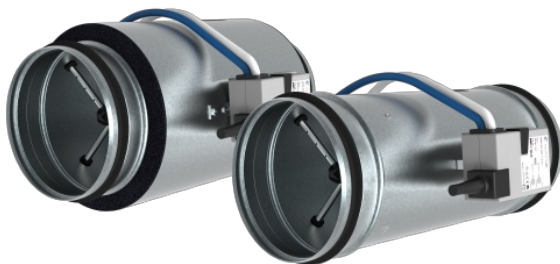


OPTIMA-R-FC Variable Air Volume Controllers

Single or double-skin circular VAV units suitable for offices, hotel rooms and meeting rooms



- Compact
- Galvanised steel
- Factory calibrated
- Noise reduction

[Find more details in our online catalogue](#)

Single Zone-Control

OPTIMA-R terminals units are ideal for single zone control with supply and return in Master and Slave setup where required cooling and heating load will vary.

Factory calibrated

VAV and Compact controllers are factory calibrated as standard to the air volume indicated in the table or upon request can be adjusted to site-required settings prior to dispatch.

Galvanised steel

The AV unit housing of the OPTIMA-R as well as the control damper blade is made from galvanized sheet steel making it tough and durable.

OPTIMA-R are single or double-skin circular VAV terminal units. These are commonly used for return air applications or for supply applications at low system pressure and are available in different sizes. The units are ideal for single zone control with supply and return in a Master and Slave arrangement. OPTIMA-R is commonly installed in offices, hotel rooms and meeting rooms where the cooling and heating load will vary on demand.

VAV unit housing is made from galvanised sheet steel. The special design of the multi-point averaging cross-flow sensor ensures the accuracy of airflow readings even where installations are difficult. VAV compact controllers are factory calibrated as standard to the default air volume or upon request can be adjusted to site-required settings prior to dispatch on Vmin and Vmax range. This must be indicated prior to ordering the units to ensure adequate calibration in the factory.

Gateway communication units can be provided and can be connected later in time to building management systems

Technical parameters

Nominal data

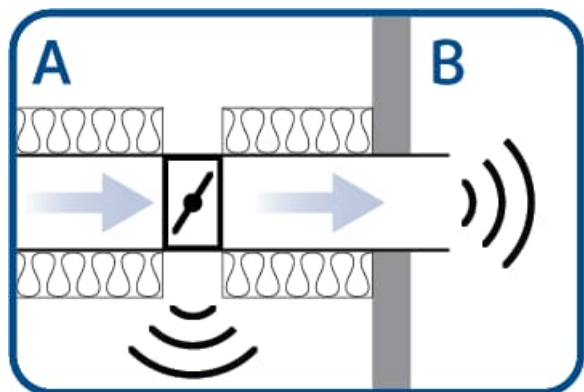
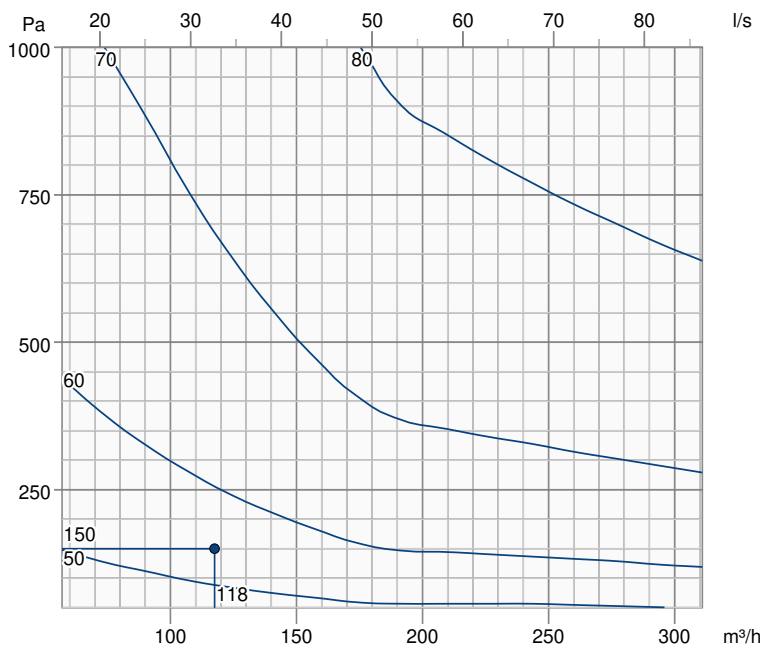
| | |
|---------------------------|------------------------|
| Communication data | 1xAI, 1xAO, Modbus RTU |
| Duct connection type | Circular |
| Voltage (nominal) | 24 V |
| Power consumption in wire | 4.1 VA |
| Pressure drop, max | 1,000 Pa |

Dimensions and weights

| | |
|--------|--------|
| Weight | 1.4 kg |
|--------|--------|

Performance

Pressure drop & sound power level (A-weighted) - Total sound power level (A-weighted) - Discharged into room

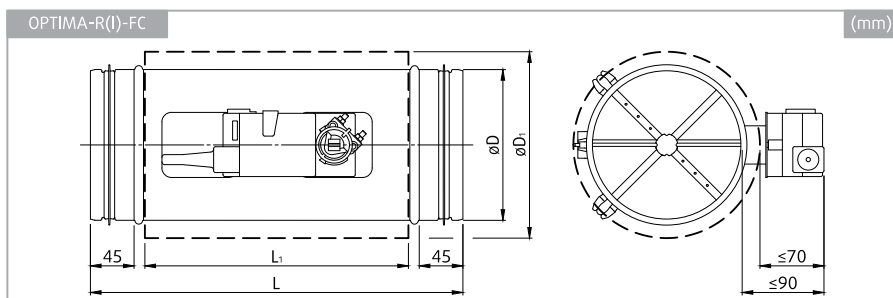


| Parameter | Value |
|-------------------------------------------------------------|------------------------|
| Air flow | 118 m³/h |
| Nominal area velocity | 4.66 m/s |
| Pressure drop | 150 Pa |
| Total sound power level - Discharged into room | 61 dB |
| Total sound power level (A-weighted) - Discharged into room | 55 dB(A) |
| Total sound power level - Casing radiated | 47 dB |
| Total sound power level - Casing radiated (A-weighted) | 36 dB(A) |
| Communication data | 1xAI, 1xAO, Modbus RTU |

| Total sound power level - Discharged into room | | Hz | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|-------------------------------------------------------|-------|-----------|-----------|------------|------------|------------|-----------|-----------|-----------|-----------|
| Lw | dB | | 53 | 57 | 54 | 53 | 50 | 45 | 39 | 34 |
| LwA | dB(A) | | 29 | 42 | 46 | 50 | 50 | 46 | 40 | 33 |

| Casing Radiated Noise | | Hz | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
|------------------------------|-------|-----------|-----------|------------|------------|------------|-----------|-----------|-----------|-----------|
| Lw | dB | | 47 | 36 | 31 | 30 | 31 | 29 | 26 | 27 |
| LwA | dB(A) | | 19 | 21 | 22 | 26 | 31 | 31 | 27 | 25 |

Dimensions



| Dimensions | Value mm |
|-----------------|----------|
| L | 290 |
| L ₂ | 128 |
| øD | 98 |
| øD ₁ | 137 |

| Part | Weight kg |
|--------------------|-----------|
| OPTIMA-R-FC-100-GM | 1.40 |

Accessories

- AIAS Combox module (19992)
- RC-C3DOC (266479)
- AIAS I/O Module (19993)
- ZTH-EU (27655)

Documents

- BACnet_PICS_VAV_V3_04_en-gb
- Handbook_OPTIMA-R-FC_202404
- Handbook_OPTIMA-R-FC_202404
- Hy_Hygiene_certificate_OPTIMA-R
- Hygiene-Conformity_Declaration
- Modbus_Registers_OPTIMA...BLC1MOD
- Modbus_Registers_OPTIMA...GOMOD
- OPTIMA-R_DoC_EN
- OPTIMA_Cabling
- OPTIMA_Comparison
- VAV-CompactKNX_en-gb_datasheet