Effective heat exchange and simultaneous fresh air ventilation

High efficiency and low noise levels are achieved by using a highly efficient heat exchange process. A comfortable air-conditioned space is achieved by conveniently selecting whether to use heat exchange or normal ventilation setting, according to the requirements of the conditioned space.

Residential, Commercial & Light Commercial

VENTILATION

Lineup

<table>
<thead>
<tr>
<th>Airflow rate (m³/h)</th>
<th>250</th>
<th>350</th>
<th>500</th>
<th>800</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Recovery Ventilator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTZ-BD025C</td>
<td>UTZ-BD035C</td>
<td>UTZ-BD050C</td>
<td>UTZ-BD080C</td>
<td>UTZ-BD100C</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connectable capacity class (kW)</th>
<th>5.0</th>
<th>6.3</th>
<th>8.0</th>
<th>10.0</th>
<th>12.5</th>
<th>14.0</th>
<th>20.0</th>
<th>25.0</th>
<th>40.0</th>
<th>50.0</th>
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<tbody>
<tr>
<td>DX-Kit for Air Handling Applications for VRF Outdoor Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEV unit</td>
<td>Control unit</td>
<td>EEV unit</td>
<td>Control unit</td>
<td>EEV unit</td>
<td>Control unit</td>
<td>EEV unit</td>
<td>Control unit</td>
<td>EEV unit</td>
<td>Control unit</td>
<td></td>
</tr>
<tr>
<td>UTP-VX30A</td>
<td>UTY-VGDX</td>
<td>UTP-VX60A</td>
<td>UTY-VGDX</td>
<td>UTP-VX90A</td>
<td>UTY-VGDX</td>
<td>UTP-VX90A×2</td>
<td>UTY-VGDX</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connectable capacity class (kW)</th>
<th>3.5 - 22.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX-Kit for Air Handling Applications for Single Split Outdoor Unit</td>
<td></td>
</tr>
<tr>
<td>UTY-XGZX</td>
<td></td>
</tr>
</tbody>
</table>

VENTILATION Product Lineup

214 VENTILATION Lineup
216 Energy Recovery Ventilator
218 DX-Kit for Air Handling Application
• for VRF Outdoor Unit
220 New DX-Kit for Air Handling Application
• for Single Split Outdoor Unit
Energy Recovery Ventilator

Energy recovery ventilator unit offers maximum comfort and greater energy savings.

Heat exchange ventilation and normal ventilation

Heat exchange ventilation
When a room is cooled or heated, the exhausted cooling / heating energy is recovered by heat exchange ventilation.

Normal ventilation
The operation is used during periods when the room space requires no cooling or heating effect, i.e. when there is minimal temperature difference between the indoor and outdoor environments.

Energy efficiency and ecology
Energy consumption is dramatically reduced by using a counter flow heat exchange element. Air conditioning load is reduced by approximately 20%, resulting in significant energy savings. Recovers up to 77% of the heat in the outgoing air.

Features of heat exchange element

With the counter-flow element, air moves in a straight line across the element. With the cross-flow element, air flows through the element for a longer time (longer distance), so the heat-exchange effect improved.

Quiet operation
Significantly reducing low pressure loss and noise allows low-noise operation.

Extended range of an external static pressure
An external static pressure is improved by adopting a powerful fan motor. This allows for application in a wide variety building.

Slim shape and easier installation
Counter-flow heat exchange element used for reduced noise and slimmer, more compact body shape.

Reverse mountable direct air supply / exhaust system
Adoption of straight air supply / exhaust system. Duct design is simplified because the air supply / exhaust ducts are straight. Since each unit can be mounted in reverse position, only one inspection hole is needed for two units. Two units can share one inspection hole so duct work is easier and more flexible.

Simple remote operation
Easy operation by connecting a liquid crystal switch
• POWER ON/OFF
• ON/OFF Timer
• Clean filter display
• Heat exchange/Normal Ventilation

Model : UTZ-BD025C / UTZ-BD035C / UTZ-BD050C / UTZ-BD080C / UTZ-BD100C

Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>UTZ-BD025C</th>
<th>UTZ-BD035C</th>
<th>UTZ-BD050C</th>
<th>UTZ-BD080C</th>
<th>UTZ-BD100C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated flow rate</td>
<td>(Extra high)</td>
<td>250 m³/h</td>
<td>150 m³/h</td>
<td>150 m³/h</td>
<td>250 m³/h</td>
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<tr>
<td>(High)</td>
<td>250 m³/h</td>
<td>150 m³/h</td>
<td>200 m³/h</td>
<td>250 m³/h</td>
<td>250 m³/h</td>
</tr>
<tr>
<td>(Low)</td>
<td>250 m³/h</td>
<td>150 m³/h</td>
<td>250 m³/h</td>
<td>250 m³/h</td>
<td>250 m³/h</td>
</tr>
<tr>
<td>Input power (Extra high)</td>
<td>W</td>
<td>128</td>
<td>190</td>
<td>289</td>
<td>418</td>
</tr>
<tr>
<td>(High)</td>
<td>123</td>
<td>185</td>
<td>225</td>
<td>378</td>
<td>432</td>
</tr>
<tr>
<td>(Low)</td>
<td>96</td>
<td>168</td>
<td>185</td>
<td>295</td>
<td>311</td>
</tr>
<tr>
<td>Sound pressure level (Extra high)</td>
<td>dB*</td>
<td>31.5</td>
<td>33.0</td>
<td>38.5</td>
<td>37.5</td>
</tr>
<tr>
<td>(High)</td>
<td>30.5</td>
<td>31.0</td>
<td>38.0</td>
<td>37.0</td>
<td>39.5</td>
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<tr>
<td>(Low)</td>
<td>26.5</td>
<td>25.5</td>
<td>32.5</td>
<td>34.5</td>
<td>36.5</td>
</tr>
<tr>
<td>Energy Exchange Efficiency (Extra high)</td>
<td>%</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>(High)</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>(Low)</td>
<td>77</td>
<td>78</td>
<td>76</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td>Temperature Exchange Efficiency</td>
<td>(Extra high)</td>
<td>%</td>
<td>63</td>
<td>66</td>
<td>62</td>
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<tr>
<td>(High)</td>
<td>63</td>
<td>66</td>
<td>62</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>(Low)</td>
<td>65</td>
<td>71</td>
<td>64</td>
<td>68</td>
<td>70</td>
</tr>
<tr>
<td>External static pressure (Extra high)</td>
<td>Pa</td>
<td>105</td>
<td>140</td>
<td>120</td>
<td>140</td>
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<tr>
<td>(High)</td>
<td>95</td>
<td>60</td>
<td>60</td>
<td>110</td>
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<tr>
<td>(Low)</td>
<td>45</td>
<td>45</td>
<td>35</td>
<td>55</td>
<td>75</td>
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<tr>
<td>Weight</td>
<td>kg</td>
<td>29</td>
<td>49</td>
<td>57</td>
<td>71</td>
</tr>
</tbody>
</table>

Specifications

- Model No.
- Rated flow rate
- Input power
- Sound pressure level
- Energy Exchange Efficiency
- Temperature Exchange Efficiency
- External static pressure

Dimensions

<table>
<thead>
<tr>
<th>Model No.</th>
<th>UTZ-BD025C</th>
<th>UTZ-BD035C</th>
<th>UTZ-BD050C</th>
<th>UTZ-BD080C</th>
<th>UTZ-BD100C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions W×D×H mm</td>
<td>882 × 599 × 270</td>
<td>1,050 × 804 × 317</td>
<td>1,090 × 904 × 317</td>
<td>1,322 × 884 × 388</td>
<td>1,322 × 1,134 × 388</td>
</tr>
<tr>
<td>Weight kg</td>
<td>29</td>
<td>49</td>
<td>57</td>
<td>71</td>
<td>83</td>
</tr>
</tbody>
</table>

*The noise level must be measured 1 m behind the unit and at the floor.
VENTILATION

PRODUCT LINEUP

VENTILATION

Multiple temperature sensors optimally control the air handling unit and fan coil unit.

Supports a wide range of capacity classes

- 2 EEV units can be connected in parallel and up to 20 HP (50 kW) large capacity units. (Separation Tube of UTP-LX180A is required.)
- Connectable capacity range: 5 kW to 50 kW

A variety of controls to match the application

Central control using our VRF controllers or central management controllers

Central control from external controllers

Functions Summary

Inputs
- ON/OFF
- Setting temperature
- Capacity demand
- Heating / Cooling operation mode
- Fault information

Outputs
- ON/OFF indication
- Fan ON/OFF indication
- Thermostat ON/OFF indication
- Defrost indication
- Fault indication

MODBUS® Control
Possible to control via a MODBUS enabled BMS by using optional interface.

Installation Limitation

- Connectable VRF series: All VRF series
- Connectable DX Kit system capacity range: 50 to 100% of the outdoor unit capacity
- Connectable DX-Kit system capacity range with indoor units: 30% or less of the outdoor unit capacity
- Max. piping length from control unit: 10 m
- Fan piping length between EEV unit and indoor unit: 5 m
- Outdoor installation: Control unit (8P4a class) and EEV unit can be installed at an outdoor space.

For 2 EEV units connection (option)
Separation Tube: UTP-LX180A

Control unit: UTY-VDGX
EEV unit: UTP-VX30A / UTP-VX60A / UTP-VX90A

Specifications

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Cooling kW</th>
<th>5.6</th>
<th>6.3</th>
<th>8.0</th>
<th>10.0</th>
<th>12.5</th>
<th>14.0</th>
<th>22.4</th>
<th>25.0</th>
<th>40.0</th>
<th>50.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating</td>
<td>kW</td>
<td>6.3</td>
<td>7.1</td>
<td>9.0</td>
<td>11.2</td>
<td>14.0</td>
<td>16.0</td>
<td>28.0</td>
<td>30.0</td>
<td>45.0</td>
<td>56.5</td>
</tr>
</tbody>
</table>

Note: Specifications are based on the following conditions.
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Piping length: 7.5 m
Voltage: 230 V.

These kits enable other manufacturers air handling units (AHU) and fan coil units (FCU) to be incorporated into a Fujitsu VRF system or, be connected to a dedicated Fujitsu VRF outdoor unit as a 1:1 system to control outside air ventilation (AHU) or room temperature (FCU).

A wired VRF system

Indoor unit
EEV unit
Control unit
DX-Kit
Piping
Wiring

When connecting to an air handling unit, the supply air temperature is controlled by the discharge sensor.

When connecting to a fan coil unit, the room temperature is controlled by the return air temperature sensor.

These kits enable other manufacturers air handling units (AHU) and fan coil units (FCU) to be incorporated into a Fujitsu VRF system or, be connected to a dedicated Fujitsu VRF outdoor unit as a 1:1 system to control outside air ventilation (AHU) or room temperature (FCU).

Central control using our VRF controllers or central management controllers

Central control from external controllers

These kits enable other manufacturers air handling units (AHU) and fan coil units (FCU) to be incorporated into a Fujitsu VRF system or, be connected to a dedicated Fujitsu VRF outdoor unit as a 1:1 system to control outside air ventilation (AHU) or room temperature (FCU).
Flexible connectivity
This kit is a control unit to allow connection to third party manufacturer equipment. Fujitsu General single split outdoor units can be used with this control unit, creating an ideal solution when a unique air handling unit is required.

Supports a wide range of capacity class
Connectable large capacity range: 3.5 kW ~ 22.0 kW (Nominal)

Operation from anywhere on your mobile device
Available to use operation and management from remote control such as Smartphones and Tablets.

Functions Summary
- ON/OFF
- Heating/Cooling operation mode
- Capacity demand (analogue 0-10 V)
- Heat exchanger temperature

Inputs

Outputs
- Status of Compressor, Defrost, Error (Potential free relays)
- LED status indication

Wireless LAN Control
Wireless LAN control with cloud connectivity enables safe remote monitoring and control from anywhere.

Easy installation
- Simple installation through compact DIN rail mountable enclosure
- No need for expansion devise
- No separate external power required

Specifications

<table>
<thead>
<tr>
<th>Capacities</th>
<th>3.5</th>
<th>4.3</th>
<th>5.2</th>
<th>6.8</th>
<th>8.5</th>
<th>9.4</th>
<th>12.1</th>
<th>13.3</th>
<th>15.0</th>
<th>19.0</th>
<th>22.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating</td>
<td>4.1</td>
<td>5.0</td>
<td>6.0</td>
<td>7.8</td>
<td>10.0</td>
<td>12.1</td>
<td>15.3</td>
<td>18.0</td>
<td>22.4</td>
<td>27.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: Specifications are based on the following conditions.
Cooling: Indoor temperature of 27°CDB / 19°CWB, and outdoor temperature of 35°CDB / 24°CWB.
Heating: Indoor temperature of 20°CDB / (15°CWB), and outdoor temperature of 7°CDB / 6°CWB.
Pipe length: 5.0 m, Voltage: 230 [V].

Model: UTY-XDZX

This kit enables other manufacturers air handling units (AHU) and fan coil units (FCU) to be incorporated into a Fujitsu General Split outdoor unit.