

T962 CRYOGENICS CONTROLS DOCUMENTATION FOR ORC REVIEW

INTRODUCTION

T962 – ArgoNeuT – is a liquid argon TPC detector – LArTPC - located in the Minos underground hall directly in front of the MINOS detector. This detector had a previous commissioning run at PAB Aug-Oct 2008. The systems described here were operated in their current state at PAB.

The cryogenics controls system consists of a programmable logic unit, connected with wiring to various sensors, valves, heaters, ODH alarm, etc. Dan Markley designed the system, and provided drawings of the wiring diagram for review.

There were two main comments from reviewers on the system wiring:

- 1) For drawing EE-444986, you might want to have the print revised to clearly show only one breaker symbol upstream of both heater control boxes.
- 2) For drawing EE-444987, you might consider putting a fuse upstream of the ODH fan power relay. The fans are probably impedance protected. However it is not obvious how long the fan cords are, how/if they are spliced, or how they are dressed.

The response from Dan Markley –

I accept them and will implement them.
Cheers, Dan.