

# Extinguishing control panels

## Fire control panels

### “Solution F1” and “Solution F2”

with automatic electronic control- and delay device  
according to VdS and EN 12094-1:2003



## Single zone extinguishing control unit ...



G208145

The successfully established within several years on the market and VdS approved fire control panel "Solution F2" can now be used as an extinguishing control system for single areas.

Additionally to the known features:

- 1–2 Loops, optional for addressable components by manufacturers either Apollo or Hochiki
- Power supply 230 VAC / 24 VDC with 3.5 Ampere
- Control panel with membrane keyboard and graphic display
- USB- and RS-232 interface
- Numerous In/Outputs
- Connectability for fire brigade periphery
- RS-485 interface card
- Single indication of detector groups

The control panel is now capable to combine the standard FCP with an integrated electronic control device for fire-extinguishing systems according to EN 12094-1.

## Multiple zone extinguishing control unit ...



G205024

The already over a decade reliable VdS-approved fire alarm system "Solution F1" is now able to gate and control multiple flooding zones. Up to nine cards can be embedded to the mainboard. Any combination of detector modules and extinguishing control cards is feasible. For example, this could contain eight extinguishing control cards and one loop module or the other way around.

Exactly the same control board, as for the single zone extinguishing control panel "Solution F2", can be mounted in the "Solution F1" to operate multiple extinguishing zones.

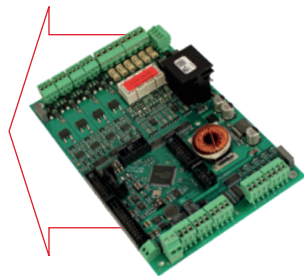
Per each extinguishing zone there is one display board with optional key switch for the essential display and eventually required operating functions.

All known of the FCP "Solution F1" housing sizes are available. In addition NSC front panels are all based on 19 inch standard dimensions and with our mounting backboard for the system boards an easy installation in a 19 inch rack is trouble-free.

In case more than eight extinguish control boards are needed, several control panels can be linked by using the ARCNET extension board to build up a network.

## ... with the FCP Solution F2

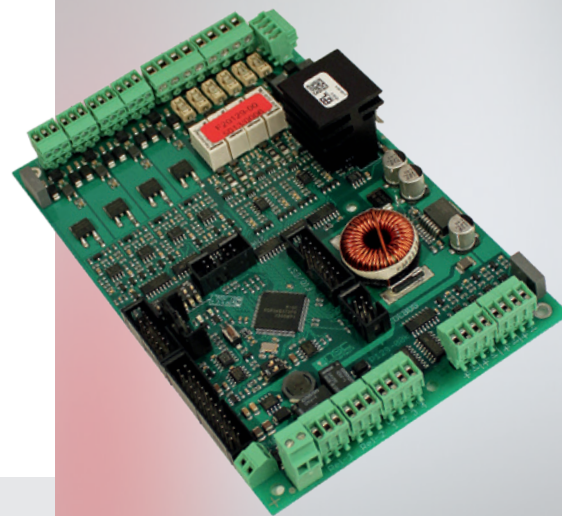
For this purpose, there is a new control board having a multiplicity of in- and outputs:



The additional display board with optional key switch provides the essential display and offers free programmable LED's, furthermore a configurable key switch for manual operation.

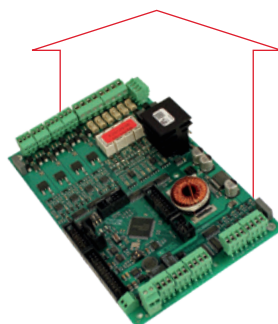
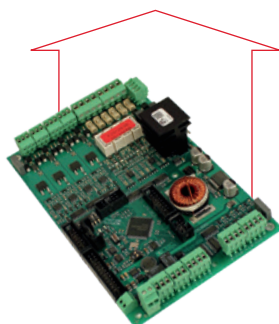
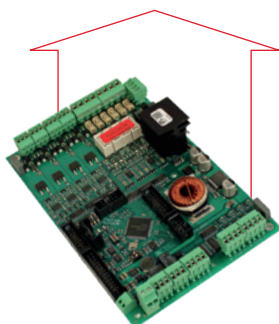
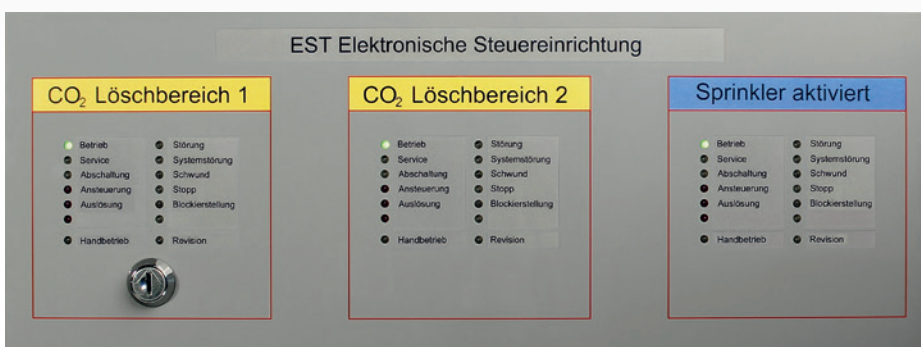
All functions are set via the NSC configuration software in the familiar convenient way.

## ■ The new control board



## ... with the FCP Solution F1

All functions are set via the NSC configuration software in the familiar convenient way.



The new control board provides Inputs and Outputs as follows:

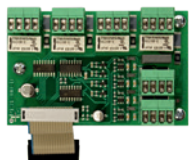
- 4 x conventional lines to connect Manual Call Points
- 4 x valve control lines 24 VDC / 1.5 A
- 2 x control lines 0.5 A for sounders and visual alarm devices
- 2 x relays (dry contact) 30 VDC / 1 A
- 4 x OC-Outputs 30 VDC / 50 mA
- 4 x monitored input lines



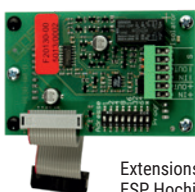
## ■ The components of extinguishing control device ECD



Control board for  
FCP Solution F1 and F2



Extensions: Standard extinguishing  
interface SST (according to VdS)



Extensions:  
ESP Hochiki  
loop module

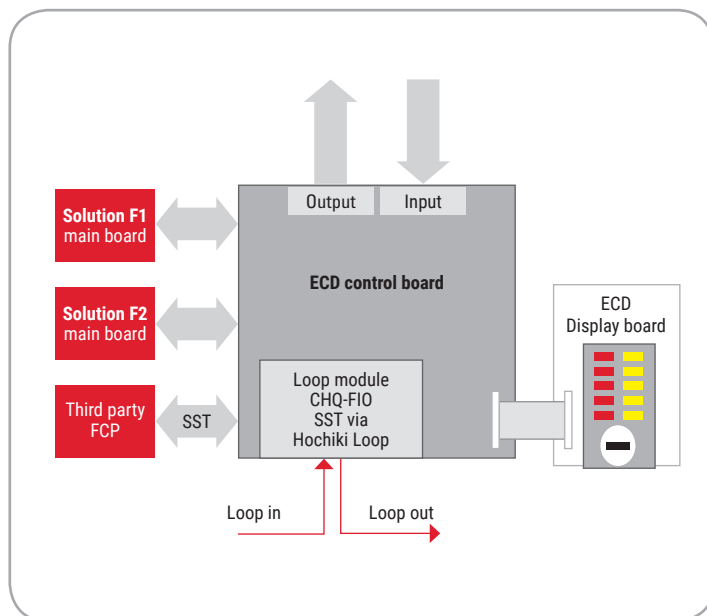


Connection cascading



Display board and optional key switch  
for one extinguishing zone

## ■ The circuit diagram of the electronic control device



## ■ Technical data of the extinguish control board

Supply voltage:	24 VDC
Quiescent current - C-control and display board:	90,8 mA
Current consumption loop module:	0,2 mA
Current consumption extinguishing interface:	0,2 mA
4 conventional lines:	20 VDC, 40 mA max., 3,3 KΩ end of line
4 valve outputs:	24 VDC, max. 1,5 A, fused
2 alarm outputs:	24 VDC, max. 0,5 A, fused
2 relays:	30 VDC, 1A, dry contact
4 OC-outputs:	30 VDC, max. 50 mA, active low
4 monitored inputs:	3,3 KΩ end of line, 680 Ω active
Operating temperature:	-5 to +40° C
Humidity:	Max. 95 %
Safety class system:	Depending on installation in FCP Solution F1 or in F2 Solution
VdS approval (EN 12094-1):	G208145 (Solution F2) / G205024 (Solution F1)

## ■ Options with requirements according to EN 12094-1

The following options are included:

Options with requirements	Description
4.17 Delaying the triggering signal	Adjustable warning time up to 60 seconds
4.18 Signal, which represents the flow of the extinguishing agent	Recognition via programmable input
4.19 Monitoring of the state / position of components	Recognition via programmable input
4.20 Stop-button	Connecting to conventional line, operation displayed
4.21 Control of flooding time	Adjustable flooding time up to 30 minutes
4.22 Launch of post flooding	Connection the call point „Second Release“ to a conventional line
4.23 Pure manual mode	Switched on via optional key switch, indicated by programmable LED's
4.24 Control signals to devices within the fire-fighting system	Via valve output
4.25 Trigger signals to spare bottles	Via valve output and indicated by programmable LED's
4.26 Control devices beyond of the fire-fighting system	Output / relay on the control board or output / relay inside the FCP or output module
4.27 Emergency Stop Button	Connect to conventional line
4.28 Controlling of a holding flooding	Adjustable time of holding flooding up to 30 min.
4.29 Release of extinguishing agent for selected extinguishing zones	Free programmable via configuration software
4.30 Activation of alarm devices with different alarm signals	Realized by two separate alarm outputs, alternatively via loop sounders with different tones