Ducting Solution for the Cisco Nexus 7018 Switch

**Specifications**

The Panduit 7018 cabinet and duct solution shall be designed to be compatible with the Cisco Nexus 7018 switch using Computational Fluid Dynamics (CFD) modeling and verified via operational testing. These ducts shall feed cool air from the cold aisle to the switch and prevent hot air recirculation. Various ducts offered to cover both hot aisle and cold aisle containment and non-containment applications. These modular ducts shall be capable of being installed in a retrofit application without disrupting the existing in-cabinet equipment and cabling. The 39.5” W (1003mm) x 48” D (1219mm) footprint shall meet the Cisco open area requirement on either side of the switch with load rating at 2500 lbs. (1134 kg).

**Technical Information**

**Dimensions**

**Ducting:**
- DIEBBC7018B: 50.53”L x 37.43”W x 40.37”D (1283.6mm x 950.76mm x 1025.5mm)
- DIRLD0425S27W: 48.41”L x 18.309”W x 25.94”D (1229.78mm x 465.05mm x 658.96mm)
- DIRLC7018VP51: 48.41”L x 18.309”W x 25.94”D (1229.78mm x 465.05mm x 658.96mm)
- DIRLC7018VP4248: 48.41”L x 18.309”W x 25.94”D (1229.78mm x 465.05mm x 658.96mm)

**Dimensions**

**Cabinets:**
- 42 RU: 31.5”W x 78.8”H x 48.0”D (800mm x 2000mm x 1219mm)
- 45 RU: 31.5”W x 84.0”H x 48.0”D (800mm x 2134mm x 1219mm)
- 48 RU: 31.5”W x 98.3”H x 48.0”D (800mm x 2267mm x 1219mm)

**Key Features and Benefits**

- **Passive airflow**: No additional moving parts or power required for a more reliable, efficient, economical, and environmentally friendly system.
- **Physical separation between inlet and exhaust airflow**: Segregates inlet and exhaust airflow preventing hot air recirculation, reducing inlet temperatures up to 17°C (30°F).
- **Maximized space utilization**: Allows the switch to be deployed in a 1000mm wide Panduit cabinet without sacrificing thermal performance.
- **Energy efficiency**: Provides cool air to the switch resulting in lower fan speed, reducing fan power consumption by up to 250W and improving reliability.
- **Day one or two installation**: Eliminates the requirement to replace or disturb existing cabinets, equipment and infrastructure for lower capital expenditures and minimized risk.
- **Easy access**: Allows access to the power supplies and fan modules minimizing network downtime.
- **Integral bonding to cabinet**: Cabinets and accessories are single-point bonded, providing a safe and reliable network, while reducing installation costs.
- **Versatility**: Cabinet designs offered in 42 RU, 45 RU, and 48 RU heights which are optimized for specific applications to allow improved thermal efficiencies resulting in reduced energy costs.
- **Rapid deployment**: Cable management included to speed deployment; adjustable rear rails can be quickly repositioned.
- **Reliability**: Thermal performance verified through Cisco lab testing by thermal engineers earning Cisco Certified designation.
- **Bonding**: Cabinets and accessories are single-point bonded, providing a safe and reliable network, while reducing installation costs.
- **Modular cable management fingers**: Provides bend radius control for each rack unit and can be positioned where required along the two front posts and two rear posts for cable protection and increased network availability; provides design flexibility, scalability, and improved aesthetics for easier moves, adds, and changes.

**Applications**

Cisco Nexus 7000 series switches are a modular switching system designed to deliver 10 Gigabit Ethernet and beyond. Panduit has developed a comprehensive physical infrastructure solution for the Nexus 7018 switch platform. When the Cisco Nexus 7018 switch is used as an access layer switch, it could be deployed using a Panduit Pod strategy that employs an End of Row (EoR) or Middle of Row (MoR) physical topology in the Equipment Distribution Area (EDA) of the data center. If deployed as an aggregation or core switch, it could be located in the Main Distribution Area (MDA) of the data center. By providing a path for cool air to the switch, data center temperature set points can be raised, resulting in higher energy efficiencies and lower operating costs.

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Net-Access™ 1000mm Wide N-Type Cabinets and Net-Direct™ Ducting Solution for the Cisco® Nexus 7018 Switch

**Selection Chart for 7018 Ducts**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIEBCC7018B</td>
<td>Non-containment, without vertical blanking panel.</td>
</tr>
<tr>
<td>DIRLD0425S27W</td>
<td>Containment, includes left and right vertical blanking panel.</td>
</tr>
<tr>
<td>DIRLC7018VP51</td>
<td>Containment, includes left and right vertical blanking panel.</td>
</tr>
<tr>
<td>DIRLC7018VP4248</td>
<td>Containment, includes right vertical blanking panel only.</td>
</tr>
</tbody>
</table>

Dimensions are in millimeters. (Dimensions in brackets are inches.)
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Inlet Duct DIRLD0425S27W

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Inlet Duct DIRLC7018VP51

51 RU Air Dam

Side Inlet Duct Upper

Side Inlet Duct Lower

Bottom Intake Duct

Front View

Side View

51 RU Air Dam

465.05 [18.309]

658.96 [25.943]

1229.78 [48.416]

E-Rail Depth Must Be 657.76mm 25.896in.

Bottom View

106.61 [4.197]

Dimensions are in millimeters. (Dimensions in brackets are inches.)
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