**Application**
- Exhaust ventilation of high-rise residential and non-residential premises with increased fire prevention requirements.
- Mounting in kitchens, bathrooms, toilets, storerooms and other household areas.

**Design**
- For wall surface mounting.
- The front panel and the casing are made of high-quality durable ABS plastic.
- Equipped with maintenance-free fire-retarding damper. At the temperature in the shaft reaches 90°C the thermal fuse melts and the damper shuts automatically hot air access off, and the flame and smoke ingress to the room through the ventilation shaft system is prevented.
- For easy mounting the damper is mounted on a pivot rod. First mount the damper to the wall and then fix the fan casing (see mounting example).
- The fire-retarding damper serves as a backdraft damper when the fan is off and prevents air moving from the ventilation shaft.
- Connected with the main ventilation shaft with a flexible air duct.
- Connecting branch pipe diameter 80 mm.

**Motor**
- Energy efficient 2- or 3-speed motor on ball bearings with minimum energy demand.
- Automatic maintaining of constant pressure and air flow in the duct.
- For precise characteristics, low noise level and safe operation such turbine is dynamically balanced while assembly.

**Modifications and options**
- **VN-180 K / VN 80 K T** – fans with timer.
- **VN-1 80 K TR / VN-80 K TR** – fans with regulated time.
- **VN-1 80 K / VN 80 K** – fans with internal switch.
- **VN 80 K F / VN 80 K F** – fans with photosensor.
- **VN-1 80 K** – fan with front panel from ground alunnum.
- **VN-1 80 K TR** – fan with front panel from mirror finish aluminium.

**Control**
- Speed switch is performed with the external manual switch. P3-1-300 speed switch for the three speed fan models and P2-1-300 for the two speed fan models. The speed switches are not included into the delivery set and are available upon order.
- Speed switching: 2-speed switch for the two speed fan models.
- The fan switches periodically to the maximum speed while operation.
- The switching interval is set by means of the internal regulator from 2 to 30 minutes. Continuous low speed operation is possible.
- The fan switches to the maximum speed after turning-on the light in the room, turn-on delay time is 50 seconds. After decrease of illumination level below the set threshold the fan switches to the run-out operation mode with the duration from 2 to 30 minutes set by the internal regulator.
- Continuous low speed operation is possible.
- The fan switches to the maximum speed when the humidity level in the room increases. It switches off as relative humidity level drops by 10 % below the set level. The humidity threshold is adjusted in the range between 60 % and 90 %. Force switching to the maximum speed is provided, in this case the turn-on delay time is 50 seconds, and the run-out time is set by the internal regulator between 2 and 30 minutes. Continuous low speed operation is possible.

**Technical characteristics**

<table>
<thead>
<tr>
<th>Model</th>
<th>VN-1 80 K</th>
<th>VN 80 K</th>
<th>VN-1A 80 K</th>
<th>VN-A 80 K</th>
<th>VN-1B 80 K</th>
<th>VN-B 80 K</th>
<th>VN-1C 80 K</th>
<th>VN-C 80 K</th>
<th>VN-1D 80 K</th>
<th>VN-D 80 K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of speeds</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Current [A]</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
<td>0,14/0,18</td>
</tr>
<tr>
<td>Connection to power supply network [mm]</td>
<td>4x1,5</td>
<td>3x1,5</td>
<td>4x1,5</td>
<td>3x1,5</td>
<td>4x1,5</td>
<td>3x1,5</td>
<td>4x1,5</td>
<td>3x1,5</td>
<td>4x1,5</td>
<td>3x1,5</td>
</tr>
<tr>
<td>Maximum air flow [m3/h]</td>
<td>63/102/150</td>
<td>35/63</td>
<td>35/102</td>
<td>35/63/102</td>
<td>63/102</td>
<td>35/63</td>
<td>35/102</td>
<td>35/102/63/102</td>
<td>63/102</td>
<td></td>
</tr>
<tr>
<td>Rotation speed [min⁻¹]</td>
<td>1350/1830/2640</td>
<td>890/1350</td>
<td>890/1350</td>
<td>890/1350/1830</td>
<td>1350/1830</td>
<td>890/1350</td>
<td>890/1350/1830</td>
<td>1350/1830</td>
<td>890/1350</td>
<td>890/1350/1830</td>
</tr>
<tr>
<td>Sound pressure level at 3 m distance [dBA]</td>
<td>30/35,2/43,7</td>
<td>26,6/30</td>
<td>26,6/35,2</td>
<td>26,6/30/35,2</td>
<td>30/35,2</td>
<td>26,6/35,2</td>
<td>26,6/35,2/30/35,2</td>
<td>30/35,2</td>
<td>26,6/35,2</td>
<td>26,6/35,2/30/35,2</td>
</tr>
</tbody>
</table>

**Aerodynamic characteristics**

**Front panel modifications**
- **Decor 1**
- **Decor 2**

**Overall dimensions**

**Mounting example**

The fans meet safety norms and standards and electromagnetic compatibility directives.

---

**Options for 2 speed fan models**

1 - timer modification:
- The fan is switched on to the maximum speed manually with the external switch, turn-on delay time is 50 seconds. The return to default position is performed with the timer, run-out time is 6 minutes. Continuous low speed operation is possible.

2 - adjustable timer modification:
- The fan can be switched to the maximum speed manually with the external switch. Turn-on delay time is set with the internal regulator ranging from 0 to 150 seconds. Run-out time is set with the internal regulator from 2 to 30 minutes. Continuous low speed operation is possible.

3 - interval switch modification:
- The fan switches periodically to the maximum speed while operation. The switching interval is set by means of the internal regulator ranging between 0.5 and 15 minutes. Run-out time is 10 minutes. The fan can be switched manually with the external switch, turn-on delay time is 50 seconds. Continuous low speed operation is possible.