

## PC INTERFACE BOX

### SECTION 1      **PRODUCT APPLICATION**

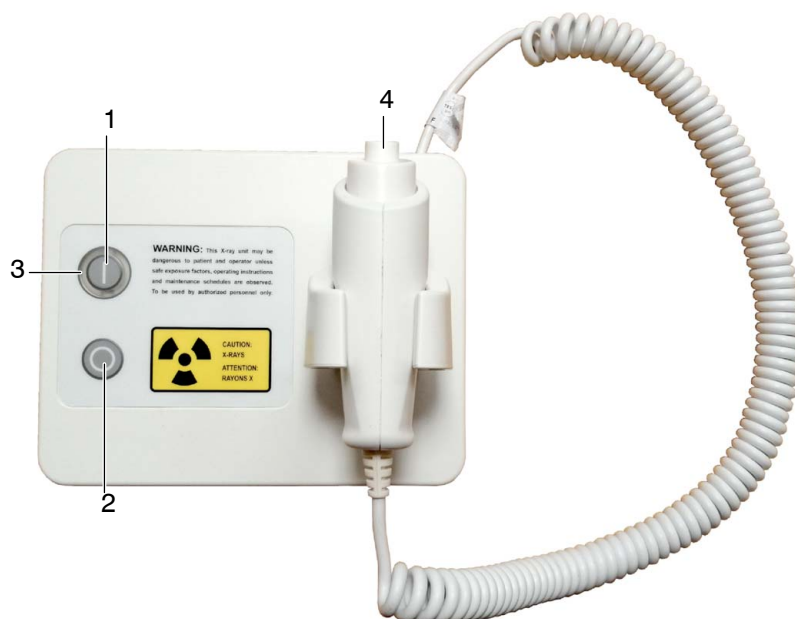
This Service Note applies to X-ray Generators operating with a PC Interface Box. This Service Note is a complement of the information included in the corresponding Service Manual.

### SECTION 2      **OPERATION OVERVIEW**

The PC Interface Box comprises the following controls:

1. Generator Power ON.
2. Generator Power OFF.
3. "Generator Power ON" Indicator, it lights when the Generator is ON.
4. Handswitch, with the controls for radiographic "Preparation" and "Exposure".

**Illustration 2-1**  
**PC Interface Box**



## 2.1 POWER ON / OFF



**ON:** The Generator is turned ON by pressing this push-button (“Generator Power ON” Indicator light is ON).

**OFF:** The Generator is turned OFF by pressing this push-button.



**IN THE EVENT OF AN EMERGENCY FORCIBLY DEPRESS THE X-RAY ROOM “EMERGENCY OFF SWITCH” (USUALLY A RED MUSHROOM-SHAPED SWITCH).**

**THIS SWITCH SHOULD BE LOCATED ON OR NEAR THE X-RAY ROOM MAINS POWER PANEL, USUALLY PLACED NEAR THE GENERATOR CONTROL CONSOLE. MORE THAN ONE OF THESE SWITCHES MAY BE PLACED AROUND THE ROOM FOR GREATER ACCESSIBILITY.**



**TO ISOLATE THE EQUIPMENT FROM MAINS, TURN OFF THE SWITCH LOCATED AT THE ROOM ELECTRICAL CABINET.**

Bear in mind the functionality of the following controls. They apply only to systems with PC supplied by the Generator’s manufacturer.

CONTROL	FUNCTION
ON / OFF Button on the PC	Switch ON / OFF the whole system
OFF Button on the Operator Program of Touch Screen or PC Screen (application mode)	Switch OFF the whole system
ON / OFF Buttons on the PC Interface Box	Switch ON / OFF only the Generator cabinet

**Note** 

*The proper way for switching ON the whole system (Generator + Computer) must be by pressing the ON button on the PC and for switching OFF the whole system must be by selecting the OFF Button on the Operator Program.*

## SECTION 3      INSTALLATION

The ON/OFF Box is shipped with the Handswitch, Generator and PC cables already connected. The PC cable can have either a USB connector or two DB9 connectors, depending on the option required. In this last case, it is mandatory to install the A3179-XX Auto ON/OFF board in the computer, to which one of the DB9 connectors has to be connected.

The Handswitch support and the optional sloping support are shipped in a separate box.

**Illustration 3-1**  
**ON/OFF Box and Handswitch support**



**ON/OFF Box**



**Handswitch Support**

The ON/OFF Box can be either wall mounted or freestanding on a table. For the wall mounting option the Handswitch support is mandatory, otherwise it is optional, but recommended.

For wall mounting, it is recommended to install only the Handswitch support in order to place the Handswitch in vertical position.

On the contrary, if the ON/OFF Box is going to be used freestanding on a table, it is recommended to install also the sloping support in order to place the Handswitch with the necessary inclination to avoid it from slipping out of the support.

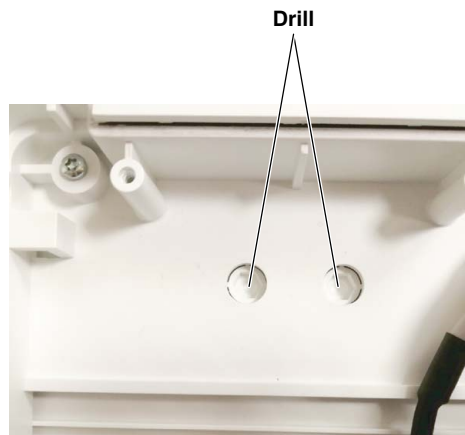
1. Handswitch support installation:
  - a. Unscrew both screws from the bottom cover and put it aside.

**Illustration 3-2**  
**Bottom cover**



- b. Drill two holes for the Handswitch support nuts and screws using a 3.5 mm (9/64") drill bit.

**Illustration 3-3**  
**Drilling points**



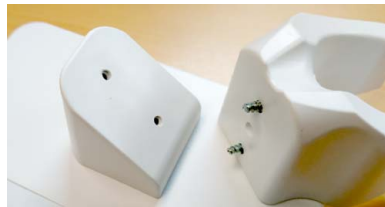
- To install only the Handswitch support, place two nuts (M3) in the inner hexagonal spaces and screw the Handswitch support from the outer part of the ON/OFF Box using two M3x10 screws.

**Illustration 3-4**  
**Handswitch support**



- To install the Handswitch support with the sloping support, screw the sloping support from the inner part of the ON/OFF Box and, then, screw the Handswitch support to it. Use four  $\varnothing$  3x10 screws for plastic.

**Illustration 3-5**  
**Handswitch support with sloping support**



2. ON/OFF Box installation.

- Freestanding: Reinstall the bottom cover using the previously removed screws and place the ON/OFF Box in its final position.

**Illustration 3-6**  
**Freestanding installation**



### PC INTERFACE BOX

- Wall mounting:
  - a. For wall mounting, the bottom cover is discarded, so it is possible to switch the cables position from the top cable outlet to the bottom cable outlet. In that case, cut the tie-wrap that hold the cables, route them through the opposite outlet and hold them together and to the ON/OFF Box with a new tie-wrap.

**Illustration 3-7**  
**Cables outlet**



- b. Fix the Wall support to the wall using 4 anchor screws.
- c. Slide the ON/OFF Box into the Wall support, taking care that it fits in both tracks, and secure it to the support with a screw on the top.

**Illustration 3-8**  
**Wall support**



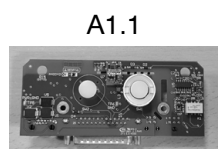
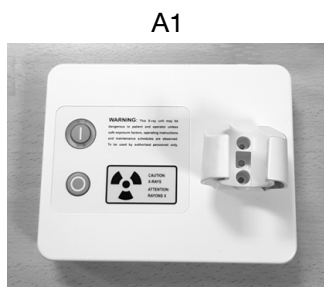
### Illustration 3-9 Wall mounting installation



3. Proceed with the cable connections (*refer to Section 5 Schematics for cable connections*).

## SECTION 4 RENEWAL PARTS

ITEM	DESCRIPTION	QTY	REFERENCE
A1	PC Interface Box	1	SAT-AS00519
A1.1	PCB Interface Box	1	SAT-A40042-02
A1.2	Hand Switch support	1	SAT-14653-01
A2	Hand Switch equipped	1	SAT-A6805-16



## SECTION 5      SCHEMATICS

The System requires to perform the connections indicated in the following schematics, according to the Installed Generator:

- 6005003      PC-CTSC-ON/OFF BOX-SHFR
- 6070064      PC-CTSC-ON/OFF BOX-SHF

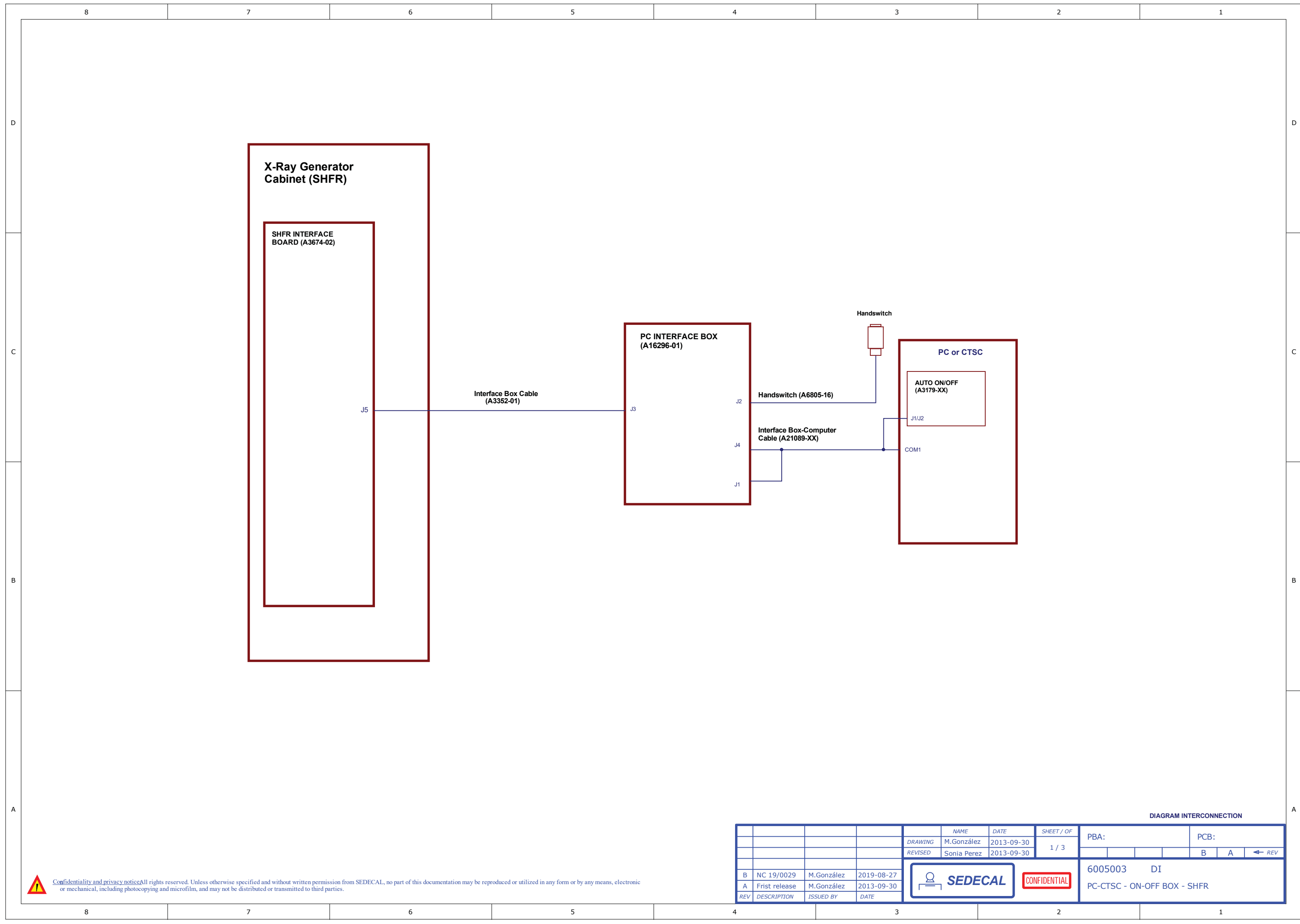


DIAGRAM INTERCONNECTION

REV	DESCRIPTION	ISSUED BY	DATE	NAME	DATE	SHEET / OF	PBA:	PCB:
B	NC 19/0029	M.González	2019-08-27	M.González	2013-09-30	1 / 3		
A	Frist release	M.González	2013-09-30	Sonia Perez	2013-09-30			
							6005003	DI
							PC-CTSC - ON-OFF BOX - SHFR	

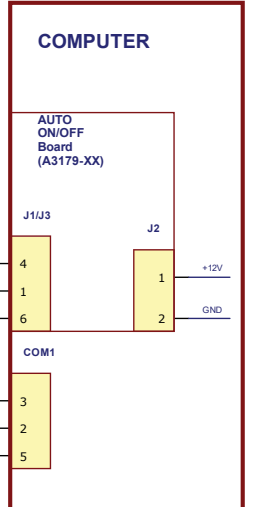
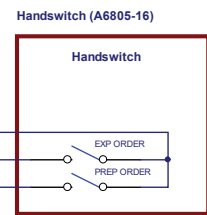
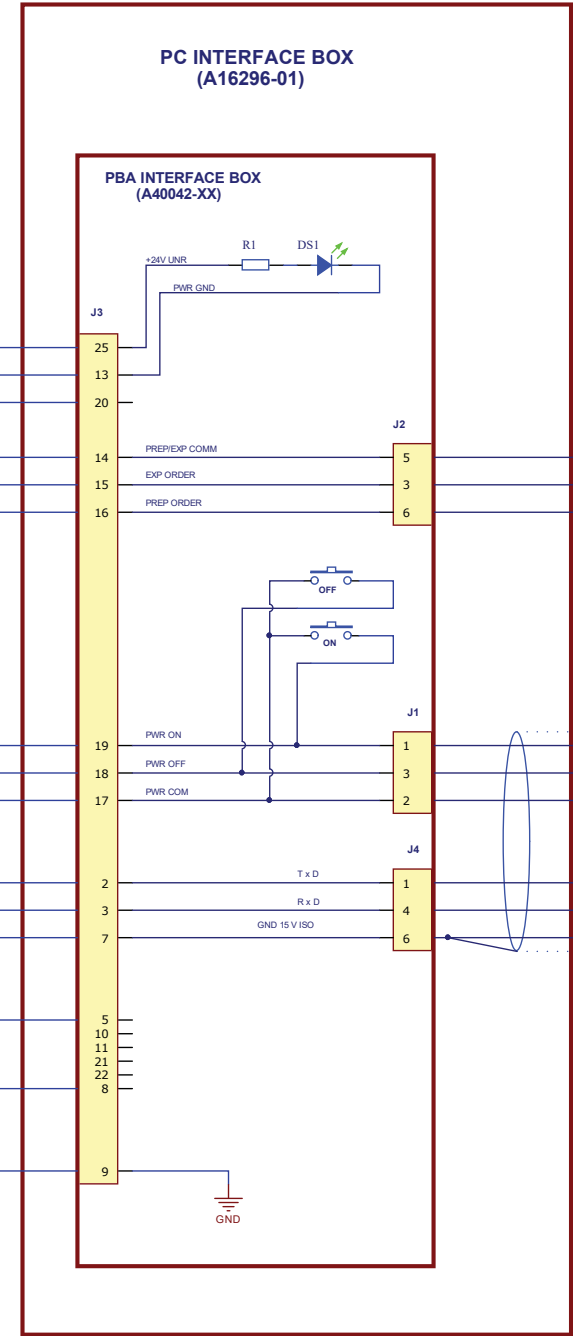
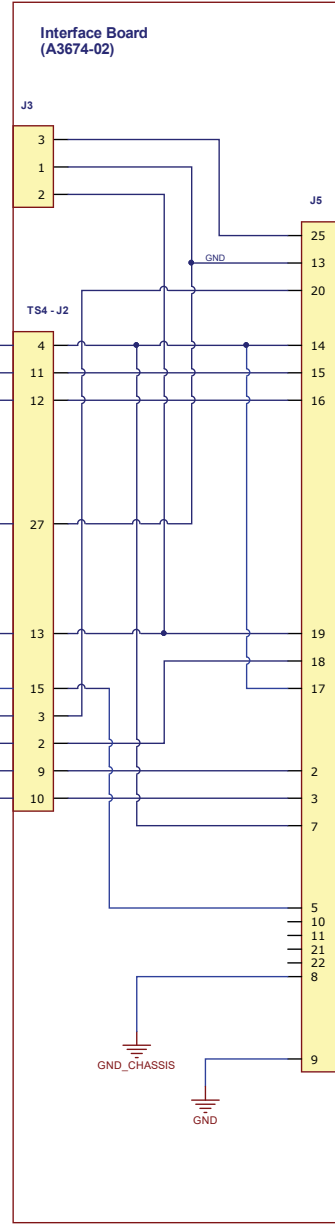
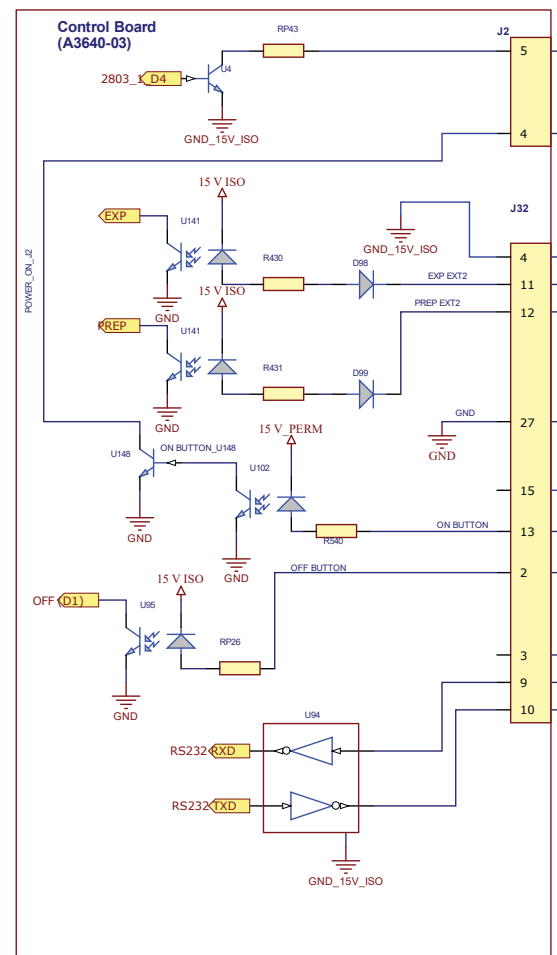
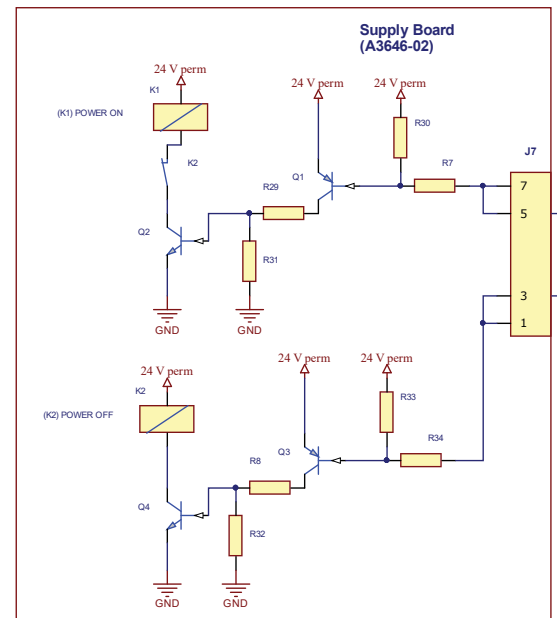


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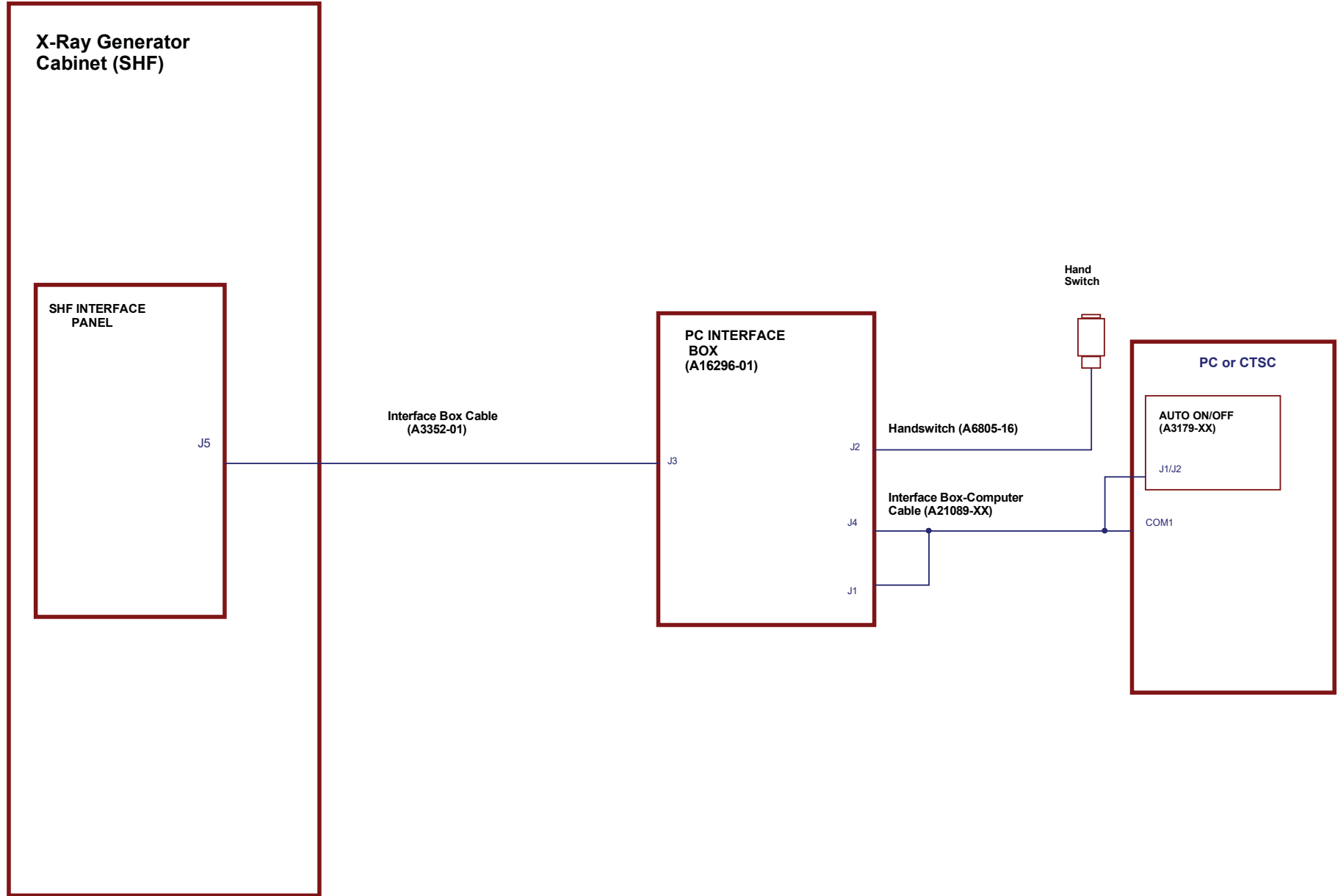
**GENERATOR CABINET**



WIRING INTERCONNECTION

DRAWING		NAME	DATE	SHEET / OF	PBA:	PCB:
REVISED		M. González	2013-09-30	2 / 3		
REV		Sonia Perez	2013-09-30			
B	NC 19/0029	M. González	2019-08-27		6005003	DI
A	First release	M. González	2013-09-30		PC-CTSC - ON-OFF BOX - SHFR	
REV	DESCRIPTION	ISSUED BY	DATE			





**SYSTEM INTERCONNECTION**

				NAME	DATE	SHEET / OF	PBA:	PCB:
				DRAWING	M.González	2019-07-08		
				REVISED	Sonia Perez	2019-07-08	1 / 3	
								A ← REV
								6070064 DI
								PC-CTSC - ON-OFF BOX - SHF
REV	DESCRIPTION	ISSUED BY	DATE					
A	Frist release	M.González	2019-07-08					

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GENERATOR CABINET

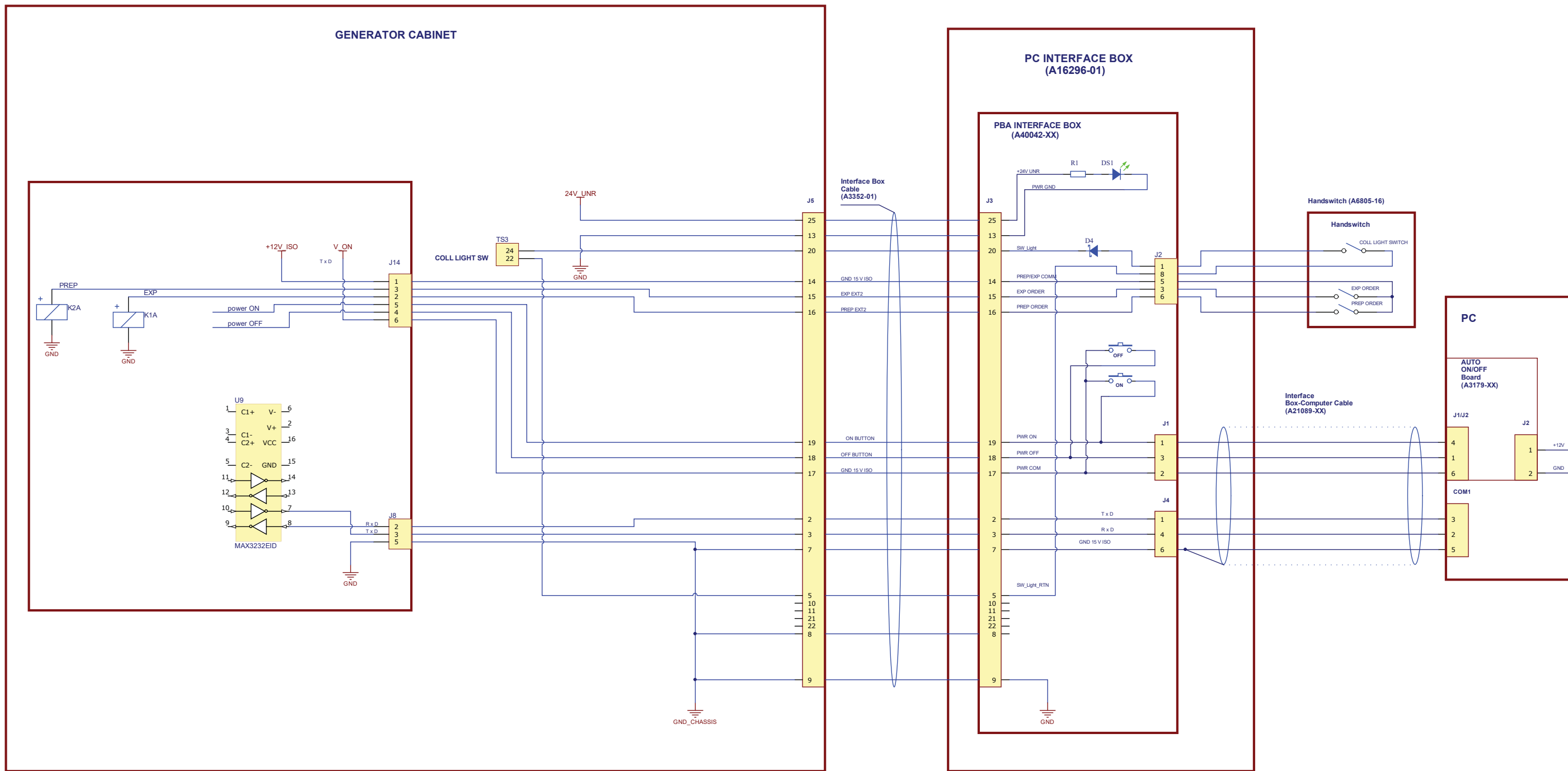
PC INTERFACE BOX (A16296-01)

PBA INTERFACE BOX (A40042-XX)

Handswitch (A6805-16)

PC

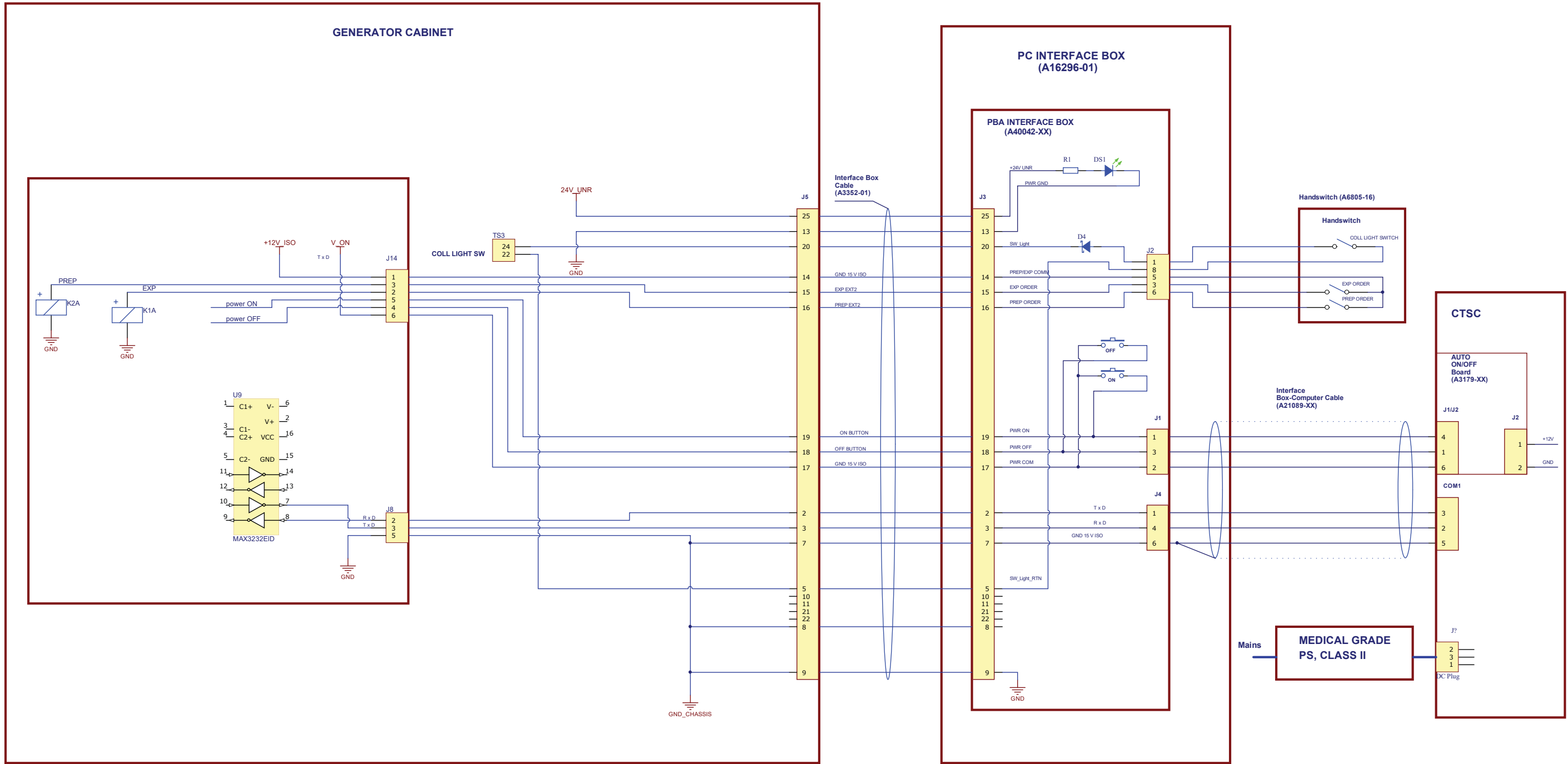
AUTO ON/OFF Board (A3179-XX)



PC WIRING INTERCONNECTION

REV	DESCRIPTION	ISSUED BY	DATE	NAME	DATE	SHEET / OF	PBA:	PCB:
A	First release	M.González	2019-07-08	M.González	2019-07-08	2 / 3		
				Sonia Perez	2019-07-08			
							6070064	DI
							PC-CTSC - ON-OFF BOX - SHF	





CTSC WIRING INTERCONNECTION

NAME	DATE	SHEET / OF	PBA:	PCB:
DRAWING	M.González	2019-07-08		
REVISED	Sonia Perez	2019-07-08	3 / 3	A ← REV
A First release		M.González	2019-07-08	6070064 DI
REV	DESCRIPTION	ISSUED BY	DATE	PC-CTSC - ON-OFF BOX - SHF

