



## System Specifications

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## Environmental Specifications

Environment		Specification
Temperature	Ambient operating temperature	32 to 104°F (0 to 40°C)
	Ambient nonoperating	−40 to 158°F (−40 to 70°C)
Relative humidity	Nonoperating	5 to 95%
	Operating	5 to 90%
Altitude	Operating	0 to 13,123 feet (0 to 4,000 meters)

## Switch Dimensions

Switch	Width	Depth	Height
Cisco Nexus 93180YC-FX3S	17.3 inches (43.9 cm)	19.5 inches (49.6 cm)	1.72 inches (4.4 cm) (1 RU)

## Switch and Module Weights and Quantities

Component	Weight per Unit	Quantity
Cisco Nexus 93180YC-FX3S Chassis (N9K-C93180YC-FX3S)	21 lb (9.52 kg)	1
Fan Module	—	4
– Port-side exhaust (blue) (NXA-FAN-35CFM-PE)	0.26 lb (0.12 kg)	
– Port-side intake (burgundy) (NXA-FAN-35CFM-PI)		
Power Supply module	—	2 (1 for operations and 1 for redundancy)
– 650-W AC port-side exhaust (blue) (NXA-PAC-650W-PE)	2.42 lb (1.1 kg)	
– 650-W AC port-side intake (burgundy) (NXA-PAC-650W-PI)	2.42 lb (1.1 kg)	
– 1200-W HVAC/HVDC dual-direction (white) (N9K-PUV-1200W)		
– 930-W DC port-side exhaust (blue) (NXA-PDC-930W-PE)		
– 930-W DC port-side intake (burgundy) (NXA-PDC-930W-PI)		

## Transceiver and Cable Specifications

To determine which transceivers, adapters, and cables are supported by this switch, see <https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html>.

To see the transceiver specifications and installation information, see <https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html>.

## Switch Power Input Requirements

The following table lists the typical amount of power that the switch consumes. It also lists the maximum amount of power that you must provision for the switch and power supply for peak conditions.



**Note** Some power supplies have capabilities that are greater than the maximum power requirements for a switch. To determine the power consumption characteristics for the switch, use the typical and maximum requirements that are listed in the following table.

Switch	Typical Power Consumption (AC or DC)	Maximum Power Consumption (AC or DC)	Heat Dissipation Requirement
Cisco Nexus 93180YC-FX3S	375	600 W	2047.285 BTU per hour

# Power Specifications

Power specifications include the specifications for each type of power supply module.

## 650-W AC Power Supply Specifications

These specifications apply to the following power supplies:

- NXA-PAC-650W-PE
- NXA-PAC-650W-PI

Characteristic	Specification
AC input voltage	Nominal range: 100 and 240 VAC (Range: 90-132 VAC, 180-264 VAC)
AC input frequency	Nominal range: 50 to 60 Hz (Range: 47-63 Hz)
Maximum AC input current	7.6 A at 90 - 132 VAC 3.65 A at 180 - 264 VAC
Maximum input volt-amperes	760 VA at 100 VAC
Maximum output power per power supply	650 W
Maximum inrush current	11 A (sub-cycle duration)
Maximum hold-up time	12 ms at 650 W
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Climate Savers Platinum Efficiency (80Plus Platinum certified)
Form factor	RSP1

## 1200-W HVAC/HVDC Power Supply Specifications

These specifications apply to the 1200-W HVAC/HVDC (N9K-PUV-1200W) power supplies.

Characteristic	Specification
Input voltage <ul style="list-style-type: none"> <li>• AC (for 1230 W output)</li> <li>• DC (for 1230 W output)</li> </ul>	Nominal (Range) <ul style="list-style-type: none"> <li>• 200 to 277 VAC</li> </ul>
AC input frequency	Nominal: 50 to 60 Hz (Range: 47-63 Hz)

Characteristic	Specification
Maximum AC input current	100 VAC, 10A
Maximum inrush current	35 A (cold turn on); 70 A (hot turn on)
Maximum output Watts <ul style="list-style-type: none"> <li>• For 200 to 277 VAC</li> <li>• For 192 to 400 VDC</li> </ul>	Per power supply <ul style="list-style-type: none"> <li>• 1230 W</li> <li>• 1230 W</li> </ul>
Power supply output voltage <ul style="list-style-type: none"> <li>• For 200 to 277 VAC</li> <li>• For 192 to 400 VDC</li> </ul>	Per power supply <ul style="list-style-type: none"> <li>• 12 VDC at 100 A</li> <li>• 12 VDC at 100 A</li> </ul>
Power supply standby voltage	12 V at 2.5 A
Efficiency rating	Climate Savers Platinum Efficiency (80Plus Platinum certified)
Form factor	RSP1

## 930-W DC Power Supply Specifications

These specifications apply to the following power supplies:

- NXA-PDC-930W-PE
- NXA-PDC-930W-PI

Characteristic	Specification
DC input voltage range	Nominal range: -48 to -60 VDC nominal (Range: -40 to -60 VDC)
Maximum DC input current	23 A at -48 VDC
Maximum output power per power supply	930 W
Maximum inrush current	35 A (sub-cycle duration)
Maximum hold-up time	8 ms at 930 W
Power supply output voltage	12 VDC
Power supply standby voltage	12 VDC
Efficiency rating	Greater than 92% at 50% load
Form factor	RSP1

# Power Cable Specifications


The following sections specify the power cables that you can order and use with this switch.

## Power Cable Specifications for AC Power Supplies

Power Type	Power Cord Part Number	Cord Set Description
	CAB-C13-C14-2M	Power Cord Jumper, C13-C14 Connectors, 6.6 feet (2.0 m)
	CAB-C13-CBN	Cabinet jumper power cord, 250 VAC, 10 A, C14-C13 connectors, 2.3 feet (0.7 m)
Argentina	CAB-250V-10A-AR	250 V, 10 A, 8.2 feet (2.5 m)
Australia	CAB-9K10A-AU	250 VAC, 10 A, 3112 plug, 8.2 feet (2.5 m)
Brazil	CAB-250V-10A-BR	250 V, 10 A, 6.9 feet (2.1 m)
European Union	CAB-9K10A-EU	250 VAC, 10 A, CEE 7/7 plug, 8.2 feet (2.5 m)
India	CAB-IND-10A	10 A, 8.2 feet (2.5 m)
India	CAB-C13-C14-2M-IN	Power Cord Jumper, C13-C14 Connectors, 6.6 feet (2.0 m)
India	CAB-C13-C14-3M-IN	Power Cord Jumper, C13-C14 Connectors, 9.8 feet (3.0 m)
Israel	CAB-250V-10A-IS	250 V, 10 A, 8.2 feet (2.5 m)
Italy	CAB-9K10A-IT	250 VAC, 10 A, CEI 23-16/VII plug, 8.2 feet (2.5 m)
Japan	CAB-C13-C14-2M-JP	Power Cord Jumper, C13-C14 Connectors, 6.6 feet (2.0 m)
North America	CAB-9K12A-NA	125 VAC, 13 A, NEMA 5-15 plug, 8.2 feet (2.5 m)
North America	CAB-AC-L620-C13	NEMA L6-20-C13, 6.6 feet (2.0 m)
North America	CAB-N5K6A-NA	200/240V, 6A, 8.2 feet (2.5 m)
Peoples Republic of China	CAB-250V-10A-CN	250 V, 10 A, 8.2 feet (2.5 m)
South Africa	CAB-250V-10A-ID	250 V, 10 A, 8.2 feet (2.5 m)
Switzerland	CAB-9K10A-SW	250 VAC, 10 A, MP232 plug, 8.2 feet (2.5 m)
United Kingdom	CAB-9K10A-UK	250 VAC, 10 A, BS1363 plug (13 A fuse), 8.2 (2.5 m)

Power Type	Power Cord Part Number	Cord Set Description
All except Argentina, Brazil, and Japan	NO-POWER-CORD	No power cord included with switch


## HVAC/HVDC Power Cables Supported by ACI-Mode and NX-OS Mode Switches

Part Number	Cord Set Description	Photo
CAB-HVAC-SD-0.6M	HVAC 2-foot (0.6 m) cable with Saf-D-Grid and SD connectors 277V AC	
CAB-HVAC-C14-2M	HVAC 6.6-foot (2.0 m) cable with Saf-D-Grid and C14 (use for up to 240 V) connector 250V AC	
CAB-HVAC-RT-0.6M	HVAC 2-foot (0.6 m) cable with Saf-D-Grid and RT connector 277V AC	
CAB-HVDC-3T-2M	HVDC 6.6-foot (2.0 m) cable with Saf-D-Grid and three terminal connectors 300V AC / 400V DC (+200/-200 V DC)	
NO-POWER-CORD	All except Argentina, Brazil, and Japan No power cord included with switch	Not applicable

**Table 1: HVAC/HVDC Power Cables Callout Table**

1	Connect this end to the power supply unit.
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## DC Power Cable Specifications

Part Number	Description	Photo
NXA-PDC-930W-PE/PI	The 930W DC power supply (NXA-PDC-930W-PE/PI) is shipped with cable CAB-48DC-40A-8AWG.	

## Regulatory Standards Compliance Specifications

The following table lists the regulatory standards compliance for the switch.

**Table 2: Regulatory Standards Compliance: Safety and EMC**

Specification	Description
Regulatory compliance	Products should comply with CE Markings according to directives 2004/108/EC and 2006/95/EC.
Safety	<ul style="list-style-type: none"> <li>• CAN/CSA-C22.2 No. 60950-1 Second Edition</li> <li>• CAN/CSA-C22.2 No. 62368-1-19 Third Edition</li> <li>• NRTL 60950-1 Second Edition</li> <li>• IEC 62368-1</li> <li>• EN 62368-1</li> <li>• AS/NZS 62368-1</li> <li>• GB4943</li> <li>• UL 62368-1</li> </ul>

Specification	Description
EMC: Emissions	<ul style="list-style-type: none"><li>• 47CFR Part 15 (CFR 47) Class A</li><li>• AS/NZS CISPR22 Class A</li><li>• CISPR22 Class A</li><li>• EN55022 Class A</li><li>• ICES003 Class A</li><li>• VCCI Class A</li><li>• EN61000-3-2</li><li>• EN61000-3-3</li><li>• KN22 Class A</li><li>• CNS13438 Class A</li></ul>
EMC: Immunity	<ul style="list-style-type: none"><li>• EN55024</li><li>• CISPR24</li><li>• EN300386</li><li>• KN 61000-4 series</li></ul>
RoHS	The product is RoH-6 compliant with exceptions for leaded-ball grid-array (BGA) balls and lead press-fit connectors.