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SPECIFICATIONS

High Voltage Shut-off Procedure

▷ Specifications

Item	Specifications	Remarks
Inverter Capacitor Discharge Status	30V or Below	It can be checked with a multi tester.

High Voltage Battery Handling Guide

Specifications

Item	Specifications	Remarks
Resistance on the Service Plug Cable Side (Ω)	1 or under (20°C)	It can be checked with a multi tester.
Main Fuse Resistance (Ω)	1 or under (20°C)	It can be checked with a multi tester.
High Voltage Main Relay Welding Condition	NO	It can be checked via KDS.
High Voltage Main Relay Welding Condition	∞Ω (20°C)	It can be checked with a multi tester.
Insulation Resistance (kΩ)	300 - 1000	It can be checked via KDS.
Insulation Resistance (M Ω) [Actual Measurement]	2 or more	Megaohm Tester
High Voltage Abnormal Voltage Inspection (V) [Measurement Range : Modules # 1 to 5]	120 - 207	It can be checked with a multi tester.
High Voltage Abnormal Voltage Inspection (V) [Measurement Range : Combined value of the modules # 1 to 5]	Extended type 240 - 412	It can be checked with a multi tester.

High Voltage Battery System

 \triangleright Extended type

Item	Specifications	Remarks
Cell Configuration	98	-
Rated Voltage (V)	352.8 (240 - 412.8)	
Nominal Capacity (Ah)	180	-
Energy (kWh)	64	-
Weight (kg)	445	-
Cooling system	Water Cooled	Forced Cooling of the Cooling Motor

Item	Specifications	Remarks
SOC (%)	5 - 95	It can be checked via KDS.
Cell Voltage (V)	2.5 - 4.3	It can be checked via KDS.
Pack Voltage (V)	240 - 412.8	It can be checked via KDS.
Voltage Deviation between Cells (mV)	40 or Below	It can be checked via KDS.
Insulation Resistance (kΩ)	300 - 1000	It can be checked via KDS.
Insulation Resistance (MΩ) [Actual Measurement]	2 or more	Megaohm Tester

High Voltage Battery Control System

BMS ECU

▷ Specifications		
Item	Specifications	Remarks
C-CAN Terminating Resistance (Ω)	Approx. 60	Refers to the combined resistance (BMS ECU \leftrightarrow Inverter)
C-CAN Terminating Resistance (Ω)	Approx. 120	It refers to the resistance value of a BMS ECU unit.

Main Relay

Specifications

	Item	Specifications
	Rated Voltage (V)	450
In Contact	Rated Current (A)	150A
	Static Pressure Drop (V)	0.15 or under (200A)
Ceil	Operation Voltage (V)	12
Coil	Resistance (Ω)	30.6 - 37.4 (20°C)

Item	Specifications	Remarks
High Voltage Main Relay Welding Condition	NO	It can be checked via KDS.

High Voltage Main Relay (-) Switch Resistance (Ω)	×	It can be checked with a multi tester.
High Voltage Main Relay Operation Noise	"Tick," "Tok"	It can be checked via KDS.
High Voltage Main Relay Coil Resistance (Ω)	21.6 - 26.4 (20°C)	It can be checked with a multi tester.

Pre-charge Relay

Specifications

	Item	Specifications
	Rated Voltage (V)	450
In Contact	Rated Current (A)	10
	Voltage Drop (V)	0.5 or under (10A)
Ceil	Operation Voltage (V)	12
Coil	Resistance (Ω)	92.7 - 113.3 (20°C)

Item	Specifications	Remarks
High Voltage Main Relay (-) Switch Resistance (Ω)	∞	It can be checked with a multi tester.
Pre-charge Relay Operation Noise	"Tick," "Tok"	It can be checked via KDS.
Pre-charge Relay Coil Resistance (Ω)	54 - 66 (20°C)	It can be checked with a multi tester.

Pre-Charge Resistor

Specifications

	Item	Specifications
Coil	Rated Capacity (W)	60
Coll	Resistance (Ω)	40

Battery Current Sensor

Specifications

Current (A)	Output Voltage (V)
-500 (Charging)	0.5
-250 (Charging)	1.5
0	2.5
250 (Discharged)	3.5
500 (Discharged)	4.5

Low Current (A)	Output Voltage (V)
-50	0.5
-25	1.5
0	2.5
25	3.5
50	4.5

Item	Specifications	Remarks
Current Sensor Output Terminal Voltage (V)	Approx. 2.5 ± 0.1	It can be checked with a multi tester.
Current Sensor Power Terminal Voltage (V)	Approx. 5 ± 0.1	It can be checked with a multi tester.

Main Fuse

▷ Specifications

 Item
 Item

 Rated Voltage (V)
 Item

Rated Current (A)		400 (DC)
Item	Specifications	Remarks

Specifications

450 (DC)

Battery Temperature Sensor

Specifications

Temperature (°C)	Resistance Value (kΩ)	Deviation (%)
-40	158.6	-2.7 - +2.8
-30	90.09	-2.7 - +2.8
-20	53.21	-2.7 - +2.8
-10	32.56	-2.7 - +2.8
0	25.78	-2.7 - +2.8

10	13.39	-2.6 - +2.7
20	8.95	-2.6 - +2.7
30	6.1	-2.5 - +2.6
40	4.2	-2.5 - +2.6
50	3.06	-2.4 - +2.5
60	3.011	±2.4
70	1.64	-2.3 - +2.4

High Voltage Battery Heater Relay

Specifications

	Item	Specifications
	Rated Voltage (V)	450
In Contact	Rated Current (A)	10
	Static Pressure Drop (V)	0.5 or under (10A)
0-1	Operation Voltage (V)	12
Coil	Resistance (Ω)	54 - 66 (20°C)

Item	Specifications	Remarks
High Voltage Battery Heater Relay Switch Resistance (Ω)	∞	It can be checked with a multi tester.
High Voltage Battery Heater Relay Operation Noise	"Tick," "Tok"	It can be checked via KDS.
High Voltage Battery Heater Relay Coil Resistance (Ω)	54 - 66 (20°C)	It can be checked with a multi tester.

High Voltage Battery Heater Fuse

▷ Specifications	
Item	Specifications
Current (A)	10

High Voltage Charging System

On-Board Charger (OBC)

Specifications

Item	Specification
Maximum Power Output (kW)	7.2
Power Density (kVA/ℓ)	0.57
Size (mm)	327 X 367 X 105
ICCB (kW)	Approx. 1.4
EVSE (kW)	6.6

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