Possibility of installing the equipment in areas without access to lifting equipment due to low weight of resistor inserts

TOP VIEW OF MODULAR RESISTOR

Recommended Service Space 600 mm
(This space can be voided if there is min. 1800 mm of free space above the resistor to remove the resistor module)

1200 kW Module Resistor

Recommended Service space 800 mm

Note: Resistor height is 1900 mm

TOP VIEW OF TRADITIONAL RESISTOR

Recommended Service Space Min. 600 mm

1200 kW Standard Resistor

Recommended Service Space Min. 2100 mm