

## **SPARE PART LIST**

Changes to the previous version (R-5397-EN/A) are highlighted with blue color.

### **1. Collimator transformer unit (option)**

<i>Component / board name</i>	<i>Part No.</i>
LCCOL board	R-4833-1
LCCOL fuse F1 (T3.15A)	P011292
LCCOL fuse F2 (T10A)	P011293
LCCOLTR	R-5121-1

### **2. Console (LCDTC1)**

<i>Component / board name</i>	<i>Part No.</i>
Display	P003007
Exposure switch, external, hand-held	R-5180-1
Keyboard with front panel	R-5133-1
TPCON board <sup>1</sup>	R-1881-1

### **3. Controller unit**

<i>Component / board name</i>	<i>Part No.</i>
C8 shift capacitor 30uF 450V	R-5125-1
LCAEC board	R-4840-1
LCAEC fuse F1 (T1A)	P011288
LCCHC board	R-4827-1
LCCON board	R-4815-1
LCCON / U12 IC	R-5040-1
LCCON / U16 IC	R-5039-1
LCCON / U27 IC for 125kV, 32kW generator	R-5041-125 R-5041-32
LCCON / U27 IC for 125kV, 40kW generator	R-5041-125 R-5041-40
LCCON / U27 IC for 125kV, 50kW generator	R-5041-125 R-5041-50
LCCON / U27 IC for 150kV, 32kW generator	R-5041-150 R-5041-32
LCCON / U27 IC for 150kV, 40kW generator	R-5041-150 R-5041-40
LCCON / U27 IC for 150kV, 50kW generator	R-5041-150 R-5041-50
LCCTR board <sup>1</sup>	R-4819-1
LCRFP board – without LCCHC (line powered generators)	R-4811-1N
LCRFP board – with LCCHC (energy storage version)	R-4811-1K
LCRFP fuse F1 (T100mA)	P011289
LCRFP fuse F2, F9 (T3.15A)	P011292

<sup>1</sup> Software version is important!



<i>Component / board name</i>	<i>Part No.</i>
LCRFP fuse F3, F5, F10 (T1A)	P011288
LCRFP fuse F4, F7, F8 (T315mA)	P011290
LCRFP fuse F6 (T10A)	P011293
LCTIF board	R-4843-2
LCUPS board - +5V	R-4837-1P5
LCUPS board - +15V	R-4837-1P15
LCUPS board - -15V	R-4837-1M15
PS1 power supply	R-5155-1

#### **4. Device connection unit (option)**

<i>Component / board name</i>	<i>Part No.</i>
LCBSC board with wires	R-5313-2

#### **5. High voltage transformer**

<i>Component / board name</i>	<i>Part No.</i>
HFHVT6 high voltage transformer for 400VAC and energy storage generators	R-5044-1
HFHVT6E high voltage transformer for 208VAC and 240VAC line powered generators	R-5044-2
L1 inverter output coil (for 400VAC mains voltage generators)	R-4963-1
L1 inverter output coil (for 208-240VAC mains voltage line powered and energy storage generators)	R-4970-1
L2 inverter output coil (for 400VAC mains voltage generators)	R-4965-1
L2 inverter output coil (for 208-240VAC mains voltage line powered and energy storage generators)	R-4971-1

#### **6. Inverter unit and capacitor bank**

<i>Component / board name</i>	<i>Part No.</i>
C1..C6, C8..C9 DC buffer capacitor (for 400VAC mains voltage)	P007803
C1..C6, C8..C9 DC buffer capacitor (for 208-240VAC mains voltage)	P007804
C1..C6, C8..C9 DC buffer capacitor (for energy storage version)	P010936
C7 inverter output capacitor (for 400VAC mains voltage)	P008377
C7 inverter output capacitor (for 208-240VAC mains voltage)	P012232
D1, D2, D3 diode module	P000374
HFIDD board	R-1952-2
HFIGB board	R-1953-2
HFRCB board	R-3027-1
LCCOM board	R-4807-1
LCPSC board	R-4823-1
SW1 thermal switch (with cable)	R-5126-1
T1, T2 IGBT module	P007569
TM1, TM2 thyristor module	P003561
TXAVB board	R-1854-1

<i>Component / board name</i>		<i>Part No.</i>
TXDMP coil set	blue coil: red coil:	R-5122-2 R-5123-2
TXDMP core set	U-core: I-core:	2 pcs. P001998 + 2 pcs. P001999
TXRDV board		R-0942-1
TXSRC board for TM1		R-1331-4
TXSRC board for TM2		R-1331-3

## 7. Power input unit

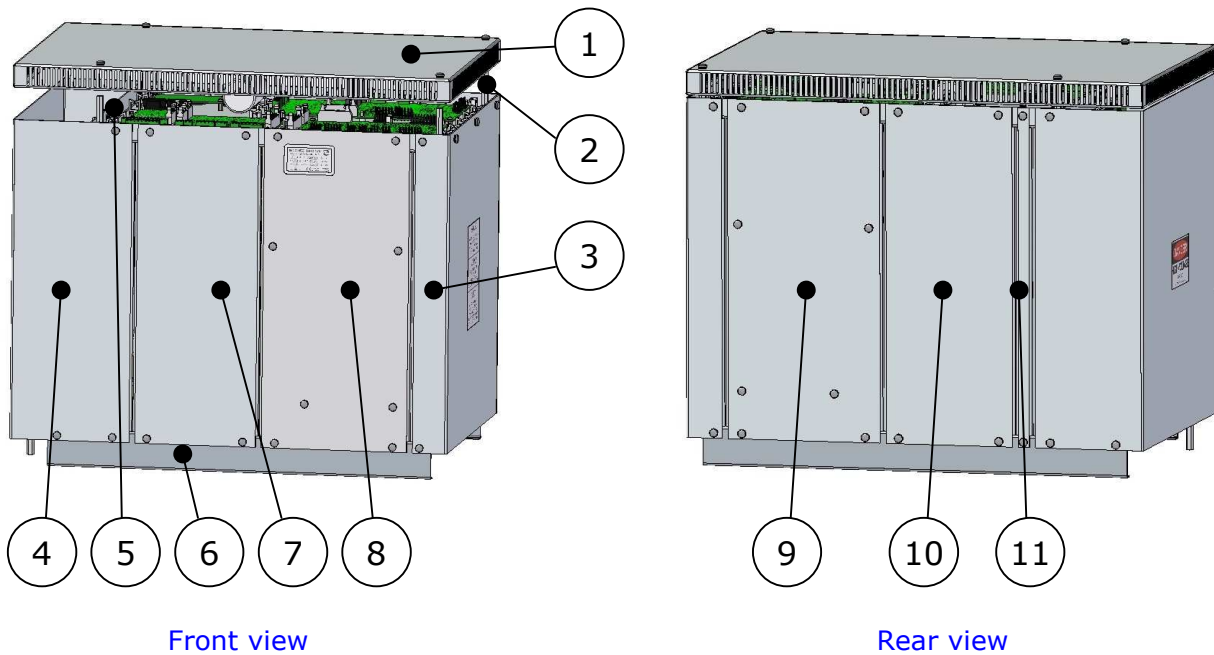
<i>Component / board name</i>		<i>Part No.</i>
F1, F2, F3 fuse (60A)		P012437
F1, F2, F3 fuse holder (3x60A)		P011225
F4, F5 fuse (T6.25A)		P011294
F4, F5, F6 fuse holder		P009649
F6 fuse (T15A)		P009650
KM1 circuit breaker (3x40A: for 400VAC mains voltage, 32kW generators)		P011823
KM1 circuit breaker (3x63A: for 400VAC mains voltage, 50kW generators)		P011412
KM1 circuit breaker (16A: for energy storage generators)		P011189
KM2 circuit breaker (16A)		P011189
LCCBC board		R-4831-1
N / L2 OUT terminal block element		P002771
R1 charger resistor (line powered generators)		R-5119-1
R1 discharge resistor (energy storage version)		P011972
RY1 main contactor		P001625
RY2 relay		P011163
RY2 relay socket:		P011164
clamp:		P011165
TR1 charger transformer		R-4719-3
ZSZ1 EMI filter		P011971

## 8. Mechanical components

### 8.1 Generator covers

<i>Fig. No.</i>	<i>Generator covers</i>	<i>Part No.</i>
1	Top cover	R-4592-2
2	Distance roller for top cover (M5x57)	R-0136-5
3	Inverter unit cover (little "U") + sticker "WARNING"	R-4552-2 + R-3355-1
4	High voltage transformer cover (big "U") for line powered generators	R-4591-2
	High voltage transformer cover (big "U") for energy storage generators	R-4591-3
	+ sticker "DANGER"	+ R-3354-1
5	Controller unit's plate	R-4542-2
6	Base frame	R-4544-2

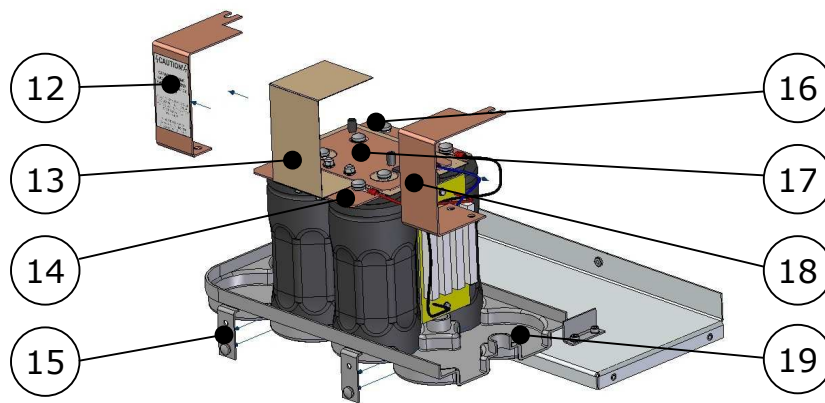
Fig. No.	Generator covers	Part No.
7	Power input unit cover	R-4664-2
8	Inverter unit frame (front side)	R-4543-31
9	Inverter unit frame (rear side)	R-4543-21
10	High voltage transformer cover	R-4590-2
11	Narrow supporting plate	R-4546-2



## 8.2 Capacitor bank components

Fig. No.	Capacitor bank components	Part No.
12	Connection bus from capacitor bank to IGBT "+" for line powered generators	R-4582-1
	Connection bus from capacitor bank to IGBT "+" for energy storage generators	R-4580-1
	+ sticker "CAUTION" (for line powered generators)	R-5102-1
13	Plastic insulator for 400VAC generators (for 4 cap., 1 sheet)	R-5080-1
	Plastic insulator for 208-240VAC line powered generators (for 8 cap., 1 sheet)	R-5080-3
	Plastic insulator for energy storage generators (1 sheet)	R-5090-1
14	Capacitor bank "+" bus for 400VAC generators (for 4 cap.)	R-5147-2
	Capacitor bank "+" bus for 208-240VAC generators (for 8 cap.)	R-5089-2
	Capacitor bank "+" bus for energy storage generators	R-4578-2
15	Fixing plate (line powered generators only)	R-4596-1
16	Bus for serial connection (400VAC generators only)	R-2235-1

<i>Fig. No.</i>	<i>Capacitor bank components</i>	<i>Part No.</i>
17	Capacitor bank "-" bus for 400VAC generators (for 4 cap.)	R-2234-2
	Capacitor bank "-" bus for 208-240VAC generators (for 8 cap.)	R-5086-2
	Capacitor bank "-" bus energy storage generators	R-4577-2
18	Connection bus from capacitor bank to IGBT "-" for line powered generators	R-4581-1
	Connection bus from capacitor bank to IGBT "-" for energy storage generators	R-4579-1
	+ sticker "CAUTION" (for line powered generators)	R-5102-1
19	Plastic holder for capacitors	R-2255-1



**8.3 Board and cable mounting components**

<i>Fig. No.</i>	<i>Board and cable mounting components</i>	<i>Part No.</i>
20	Plastic spacer for board mounting	P010451
21	Metal spacer for board mounting	R-0134-8
22	Plastic cable clip	P011348

