DCS-100



DCS-100
Full Specification

Addressable Fire/Smoke Damper control and indicator panel for up to 100 dampers.

Physical

Dimensions (max):	325.5 x 410 x 154 mm W x H x D
Weight (typical):	8Kg excluding options
IP rating:	44 (Solids > 1mm & splash proof)
Materials:	Powder coated mild steel casing
Climatic:	0 to 70 C ambient 80% RH non-condensing
Colours:	Black and grey (RAL 7000)
Cable entry:	Knockouts top, Gland plate bottom
Hinging:	Left as standard, right by request

NB for right hinging gland plate and knockouts are reversed.

Whilst every effort is made to keep this document up to date details are subject to change without notice.
DCS-100 Full Specification Issue 6 19/02/2021
©Disys Technologies Ltd. Unit 24-27 Cross Hands Business Centre, Heol Parc Mawr, Llanelli SA14 6RE

disystechnologies.com



DCS-100
Full Specification

Electrical

Supply Voltage:	90-260V ac 47-63Hz
Power consumption:	45W (max)
PSU approvals:	EN 60950-1 EN54-4 compliant
Battery backup (Optional)	2.3Ah internal battery. Hold up time 2 hrs.
Fusing:	Internal 1A a/s 20mm
Digital Inputs:	5V 10mA to volt free contacts 8 off fitted as standard, 1 normally used for psu fail detect.
Digital Outputs:	Opto-isolated 24V 100mA rated 4 fitted as standard (1 required for common fault) – 4 optional SPC0 Relays.

System

Display:	2 line 40 character LCD 100 tri-colour damper status LEDs
Nodes (all types) per panel:	150 max
Dampers per panel:	100 max
No: of zones:	100 max
Reaction time:	<1s (alarm change of state to DIN12 output change)
Overrides (Optional):	Active only when a current fire alarm. Full Vent – re-opens all closed dampers. Close all – closes any dampers not already closed. Extract only – opens extract dampers only for cold smoke clearance.
Menu Functions:	Test – closes all dampers. Faults – lists all dampers which are not in their correct state with a reason (and damper reference/location -32 characters max- if required.)
Enable Key:	All front panel button functions disabled until enabled by keyswitch.

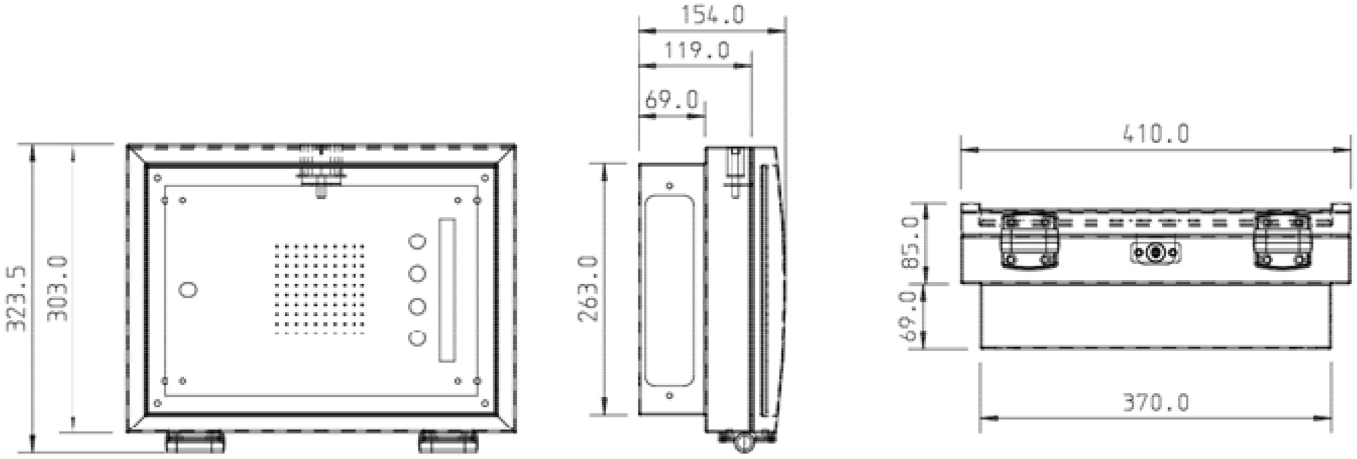
Whilst every effort is made to keep this document up to date details are subject to change without notice.
DCS-100 Full Specification Issue 6 19/02/2021
©Disys Technologies Ltd. Unit 24-27 Cross Hands Business Centre, Heol Parc Mawr, Llanelli SA14 6RE

DiSYS™ TECHNOLOGIES

disystechnologies.com



DCS-100
Principles of Operation



Normal Operation

In the normal or non-alarm condition each DIN-12 (damper control node) drives the damper actuator and monitors the limit switches for the damper status. The damper status at each node is relayed to the DCS-100 control panel and the status indicated by the front panel LEDs. Timers in the node enable the detection of dampers failing to open or close correctly,

Alarm Condition

An alarm condition is generated by the change of state of the fire alarm contacts, (on the 8 channel DIN-08F fire alarm interface node) from closed (non-fire) to open (fire). This change of state is detected by the panel and the other nodes in the system. On receipt of the alarm signal the panel enables the fireman's overrides switches (where fitted) and if the overrides are subsequently activated transmits this information to the nodes. The individual damper control nodes on receipt of the fire alarm condition cut the drive to the actuator and signal the change of state to the panel. The nodes will now act on any override signal from the panel.

Fail Safe Condition

If any damper control node fails to receive the non-fire message from the fire alarm interface node for a period of more than 30s the damper node will default to the fire condition and cut the power to the actuator.

Indications.

Green	No Fire/Damper Open
Red	Fire/Damper Closed
Amber	Fault - Further information can be viewed on the LCD display

Whilst every effort is made to keep this document up to date details are subject to change without notice.
DCS-100 Full Specification Issue 6 19/02/2021
©Disys Technologies Ltd. Unit 24-27 Cross Hands Business Centre, Heol Parc Mawr, Llanelli SA14 6RE

DiSYS™ TECHNOLOGIES

disystechnologies.com