ECONOVENT® PUR (A,B,C,D)
Instructions for constant speed with wiring diagram
Rotor size 030-250
**Constant Speed - Description, control**

**PUR (A,B,C,D) rotor size 030–250**

**Drive Equipment for Constant Speed**

Heat recovery is regulated by means of two-position motor operation (on/off control).

The electric motor with drive pulley and drive belt are included in the supply.

<table>
<thead>
<tr>
<th>Rotor size</th>
<th>Electric motor (50/60 Hz)</th>
<th>1x(220-240V)</th>
<th>3x400V</th>
<th>3x230V</th>
</tr>
</thead>
<tbody>
<tr>
<td>030-080</td>
<td>25 W</td>
<td>0.25 A</td>
<td>25 W</td>
<td>0.12 A</td>
</tr>
<tr>
<td>081-150</td>
<td>40 W</td>
<td>0.35 A</td>
<td>40 W</td>
<td>0.16 A</td>
</tr>
<tr>
<td>151-250</td>
<td>105 W</td>
<td>0.72 A</td>
<td>160 W</td>
<td>0.44 A</td>
</tr>
</tbody>
</table>

**Control Example**

The performance of the motor alone can be checked by lifting the drive belt off the drive pulley. Always check the direction of rotation.

The rotor shall rotate in such a direction that a point on the rotor surface in the extract air will move towards the purging sector.

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**Fig. 1:1 Heat recovery**

**Fig. 1:2 Cooling energy recovery**

**Fig. 1:3 Purging operation**

**Designations**

GT1, GT2 = Temperature sensor
GX1 = Timeswitch
M = Drive motor
GT∆ = Differential thermostat
G1 = Main switch in the electrical equipment cubicle
S1 = Control switch
K1 = Contactor
SB = Safety isolating switch

1) Supplied with the thermal wheel. All other items shown outside the dotted line are required to be field supplied and wired.
Constant Speed – Wiring diagram
PUR (A,B,C,D) rotor size 030–250

Fig. 2. Basic Wiring Diagram

Designations

- **F1**: Fuses
- **F2**: Control circuit fuse
- **GT1**: Thermostat
- **GT∆**: Differential thermostat
- **GX1**: Time switch,
  - a = intermittent operation
  - b = purging operation
- **H1**: Signal lamp
- **K:FF**: Interlocks e.g. extract air fan
- **K1**: Contactor VVX
- **K1:1**: Overcurrent protection
- **K1:k**: Interlocking contact in K1. Used in systems with rotation monitor
- **M**: Motor
- **G1**: Main switch in the electric equipment cubicle
- **S1**: Control switch
- **SB**: Safety isolating switch

1) Supplied with the thermal wheel. All other items shown outside the dotted line are required to be field supplied and wired.
**Constant speed – Electrical connections**

**PUR (A,B,C,D) rotor size 030–250**

Wire the electrical connections to the appropriate motor terminals.

**PUR (A,B,C,D) rotor size 030-150 Panasonic**

*Note!* These motors cannot be operated at other voltages other than the ordered voltage, i.e. a 240V/1 phase motor cannot be connected to 400V/3 phase or visa versa. Each specific voltage requires a different motor type.

**PUR (A,B,C,D) rotor size 151-250 Groschopp**

The motor can be wired for any of the below voltages.

- **3 x 400V**
- **3 x 230V**
- **1 x (220-240V) right-hand direction of rotation**
- **1 x (220-240V) left-hand direction of rotation**

*For reversed rotation: switch L1 and L2.*

For reversed rotation: switch L1 and L2.

TK = Thermal contact

GR/G = Ground

*Motor cable to be field supplied and wired. Not included in the supply from Fläkt Woods.*

**Capacitor included in delivery when ff = 03, 23, 63, 83.**

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