# Thermal Inlet Duct for the Cisco^ Nexus 7009 Switch For Net-Access™ Switch Cabinets (CN**)

specifications

The thermal inlet duct shall be designed to be compatible with the Cisco^ Nexus 7009 switch using Computational Fluid Dynamics (CFD) modeling and verified via operational testing. The inlet duct shall consist of two (3 RU) inlet ducts and a side duct to feed cool air from the cold aisle to the switch's side inlet and prevent hot exhaust recirculation. The modular duct shall be capable of being installed in a retro-fit application without disrupting existing in-cabinet equipment and cabling.
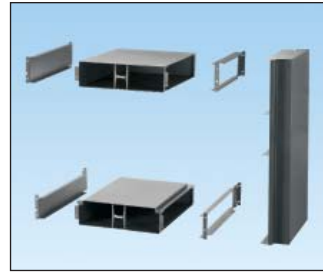
technical information

Dimensions:	35.07"L x 23.30"W x 4.70"D (891mm x 592mm x 119mm)

key features and benefits

Passive airflow	No additional moving parts or power required for a more reliable, efficient, economical and environmentally friendly system
Certified performance	Designed and validated thermal performance by Panduit
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)
Inlet duct design	Ensures the cabinet is containment ready for vertical exhaust ducting (VED) and aisle containment
Maximized space utilization	Allows the switch to be deployed in a 800mm 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

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 7009 switch platform.

When the Cisco^ Nexus 7009 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.

^Cisco is a registered trademark of Cisco Technology, Inc.

Inlet Duct for End of Row (EoR) Switching Applications	
Inlet duct:	CNLTD142A3

Net-Access™ Switch Cabinets for use in Hot Aisle/Cold Aisle Applications*	
45 RU, front dual hinge door, rear perforated split doors, (2) side panels, #12-24 rails – mounted numbers up:	CN1NU
45 RU, front dual hinge door, rear perforated split doors, no side panels, #12-24 rails – mounted numbers up:	CN2NU

Net-Access™ Switch Cabinet Accessories	
Vertical Blanking Panel:	CNVBP

Net-Access™ Switch Cabinet for use with Vertical Exhaust Ducting	
45 RU, front dual hinge door, rear solid split door, no side panels, vertical blanking panels, #12-24 rails – mounted numbers up:	CN28HBNU

Vertical Exhaust Ducting	
Height adjustable – from 42" to 70" (1067mm to 1778mm):	CVED32VE
Height adjustable – from 21" to 45" (533mm to 1143mm):	CVED32VEN
Height adjustable – from 20" to 38" (508mm to 965mm):	CVED32VES

Net-Access™ Switch Cabinets for use in Cold Aisle Containment Applications	
45 RU, front dual hinge door, rear perforated split doors, no side panels, vertical blanking panels, #12-24 rails – mounted numbers up:	CN28BNU
45 RU, front dual hinge door, rear perforated split doors, (1) side panel – left side, vertical blanking panels, #12-24 rails – mounted numbers up:	CN28BLNU
45 RU, front dual hinge door, rear perforated split doors, (1) side panel – left side, vertical blanking panels, cage nut rails – mounted numbers up:	CN28BLCNNU
45 RU, front dual hinge door, rear perforated split doors, no side panels, vertical blanking panels, cage nut rails – mounted numbers up:	CN28BCNNU
42 RU, front dual hinge door, rear perforated split doors, no side panels, vertical blanking panels, cage nut rails – mounted numbers up:	CN282BCNNU

Net-Contain™ Sliding Door Low Profile Cold Aisle Containment System*	
Integral low profile ceiling structures Net-Access™ 800mm Cabinets:	
4' (1200mm) aisle width:	CXCAC08F04IRBL
6' (1800mm) aisle width:	CXCAC08F06IRBL
End of row dual sliding doors:	NACACT5F08DSBL

*For additional information on Net-Access™ Cabinets, refer to brochure SA-RKCB19.
**No VED required.
White cabinets also available upon request.
Please consult Panduit Customer Service for lead times.
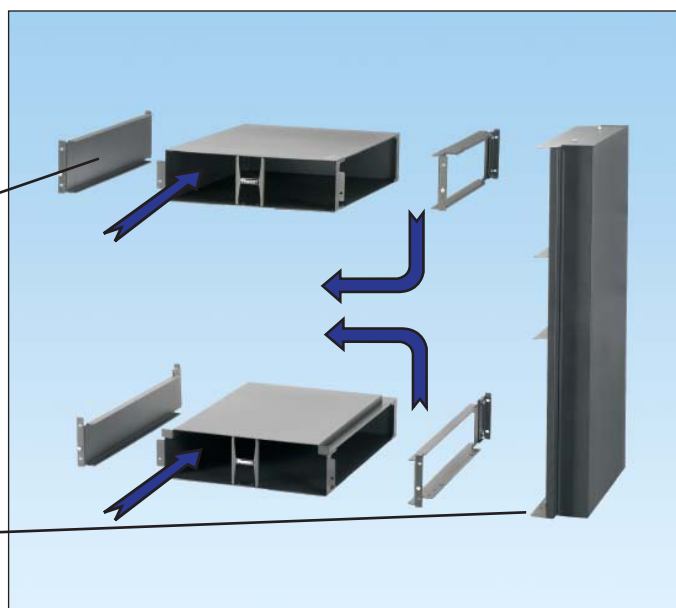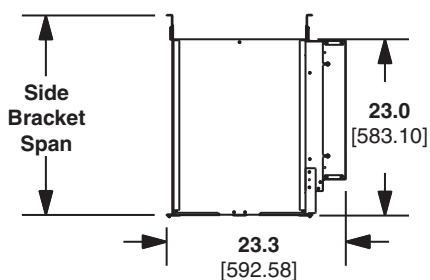
Figure 1. Full populated cabinet application

Figure 2. Inlet Duct Exploded View Showing Inlet Airflow Path

Side Bracket Span

23.0 [583.10]

23.3 [592.58]

5.25 [133.35] 3 RU Typical

14 RU of Space is Needed Between Inlet ducts

18.3 [464.77]

4.7 [118.97]

35.00 [889.00] 20 RU
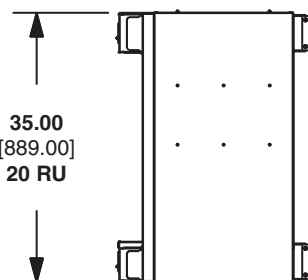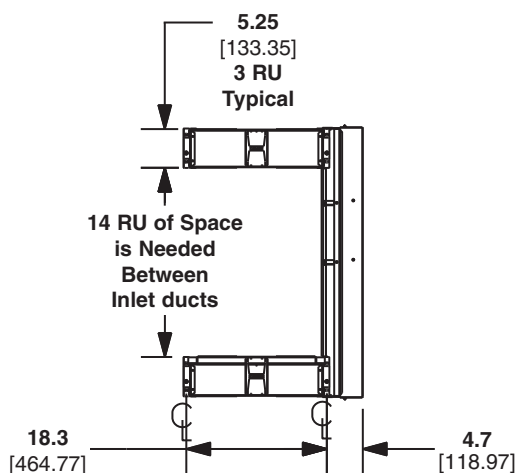
Dimensions are in inches. [Dimensions in brackets are metric].

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

For more information

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**Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300 and reference RKSP91**

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