

FANCELL CABINETS

Cannon Technologies FANCELL cabinet, S075800A, has been designed to cool equipment using Forced fan convection.

The cabinet is manufactured from 2-mm thick galvanised sheet to BS EN10 142 Fe Po 2 ZZ600 NAO. The zinc deposit of 600-grams/m² equates to a thickness of 43-microns. With the known erosion rate of zinc given as 1.5-microns per year for the UK, the protection offered before the application of the powder coating is over 28-years. It is for this reason that Cannon can give a true life expectancy of 30-years for the cabinet. Heavy gauge mild steel is used to manufacture the roof and is of a welded construction. After welding it is shot blasted and hot dip galvanised to BS 729.

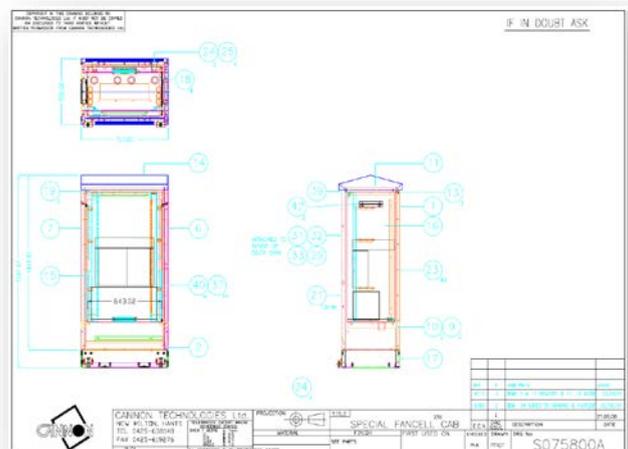
Each component undergoes a five stage pre-treatment before the application of an 80-micron thick pure polyester powder coating, before assembly. The cabinets are painted to the customer’s specified colour but Cannon Datacom Ltd would offer a selection of preferred stock colours. The finish would be scratch resistance and of an anti-graffiti formula.

The materials used in the construction of the cabinet will withstand and not be affected by long-term exposure to UV or weathering. It must be pointed out that in the removal of the graffiti, most solvents would not affect the powder coatings used, but strong solvents containing Methylene Chloride must be avoided. This material is basically a paint stripper and it would render the surface useless. Acetone should also be avoided, although an application would not be so dramatic, it could dissolve the finish making it very soft and malleable if used copiously.

The cabinet is of a dual skin construction, using air as an insulator between the outer and inner skins. As mentioned above the cabinet is cooled by using forced fan convection, the air is drawn through slots formed in the base of the door.

The air is pulled between the two skins forming the door, entering the internal cabinet via a replaceable filter element. The filter will trap particles down to 15/20-microns in size. The element will require periodical replacement and the time factor is dependant on location.

The air is drawn through the equipment housed internally by the fan tray positioned in the top panel of the equipment chamber. The warm air is expelled through the fans into the roof void where it is exhausted back into the atmosphere via slots formed in the undersides of the rear and front roof overhangs.



The fans can be powered either by mains voltage or via an independent 48-volt DC power supply, and can be controlled by the Environmental Control system. Remote monitoring is also possible via an optional Cannon Guard system, 19" rack mounted, 1-U chassis providing alarm output(s) over IP via SNMP (Cannon Guard 405E-N3SP-2A), details of the unit are available upon request.

The Environmental Monitoring and Control system controls the fan speed measured against internal temperature and provides a OPEX cost saving by reducing the fans speed & therefore reduced power usage and fan noise during low temperature conditions. It also provides alarm contacts typically, temperature out of limits, door open, fan failure etc.

The cabinet is configured with a multi-point locking door allowing access to the equipment chamber and the dead locking cam is designed to accommodate most manufacturers designed cylinders using a standard 19-mm diameter barrel.. For added security the cylinder need not be fitted until after the installation and hand over of the cabinet, this eliminates the need to release the high security cylinder keys to the contractor. By using a combination of internally fitted locking rods and guides, the system seals and secures the doors in one action, therefore eliminating the need for a multiplicity of locks.

The doors are hung on high security stainless steel lift off hinges, which would allow the doors to open through 180°. Door stays are also fitted to allow the door to be held open at varying angles, typically 90° and 120° as standard.

The cabinet is designed to fit onto a standard railway specified pre-cast concrete base. This arrangement can also be designed to suit a roadside application of either a direct bury or transformer type.

Optional is also an internally mounted low power AC LED strip light, this is switched on during the door being opened.

Cannon can also provide integration of:

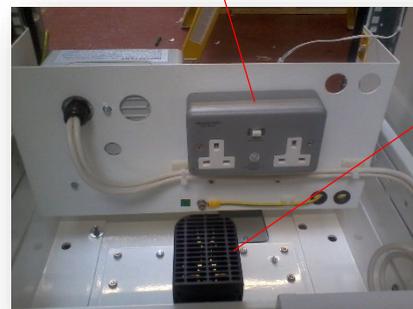
- A consumer unit complete with a double pole RCCB incomer, single pole MCB's as required and mounted on a 5-U high mounting bracket.
- 13-amp single or dual RCB socket for use during customer configuration and site testing/set-up.
- Commando socket with optional 3 way change-over switch for optional generator backup.
- Heater including thermostat, humidity stat and pressure relief filter valve.
- AC and DC distribution options including battery back-up.



An optional independent 48-volt DC power supply and Environmental Monitoring and Control system control the fan(s) speed to match exacting requirements against programmable temperature points.

A 13-amp dual RCB socket for use during customer configuration and site testing/set-up

A heater can provide protection during start-up, cold temperatures and against humidity.



Integration of a small 6-way consumer unit complete with a double pole 63-amp RCCB incomer and 6-off 20-amp single pole MCB's all mounted on a 5-U high mounting bracket .

