



48TL80



48TL160H



48TL200

Ilustračné foto

Technical Features

- Steel cell case and double stainless steel device case
- Integrated system (BMS) for monitoring, diagnostics and data logging
- User interface on front panel
- Ready for remote diagnostics and monitoring
- Compatible with any DC power supply and standard telecom rectifiers
- Scalable with parallel operation
- No memory effect
- BMS diagnostics alert on anomalies and disconnect the device in case of serious failure
- Supplementary protection with an independent circuitry in the event of BMS failure
- Integrated low voltage disconnect (LVD)
- **48TL-H models:** optimized insulation to guarantee lowest thermal loss and maximize the system energy efficiency Ideal for applications that require medium to very long discharge

FIAMM Manufacturing

- Made in Switzerland
- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System
- Over 10 years experience with sodium nickel chloride technology

Environment

- Zero ambient emission: can be installed in a sealed environment
- System outside temperature only few degrees above the ambient temperature

- Efficient material usage and 100% recyclable: stainless steel, nickel, iron, salt, ceramic
- RoHs compliant

Sodium Nickel Chloride Technology

- Use of sodium and nickel as active materials, with solid ceramic electrolyte
- Active materials contained in sealed steel sheet cells
- "hot device" - internal operating temperature around 300°C / 572°F
- Made with 2.58 Volt cells with 140 Wh/kg / 310Wh/lb and 280 Wh/liter specific density
- Proven technology for energy storage and clean powering of electric vehicles

Applications and Key Benefits

- Constant performance at -20° to +60°C / -4°F to 140°F
- No cooling required
- >3000 cycles at 80% DoD
- 100% maintenance free in operation
- Allows remote monitoring
- Specific energy: 70% lighter and 30% smaller than conventional backup systems
- Very low total cost of ownership (TCO) compared to other backup technologies
- No outgassing and zero ambient emission
- Very long shelf life without maintenance: stores energy indefinitely when not connected

48V sodium nickel chloride energy backup system, specifically designed for telecom application

Ideal for:

- Telecom central office sites with stringent energy density requirement
- Telecom outdoor cabinets in locations with elevated or extreme temperature
- Installation with poor grid connection and frequent power outages
- Installation in locations where regular on-site maintenance is costly or not possible

Applicable Standards

- EN 61000-6-1
- CE
- CAS Nr 7440-02-0 Nickel specification
- NEBS Level-1 DA-1976
- 48TL200: certified
- 48TL120 - 48TL160 - 48TL160H: designed to comply

General Characteristic

- Nominal voltage: 48 VDC
- Open circuit voltage: 51,6 V
- Bus voltage range: 53 to 59 V
- Cycles: > 3000 cycles at 80% (DoD)
- Operating temperature range: -20 °C / +60 °C continuous

Model	Nominal Capacity	Nominal Energy	Gravimetric Energy Density	Volumetric Energy Density	Max. Continuous Discharge Current	Warm-up Time to be Operational	Interface
	C4 / 42V						
FIAMM 48TL range							
48TL80	80 Ah	3650 Wh	81 Wh/kg 37 Wh/lb	80 Wh/l	50 Amps	< 20 hours	RS 232 (option RS 485)
48TL120	120 Ah	5700 Wh	74 Wh/kg 34 Wh/lb	64 Wh/l	90 Amps	< 14 hours	RS 485 / USB Ethernet / CAN
48TL160	160 Ah	7700 Wh	85 Wh/kg 38 Wh/lb	86 Wh/l	120 Amps	< 14 hours	RS 485 / USB Ethernet / CAN
48TL200	200 Ah	9600 Wh	91 Wh/kg 42 Wh/lb	108 Wh/l	150 Amps	< 14 hours	RS 485 / USB Ethernet / CAN
FIAMM 48TL-H range							
48TL160H	160 Ah	7700 Wh	86 Wh/kg 39 Wh/lb	83 Wh/l	65 Amps	< 13 hours	RS 485 / USB Ethernet / CAN

Model	Front	Depth	Height	Weight
48TL80	260 mm	550 mm	320 mm	45 kg
48TL120	496 mm	558 mm	320 mm	77 kg
48TL160	496 mm	558 mm	320 mm	91 kg
48TL160H	496 mm	578 mm	325 mm	90 kg
48TL200	496 mm	558 mm	320 mm	105 kg



Illustrative photo

A2B, s.r.o. reserves the right to change any specifications without prior notice (V122013)

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