



KF-650 230V Essence 8 Way Wiring Centre

Precision Control for Multi-Zone Manifolds & Actuators



Product Description

The KF-650 is a professional multi-zone underfloor heating wiring centre engineered to simplify the electrical integration of UFH manifolds. It manages up to 8 zones of thermal actuators (230V) while providing a volt-free interlock for seamless heat pump or boiler demand. Fully compliant with Part L heating control requirements and BS EN 1264, the unit features configurable pump delay logic to optimise the efficiency of low flow temperature heat sources and protect mechanical assets such as pumps and valves.

Key Features

- **Part L Compliance & Efficiency:** Integrated dip switches provide selectable pump delay logic (0, 3, 4, or 5 minutes) to prevent short-cycling of heat sources and ensure efficient operation of low temperature heat sources, meeting Approved Document L standards.
- **Rapid Site Deployment:** Features a hinged cover with captive screws and internal cable brace points for secure, organised termination of manifold and thermostat wiring, significantly reducing installation time.
- **On-Board Diagnostics:** High-visibility LED status indicators for Power, Pump, Boiler, and individual Zones provide instant fault-finding capabilities, allowing installers to rapidly diagnose wiring or actuator failures without external meters.
- **Universal Interlock:** Provides volt-free (COM/NO) boiler switching or 230V switched output, ensuring compatibility with all major system boilers and air source heat pumps.

Associated Products

- **Thermal Actuators:** Designed for seamless operation with Whisper Controls 230V thermal actuators (rapid-fit for all standard UFH manifolds).
- **Standard 230V Thermostats:** Universal compatibility with all Whisper Controls 230V dial and digital programmable thermostats.
- **Smart Thermostats:** Provides the hardwired backbone for Tuya and Smart Life enabled thermostats, ensuring robust zone control.
- **Wireless Receiver:** Compatible with EA-Series receivers for RF thermostat integration.

Technical Specification

Item	KF-650 230V Essence 8 Way Wiring Centre
Product Code	WCN8-0650
Dimensions	255mm x 120mm x 44.5mm
Voltage	230V AC 50Hz
Max Relay Load	NC 3A, NO 5A, 3A Pump / 5A Boiler
Total Load Max	3A
Fuse Rating / Type Delay (T)	T5A, 20mm x 5mm slow-blow (time delay)
Actuator Output	230V
Number of Zones	8
Actuators Per Zone	2
Boiler/Heat Source Connection	Volt-free
Pump Delay Options	0 min, 3 min, 4 min, 5 min
Protection Rating	IP20 (Pollution Degree 2, Class II)
Mounting Type	DIN Rail or Wall Mount
Ambient Temp Range	-20°C to 50°C
Compliance	CE marked Low Voltage Directive 2014/35/EU EMC Directive 2014/30/EU RoHS Directive 2011/65/EU and (EU) 2015/863
Safety Standards	EN IEC 62368-1:2020+A11:2020, EN IEC 60730-2-9:2019+A1:2019 +A2:2020, EN 60730-1:2016+A1:2019+A2:2022,
EMC Standards	EN IEC 60669-2-1:2022+AC:2024-05,



Whisper Controls Limited

Unit 9, Stanton Harcourt Industrial Estate, Standlake, Witney,
Oxfordshire, OX29 5UX, United Kingdom.
Tel: +44 (0)1993 640073 [whispercontrols.com](https://www.whispercontrols.com)



DS-WC-KF-650-FEB26-V1.0



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Precision Control for Multi-Zone Manifolds & Actuators



Digital Data Table

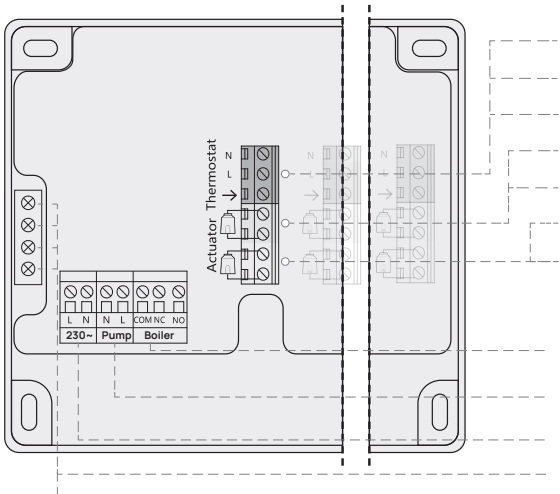
Variable	Value
Uniclass 2015 Code	Pr_75_50_96_96
Asset Type	Underfloor Heating Wiring Centre
Material Composition	ABS / Polycarbonate
Recyclability (WEEE Status)	WEEE Compliant (Use local schemes)

Specification Clauses

The Wiring Centre shall be a Whisper Controls KF-650. The manufacturer must provide a valid 5-year warranty from the date of installation. The product must be backed by a proven manufacturing defect indemnity policy with a limit of £5,000,000 per incident. The unit must feature user-configurable pump delay logic (0, 3, 4, 5 minutes) to ensure compliance with Building Regulations Part L flow temperature requirements. Construction and performance must adhere to BS EN 1264-4 standards. Any proposed alternatives must be submitted for technical review 14 days prior to the tender return date, accompanied by independent verification of selectable pump delay logic, volt-free boiler interlock, and proof of equivalent indemnity insurance.

Technical Data

Hardwired 230V hub supporting 8 zones. Features volt-free boiler switching (COM/NO) or 230V switched output for zone valves. All connections must be secured via internal cable brace points.



Thermostat	N	Neutral 230 Vac
	L	Live 230 Vac
	→	NO/NC (Live 230 Vac)
Actuator		Live 230 Vac actuator 1
		Neutral 230 Vac actuator 1
		Live 230 Vac actuator 2
		Neutral 230 Vac actuator 2
Generator output		Free contact
Main Supply		L: Live 230 Vac N: Neutral 230 Vac
Pump Output		L: Normally Open Live 230 Vac N: Neutral 230 Vac
		PE: Common earth connection



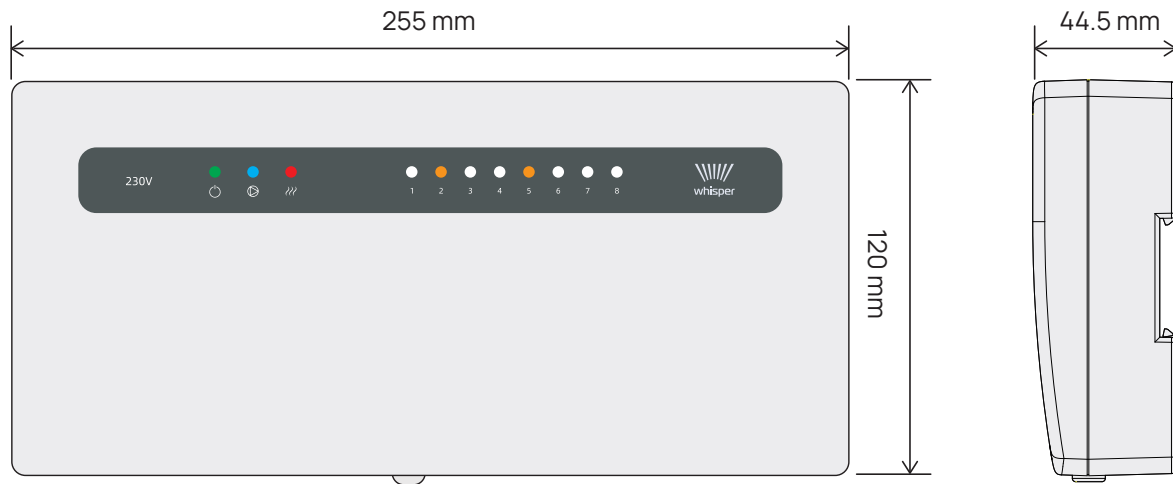


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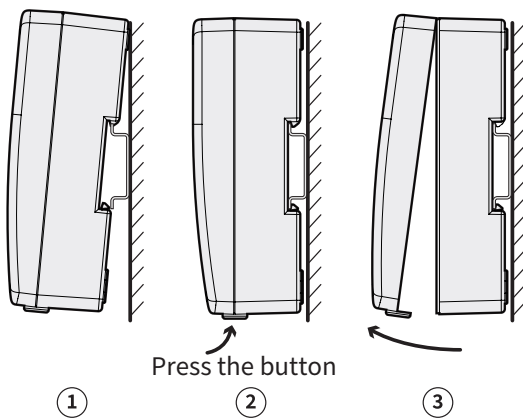
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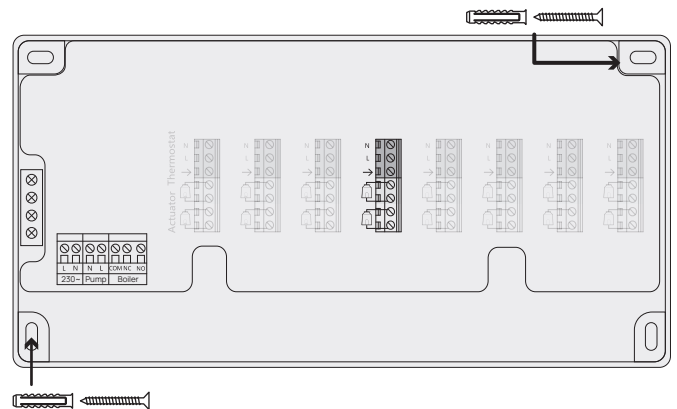
Product Dimensions (mm)



DIN rail mounting



Wall mounting



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Unit 9, Stanton Harcourt Industrial Estate, Standlake, Witney,
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Tel: +44 (0)1993 640073 whispercontrols.com



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