Traction Transformer

Shell-type Transformer

- Less oil required
- Lightweight
- Smaller size (compact)

Shell Technology

Shell form (form fit tank) → Compact and lightweight

Shell (form fit tank) technology

- Less oil required
- Lightweight
- Smaller size (compact)

- Oil cooler
- Dial thermometer with contact
- Oil pump
- Metallic bellows conservator
- Self resetting-type pressure relief device
- Primary bushing
- Oil flow relay

Core
- Core (earth voltage)

Coil
- Oil and atmosphere
- Oil change
- Breathing
- Metallic bellows conservator

Insulating distance

Core (earth voltage)
- Tank (earth voltage)

Oil Preservation System

Metallic bellows sealing system

- Less maintenance
- Higher reliability

- Oil and atmosphere
- Oil change
- No contact
- Not required

- Oil flow relay
- Self resetting-type pressure relief device
- Primary bushing

Breathing

Minimum size

Core (earth voltage)
- Tank (earth voltage)

ore-type technology

- Core (earth voltage)
- Tank (earth voltage)

Insulating distance

Metallic bellows conservator

Breathing

Minimum size

Core (earth voltage)
- Tank (earth voltage)

reather-type system

- Oil and atmosphere
- Oil change
- Contact
- Required

- Breathing
- Minimum size

- Metallic bellows conservator
- Core (earth voltage)
- Tank (earth voltage)
Wide Applications

Coordinated design with propulsion system
- Characteristics are suitable to PWM converter systems
- Design conforms to system requirements (with multiple secondaries, reactors, etc.)

Various mounting options
Allows mounting various configurations

Rooftop
Onboard
Undercarriage

Various insulating oils
Metallic bellows sealing allows compatibility with various insulating oils
- Mineral oil
- Ester oil
- Silicon oil

Natural air cooling
- Ensures low noise and easy maintenance
- Designed based on well-proven thermal simulation

Oil preservation system
- Prevents deterioration
- Allows stable insulation
- Prevents fire

Representative Products

For high speed railways
Rating: 4,160kVA, 25kV-60Hz

For locomotives
Rating: 3,490kVA, 20kV-50/60Hz

For EMUs (natural air cooling-type product)
Rating: 730kVA, 20kV-50Hz

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

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