

iSense-PLUS

DECENTRALISED MECHANICAL EXTRACT VENTILATION

iSense-PLUS is a Decentralised Mechanical Extract Ventilation fan (dMEV) to provide continuous background extract ventilation for new build properties.



HOW DOES IT WORK?

iSense-PLUS works under the same principle as whole house mechanical extract (MEV) but with individual fans installed in each wet room within a property to draw moisture laden air from these areas. The Nuaire iSense-PLUS complies with the latest building regulations and is listed on the Product Characteristics Database SAP10

iSense-PLUS

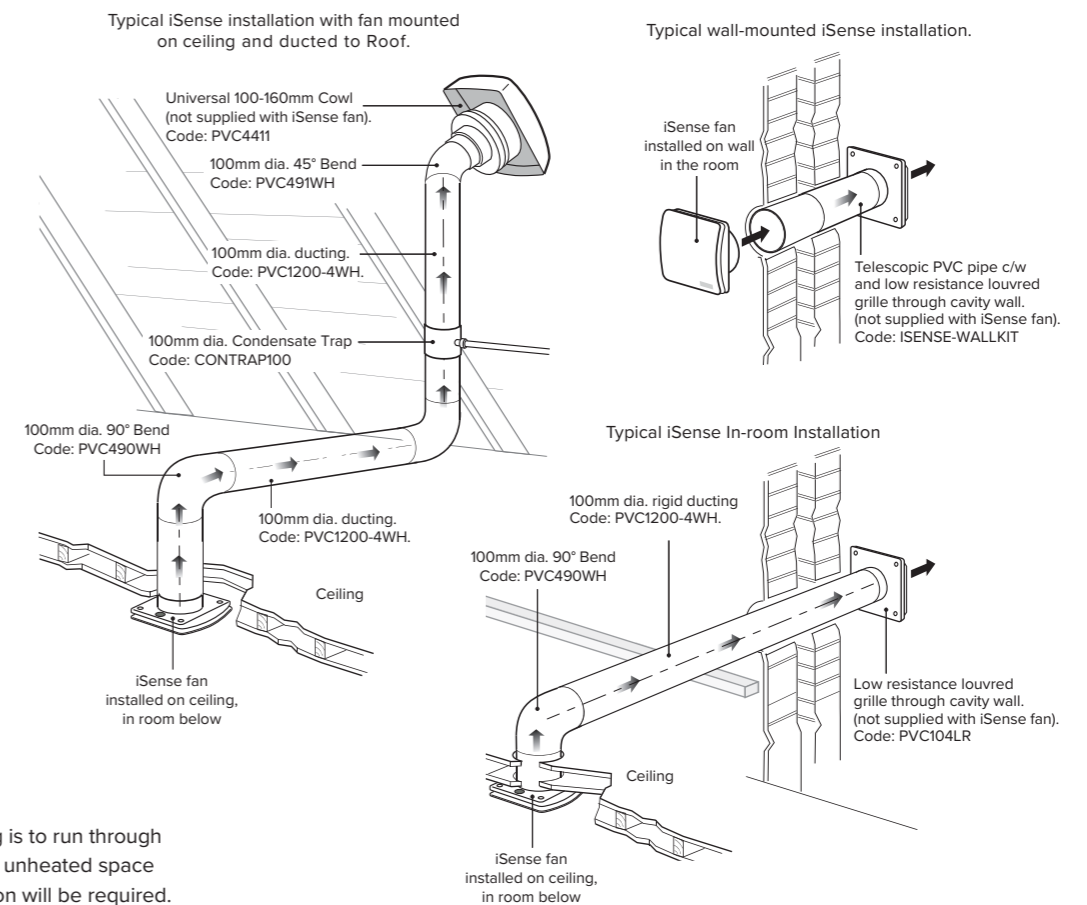
PERFORMANCE & TECHNICAL INFORMATION

iSense-PLUS is a compact and stylish continuous ventilation solution for both wall and ceiling applications and is fully compliant with latest Part F & L Building Regulations.

iSense-PLUS has a built-in intelligent energy saving mechanism along with a digital control for easy set-up & commissioning.



TECHNICAL

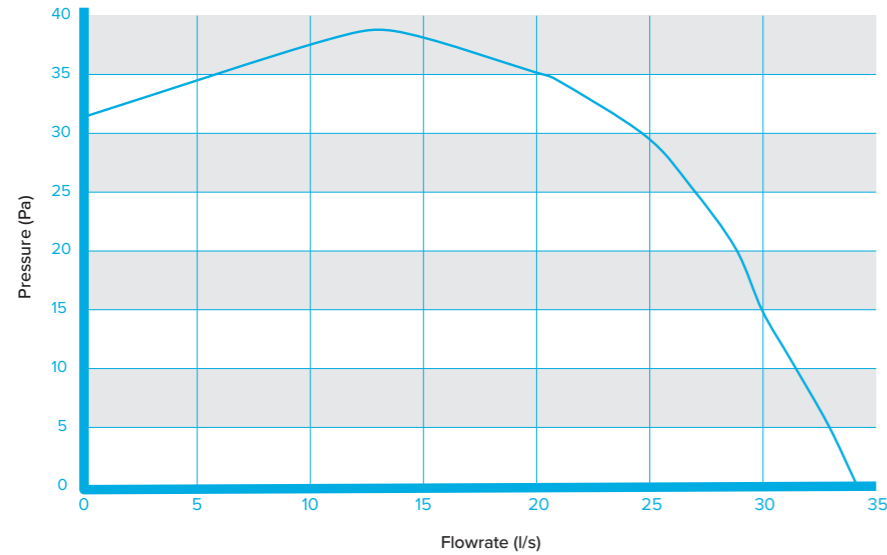


If ducting is to run through a cold or unheated space installation will be required.

iSense-PLUS

PERFORMANCE & TECHNICAL INFORMATION

MAXIMUM SPEED PERFORMANCE



CASING



SPF PERFORMANCE

FAN LOCATION	SFP
In-room fan - kitchen	0.23
In-room fan - other wet room	0.28
Through-wall fan - kitchen	0.16
Through-wall fan - other wet room	0.23

COMPLIANCE

Building Regulations Part F1(1) are set to protect the health of the occupants of the building by providing adequate ventilation. Without adequate ventilation, mould and internal air pollution might become hazardous to health.



Table 1.3 Minimum whole dwelling ventilation rates determined by the number of bedrooms

Number of bedrooms ^(1/2)	Minimum ventilation rate by number of bedrooms (l/s)
1	19
2	25
3	31
4	37
5	43

Table 1.2 Minimum extract ventilation rates continuous extract systems¹

Room	High rate (l/s)	Continuous rate
Kitchen	13	The sum of all extract ventilation in the dwelling on its continuous rate should be at least the whole dwelling ventilation rate given in Table 1.3.
Utility room	8	
Bathroom	8	
Sanitary accommodation	6	

Notes:

- If the dwelling only has one habitable room, a minimum ventilation rate of 13 l/s should be used.
- For each additional bedroom, add 6 l/s to the values in Table 1.3.

Note:

- If the continuous rate of ventilation provided in a room is equal to or higher than the minimum high rate specified in the table, no extra ventilation is needed.

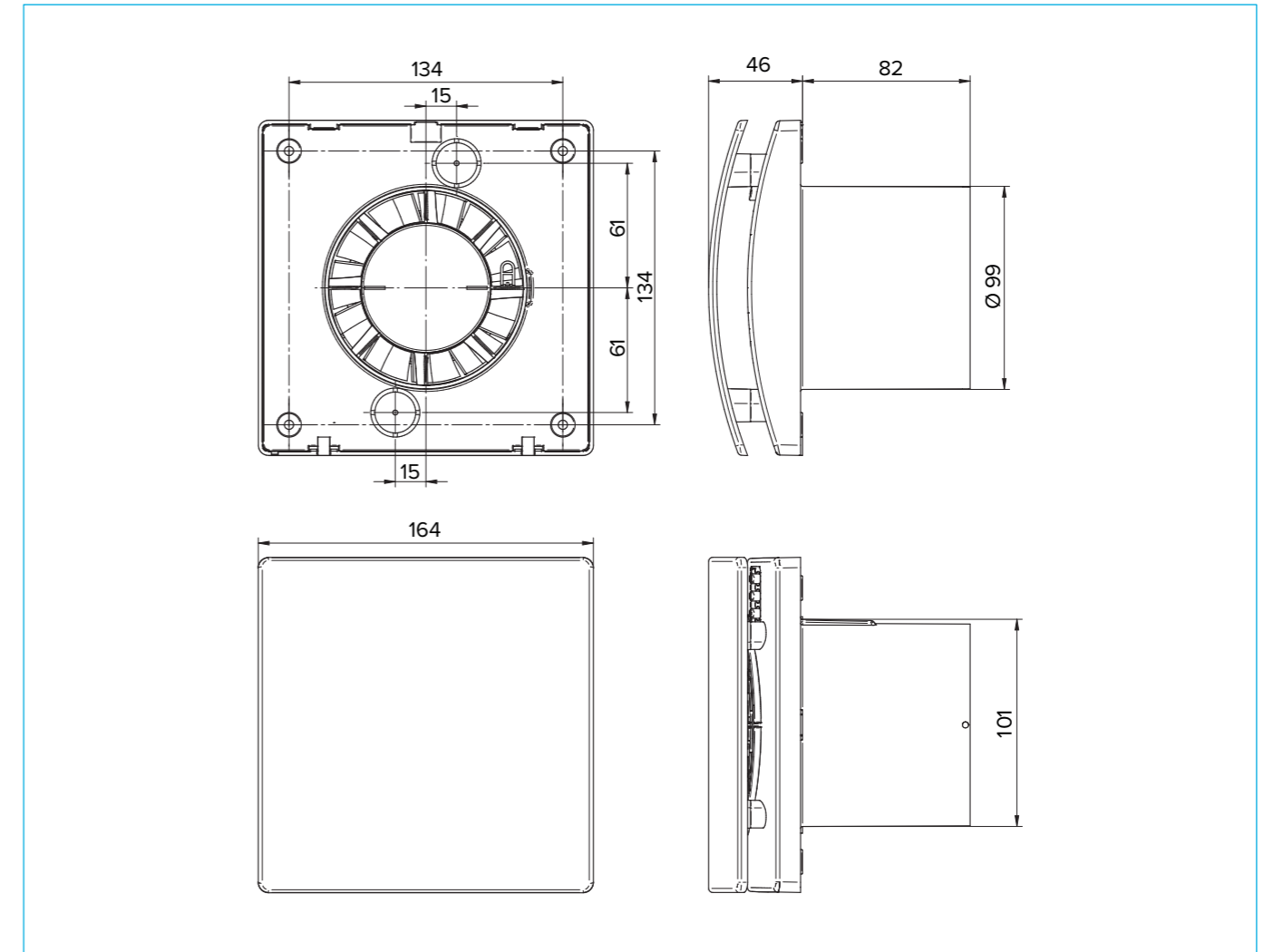
SOUND PERFORMANCE

UNIT	DUTY	FREQUENCY Hz							LwA	dBA @ 3m
		125	250	500	1KHz	2KHz	4KHz	8KHz		
iSense-PLUS	34 l/s	39	44	52	47	48	43	30	54	33

iSense-PLUS

PERFORMANCE & TECHNICAL INFORMATION

DIMENSIONS (mm)



ANCILLARIES AVAILABLE



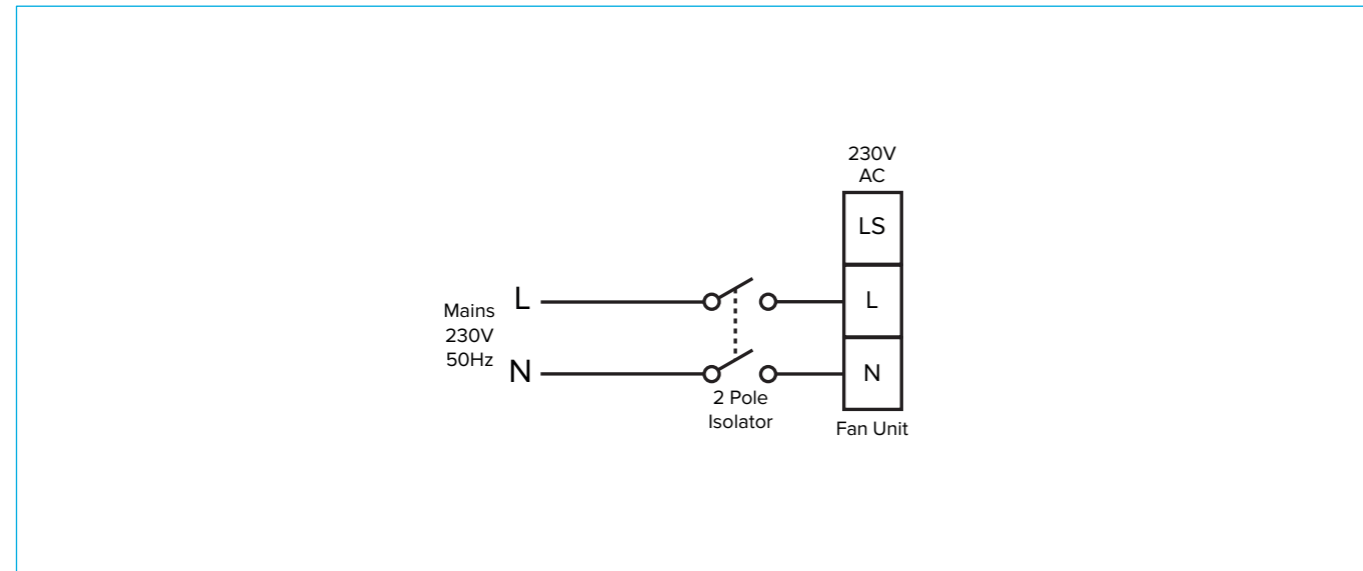
iSense-PLUS

PERFORMANCE & TECHNICAL INFORMATION

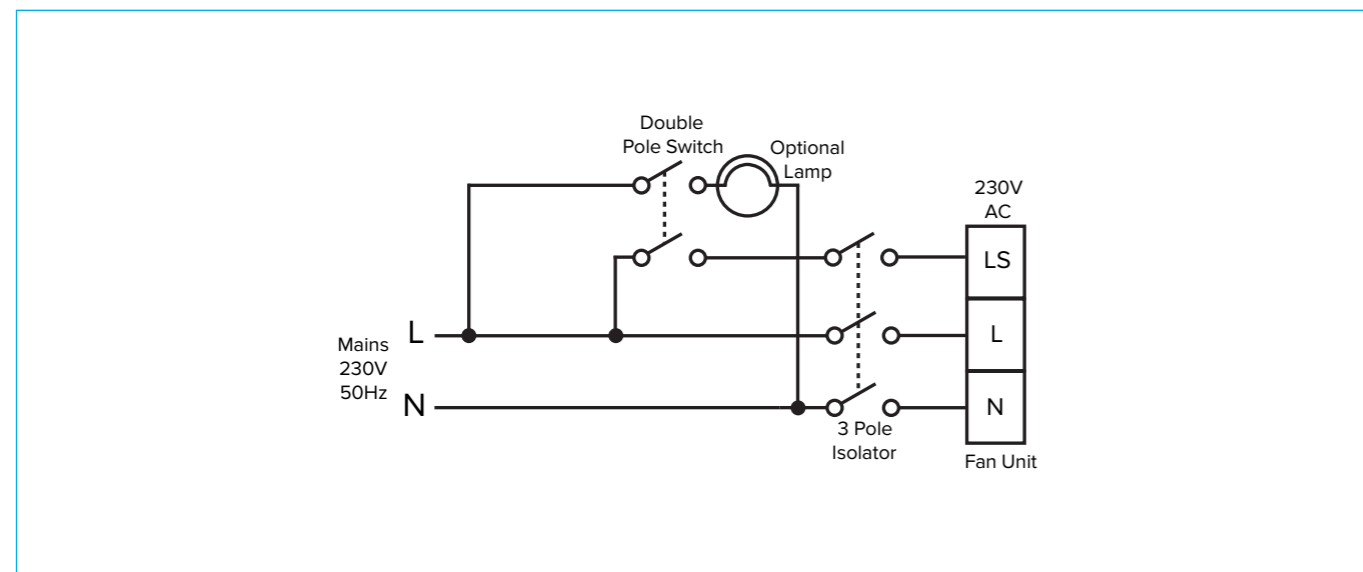
ELECTRICAL DETAILS

Voltage	230V
Frequency	50Hz
Operating Temperature	0 - 40°C
Maximum Power Consumption	7W

2 CORE WIRING



3 CORE WIRING



iSense-PLUS

DECENTRALISED MECHANICAL EXTRACT VENTILATION (dMEV)

CONSULTANT SPECIFICATION

iSense-PLUS KITCHEN AND WET ROOM EXTRACT FAN

The unit shall be manufactured by Nuaire.

The National Calculation Method (SAP) identifier for this product is Decentralised Mechanical Ventilation Equipment (dMEV).

The unit shall be surface mountable for either wall or ceiling applications.

The unit shall have 2 speed settings – trickle and boost:

- Trickle flowrates shall be selectable in steps of 1 l/s between 5 and 20 l/s.
- Boost flowrates shall be selectable in steps of 1 l/s between 6 and 29 l/s.

The unit shall have an adjustable internal humidistat and run-on timer. Commissioning will be via a 7-segment display and three push buttons. Display shall be capable of showing the run time in hours days and years.

The unit shall be capable of maintaining it's airflow setting against an external wind load of up to 20Pa.

The impeller shall be directly driven by a low energy, high efficiency DC motor, fitted with sealed, self-lubricating ball bearings.

IPX4 rated (wall mounted only).

Suitable for bathroom zone 1 applications.

Motors shall be DC brushless with locked rotor protection to prevent overheating in the event of fan failure.

Each unit is capable of being set to comply with Building Regulations:

- Part F 2010 (2021 Edition) – Means of ventilation for continuous mechanical extract.
- Part L 2010 (2021 Edition) - Conservation of fuel and power continuous mechanical extract systems.

The unit will meet the requirements of Part F for the following installations:

- Fan mounted within room with a maximum of 5m of rigid PVC ducting (Nuaire part number PVC1200-4WH), 4 off 90° bends (Nuaire part number PVC490WH), 1 off low resistance extract grille (Nuaire part number PVC104LR).
- Fan mounted through a wall with 300mm rigid PVC ducting, 1 off low resistance extract grille. (Nuaire part number PVCWALL/6)

Unit can comply with BRE digest 398 under continuous mechanical extract ventilation.

The unit shall be designed for quietest operation to ensure occupant satisfaction.

The unit shall incorporate electrical connections to allow for the unit's "boost" airflow to be triggered by switched live.

The unit shall incorporate a pull-cord to allow "boost airflow operation.

The unit shall be supplied with a 5 year warranty; 1 year parts and labour, remaining years parts only.