To EXTERNAL BYPASS (sheet 4)

To J1 rc + interface AC card 2077 (sheet 3)

*0397

Cu bar

N

9....2074.02. RFI card

L1B

L2B

L3B

To J14 interface and inverter control card 2076 (sheet 3)

*0472   161   160

J14

cu bar

cu bar

cu bar

SWMB

FC22 FC23 FC24 FC29 FC30 FC31

*0314

*0215

J13

J1A   J1

STATIC SWITCH

L1BO   21A   21A

L2BO   22A   22A

L3BO   23A   23A

to TLI-SWOUT (sheet 2)

to SWOUT (sheet 2)

*0397

to N SWOUT(sheet 2)

*0397

to N SWOUT(sheet 2)

To J3 power supply card 2120 (sheet 3)

*0389

J3

SWBY

29   L1B
30   L2B
31   L3B

STATIC SWITCH

9....2078.01. Statich Switch driver

*0383

J7   X3 X3   J5

From J5 interface and inverter control card 2076 (sheet 3)

9....2099.01. Battery SCR driver

J7   X6 X6   J7

*0314   *0386

From J7 rectifier control card 2075 (sheet 3)
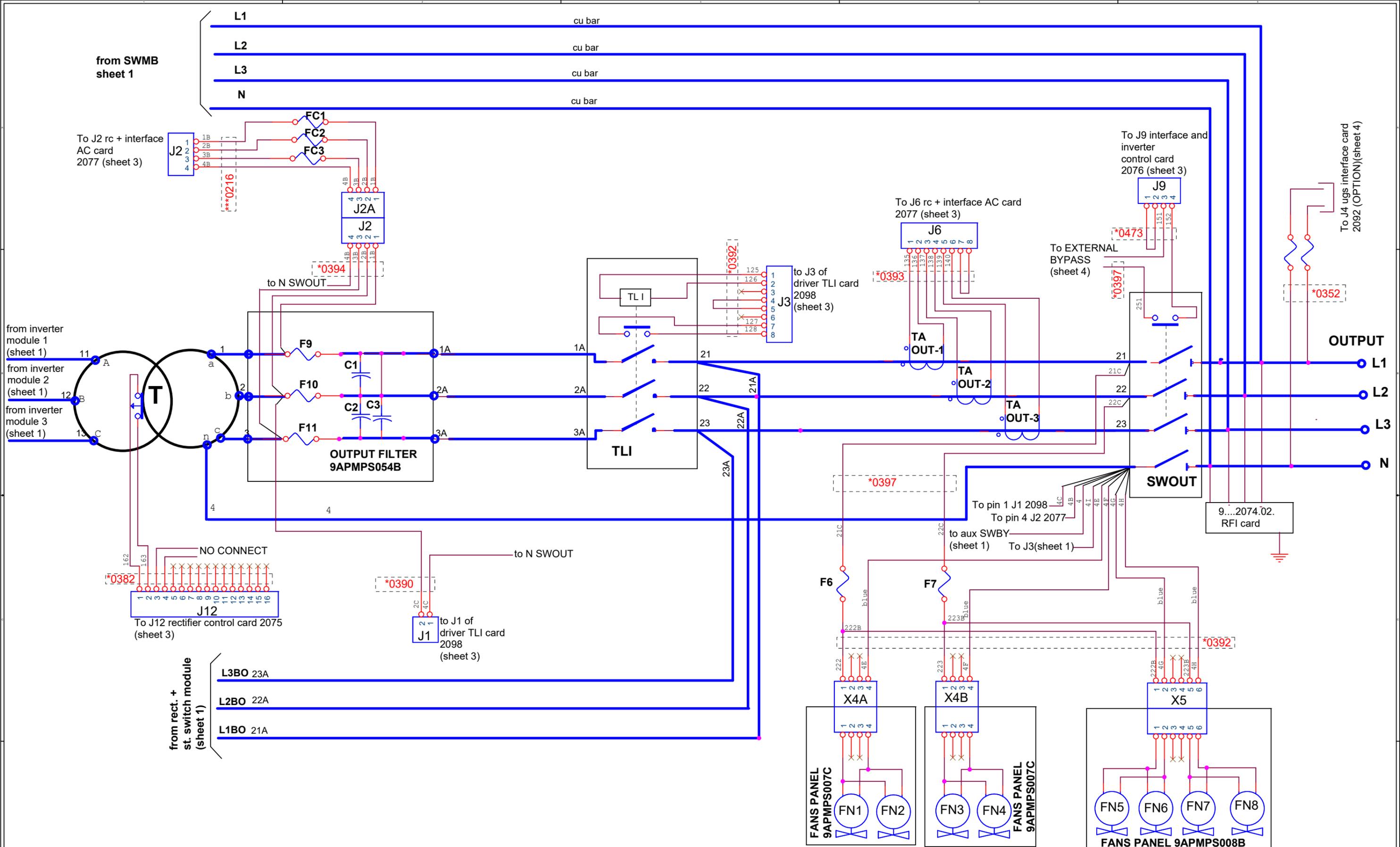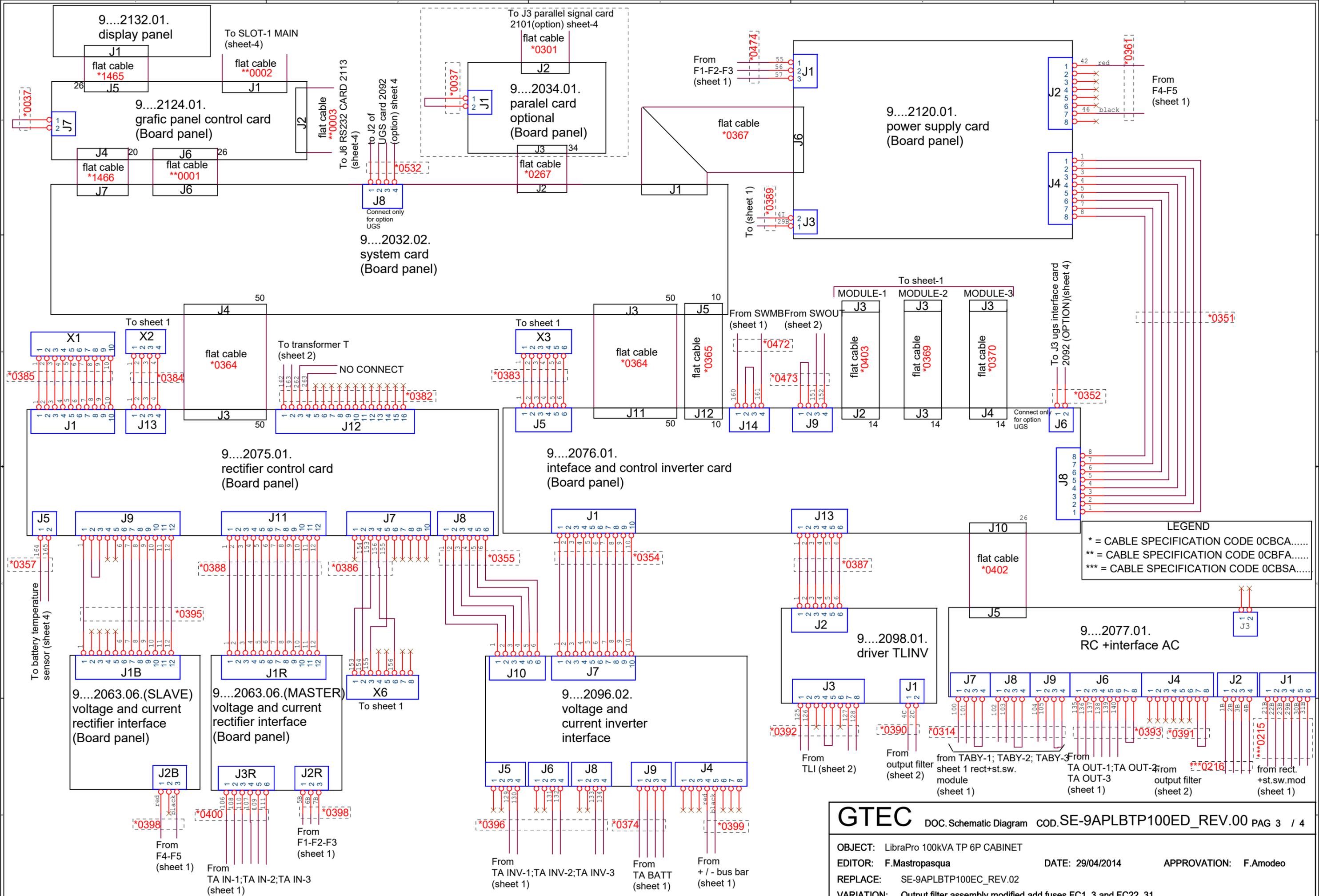
LEGEND
* = CABLE SPECIFICATION CODE 0CBCA......
** = CABLE SPECIFICATION CODE 0CBFA......
*** = CABLE SPECIFICATION CODE 0CBSA......

From interface and inverter control card 2076 (sheet 3)

To J1 power supply card 2120 (sheet 3)

J1

J2R

To J2 voltage and current rectifier interface card 2063 MASTER(sheet 3)

*0474   *0398

REMOVABLE BARS

F1 F2 F3

To J7-J8-J9 rc + interface AC card 2077 (sheet 3)

J7
J8
J9

*0400   *0314

J3R

*0397

RECTIFIER + STATICH SWITCH MODULE SE-9APMPS013B

+   40   41   −

J2   J3   J4

cu bar

red 34   red 34   red 34

flat cable *0403   flat cable *0369   flat cable *0370

+   +   +

9....2079.01. driver inverter card

J3   J3   J3

INVERTER MODULE SE-9APMPS015E   INVERTER MODULE SE-9APMPS014E   INVERTER MODULE SE-9APMPS015E

32 black   32 black   32 black

cu bar

5th harmonic filter OPTIONAL SE-9APMPS040...

To J3 voltage and current rectifier interface card 2063 MASTER(sheet 3)

L1

L1   L2   L3

TA IN-1
TA IN-2
TA IN-3

SWIN

5   6   7

A A1   B B1   C C1

8 L1   9 L2   10 L3

RECTIFIER

11   12   13

TA INV-1   TA INV-2   TA INV-3

9....2074.02. RFI card

To J2 power supply card 2120 (sheet 3)

J2

From J13 rectifier control card 2075 (sheet 3)

*0384

J13   X2 X2   J4

9....2064.01. driver rect.SCR card

*0399   red black

J4

*0396   *0396   *0396

to A of transformer (T) (sheet 2)   to B of transformer (T) (sheet 2)   to C of transformer (T) (sheet 2)

J5   J6   J8

To voltage and current inverter interface card 2096 (sheet 3)

To J2 voltage and current rectifier interface card 2063 SLAVE(sheet 3)

J2B

*0398

red black

*0361

From J1 rectifier control card 2075 (sheet 3)

J1   X1 X1   J1

*0385   *0314

To J9 voltage and current inverter interface card 2096 (sheet 3)

J9

F4   F5

*0374

*0397

BATTERY

+   39   39   cu bar

TA BATT

black

37   37   F8   cu bar

SCR1

**Title block:**

GTEC   DOC. Schematic Diagram   COD. SE-9APLBTP100ED_REV.00 PAG 1 / 4

OBJECT:   LibraPro 100kVA TP 6P CABINET

EDITOR:   F.Mastropasqua     DATE: 29/04/2014     APPROVATION:   F.Amodeo

REPLACE:   SE-9APLBTP100EC_REV.02

VARIATION:   Output filter assembly modified,add fuses FC1..3 and FC22..31

from SWMB sheet 1

L1    cu bar
L2    cu bar
L3    cu bar
N    cu bar

To J2 rc + interface AC card 2077 (sheet 3)

J2
FC1
FC2
FC3
***0216
J2A
J2
*0394
to N SWOUT

To J9 interface and inverter control card 2076 (sheet 3)

J9
*0473
To EXTERNAL BYPASS (sheet 4)

To J4 ugs interface card 2092 (OPTION)(sheet 4)

*0352

To J6 rc + interface AC card 2077 (sheet 3)
J6
*0393

*0392
125 126 127 128
to J3 of driver TLI card 2098 (sheet 3)
J3

TL I

from inverter module 1 (sheet 1)
from inverter module 2 (sheet 1)
from inverter module 3 (sheet 1)

T

F9 F10 F11
C1 C2 C3
OUTPUT FILTER 9APMPS054B

TLI

TA OUT-1
TA OUT-2
TA OUT-3

OUTPUT
L1
L2
L3
N

SWOUT

9....2074.02. RFI card

*0397

NO CONNECT
*0382
J12
To J12 rectifier control card 2075 (sheet 3)

to N SWOUT
*0390
J1
to J1 of driver TLI card 2098 (sheet 3)

To pin 1 J1 2098
To pin 4 J2 2077
to aux SWBY (sheet 1)
To J3(sheet 1)

F6
F7

*0392

from rect. + st. switch module (sheet 1)
L3BO 23A
L2BO 22A
L1BO 21A

X4A
X4B
X5

FANS PANEL 9APMPS007C
FN1 FN2
FANS PANEL 9APMPS007C
FN3 FN4
FANS PANEL 9APMPS008B
FN5 FN6 FN7 FN8

GTEC   DOC. Schematic Diagram   COD. SE-9APLBTP100ED_REV.00 PAG 2 / 4

OBJECT:   LibraPro 100kVA TP 6P CABINET
EDITOR:   F.Mastropasqua    DATE: 29/04/2014    APPROVATION:   F.Amodeo
REPLACE:   SE-9APLBTP100EC_REV.02
VARIATION:   Output filter assembly modified,add fuses FC1..3 and FC22..31

LEGEND
* = CABLE SPECIFICATION CODE 0CBCA......
** = CABLE SPECIFICATION CODE 0CBFA......
*** = CABLE SPECIFICATION CODE 0CBSA.....

9....2132.01.
display panel

J1
flat cable
*1465

26      J5

To SLOT-1 MAIN
(sheet-4)

flat cable
**0002

J1

To J3 parallel signal card
2101(option) sheet-4

flat cable
*0301

J2

9....2034.01.
paralel card
optional
(Board panel)

J3      34

flat cable
*0267

J2

*0037

*0037

J1

J7

9....2124.01.
grafic panel control card
(Board panel)

J4      20        J6      26

flat cable
*1466

flat cable
**0001

J7        J6

J2

flat cable
**0003

To J6 RS232 CARD 2113
(sheet-4)

to J2 of
UGS card 2092
(option) sheet 4

*0532

J8
Connect only
for option
UGS

9....2032.02.
system card
(Board panel)

flat cable
*0367

J6

J1

From
F1-F2-F3
(sheet 1)

*0474

55
56
57

1
2
3

J1

9....2120.01.
power supply card
(Board panel)

*0361

42    red

1
2
3
4
5
6
7
8

46    black

J2

From
F4-F5
(sheet 1)

1
2
3
4
5
6
7
8

J4

To (sheet 1)

*0389

4I
29B

2
1

J3

To sheet-1

MODULE-1      MODULE-2      MODULE-3

J4      50

flat cable
*0364

To transformer T
(sheet 2)

NO CONNECT

J3      50

X1

1 2 3 4 5 6 7 8 9 10

X2

1 2 3 4

*0385

*0384

To sheet 1

flat cable
*0364

X3

1 2 3 4 5 6

*0383

J3      50    J5    10

flat cable
*0365

From SWMB  From SWOU
(sheet 1)    (sheet 2)

*0472

*0473

J3        J3        J3

flat cable
*0403

flat cable
*0369

flat cable
*0370

To J3 ugs interface card
2092 (OPTION)(sheet 4)

*0351

To J3 ugs interface card
2092 (OPTION)(sheet 4)

*0352

J1

1 2 3 4 5 6 7 8 9 10

J13

1 2 3 4

J3      50

To transformer T
(sheet 2)

*0382

J12

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

J5

1 2 3 4 5 6

J11      50    J12    10

J14        J9

1 2 3 4    1 2 3 4

J2        J3        J4
14        14        14

Connect only
for option
UGS

J6

1 2

9....2075.01.
rectifier control card
(Board panel)

9....2076.01.
inteface and control inverter card
(Board panel)

J8

8 7 6 5 4 3 2 1

J5

1 2

J9

1 2 3 4 5 6 7 8 9 10 11 12

J11

1 2 3 4 5 6 7 8 9 10 11 12

J7

1 2 3 4 5 6 7 8 9 10

J8

1 2 3 4 5 6

J1

1 2 3 4 5 6 7 8 9 10

J13

1 2 3 4 5 6

J10      26

*0357

*0388

*0386

*0355

*0354

*0387

flat cable
*0402

To battery temperature
sensor (sheet 4)

*0395

LEGEND

* = CABLE SPECIFICATION CODE 0CBCA......
** = CABLE SPECIFICATION CODE 0CBFA......
*** = CABLE SPECIFICATION CODE 0CBSA......

J1B

1 2 3 4 5 6 7 8 9 10 11 12

J1R

1 2 3 4 5 6 7 8 9 10 11 12

X6

1 2 3 4 5 6 7 8

J10

1 2 3 4 5 6 7 8 9 10

J7

1 2 3 4 5 6 7 8 9 10

J2

1 2 3 4 5 6

J5

9....2063.06.(SLAVE)
voltage and current
rectifier interface
(Board panel)

9....2063.06.(MASTER)
voltage and current
rectifier interface
(Board panel)

To sheet 1

9....2096.02.
voltage and
current inverter
interface

9....2098.01.
driver TLINV

9....2077.01.
RC +interface AC

J3

J3      J1

1 2 3 4 5 6    1 2

*0392

*0390

*0314

From
TLI (sheet 2)

From
output filter
(sheet 2)

J7    J8    J9    J6        J4        J2    J1

*0393    *0391    ***0215

***0216

from TABY-1; TABY-2; TABY-3
sheet 1 rect+st.sw.
module
(sheet 1)

From
TA OUT-1;TA OUT-2;
TA OUT-3
(sheet 1)

From
output filter
(sheet 2)

from rect.
+st.sw.mod
(sheet 1)

J2B

1 2 3

J3R

1 2 3 4 5 6

J2R

1 2 3 4

red  black

*0398

*0400

*0398

From
F4-F5
(sheet 1)

From
TA IN-1;TA IN-2;TA IN-3
(sheet 1)

From
F1-F2-F3
(sheet 1)

J5    J6    J8    J9        J4

1 2 3 4  1 2 3 4  1 2 3 4  1 2 3 4  1 2 3 4 5 6 7

*0396

*0374

red  black

*0399

From
TA INV-1;TA INV-2;TA INV-3
(sheet 1)

From
TA BATT
(sheet 1)

From
+ / - bus bar
(sheet 1)

GTEC    DOC.Schematic Diagram    COD.SE-9APLBTP100ED_REV.00  PAG  3  / 4

OBJECT:     LibraPro 100kVA TP 6P CABINET

EDITOR:     F.Mastropasqua             DATE: 29/04/2014          APPROVATION:   F.Amodeo

REPLACE:     SE-9APLBTP100EC_REV.02

VARIATION:    Output filter assembly modified,add fuses FC1..3 and FC22..31

## OPTION PANEL

RS 232

EPO  REMOTE

J1  J2

J3

9....2113.01.
RS232 CARD

J9

*0407

SLOT-2
AUX

SLOT-1
MAIN

J7  20

flat cable
*0310

flat cable
**0002

To J1 grafic panel control
card 2124(sheet 3)

J8  N.C

J6

flat cable
**0003
To J2 grafic panel control
card 2124(sheet 3)

### PARALLEL OPTION

J2  J1

9....2101.01.
parallel signal
card (OPTION)

J3  10

flat cable
*0301

to J2 parallel
card (option)
(sheet 3)

### INTERFACE I/O OPTION

*0407

J6

9....2090.01.
INTERFACE I/O
CARD-1

J9

J6

9....2090.01.
INTERFACE I/O
CARD-2

J9

9....2137.02.
FILTER CAN-BUS
2090 CARD

### UGS INTERFACE OPTION

To J6 interface
and inverter
control card
2076 (sheet 4)

*0532

J3  J5  J1

9....2092.02.
UGS INTERFACE
(OPTION)

J2  J4

*0532  *0532

To J8 system catd
2032 (sheet 4)

To output
PH-N
(sheet 2)

to J5 rectifier control
card 2075 (sheet 3)

*0357

164  to battery
165  temperature
sensor

to SWOUT
sheet 2

to SWMB
sheet 1

151
251
161
261

SWOUT

SWMB

to EXTERNAL BY-PASS

*0397

### BATTERY START OPTION

standard cable
from J2 main power
supply

standard cable
from J4 voltage
and current card

J2  J4

J2-2  J4-2

HALOGEN LAMP

NO CONNECT

4
8

red

white  white

J4  J5

J3

red

NO CONNECT  1

J8

PUSH BUTTON

2  3

2  3

SNUBBER

J9  J10

3

red  white

8
1

4
1

2

TERMINAL BOARD

J2-1  J4-1

to J2 mains power supply card
2120

to J4 voltage and current
card 2096

### BATTERY TEMPERATURE SENSOR OPTION

J1  J13  J3  50  J12

9....2075.01.
rectifier control card
(Board panel)

J5  J9  J11  J7  J8

On standard rectifier control card 9... 2075.01.
1-Disconect the standard cable code *0357 from J5.
2-Connect the filter code 9APMHT019.
3-Connect the cable code *0357 previus diconnect

FILTER
9APMHT019.

J5

165
164

*0357