Incorporating

Fire protection

NCA Series CPL
Fire damper control panels

- **Full range of control panels to suit all sizes of installation**
- **CPL1 - Basic hard wired**
- **CPL2 - Basic addressable**
- **CPL3 - Advanced addressable**
- **CPL4 - Advanced addressable with user interface (touch screen)**
- **Commissioning available throughout UK and RoI**

S700: January 2024

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Quality assurance

HVC Supplies (Stourbridge) Ltd is an ISO 9001 certified company.

Assessed to ISO 9001
Cert/Ref No. 1186

NCA Series CPL

Available to suit all sizes of application, NCA Series CPL fire damper control panels are designed to control motorised fire dampers such as our own Series 400A or Series 700.

Necessary in all but the most basic installations, control panels provide centralised points of control connecting fire dampers to other building systems such as fire alarms, and greatly assist regular testing and maintenance.

Ranging from basic hard wired systems suitable for installations of up to 40 dampers, up to advanced addressable systems with touchscreen interfaces capable of managing hundreds of dampers with associated equipment such as fans, we are able to cater for almost any application.

Commissioning available throughout the UK and Republic of Ireland.

The below table gives a comparison of each system level available from HVC.

System levels

	CPL1	CPL2	CPL3	CPL4
System architecture	Non-addressable	Addressable	Addressable	Addressable
Max no. of dampers	40 (recommended)	Unlimited	Unlimited	Unlimited
Panel to damper connection	Power and motor end switches wired directly back to panel	Motor wired to DCM. DCM powered from local fuse spur, communication cable connected in series between DCMs	Motor wired to DCM. DCM powered from local fuse spur, communication cable connected in series between DCMs	Motor wired to DCM. DCM powered from local fuse spur, communication cable connected in series between DCMs
Programmable controller	No	Yes - Proprietary controller	Yes - Mitsubishi PLC	Yes - Mitsubishi PLC
Interface	None	None	None	Touchscreen
Recommended for	Small systems with no programming required	Medium systems with basic programmable functionality	Large systems requiring complex programmable functionality	Large systems requiring complex programmable functionality with user interface for operation and maintenance purposes

DCM = Damper control module

NCA Series CPL1

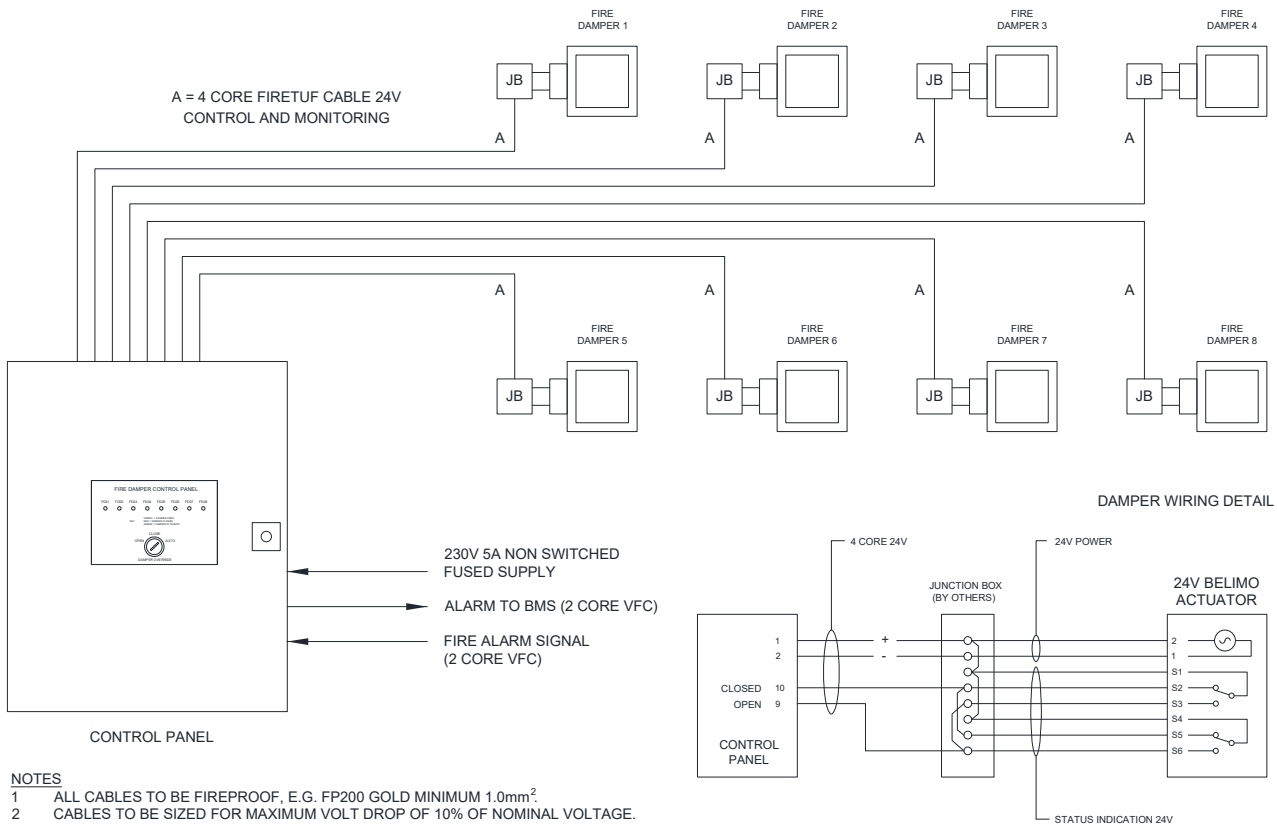
Basic panel for systems of up to 40 dampers (recommended) with no programming required.

40 damper recommendation is based on practicallity of wiring more than 40 dampers back to panel, more dampers can be accomodated if required.

Features

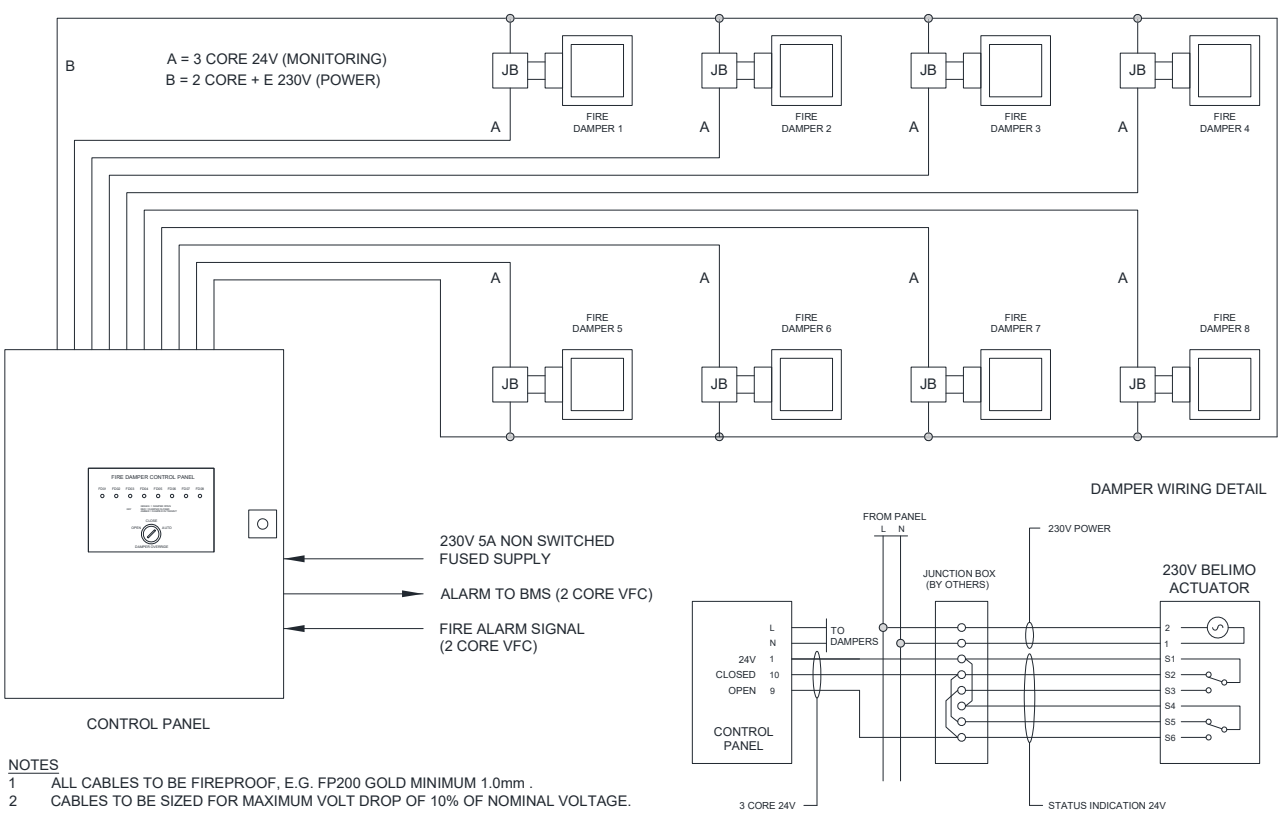
Standard features	Optional features
• Simple and robust relay driven logic • Tri-colour LED damper status indication (green = open / amber = in-transit / red = closed) • Three position (open/close/auto) keyswitch for each zone • Zoned fire alarm inputs • IP54 rated ‘Schneider Electric’ enclosure in RAL7035	• Fireman’s override keyswitch (remote from panel) • BMS fault interface (common ‘any damper closed’ signal) • Glazed panel door • Battery backup (24V dampers only) • Key lock (replaces standard ‘T’ slot panel opening latch)

CPL1 typical schematic - 24V actuators



NOTES
1 ALL CABLES TO BE FIREPROOF, E.G. FP200 GOLD MINIMUM 1.0mm^2.
2 CABLES TO BE SIZED FOR MAXIMUM VOLT DROP OF 10% OF NOMINAL VOLTAGE.

CPL1 typical schematic - 230V actuators



NOTES
1 ALL CABLES TO BE FIREPROOF, E.G. FP200 GOLD MINIMUM 1.0mm .
2 CABLES TO BE SIZED FOR MAXIMUM VOLT DROP OF 10% OF NOMINAL VOLTAGE.

VFC = Volt free contact

NCA Series CPL2

Mid level addressable system for installations of unlimited numbers of dampers with a basic level of programmable functionality, such as cause and effect.

Dampers are connected to the panel via communication cable installed in series between DCMs (damper control modules). Damper actuators are connected to the DCM, which should be powered from a 230V local fused spur or 24V power supply.

See page 9 for typical schematic.

Features

Standard features	Optional features
• Simple and robust high integrity system • Tri-colour LED damper status indication (green = open / amber = in-transit / red = closed) • Three position (open/close/auto) keyswitch for each zone • Zoned fire alarm inputs • IP54 rated ‘Schneider Electric’ enclosure in RAL7035 • Bi-directional looped signalling (cable break does not cause loss of signal) • Continuous fault monitoring system • Time clock operation permitting automated damper testing	• Fireman’s override keyswitch (remote from panel) • BMS fault interface (common ‘any damper closed’ signal) • Glazed panel door • Battery backup (24V dampers only) • Key lock (replaces standard ‘T’ slot panel opening latch) • Damper test switch and timer • Loop isolators (isolates damaged section of installation) • BMS interface options (Modbus) • Additional panels (repeater/mimic/monitoring/firemans) • Additional interfaces (fan/window/door)

NCA Series CPL3

Mid level addressable system for installations of unlimited numbers of dampers requiring complex programmable functionality to accommodate functions like automated testing, cause and effect damper operation etc.

Dampers are connected to the panel via communication cable installed in series between DCMs (damper control modules). Damper actuators are connected to the DCM, which should be powered from a 230V local fused spur or 24V power supply.

See page 9 for typical schematic.

Features

Standard features	Optional features
• Simple and robust high integrity system • Mitsubishi PLC controller (PC programmable) • Tri-colour LED damper status indication (green = open / amber = in-transit / red = closed) • Three position (open/close/auto) keyswitch for each zone • Zoned fire alarm inputs • IP54 rated ‘Schneider Electric’ enclosure in RAL7035 • Bi-directional looped signalling (cable break does not cause loss of signal) • Continuous fault monitoring system • Time clock operation permitting automated damper testing	• Fireman’s override keyswitch (remote from panel) • BMS fault interface (common ‘any damper closed’ signal) • Glazed panel door • Battery backup (24V dampers only) • Key lock (replaces standard ‘T’ slot panel opening latch) • Damper test switch and timer • Loop isolators (isolates damaged section of installation) • BMS interface options (Modbus) • Additional panels (repeater/mimic/monitoring/firemans) • Additional interfaces (fan/window/door)

NCA Series CPL4

High level addressable system for installations of unlimited numbers of dampers requiring complex programmable functionality to accommodate functions like automated testing, cause and effect damper operation etc.

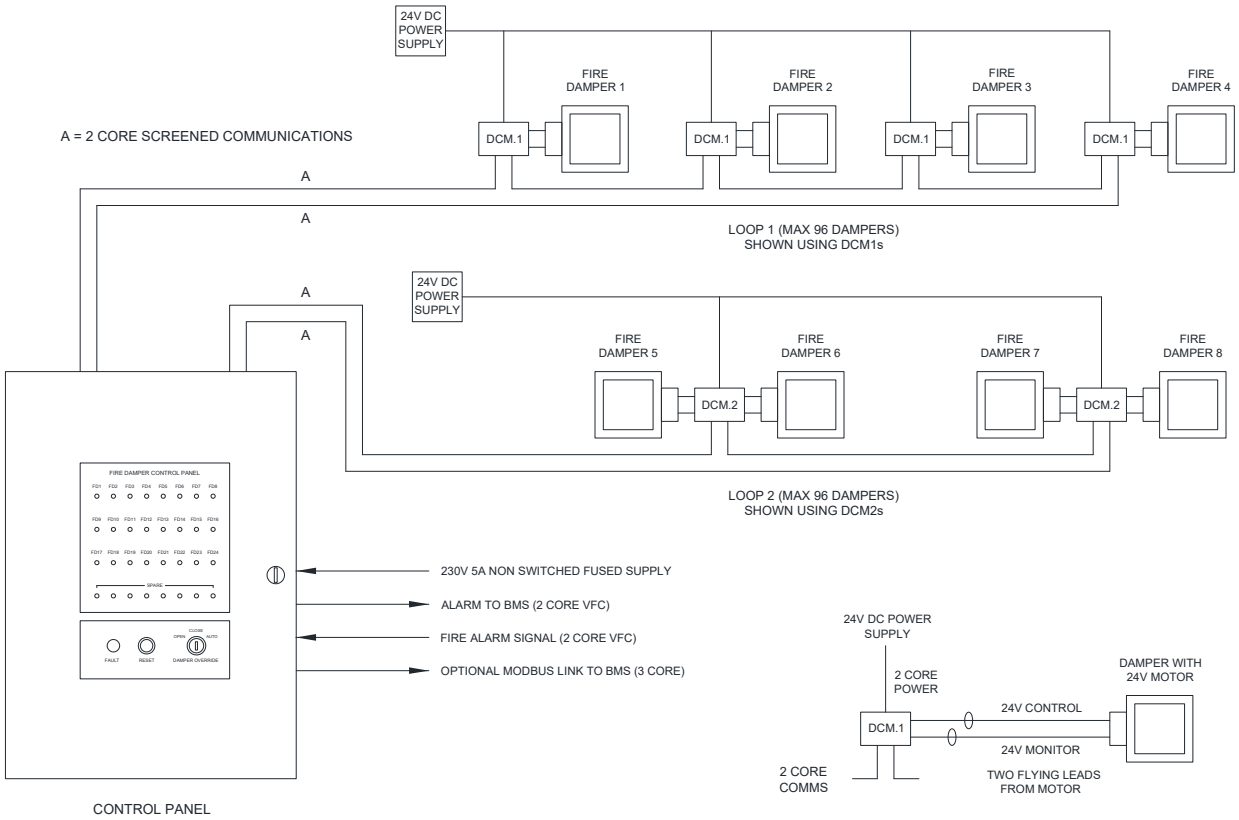
CPL4 panels are fitted with a touchscreen interface facilitating operation and maintenance tasks without requiring a separate PC.

Dampers are connected to the panel via communication cable installed in series between DCMs (damper control modules). Damper actuators are connected to the DCM, which should be powered from a 230V local fused spur or 24V power supply.

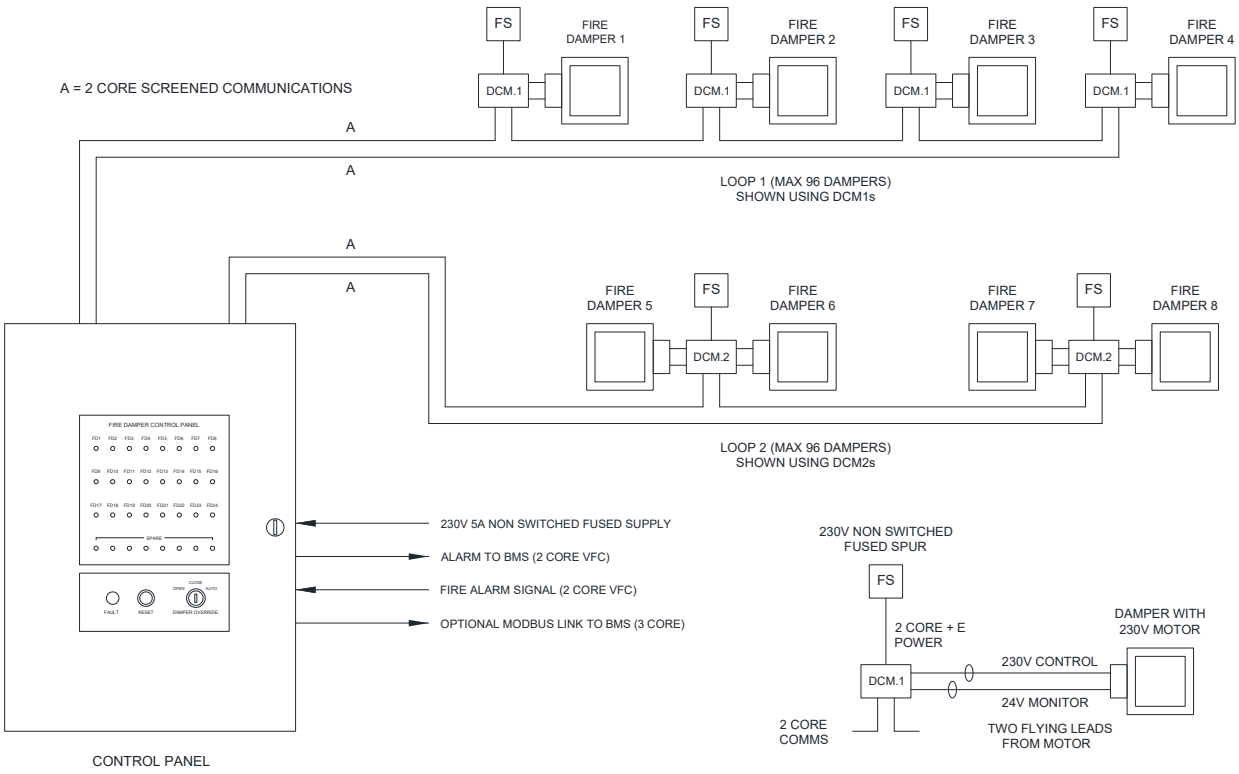
Features

Standard features	Optional features
• Simple and robust high integrity system • Mitsubishi PLC controller (PC programmable) • 10” 1024 x 600 px TFT LCD touch screen display • Three position (open/close/auto) keyswitch for each zone • Zoned fire alarm inputs • IP54 rated ‘Schneider Electric’ enclosure in RAL7035 • Bi-directional looped signalling (cable break does not cause loss of signal) • Continuous fault monitoring system • Time clock operation permitting automated damper testing	• Fireman’s override keyswitch (remote from panel) • BMS fault interface (common ‘any damper closed’ signal) • Glazed panel door • Battery backup (24V dampers only) • Key lock (replaces standard ‘T’ slot panel opening latch) • Damper test switch and timer • Loop isolators (isolates damaged section of installation) • BMS interface options (Modbus) • Additional panels (repeater/mimic/monitoring/firemans) • Additional interfaces (fan/window/door)

CPL2/3/4 typical schematic - 24V actuators



CPL2/3/4 typical schematic - 230V actuators



VFC = Volt free contact
FS = Fused spur

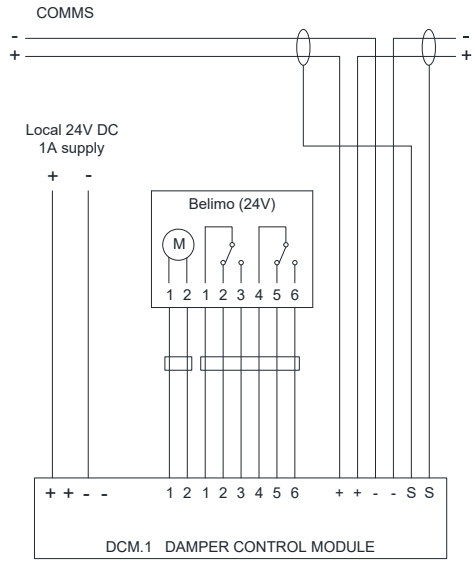
DCM (damper control module)

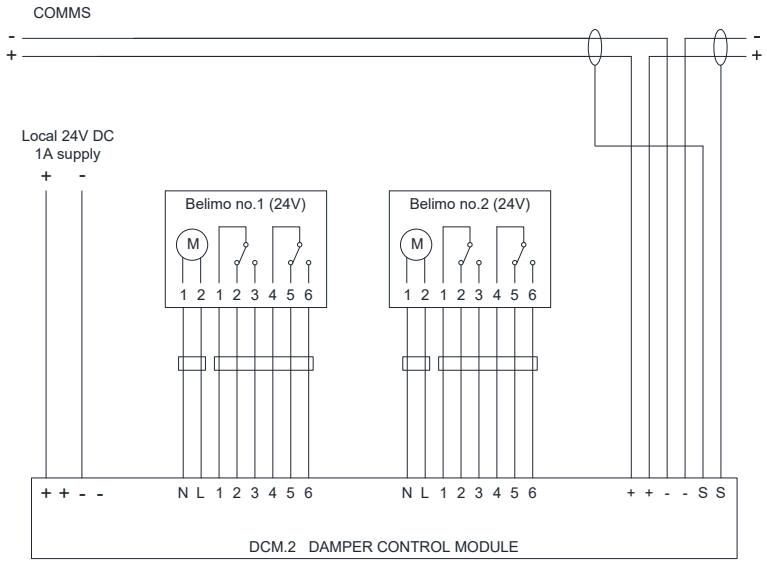
Connecting damper motors to power and communication cables, DCMs are a necessary component with all addressable systems (CPL2, 3 and 4).

Available in DCM1 and DCM2 variants, DCM1s allow connection of a single fire damper actuator (or S700 relay box), whereas DCM2s allow connection of two.

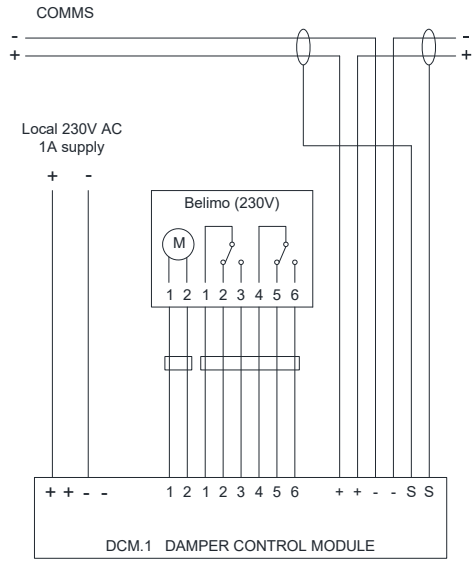
Saving both cost and installation time, DCM2s are useful where two dampers are in close proximity to each other. Independent control over each damper is retained.

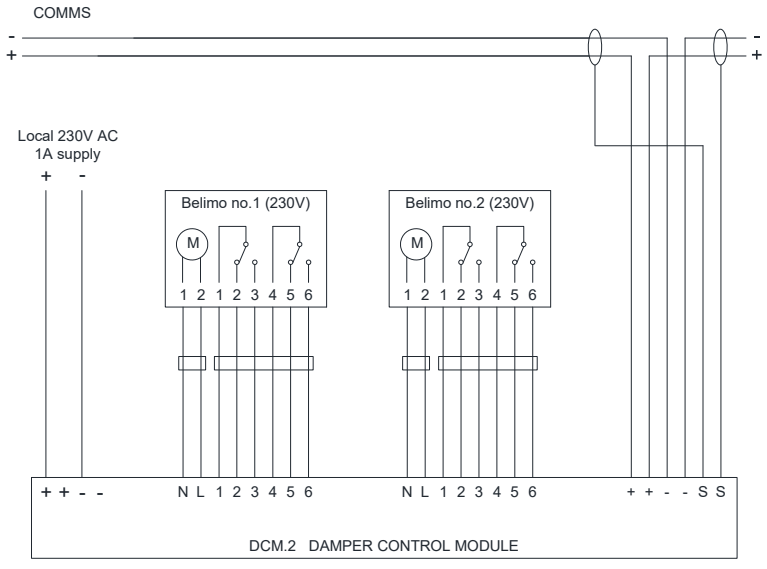
DCM schematic - 24V actuators





DCM schematic - 230V actuators





Notes

Finish

RAL7035 only

Ordering codes (CPL1 only)

Example

1 - CPL1 - 230V - 12

Codes

1)	**Quantity**		
2)	**Series**	CPL1	Non-addressable fire damper control panel
3)	**Actuator voltage**	24V 24V BAT 230V	Suitable for dampers fitted with 24V actuators Suitable for dampers fitted with 24V actuators c/w battery backup Suitable for dampers fitted with 230V actuators
4)	**Damper quantity**	**state number**	Number of dampers (min. 4, max. 40, increments of 4)

For CPL1 systems requiring options not shown above, please contact HVC.

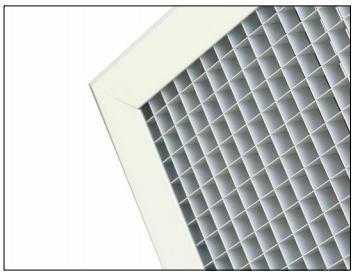
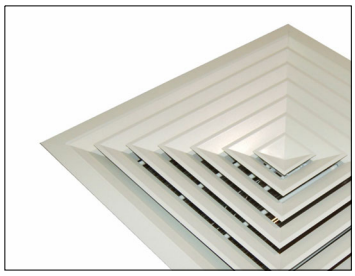
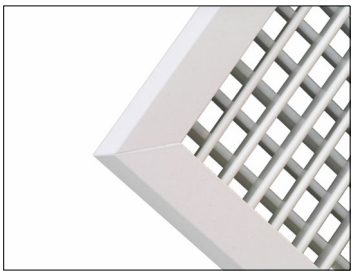
For addressable systems (CPL2-4) please contact HVC.

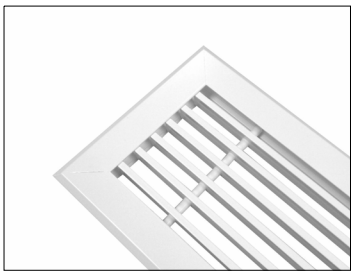
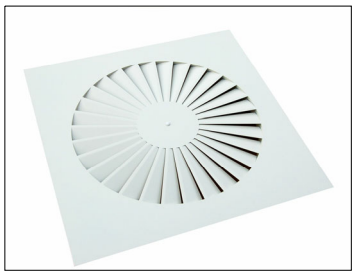
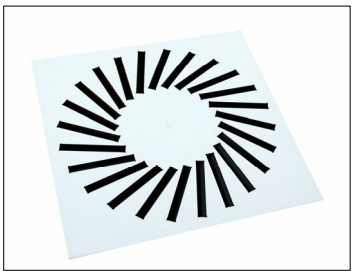
HVC & NCA products

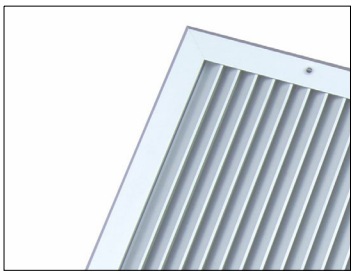
HVC offer the significant advantage of manufacturing both in duct and duct terminal equipment, making us a one stop shop for all your HVAC needs.

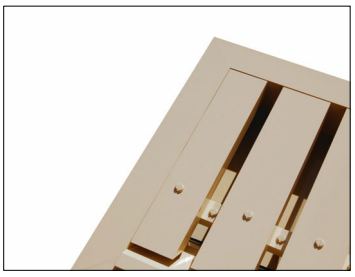
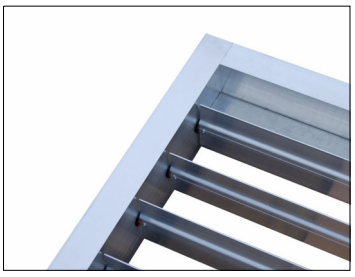
The products shown below are a selection, not an exhaustive list. Go to **www.h-v-c.com** for details on all HVC and NCA products.

HVC: Grilles, Diffusers, Louvres and Volume Control Dampers

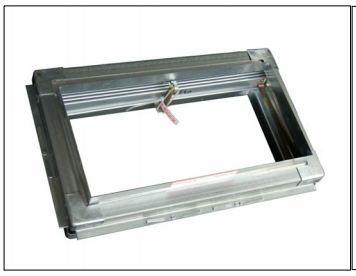
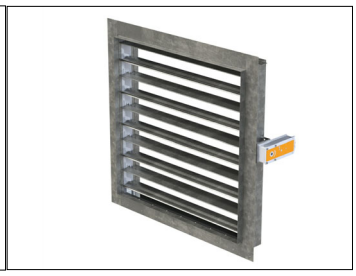






NCA: Fire and volume control dampers

Assessed to ISO 9001
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