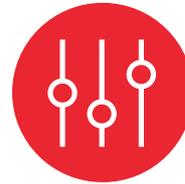


Control Panel Solutions

CONTROL PANEL SOLUTIONS

A Division of Eurotec Ltd

CONTROL PANEL SOLUTIONS



Control Panel Solutions (CPS), a division of Eurotec Ltd, has been building control panels for the HVAC&R and Industrial sectors since 2008. CPS integrates and value-adds to the extensive range of HVAC&R and Electrical control and monitoring Solutions sold by Eurotec to New Zealand industry for over 30years.

CPS is supported by the wealth of industry and application knowledge that has been synonymous with Eurotec for over a quarter of a century, with a focus on providing quality control panels at competitive prices, yet providing clients with custom solutions to meet their application requirements.

With a wide range of in-house expertise and products, we have the ability to produce complete turnkey control panel solutions that are pretested and programmed before going to site, therefore minimizing the installation time and providing faster on-site commissioning.

This profile features a selection of projects which demonstrate the range of Control Panel Solution's capabilities.



Control Panel for Transcritical CO2 Plant

This electrical and control panel was specifically designed and built by CPS to be part of a Transcritical CO2 system.

This was the first Transcritical plant for both Eurotec and plant manufacturer, so they needed an internationally proven and reliable controls option, which was achieved by using Carel pRack300T.

The CPS team needed to work closely with the plant designer to ensure their detailed control requirements were met.



- + 250amp Main Isolator
- + 120amp MCCB
- + 2 x Carel pRack300T controllers for Main and Parallel compressor racks
- + Carel EEV drivers for the 2 x Carel High Pressure Valves
- + Individual controllers for each rooms temperature and defrost control
- + Carel 'bOSS' supervisory module
- + 22", Touch Screen HMI for 'bOSS' supervisory system



Control Panel for Fruit Cold Storage applications

This panel was a standard Control Panel Solutions design to serve a four room apple coolstore.

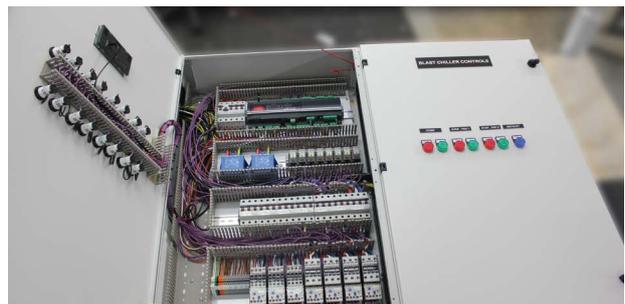
- + 2 x 67amp compressor circuits
- + Controlled with a Carel pRACK300 controller
- + 1 x VSD Compressor, 1 x Staged Compressor



Control Panel for Cold Storage applications

This panel was a standard Control Panel Solutions design. The rack supplied refrigeration to eight medium sized temperature rooms, and each room was controlled with Carel SmartCella controllers. The panel also controlled a separate condensing unit for a Blast Chiller.

- + 250amp rated panel
- + 4 x compressor rack
- + 3 x condenser fans
- + Carel pRack100 controller



Control Panel for Cold Storage applications

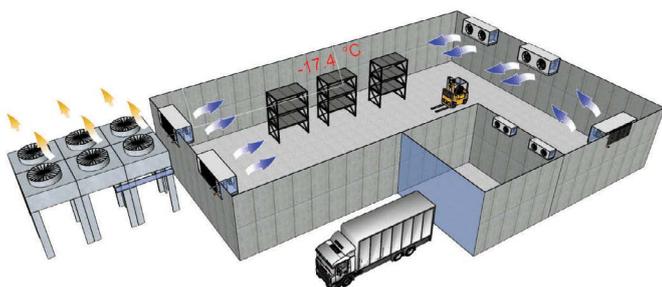


One of the latest CPS panel projects is for an application Eurotec specialize in, industrial and commercial cold storage. We source all components directly from partners like Carel, as well as most of the switchgear, so we are able to engineer a robust and competitive solution for contractors to install on their projects.

This panel is CPS Division programmed and electrically tested, built for a cold store with 5 Freezers and 1 ELA area. Carel pRack300 manages the 4 compressor rack, and the Carel EVDEVO and EXV's offer energy saving and accurate superheat control on the evaporators.



- + Remote access, data logging & alarm management by Carel BOSS
- + Under floor heater control incorporated
- + Carel c.pCO PLC with custom engineered software logic for precise control of room temperatures



Control Panel for Flower Export Cold Storage facility

This project involved the design , build and commissioning of a full Carel Control system to manage 5 refrigerated zones in a flower export processing facility. CPS built the panel as one assembly which was then delivered to site in Canterbury.

The 5 zones were split across two independent Compressor rack systems with remote condensers. Carel pRack300 was used on each system for semi hermetic compressor management with part winding start and unloaders for capacity control.

Further enhancements on this system in the near future will be to upgrade lead compressors to operate with Eaton DG1 Variable Frequency Drives and DH1 model for the condenser fans which will deliver tighter control and save on energy at the same time.

- + All evaporators in the zones have Carel Electronic Expansion Valves (EEV) being driven by EVD Evolution Drivers and backed up by Ultracap modules for shutdown in the event of a power failure
- + Carel IR33+ manages the temperature and defrost control of the zones
- + Whole system is supervised by Carel Boss Mini

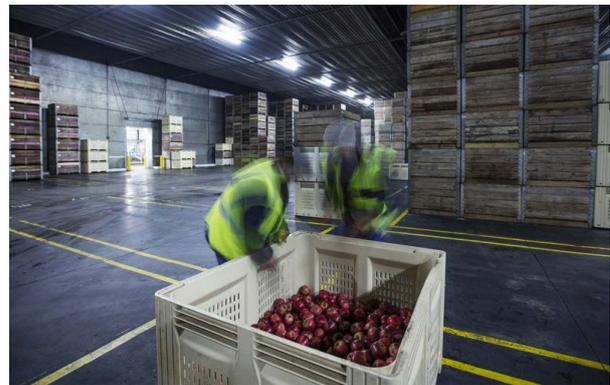


Control Panel for Cold Storage applications

This custom built plant for a three room coolstore, required CPS to design a control system that was a 'one off'. Most of the operational logic for the plant, was based on the designers own independent design theory. This required CPS to interpret these ideas and design a working control system that met the plant manufacturers expectations.

To achieve this, CPS also needed to integrate a main control system that was unfamiliar, but required by the designer.

- + 250amp rated panel
- + Included CPC, 'E2' controller in the panel, as required by contractor
- + System is DX over Glycol as secondary refrigerant



Please contact your local Eurotec Refrigeration Sales Engineer from the list below for a no obligation catch up to see how we can add value to your controls package.

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