

VR - Villavent heat recovery units with rotating heat exchanger

Fans

VR-units are equipped with centrifugal fans with forward curved impeller blades and maintenance free external rotor motors, protected by integrated thermal protection. VR-400 EV/B is fitted with single inlet fans, and VR-700 EV with double inlet fans. The fans can easily be removed for cleaning, maintenance or replacement.

Filters

Discreet lamp indicators, integrated and/or remote, show time for filter change. Operation time (6, 9 or 12 months) between filter change can be chosen from the control panel.

Re-heater battery - supply air temperature

The high efficiency rotating heat exchanger will normally ensure that satisfactory supply air temperature is maintained without use of re-heater battery. The integral electrical re-heater will, however, ensure that set supply air temperature is maintained even in areas with extremely low outdoor temperatures.

When heat recovery from the extract air is insufficient to obtain set supply air temperature, the re-heater battery will automatically switch on. Lamp signal on the control panel will indicate when the re-heater is in operation.

Duct cover

White painted duct cover, 3 parts, for installation between ceiling and unit can be supplied as additional equipment (EV-models).

Summer operation

The unit will automatically switch between normal operation with heat recovery and summer operation without heat recovery. When supply air temperature exceeds set temperature, the rotor will stop and there will be no heat recovery.

If cooling/air-conditioning is installed in the building, and the extract air temperature is lower than the outdoor temperature, the unit will automatically switch to recover the chilled indoor air. The extract air will then cool down the supply air in the exchanger before the it air is lead into the living areas.

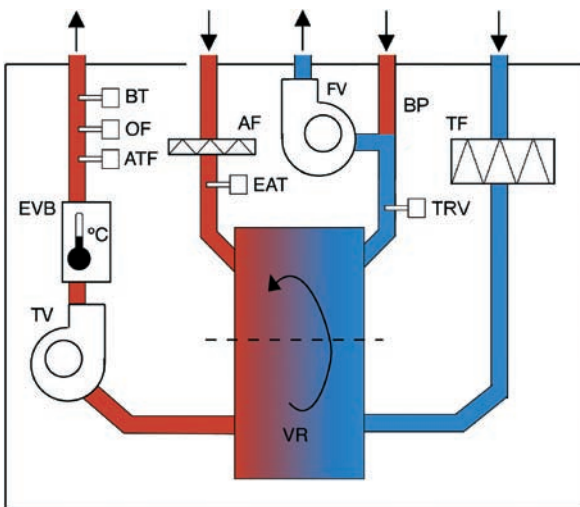
Rotation guard

Alarm menu will show possible interruptions and ensure safe and energy efficient operation. An unintended rotor stop, and thereby no heat recovery, will be indicated by separate lamp signal.

Timer operation

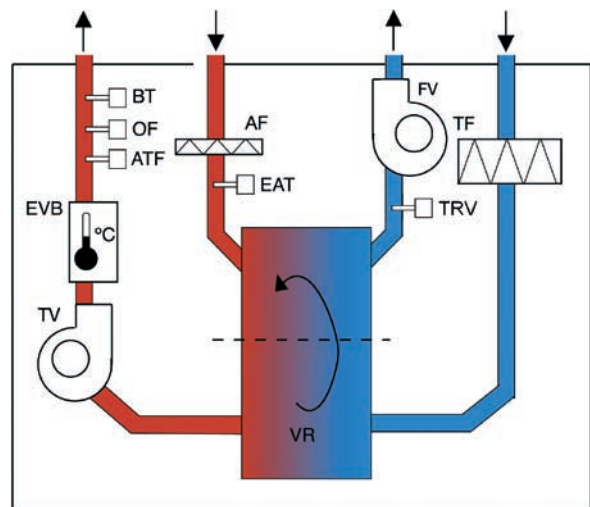
If VR-units are installed for ventilaton of commercial buildings, it might be pertinent to install a separate week timer for automatic day and night operation (reduced ventilation). If the ventilated areas are used when night operation is on, override to day operation can be activated via separate switch on the control panel. Automatic re-set to set operation after 3 hours.

VR-400 EV/B



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|-----|--|-----|-----------------------------|
| TF | Inlet filter | BT | Fire thermostat |
| AF | Extract filter | ATF | Operation thermostat sensor |
| TV | Inlet fan | EAT | Extract temperature sensor |
| FV | Extract fan | VR | Rotating exchanger |
| EVB | Re-heater battery | TRV | Temp.sensor rotation guard |
| OF | Overheat sensor | | |
| BP | Bypass-duct for kitchen extract (if installed) | | |

VR-700 EV



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|-----|-------------------|-----|-----------------------------|
| TF | Inlet filter | BT | Fire thermostat |
| AF | Extract filter | ATF | Operation thermostat sensor |
| TV | Inlet fan | EAT | Extract temperature sensor |
| FV | Extract fan | VR | Rotating exchanger |
| EVB | Re-heater battery | TRV | Temp.sensor rotation guard |
| OF | Overheat sensor | | |

VR-400 EV/B

VR-700 EV

	VR-400 EV/B	VR-700 EV
Remote control panel type CE	x	x
Week timer	x	x
Duct cover	x (Height = 295 mm)	x (Height = 295 mm)

VR - Villavent heat recovery units with rotating heat exchanger

Fans

VR-units are equipped with centrifugal fans with forward curved impeller blades and maintenance free external rotor motors, protected by integrated thermal protection. VR-250 EH/B and VR-400 E are fitted with single inlet fans, and VR-700 E with double inlet fans. The fans can easily be removed for cleaning, maintenance or replacement.

Filters

Discreet lamp indicators, on integrated and/or remote control panel, show time for filter change. Operation time (6, 9 or 12 months) between filter change can be set from the control panel.

Re-heater battery - supply air temperature

The high efficiency rotating heat exchanger will normally ensure that satisfactory supply air temperature is maintained without use of re-heater battery. The integral electrical re-heater will, however, ensure that set supply air temperature is maintained even in areas with extremely low outdoor temperatures.

When heat recovery from the extract air is insufficient to obtain set supply air temperature, the re-heater battery will automatically switch on. Lamp signal on the control panel will indicate when the re-heater is in operation.

Duct cover

White painted duct cover, 3 parts, for installation between ceiling and unit can be supplied as additional equipment (EV-models).

Summer operation

The unit will automatically switch between normal operation with heat recovery and summer operation without heat recovery. When supply air temperature exceeds set temperature, the rotor will stop and there will be no heat recovery.

If cooling/air-conditioning is installed in the building, and the extract air temperature is lower than the outdoor temperature, the unit will automatically switch to recover the chilled indoor air. The extract air will then cool down the supply air in the exchanger before the supply air is lead into the living areas.

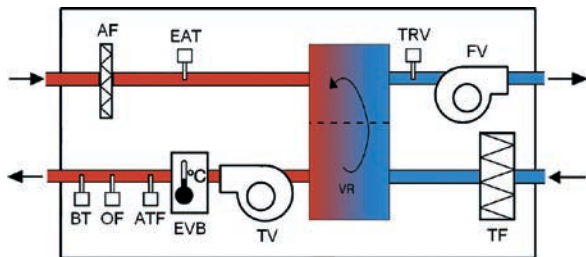
Rotation guard

Alarm menu will show possible interruptions and ensure safe and energy efficient operation. An unintended rotor stop, and thereby no heat recovery, will be indicated by separate lamp signal.

Timer operation

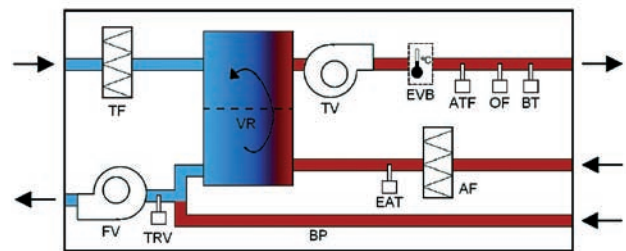
If VR-units are installed for ventilaton of commercial buildings, it may be pertinent to install a separate week timer for automatic day and night operation (reduced ventilation). If the ventilated areas are used when night operation is on, override to day operation can be activated via separate switch on the control panel. Automatic re-set to set operation after 3 hours.

VR-400/-700 E



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|-----|-------------------|-----|------------------------------|
| TF | Inlet filter | BT | Fire thermostat |
| AF | Extract filter | ATF | Operation temperature sensor |
| TV | Inlet fan | EAT | Extract temperature sensor |
| FV | Extract fan | VR | Rotating exchanger |
| EVB | Re-heater battery | TRV | Temp.sensor rotation guard |
| OF | Overheat sensor | | |

VR-250 EH/B



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|-----|--|-----|----------------------------|
| TF | Inlet filter | BT | Fire thermostat |
| AF | Extract filter | ATF | Operation thermostat |
| TV | Inlet fan | EAT | Extract temperature sensor |
| FV | Extract fan | VR | Rotating exchanger |
| EVB | Re-heater battery | TRV | Temp.sensor rotation guard |
| OF | Overheat sensor | | |
| BP | Bypass-duct for kitchen extract (if installed) | | |

VR-400/-700 E

VR-250 EH/B

	VR-400/-700 E	VR-250 EH/B
Remote control panel type CE	x	x
Week timer	x	
Duct cover		