



O RANGE 7

SMOKE CONTROL PANEL

SUITABLE FOR: SINGLE & MULTI ZONE INSTALLATIONS

24 HR NEXT DAY DESPATCH

SMOKE VENTILATION

ENVIRO OPTION

230VAC SUPPLY

24V DC OUTPUT

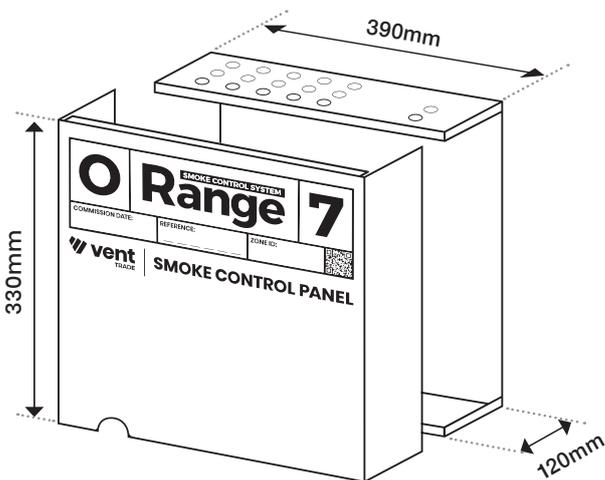
Smoke Control System

An O Range 7 Smoke Control Panel manages dampers and vents to allow the dispersal of smoke and heat from a single zone. It can also control daily ventilation via an environmental damper or vent.

Each Control panel is supplied with two 12Vdc 7Ah in series batteries – these are kept charged when mains power supply is available. When power is unavailable they guarantee a 72 hour period in standby mode allowing the execution of a complete emergency opening command as prescribed by BS EN 12101-10.

A Firefighter Switch will need to be fitted to each panel to show Fault, Open and Close status of all linked panels within the system.

Dimensions (Control Panel)



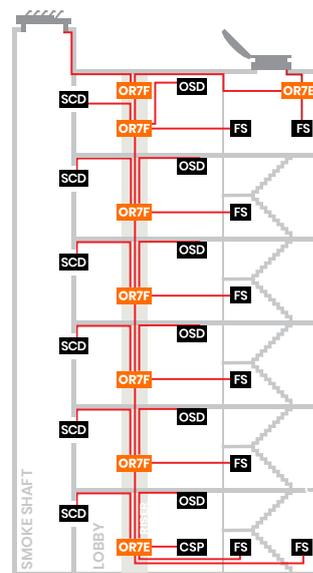
Product Specifications

- BS EN12101-10 Certified
- Connection of up to 60 zones (in series)
- LED fault reporting
- 72 hour standby for emergency activation

Installation Examples

SYSTEM KEY:

- OR7F** O RANGE FIELD PANEL
- OR7E** O RANGE LINE END PANEL
- SCD** SMOKE CONTROL DAMPER
- FS** FIREFIGHTER SWITCH
- OSD** OPTICAL SMOKE DETECTOR
- CSP** CONTROL STATUS PANEL



MULTI ZONE
SMOKE SHAFT & STAIRWELL SYSTEMS



SINGLE ZONE*
STAIRWELL SYSTEM (OUT OF THE BOX)

*OR7E or OR7F can be used in a single zone stairway system

Technical Data

	O Range 7
Control Panel Voltage In	230Vac
Control Panel Voltage Out	24Vdc nominal
Battery	2x 12Vdc 7Ah
Battery Re-charging Time – 0% to 100%	24 hours max.
Battery Standby / Emergency Use	72 hours
Operating Temperature	-5°C to +40°C
Visual Diagnostics	On Board LEDs & Front Panel LEDs
Daily Ventilation Zones	1
Smoke Ventilation Zones	1
Certifications	BS EN 12101-10

INPUTS

Smoke Detectors / Fire Alarm	4 max.
Firefighter Switches Supported	2 max.
Firefighter Switches Input No. Of Cable Cores	7 Core + Earth
Environmental Switch (manual)	1
Thermostat / Wind / Rain Sensor	✓
Carbon Dioxide (CO ₂) Sensor	✓
Maglock Support – Auxiliary Output	Upgrade Option

OUTPUTS

Motor Output Current	1x 7 amps
Enviro Assist Damper	Upgrade Option
Visual Display	via O Range Firefighter Switch & Front Panel LEDs
Fault VFC (Volt Free Contact) 2x	Upgrade Option
Lift To Ground	Upgrade Option

Electrical Ratings

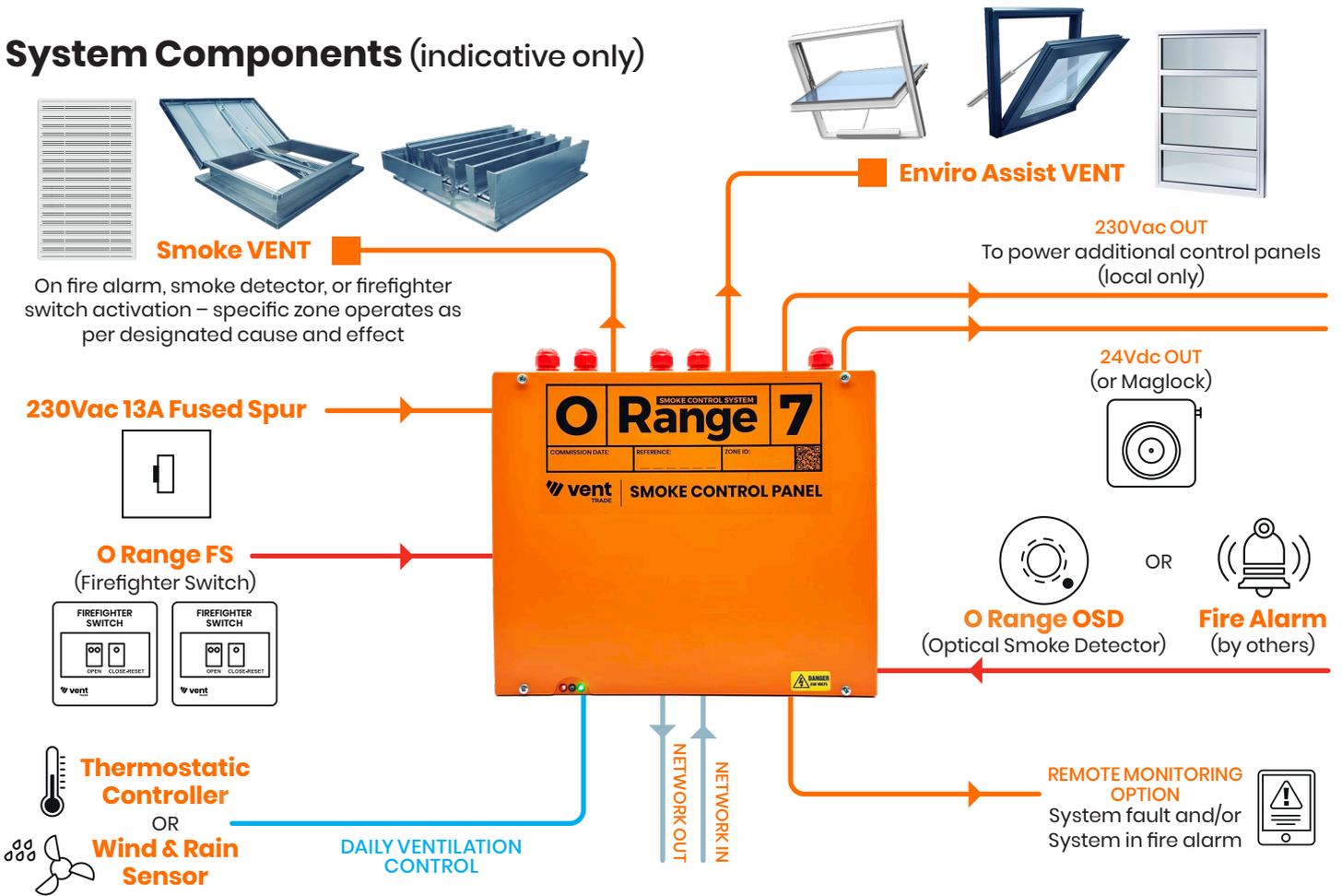
	O Range 7	Notes
AC Mains Supply	230Vac 50Hz	Standby
AC Current Draw (Standby)	150mA	
AC Current Draw (Charging)	275mA	
AC Max. Current Draw	2.2 amps	
Battery Capacity	7000mAh	
PSU Output Voltage	27.8Vdc	Test on install
Motor Output Current	7 amps	
Sensor Output Current Budget	0.05 amps Average Continuous (0.5 amps max. pulse)	Combined budget: Sensor 1, Sensor 2, FOS1, FOS2. When operating from battery
Relay Board Current	1 amp Each Relay	
Mag Lock Current	0.5 amps	Disabled when using secondary supply
Ext. Relay Output Current	1 amp	Disabled when using secondary supply
Max. Interruption Time	500 milliseconds	Switching from Primary to Secondary Supply

Fuse Ratings

AC Mains Input	3A Fast – 5x20 BS1362
Option Relay 1 / Option Relay 2	1A Fast – Automotive Blade
Option Maglock	1A PTC Resettable
Actuator	Programmable Digital Auto Reset
Sensors / FOS	1A PTC Resettable
Ext. Relay Output	1A PTC Resettable

Vent Trade advises that the design, supply, and installation of all electrical wiring be carried out in accordance with current standards.

System Components (indicative only)



Product Code

O Range: End Of Line Control Panel	COSM-ORA-7.0A-EL01
O Range: Field Control Panel	COSM-ORA-7.0A-FI01
O Range: Smoke Detector	CXSM-ORA-SDET-0001
O Range: Roof Access Key Switch	CXSM-ORA-RAKS-0001
O Range FS: Orange Firefighter Switch	CXSM-ORA-FFSW-0001



Smoke ventilation systems require regular testing and record-keeping by authorised, competent persons.



...by "Accredited" and "certified smoke vent engineers only"



Related Products and Services

The following should also be considered when planning your system.



DAILY VENTILATION



WEATHER STATION OPTIONS



CO₂ DETECTOR



MAGNETIC DOOR RELEASE



VENTEC DAY SWITCH



INSTALLATION & MAINTENANCE



PROJECT COMMISSIONING