The Power Distribution to Miniball

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October 2022

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1 Overview

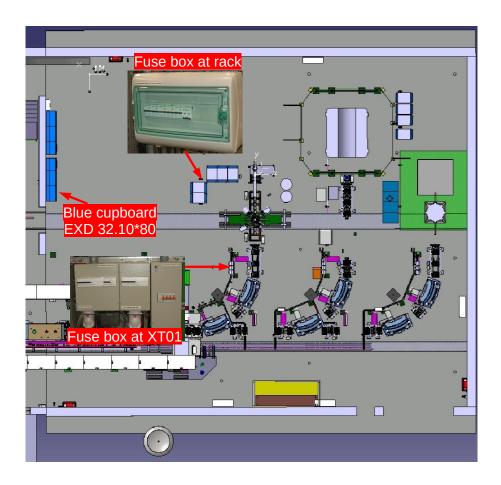


Figure 1: Locations of the components in the power supply to Miniball. Note that in the inset photo of the fuse box at the racks, the last fuse is supposed to be off.

The primary power supply for Miniball is located in the blue cupboard EXD 32.10*80 on the wall between the new and old part of the hall. Its location is shown on the plan in figure 1.

From there there are cables to the end of the XT01 beamline, where there are three fuse boxes. A photo of these is inset into figure 1.

From here, there are separate lines to the power strips on the beam line, which power the pumps and to a fuse box at the corner of the racks. This is schematically illustrated in figure 2. There are six fuses, one for each rack and a spare.

Each of the five racks has a power strip, which corresponds to one of the fuses

in the fuse box at the corner of the racks.

Additionally, since the end of 2021, we have one extra power strip on rack one, which is powered from the ISOLDE UPS. This is to power the autofill computer and the HV mainframe.

Miniball power distribution 2022

63 Amps in blue cupboard EXD 10.32*80 Miniball Box fixed at the end of XT01 beamline Fuse box at corner of racks (behind racks 2 and 3) 5 individual 16 Amp power strips with individual fuses Individual fuses 32 A .e. one per rack → Beam line → (Turbo pumps, roughing) pumps etc ..) Electronic racks ISOLDE UPS power supply Single 16 Amp power strip with individual fuse at rack 5

Figure 2: A schematic of the electricity supply to Miniball.

2 What to do if there's no power

If there's no power to the racks, except the strip on the UPS:

- Check the fuses in the box at the corner of the racks. There are six fuses. The first five power the five racks. The last one is unused.
- Check the fuse box at the end of XT01.
- Check the blue cupboard EXD 32.10*80.

If there's no power to the beam line:

- Check the fuse box at the end of XT01.
- Check the blue cupboard EXD 32.10*80.