Solution F1

Fire Control Panels – the new generation

nsc
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The Fire Alarm Control Panel Solution F1

■ The Concept

The "Solution F1" Fire Control Panel range is a new generation, modular and ultra modern Fire Control Panels. These have been developed to meet international standards and to satisfy specific international requirements at the highest level.

These panels contain numerous new features – several are unique in the security business – and they convince by their comprehensive equipment. Many optional (at extra cost) features in other panels are included in the "Solution F1" standard configuration.

This range has been designed to be a universal and flexible product in terms of both the different configuration possibilities as well as the front fascia design. It thus meets the requirements for all possible applications. By the outstanding modularity of this panel it can be perfectly adapted to all anticipated user requirements.

Flexibility – especially for connecting different detectors – was one of the most important aims during the development of this new Fire Control Panel. Obviously it is a standard for this panel to connect nearly all conventional detectors of the market but very remarkable:

The "Solution F1" panels are compatible to the newest analogue addressable detectors of Hochiki and Apollo – two of the biggest and best known players in the detector market worldwide.

- **Modular, intelligent Hybrid Fire Control Panel Range**
- **Supports Hochiki ESP and Apollo XP95 / Discovery detectors**
- **2 – 18 loops in one standard housing**
- **Brand new touch control panel**
- **Graphics LCD module 240 x 64 as standard included on basic model**
- **Integral Power supply 24 V DC with max. 6.7 A or 4.2 A as standard included**
- **32 bit high performance CPU**
- **Flash memory up to 8 MB and RAM memory up to 8 MB**
- **Many powerful features included**
- **Configuration software operated via Modem or USB interface**
- **Full redundant main board and full redundant loop cards as options**

■ The Reliability

If for certain applications a higher reliability as EN-54 and VdS standards is required – that will be no problem for the "Solution F1" control panel: the Control Processing Unit can be doubled as well as the system boards which are responsible for the communication with the sensors and which passes the information from the detectors to the CPU. So the end user gets a **100 % redundancy of the whole system**.

But the R&D people did not stop the ambitious aims for reliability there: They created a brand new control panel technology – with absolutely no mechanical parts any longer – which is unique in the security business and which has a lot of advantages for the installer as well as for the end user. It contains a pressure sensitive piezo lacquer and doesn't have to be adjusted. The surface makes a worth-while impression because of it's glass like design.

This material is resistant against cleansing, there is absolutely no attrition over years and moreover it is very stable against EMC influences.

Solution F1-18
in B2 enclosure

Solution F1-6
in A1 enclosure

The product range

The "Solution F1-6" panel has as standard a 24 V DC power supply with max. current of 4.2 A. The user can connect up to 6 loops – each with 254 loop devices (127 detectors/modules plus 127 loop sounder) – to this panel and can organize a max. of 512 zones. There are three standard housings which should be chosen depending on battery backup requirements.

The bigger model "Solution F1-18" has a 24 V DC power supply with max. current of 6.7 A fitted as standard. This panel can control 18 loops as its maximum. Again there are

3 standard housings available. The selection is dependent on battery space and number of loops needed. This "Solution F1-18" has several more standard features compared with the smaller panel: 1,024 programmable zones, USB host interface, metal rack for 2nd assembly level, interface for optional TFT display, slot for SD card memory and interface for audio codec module.

Both models can be supplied in a 19" rack mounting version instead of a standard housing. There are no special adapters or frames necessary because the "Solution F1" is generally compatible to 19"

housings. The pluggable wiring terminals will be greatly appreciated because the installation will be done very quickly and effectively.

For software configuration or data analysis by telephone line the technician can connect the panels via modem (analogue or ISDN) with his PC. Therefore you will find a slot at the main board which not only handles the data communication but it provides the power supply for these modems too.

Alternatively the Soliton F1 control panels can be equipped by a Web server.

■ Standard Configuration

The standard configuration is impressively equipped, unlike almost all other models on the market. Some of the standard features included are:

- **Graphics LCD module with 240 x 64 dots**
- **Integral power supply with 4.2 A or alternative 6.7 A**
- **Steel housing with brand new touch control panel**
- **Interface for German Fire Brigade Control Panel**
- **3 separate power outputs for transmission device / sounders / strobes**
- **USB interface for configuration by PC**
- **Up to 8 programmable push buttons**
- **Redundant RS-485 interface**
- **3 x RS-232 interfaces**
- **2 monitored conventional zones**
- **16 digital outputs, programmable**
- **8 digital inputs, monitored for "open-circuit"**
- **4 relay change over contacts, programmable**
- **Earth fault detection**
- **Event log with max. 10,000 messages**

These standard features are included at no extra cost.

Solution F1-18
in C1 enclosure

■ Most important features

- 2 to 18 loops are possible in one standard wall-mounted housing. Analogue addressable detectors and conventional detectors can be mixed in one Fire Control Panel.

- User-friendly housings because of hinged frames which gives easy access for the technician to the wiring terminals.

- 32 Bit advanced CPU core – supplied as an upgradeable PCB module! This gives the possibility for smart software solutions and the possibility to change the micro processor very easily in the event of a new – higher performed – model in future or if one model become obsolete. In such a case the main board PCB of the "Solution F1" panel need not be exchanged or upgraded.

- Generous memory space with 8MB-Flash and 8MB-RAM to allow convenient programming of links and customer specified texts.

- Numerous running modes and detection algorithms are programmable at this new panel. In combination with analogue addressable detectors it can be perfectly adapted to every application of the market.

- Multi protocol loop cards are available, which means that different analogue addressable detectors can be easily connected. These PCBs are able to check the loop for short circuit and wire break and detect a possible earth fault of the shielding.

- Guaranteed 100% compatibility to Hochiki ESP protocol as well as to Apollo XP95 / Discovery protocol.

- Network by ARCNET. This BUS system distinguishes by multi master ability which leads to a continuously running network even if the master node fails.

- 8 programmable push buttons allow a user-friendly handling of certain user defined operations. The user can store several operating steps into the memory and then he can program them on one of the push button S1 to S8.

- Auto dynamic operating mode by the graphics display with assigned functional push buttons.

- The texts on front fascia are easy to change for international versions of the "Solution F1".