



Installation — AC Power Supply

Avaya Virtual Services Platform 9000

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NN46250-303
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Chapter 1: Regulatory information and safety precautions

Read the information in this section to learn about regulatory conformities and compliances.

International Regulatory Statements of Conformity

This is to certify that the Avaya Virtual Services Platform 9000 chassis and components installed within the chassis were evaluated to the international regulatory standards for electromagnetic compliance (EMC) and safety and were found to have met the requirements for the following international standards:

- EMC—Electromagnetic Emissions—CISPR 22, Class A
- EMC—Electromagnetic Immunity—CISPR 24
- Electrical Safety—IEC 60950, with CB member national deviations

Further, the equipment has been certified as compliant with the national standards as detailed in the following sections.

Russia, Belarus, and Kazakhstan Requirement

В целях соблюдения действующего законодательства, продукты Компании Авайя, которые поставляются в Россию, Белоруссию и Казахстан, поставляются с конфигурацией, которая соответствует текущим требованиям нормативных актов. Любые изменения предустановленного программного обеспечения или прошивки программно-аппаратного комплекса, включая установку иной прошивки, запрещаются, а в случае таких изменений, лицо или компания их осуществившие несут ответственность на свой страх и риск. Компания Авайя не несет ответственности за внесение каких-либо изменений в продукт, произведенный на или для использования на территории России, Белоруссии и Казахстана, кроме модификации, которые выполнены и сертифицированы Компанией Авайя.

In order to comply with existing laws, Avaya's products that are supplied to Russia, Belarus, and Kazakhstan are supplied with a configuration which is in line with existing legislation. Modifications may lead to product certifications becoming invalid. Any modification of preinstalled software and firmware, including installation of other or more current firmware or software, therefore is done at the responsibility of the person or company executing the changes. Avaya is not responsible for any modifications to the product made on or for use on the territory of Russia, Belarus and Kazakhstan other than modifications executed and certified by Avaya itself.

National Electromagnetic Compliance (EMC) Statements of Compliance

FCC Statement (USA only)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to take whatever measures may be necessary to correct the interference at their own expense.

ICES Statement (Canada only)

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Virtual Services Platform 9000 chassis and installed components) does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (Virtual Services Platform 9000 chassis) respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

CE Marking Statement (Europe only)

EN 55022 Statements

This is to certify that the Virtual Services Platform 9000 chassis and components installed within the chassis are shielded against the generation of radio interference in accordance with the application of Council Directive 2004/108/EC. Conformity is declared by the application of EN 55022 Class A (CISPR 22).

Caution:

This device is a Class A product. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users are required to take appropriate measures necessary to correct the interference at their own expense.

EN 55024 Statement

This is to certify that the Virtual Services Platform 9000 chassis is shielded against the susceptibility to radio interference in accordance with the application of Council Directive 2004/108/EC. Conformity is declared by the application of EN 55024 (CISPR 24).

EN 300386 Statement

The Virtual Services Platform 9000 chassis complies with the requirements of EN 300386 V1.3.3 for emissions and for immunity for a Class A device intended for use in either

Telecommunications centre or locations other than telecommunications centres given the performance criteria as specified by the manufacturer.

EC Declaration of Conformity

This product conforms to the provisions of the R&TTE Directive 1999/5/EC.

European Union and European Free Trade Association (EFTA) Notice



All products labeled with the CE marking comply with R&TTE Directive (1999/5/EEC) which includes the Electromagnetic Compliance (EMC) Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms (ENs). The equivalent international standards are listed in parenthesis.

- EN 55022 (CISPR 22)–Electromagnetic Interference
- EN 55024 (IEC 61000-4-2, -3, -4, -5, -6, -8, -11)–Electromagnetic Immunity
- EN 61000-3-2 (IEC 61000-3-2)–Power Line Harmonics
- EN 61000-3-3 (IEC 61000-3-3)–Power Line Flicker

VCCI Statement (Japan/Nippon only)

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI) for information technology equipment. If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

BSMI statement (Taiwan only)

BSMI statement (Taiwan only)

This is a Class A product based on the standard of the Bureau of Standards, Metrology and Inspection (BSMI) CNS 13438 and CNS 14336–1, Class A.

警告使用者:

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Chinese EMI and safety warnings

⚠ Voltage:

Risk of injury by electric shock

Before working on this equipment, be aware of good safety practices and the hazards involved with electrical circuits. Use only power cords that have a good grounding path. Ensure that the switch is properly grounded before powering on the unit.

⚠ 電壓警告:

觸電受傷的危險性

在此設備上進行作業之前，要認知到良好的安全行為和涉及電子電路可能的危害。使用的電源線需有接地路徑。確保供電給設備之前，有適當的接地。

⚠ Warning:

Disconnecting the power cord is the only way to turn off power to this device. Always connect the power cord in a location that can be reached quickly and safely in case of emergency.

⚠ 警告使用者:

斷開電源線，是關閉該設備電源的唯一方法。始終確保連接電源線的位置，在緊急情況下，是可以快速且安全抵達的一個位置。

⚠ Electrostatic alert:

Risk of equipment damage

To prevent damage from electrostatic discharge, always wear an antistatic wrist strap connected to an ESD jack when connecting cables or performing maintenance on this device.

⚠ 靜電提醒：
設備損壞的風險
 為了防止靜電放電的破壞，在此設備上連接纜線或執行維護時，始終戴上防靜電腕帶並連接到ESD插孔。

KCC Notice (Republic of Korea only)

This device has been approved for use in Business applications only per the Class A requirements of the Republic of Korea Communications Commission (KCC). This device may not be sold for use in a non-business application.

For Class A:

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

National Safety Statements of Compliance

CE Marking Statement (Europe only)

EN 60 950 Statement

This is to certify that the Virtual Services Platform 9000 chassis and components installed within the chassis are in compliance with the requirements of EN 60 950 in accordance with the Low Voltage Directive. Additional national differences for all European Union countries have been evaluated for compliance. Some components installed within the Virtual Services Platform 9000 chassis may use a nickel-metal hydride (NiMH) and/or lithium-ion battery. The NiMH and lithium-ion batteries are long-life batteries, and it is very possible that you will never need to replace them. However, should you need to replace them, refer to the individual component manual for directions on replacement and disposal of the battery.

Denan Statement (Japan/Nippon only)



警告

本製品を安全にご使用頂くため、以下のことにご注意ください。

- 接続ケーブル、電源コード、ACアダプタなどの部品は、必ず製品に同梱されております添付品または指定品をご使用ください。添付品・指定品以外の部品をご使用になると故障や動作不良、火災の原因となることがあります。
- 同梱されております付属の電源コードを他の機器には使用しないでください。上記注意事項を守らないと、死亡や大怪我など人身事故の原因となることがあります。

Información NOM (únicamente para México)

La información siguiente se proporciona en el dispositivo o en los dispositivos descritos en este documento, en cumplimiento con los requisitos de la Norma Oficial Mexicana (NOM):

Exportador:	Avaya Inc. 4655 Great America Parkway Santa Clara, CA 95054 USA
Importador:	Avaya Communication de México SA de CV Av. Presidente Masarik 111 Piso 6 Col Chapultepec Morales Deleg. Miguel Hidalgo México D.F. 11570
Embarcar a:	Model 9006AC: 100-120 VCA, 47–63 Hz, 13.3 A (100 VCA) - 11.2 A (120 VCA) max. por fuente de poder 200-240 VCA, 47–63 Hz, 11.8 A (200 VCA) – 9.9 A (240 VCA) max. por fuente de poder

NOM Statement (Mexico only)

The following information is provided on the devices described in this document in compliance with the safety requirements of the Norma Oficial Mexicana (NOM):

Exporter:	Avaya Inc. 4655 Great America Parkway Santa Clara CA 95054 USA
Importer:	Avaya Communication de México, S.A. de C.V. Av. Presidente Masarik 111 Piso 6 Col Chapultepec Morales Deleg. Miguel Hidalgo México D.F. 11570
Input:	Model 9006AC: 100-120 VAC, 47–63 Hz, 13.3 A (100 VAC) - 11.2 A (120 VAC) maximum for each power supply 200-240 VAC, 47–63 Hz, 11.8 A (200 VAC) – 9.9 A (240 VAC) maximum for each power supply

National Environmental Statement of Compliance

The WEEE Directive 2002/96/EC and RoHS (Restriction of Hazardous Substances) Directive 2002/95/EC set collection, recycling and recovery targets for various categories of electrical products and their waste.

Restriction on Hazardous Substances Directive Compliance Statement

The Restriction on Hazardous Substances Directive (RoHS) (2002/95/EC), which accompanies the WEEE Directive, bans the use of heavy metals and brominated flame-retardants in the manufacture of electrical and electronic equipment. Specifically, restricted materials under the RoHS Directive are Lead (including solder used in PCB's), Cadmium, Mercury, Hexavalent Chromium, and Bromine.

Avaya declares compliance with the European Union (EU) RoHS Directive (2002/95/EC) in that Lead, which is a restricted hazardous substance, is used only in accordance to the exemption(s) to Article 4(1), item 7 granted by the European Union (EU) RoHS Directive (2002/95/EC) in the Annex—"lead in solders for network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunication".

WEEE Directive Compliance Statement



This product at end of life is subject to separate collection and treatment in the EU Member States, Norway, and Switzerland and therefore is marked with the symbol shown at the left. Treatment applied at end of life of these products in these countries shall comply with the applicable national laws implementing Directive 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE).

Avaya declares compliance with the European Union (EU) WSEE Directive (2002/96/EC).

Safety Messages

This section describes the different precautionary notices used in this document. This section also contains precautionary notices that you must read for safe operation of the Avaya Virtual Services Platform 9000.

Notices

Notice paragraphs alert you about issues that require your attention. The following sections describe the types of notices. For a list of safety messages used in this guide and their translations, see the Translations of safety messages chapter.

Attention Notice

 **Important:**

An attention notice provides important information regarding the installation and operation of Avaya products.

Caution ESD Notice

 **Electrostatic alert:**

ESD

ESD notices provide information about how to avoid discharge of static electricity and subsequent damage to Avaya products.

 **Electrostatic alert:**

ESD (décharge électrostatique)

La mention ESD fournit des informations sur les moyens de prévenir une décharge électrostatique et d'éviter d'endommager les produits Avaya.

 **Electrostatic alert:**

ACHTUNG ESD

ESD-Hinweise bieten Information dazu, wie man die Entladung von statischer Elektrizität und Folgeschäden an Avaya-Produkten verhindert.

 **Electrostatic alert:**

PRECAUCIÓN ESD (Descarga electrostática)

El aviso de ESD brinda información acerca de cómo evitar una descarga de electricidad estática y el daño posterior a los productos Avaya.

 **Electrostatic alert:**

CUIDADO ESD

Os avisos do ESD oferecem informações sobre como evitar descarga de eletricidade estática e os consequentes danos aos produtos da Avaya.

 **Electrostatic alert:**

ATTENZIONE ESD

Le indicazioni ESD forniscono informazioni per evitare scariche di elettricità statica e i danni correlati per i prodotti Avaya.

Caution Notice

 **Caution:**

Caution notices provide information about how to avoid possible service disruption or damage to Avaya products.

 **Caution:**

ATTENTION

La mention Attention fournit des informations sur les moyens de prévenir une perturbation possible du service et d'éviter d'endommager les produits Avaya.

 **Caution:**

ACHTUNG

Achtungshinweise bieten Informationen dazu, wie man mögliche Dienstunterbrechungen oder Schäden an Avaya-Produkten verhindert.

 **Caution:**

PRECAUCIÓN

Los avisos de Precaución brindan información acerca de cómo evitar posibles interrupciones del servicio o el daño a los productos Avaya.

 **Caution:**

CUIDADO

Os avisos de cuidado oferecem informações sobre como evitar possíveis interrupções do serviço ou danos aos produtos da Avaya.

 **Caution:**

ATTENZIONE

Le indicazioni di attenzione forniscono informazioni per evitare possibili interruzioni del servizio o danni ai prodotti Avaya.

Warning Notice

 **Warning:**

Warning notices provide information about how to avoid personal injury when working with Avaya products.

 **Warning:**

AVERTISSEMENT

La mention Avertissement fournit des informations sur les moyens de prévenir les risques de blessure lors de la manipulation de produits Avaya.

 **Warning:**

WARNUNG

Warnhinweise bieten Informationen dazu, wie man Personenschäden bei der Arbeit mit Avaya-Produkten verhindert.

 **Warning:**

ADVERTENCIA

Los avisos de Advertencia brindan información acerca de cómo prevenir las lesiones a personas al trabajar con productos Avaya.

 **Warning:**

AVISO

Os avisos oferecem informações sobre como evitar ferimentos ao trabalhar com os produtos da Avaya.

 **Warning:**

AVVISO

Le indicazioni di avviso forniscono informazioni per evitare danni alle persone durante l'utilizzo dei prodotti Avaya.

Danger High Voltage Notice

 **Voltage:**

Danger—High Voltage notices provide information about how to avoid a situation or condition that can cause serious personal injury or death from high voltage or electric shock.

 **Voltage:**

La mention Danger—Tension élevée fournit des informations sur les moyens de prévenir une situation ou une condition qui pourrait entraîner un risque de blessure grave ou mortelle à la suite d'une tension élevée ou d'un choc électrique.

 **Voltage:**
GEFAHR

Hinweise mit „Vorsicht – Hochspannung“ bieten Informationen dazu, wie man Situationen oder Umstände verhindert, die zu schweren Personenschäden oder Tod durch Hochspannung oder Stromschlag führen können.

 **Voltage:**
PELIGRO

Los avisos de Peligro-Alto voltaje brindan información acerca de cómo evitar una situación o condición que cause graves lesiones a personas o la muerte, a causa de una electrocución o de una descarga de alto voltaje.

 **Voltage:**
PERIGO

Avisos de Perigo—Alta Tensão oferecem informações sobre como evitar uma situação ou condição que possa causar graves ferimentos ou morte devido a alta tensão ou choques elétricos.

 **Voltage:**
PERICOLO

Le indicazioni Pericolo—Alta tensione forniscono informazioni per evitare situazioni o condizioni che potrebbero causare gravi danni alle persone o il decesso a causa dell'alta tensione o di scosse elettriche.

Danger Notice

 **Danger:**

Danger notices provide information about how to avoid a situation or condition that can cause serious personal injury or death.

 **Danger:**

La mention Danger fournit des informations sur les moyens de prévenir une situation ou une condition qui pourrait entraîner un risque de blessure grave ou mortelle.

 **Danger:**
GEFAHR

Gefahrenhinweise stellen Informationen darüber bereit, wie man Situationen oder Umständen verhindert, die zu schweren Personenschäden oder Tod führen können.

 **Danger:**
PELIGRO

Los avisos de Peligro brindan información acerca de cómo evitar una situación o condición que pueda causar lesiones personales graves o la muerte.

 **Danger:**

PERIGO

Avisos de perigo oferecem informações sobre como evitar uma situação ou condição que possa causar graves ferimentos ou morte.

 **Danger:**

PERICOLO

Le indicazioni di pericolo forniscono informazioni per evitare situazioni o condizioni che potrebbero causare gravi danni alle persone o il decesso.

Chapter 2: Purpose of this document

This document provides information about the 9006AC power supply and provides instructions about how to install an AC power supply in the Avaya Virtual Services Platform 9000 chassis.

Purpose of this document

Chapter 3: New in this release

The following sections describe the changes in *Avaya Virtual Services Platform 9000 Installation — AC Power Supply*, NN46250– 303, for Release 3.3.

Features

There are no feature-related changes.

Other changes

Regulatory information:

[Información NOM \(únicamente para México\)](#) on page 12 is updated.

[National Environmental Statement of Compliance](#) on page 13 is added.

Documentation updates:

The following sections are updated:

- [9006AC power supply](#) on page 23.
- [Removing the power supply filler panel](#) on page 31.
- [Installing the AC power supply](#) on page 32.
- [Removing the AC power supply](#) on page 35.

New in this release

Chapter 4: AC power supply fundamentals

This chapter provides basic information about the Avaya Virtual Services Platform 9000 AC power supplies. Each power supply contains its own fans and independently draws cooling air in from the front of the power supply and exhausts air out the back of the power supply. Unpopulated slots do not affect cooling of populated slots.

9006AC power supply

The nominal input voltage range is 100–120 VAC and 200–240 VAC; however, the output power is limited to 1200 W maximum at 100–120 VAC nominal input voltage conditions. To obtain full output power of 2000 W, you must connect the 9006AC power supply to a 200–240 VAC nominal input voltage source.

! Important:

For proper load balancing, Avaya recommends that you use the same AC input voltage and output power rating for all power supplies. They can all function at 1200 W, or they can all function at 2000 W, but you must not mix 1200 W and 2000 W power supplies in the same chassis.

This power supply is hot swappable; you can remove the power supply from the Virtual Services Platform 9000 without powering off the system.

The following figure shows the back of the chassis where the six 9006AC power inlets are situated.

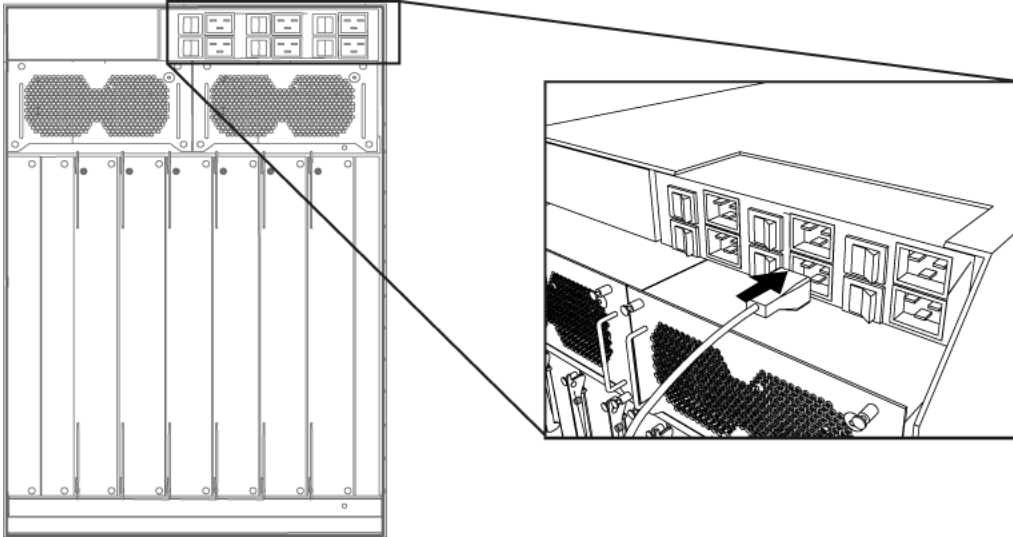


Figure 1: AC power inlets on the 9012 chassis

The 9006AC power supply measures 1.625 inches (in.) x 4 in. x 13.875 in. (41.3 millimeter [mm] x 101.6 mm x 352.4 mm) and weighs 5 pounds (2.27 kilograms).

See the electrical specifications for AC input power specifications.

The total input power consumption of the components (modules, fan trays, and cooling module) must not exceed the output power rating of the 9006AC power supply.

For more information about the number of power supplies needed in your system, see *Avaya Virtual Services Platform 9000 Installation — Chassis, NN46250-304*.

9006AC power supply features

The 9006 power supply contains the following features:

- AC input under-voltage and over-voltage protection
- DC output over-voltage and over-current protection
- over-temperature warning and protection
- power factor correction (meets EN/IEC 61000-3-2 and EN60555-2 requirements)
- redundant, parallel operation with active load sharing
- internal front-to-back cooling with variable-speed fan control

Minimum number of power supplies required

To configure a Virtual Services Platform 9000 system, consider the total power consumption to ensure proper system performance. For more information about the number of power supplies required for your configuration, see *Avaya Virtual Services Platform 9000 Installation — Chassis, NN46250-304*.

Redundant power configuration

If a chassis has a redundant power supply configuration and one power supply fails, the chassis continues to operate with no interruption of service. The chassis continues to supply the same output power with the remaining power supplies.

If a chassis has the minimum power supply configuration (nonredundant configuration) and one power supply fails, the system loses power and network connectivity. A trap and syslog message indicates that the configuration is nonredundant.

! Important:

Avaya recommends that you operate the Virtual Services Platform 9000 system in a redundant configuration at all times to ensure a maximum network up time.

The following figure shows a redundant power supply configuration using six 9006AC power supplies.

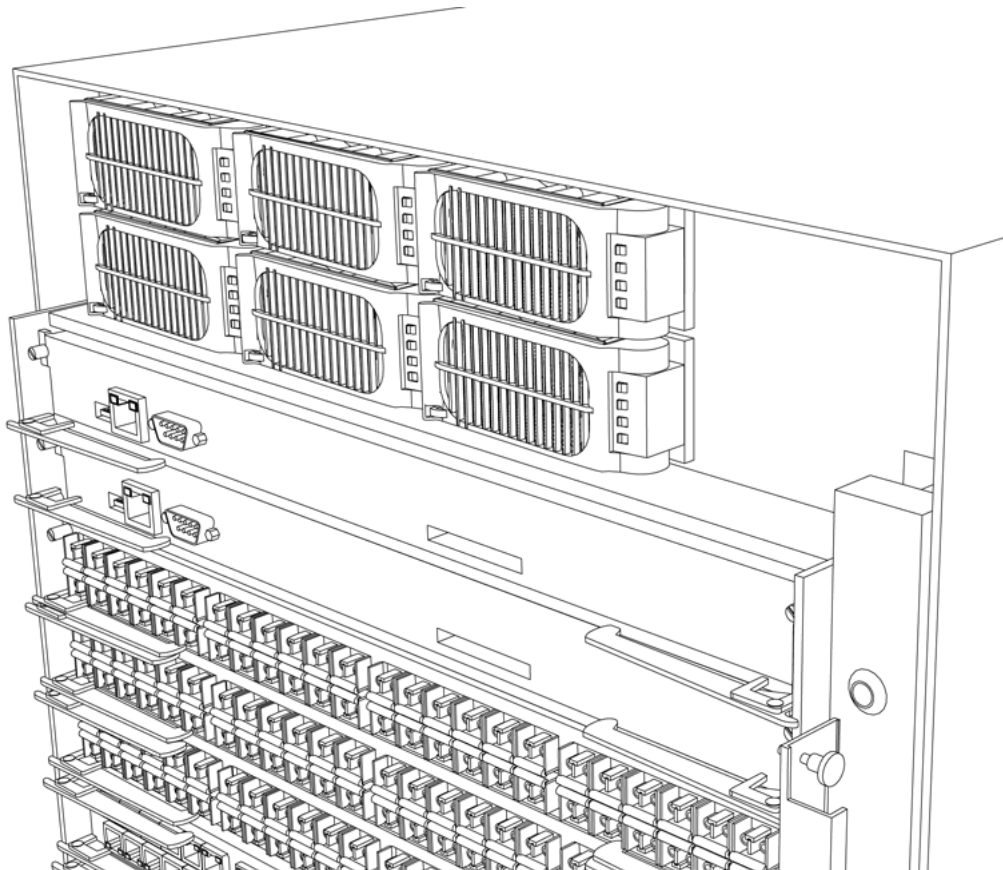


Figure 2: Redundant power supplies

You can operate the 9006AC power supplies separately, or in parallel, or parallel redundant configurations.

! Important:

Avaya recommends that you install each power supply on its own dedicated branch circuit for electrical installation reasons.

Power supply and the chassis

The VSP chassis has six bays for power supplies.

! Important:

Software checks

If the total power provided by the power supplies falls below the switch requirement, the polling software displays the following message on the console: `chCheckPowerUsage: One or more cards running low on power.`

You can view the total amount of power the switch uses and the total amount of power the power supplies provide by using the following commands:

- Shows power information – `show sys-info power`
- Shows power management information – `show sys power`

The Virtual Services Platform 9000 chassis ships with no installed power supplies. In the front of the chassis, power supply bays are numbered from left to right, so 1, 2, and 3, on the first row, and then 4, 5, and 6 on the second row. Install the first power supply in the top-left bay.

The individual on/off AC power switches and AC IEC60320 inlet connectors at the back of the chassis are numbered from right to left, so 3, 2, and 1 on the first row, and then 6, 5, and 4, on the second row.

Power supply LEDs

The following table describes the LED operation for the 9006AC power supplies.

Table 1: 9006AC Power supply LEDs

AC OK (green)	DC OK (green)	Service (amber)	Fault (red)	Condition
On	On	Off	Off	OK
On	On	On	Off	thermal alarm (5C before shutdown)
On	Off	On	On	thermal shutdown
On	Off	Off	On	defective fan
On	Off	Off	On	blown AC fuse in unit
Off	On	Off	Off	no AC for less than 15 ms on a single unit
blinks	Off	Off	Off	AC present but not within limits
Off	Off	Off	Off	AC not present

AC OK (green)	DC OK (green)	Service (amber)	Fault (red)	Condition
On	Off	Off	On	boost stage failure
On	Off	Off	On	over voltage latched shutdown
On	On	Off	On	non-catastrophic internal failure
On	Off	Off	Off	standby

Chapter 5: AC power supply installation

About this task

This chapter describes the procedures to install the AC power supply in the Avaya Virtual Services Platform 9000 chassis.

- You need qualified service personnel to install and replace Virtual Services Platform 9000 components.

Voltage:

Risk of injury by electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

Avaya Virtual Services Platform 9000 Administration, NN46250-600 explains the minimum Virtual Services Platform 9000 software version required to support the hardware.

Important:

Avaya recommends that you install each power supply on its own dedicated branch circuit for electrical installation reasons.

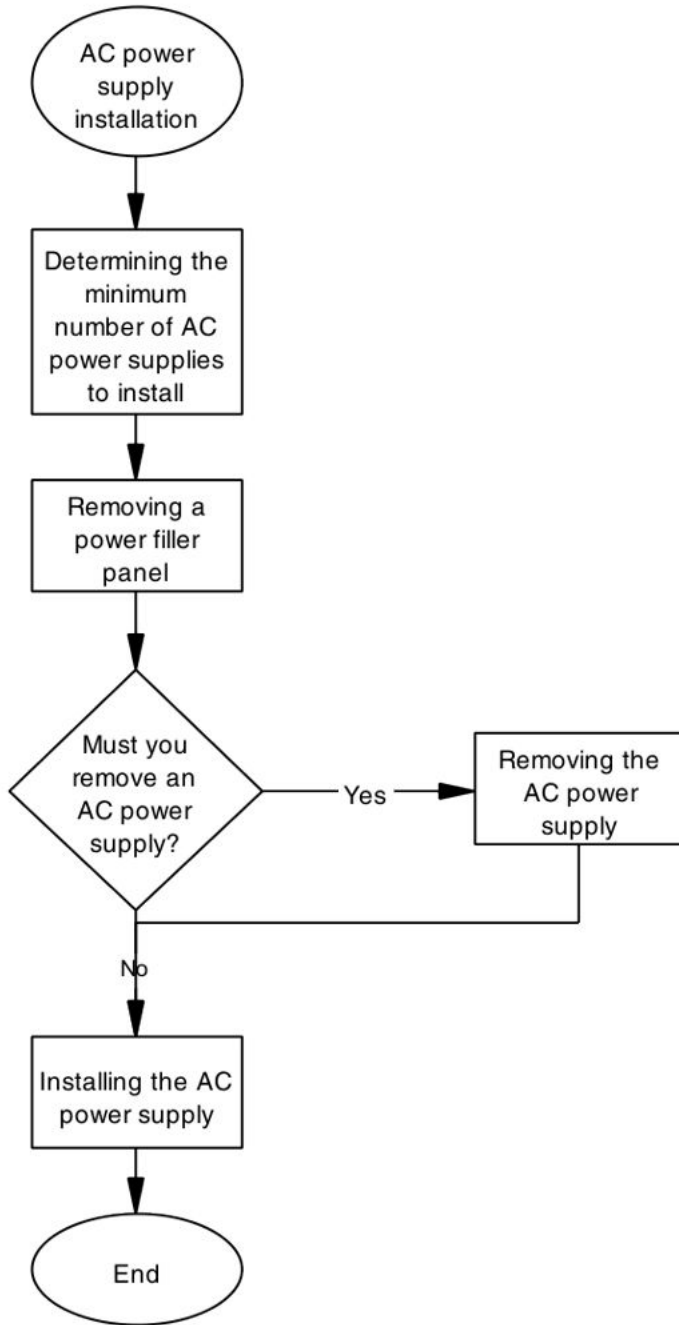
The following table lists the estimated time to install an AC power supply for the Virtual Services Platform 9000. The installation time depends on the number of power supplies you are installing.

Table 2: Estimated time

Task	Estimated Time
Removing the power filler panel	2 minutes
Installing the AC power supply	2 minutes

This task flow shows you the sequence of procedures you perform to install the AC power supply in the Virtual Services Platform 9000.

AC power supply installation



Removing the power supply filler panel

Remove the power supply filler panel to access the power supply in a bay. The power supply filler panel maintains the proper cooling airflow in the Virtual Services Platform 9000 chassis.

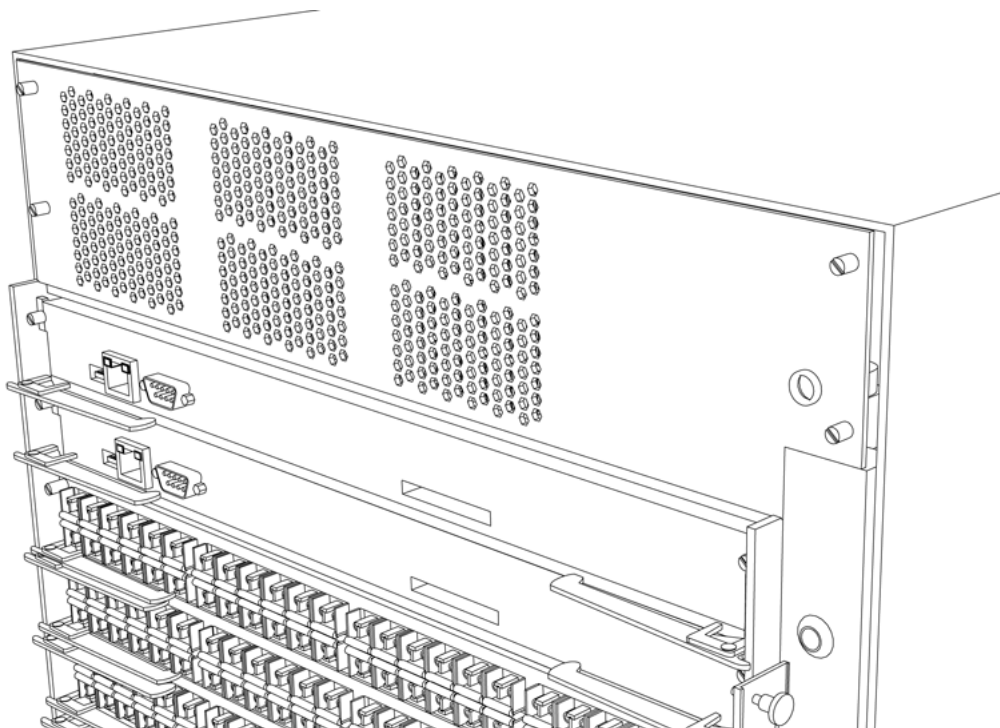
Before you begin

⚠ Caution:

Avaya recommends that you place a filler panel in any power supply bay that is not used.

Procedure

1. Use a Phillips screwdriver to loosen the four captive screws, which secure the power supply filler panel to the chassis, until the filler panel disengages.



2. Pull the power supply filler panel from the chassis.
-

Installing the AC power supply

Install the AC power supply to provide a power source to the Virtual Services Platform 9000.

Before you begin

- Remove the filler panel from the power bay if required. Save the power filler panel in case you need to operate the Virtual Services Platform 9000 chassis with a power supply removed.

 **Voltage:**

Risk of injury from electric shock

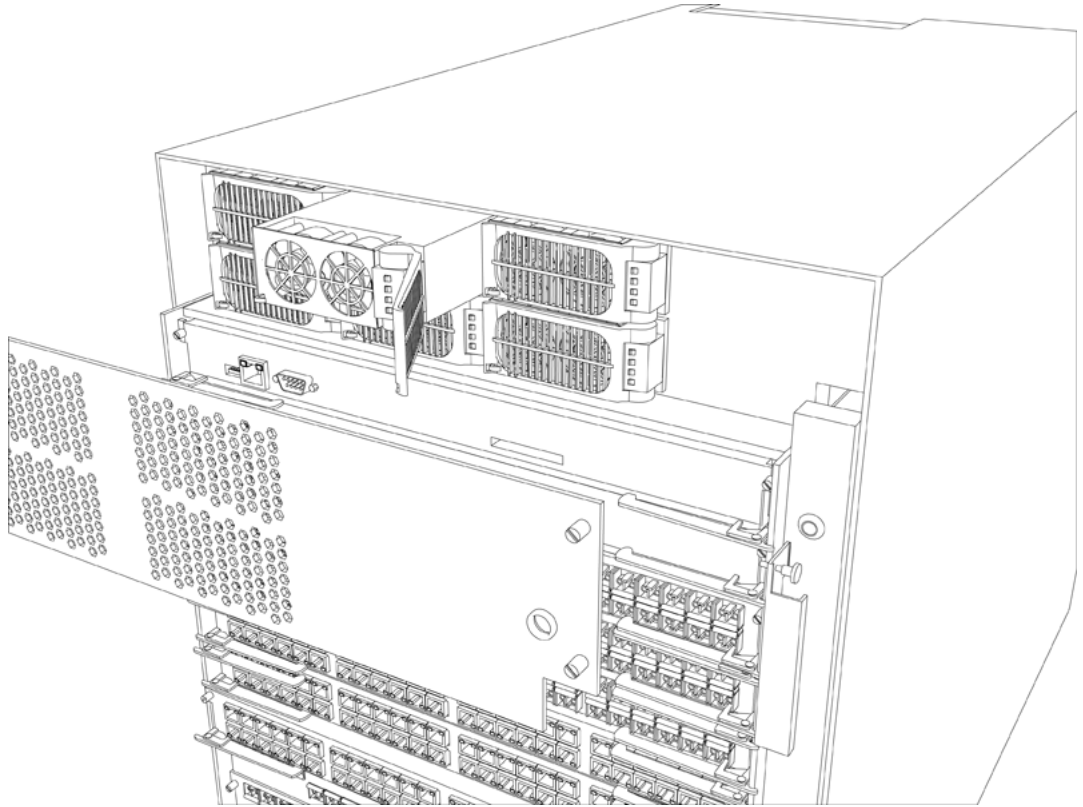
Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

 **Caution:**

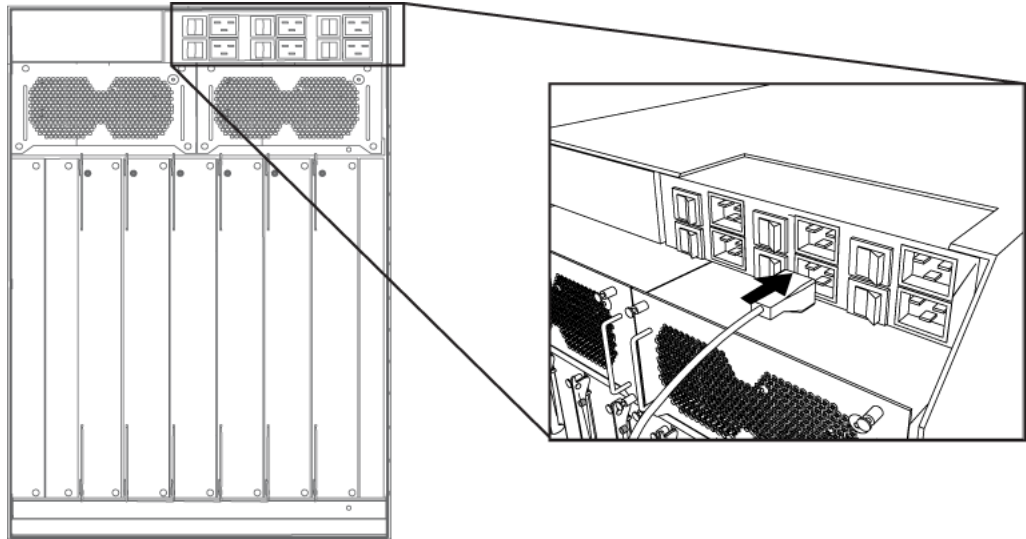
If you must reinsert a power supply, ensure the fans stop spinning. When the fans stop spinning, the AC power supply is discharged and ready to be reinserted.

Procedure

1. Loosen the 4 captive screws to remove the chassis grill.



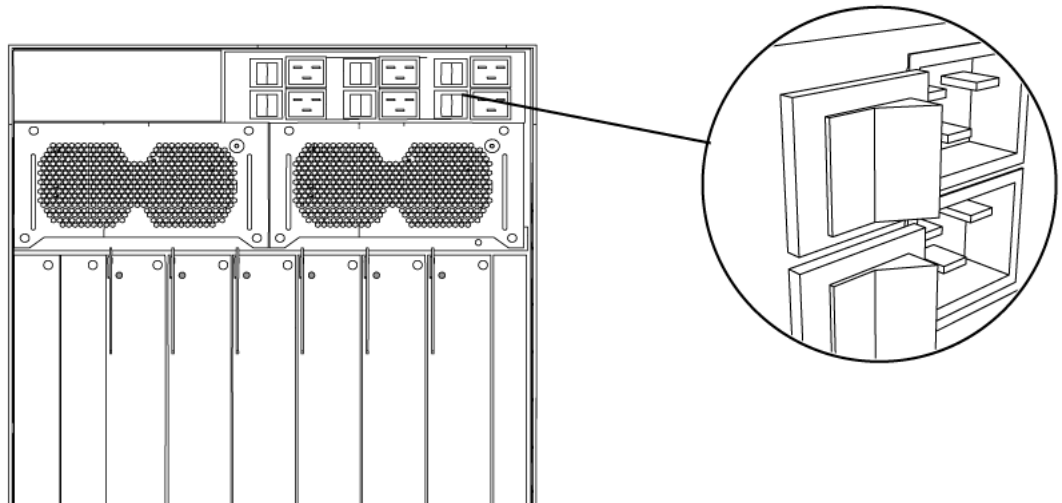
2. Push the power supply firmly into the bay until the action lever clicks.
3. Close the action lever on the power supply grill to lock the power supply in place.
4. Replace the chassis grill and tighten the 4 captive screws.
5. Connect a power cord from the power inlet to an AC power outlet.



! Important:

Avaya recommends that you install each power supply on its own dedicated branch circuit for electrical installation reasons.

6. Turn on the power switch on the back of the chassis.



Removing the AC power supply

Remove a power supply to replace it with a new power supply. After you remove a power supply, the LED on the power supply turns off, and the Virtual Service Platform 9000 chassis automatically redistributes the load to the remaining power supplies.

Before you begin

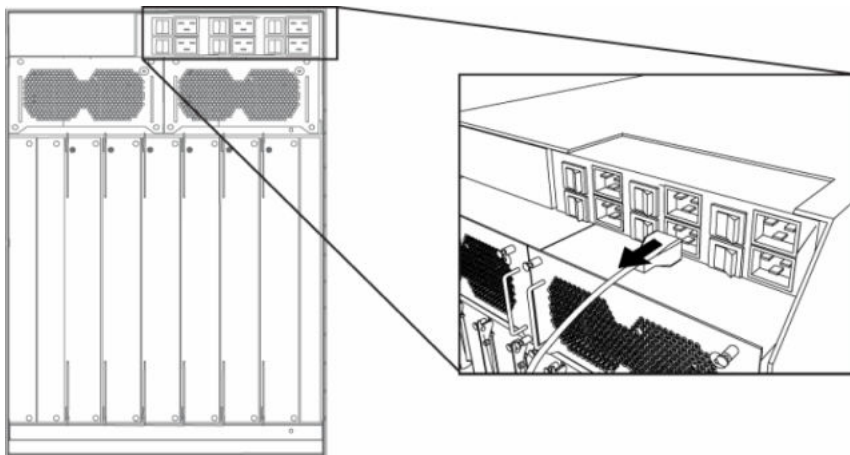
⚠ Danger:

Risk of injury from electric shock

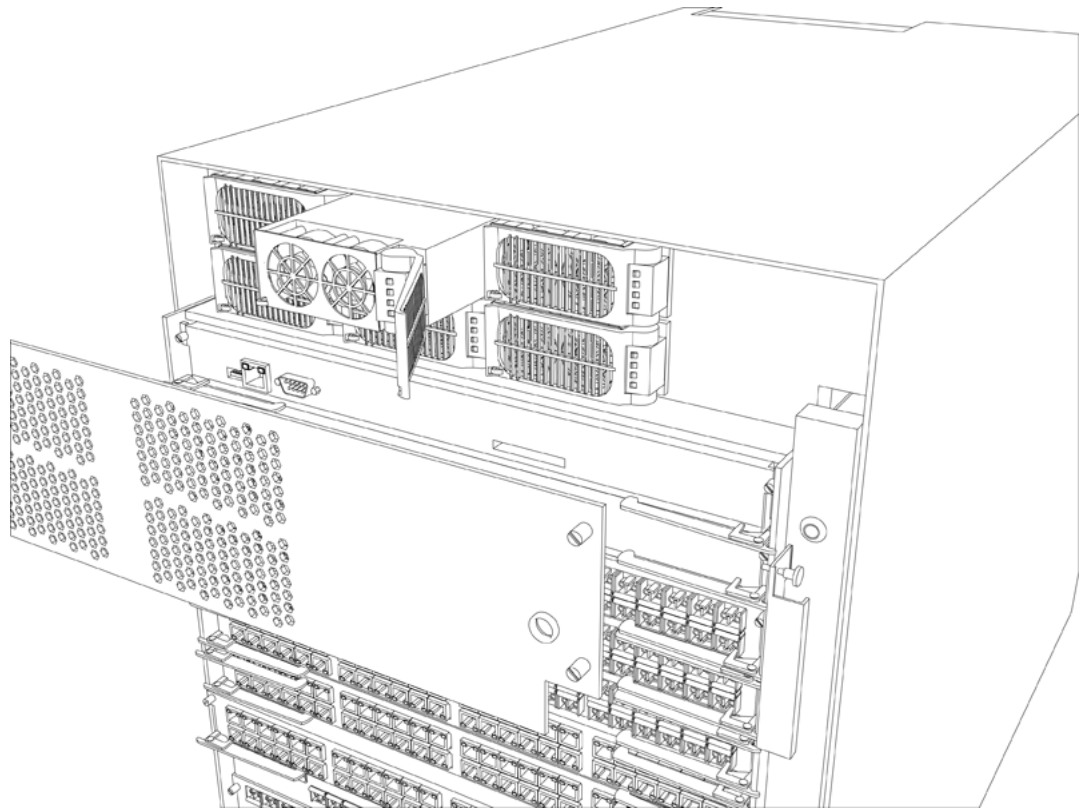
Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

Procedure

1. Turn off the power supply switch on the back of the chassis.
2. Disconnect the power cord from the power outlet and from the power supply.



3. Pull the action lever to release the power supply.
4. Pull the power supply out of the chassis.



Chapter 6: Translations of safety messages

This chapter describes the translations of safety messages which you need to be aware of while executing the installation of AC power supply.

Class A product caution statement

Caution:

This device is a Class A product. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users are required to take appropriate measures necessary to correct the interference at their own expense.

Caution:

ATTENTION

Le périphérique est un produit de Classe A. Le fonctionnement de cet équipement dans une zone résidentielle risque de causer des interférences nuisibles, auquel cas l'utilisateur devra y remédier à ses propres frais.

Caution:

ACHTUNG

Dies ist ein Gerät der Klasse A. Bei Einsatz des Geräts in Wohngebieten kann es Störungen des Radio- und Fernsehempfangs verursachen. In diesem Fall muss der Benutzer alle notwendigen Maßnahmen ergreifen, die möglicherweise nötig sind, um die Störungen auf eigene Rechnung zu beheben.

Caution:

PRECAUCIÓN

Este es un producto clase A. El uso de este equipo en áreas residenciales puede causar interferencias nocivas, en cuyo caso, se requerirá que los usuarios tomen cualquier medida necesaria para corregir la interferencia por cuenta propia.

Caution:

CUIDADO

Este dispositivo é um produto Classe A. Operar este equipamento em uma área residencial provavelmente causará interferência prejudicial; neste caso, espera-se que os usuários tomem as medidas necessárias para corrigir a interferência por sua própria conta.

 **Caution:**

ATTENZIONE

Questo dispositivo è un prodotto di Classe A. Il funzionamento di questo apparecchio in aree residenziali potrebbe causare interferenze dannose, nel cui caso agli utenti verrà richiesto di adottare tutte le misure necessarie per porre rimedio alle interferenze a proprie spese.

Electrostatic discharge caution statement

 **Electrostatic alert:**

Risk of equipment damage

To prevent damage from electrostatic discharge, always wear an antistatic wrist strap connected to an ESD jack.

 **Electrostatic alert:**

ATTENTION

Risque d'endommagement de l'équipement

Pour prévenir tout dommage dû à une décharge électrostatique, vous devez toujours porter un bracelet antistatique connecté à une prise ESD.

 **Electrostatic alert:**

ACHTUNG

Risiko eines Geräteschadens Um Schäden

durch elektrostatische Entladung zu verhindern, tragen Sie bei der Instandhaltung dieses Produkts immer ein antistatisches Band am Handgelenk, welches mit einer ESD-Buchse verbunden ist.

 **Electrostatic alert:**

PRECAUCIÓN

Riesgo de daño del equipo

Para prevenir el daño producido por una descarga electrostática, use siempre una pulsera antiestática conectada a un enchufe ESD.

 **Electrostatic alert:**

CUIDADO

Risco de danos ao equipamento

Para evitar danos com descarga eletrostática, sempre use uma pulseira antiestática que esteja conectada a uma tomada ESD.

 **Electrostatic alert:**

ATTENZIONE

Rischio di danni all'apparecchiatura

Per evitare danni derivanti da scariche elettrostatiche, indossare sempre un polsino antistatico collegato a una presa ESD.

Electric shock danger statement

 **Voltage:**

Risk of injury by electric shock

Before working on this equipment, be aware of proper safety practices and the hazards involved with electrical circuits. Use only power cords that have a grounding path. Ensure the switch is properly grounded before powering on the unit.

 **Voltage:**

DANGER

Risques de blessure par choc électrique

Avant de manipuler cet équipement, vous devez prendre connaissance des pratiques de sécurité appropriées et des risques associés aux circuits électriques. Utilisez uniquement des cordons d'alimentation possédant un conducteur de terre. Assurez-vous que le commutateur est correctement relié à la terre avant de mettre l'unité sous tension.

 **Voltage:**

GEFAHR

Verletzungsrisiko durch Stromschlag

Informieren Sie sich über entsprechende Sicherheitsmaßnahmen und die mit Stromkreisen verbundenen Gefahren, bevor Sie mit diesem Gerät arbeiten. Verwenden Sie nur Netzkabel mit Erdungspfad. Stellen Sie sicher, dass der Schalter ordnungsgemäß geerdet ist, bevor Sie das Gerät einschalten.

 **Voltage:**

PELIGRO

Riesgo de lesión por electrocución

Antes de trabajar con este equipo, infórmese acerca de las medidas de seguridad adecuadas y de los peligros relacionados con los circuitos eléctricos. Utilice sólo cables de corriente que tengan puesta a tierra. Asegúrese de que el interruptor tenga puesta a tierra antes de encender la unidad.

 **Voltage:**

PERIGO

Risco de ferimentos por choque elétrico

Antes de começar a trabalhar com o equipamento, esteja ciente das práticas de segurança adequadas e dos perigos inerentes a circuitos elétricos. Use apenas cabos de alimentação que tenham ligação à terra. Certifique-se de que o switch esteja devidamente aterrado antes de ligar o aparelho.

 **Voltage:**

PERICOLO

Rischio di scosse elettriche

Prima di utilizzare questa apparecchiatura, considerare le appropriate pratiche di sicurezza e i pericoli correlati ai circuiti elettrici. Utilizzare esclusivamente cavi di alimentazione dotati di un percorso per il collegamento a terra. Prima di attivare l'alimentazione dell'unità, accertarsi che l'interruttore sia adeguatamente collegato alla messa a terra.

Chapter 7: Electrical specifications for AC power supply

This chapter lists the electrical specifications and provides power rating for the 9006AC power supply.

AC input power specifications

The following table describes the technical specifications for AC input power for the Model 9006AC power supply.

Table 3: Input power specifications

Parameter	Specification at input voltage 100-120 V AC	Specification at input voltage 200-240 V AC
Input current	13.3 A (100 V AC) - 11.2 A (120 V AC)	11.8 A (200 V AC) – 9.9 A (240 V AC)
Operating frequency range	47–63 Hz	47–63 Hz
Input volt-ampere (VA)	1445 VA	2325 VA
Efficiency	85% minimum, 90% typical	88% minimum, 93% typical
Input power consumption	1416 W	2277 W
Heat dissipation (thermal output)	724 British Thermal Unit (BTU)/hour	933 BTU/hour
Hold-up time (See note 1.)	25 ms	20 ms
Note 1: Measurement starts at zero crossing of the AC voltage. Measurement made at full load and voltage is allowed to decay to 44 VDC.		

DC output power specifications

The following table describes the technical specifications for the DC output power for the 9006AC power supply.

Table 4: Output power specifications

Parameter	Specification at input voltage 100–120 V AC	Specification at input voltage 200–240 V AC
Maximum main output power	1200 W	2000 W
Maximum main output current	22 A	37 A
Auxiliary output voltage / power	5 V DC / 3.75 W	5 V DC / 3.75 W
Output voltage set-point	54 V DC	54 V DC

Electrical specifications for AC power supply

Parameter	Specification at input voltage 100–120 V AC	Specification at input voltage 200–240 V AC
Mean time between failures (See note 1.)	400 000 hours	400 000 hours
Note 1: Per telcordia SR-332, 25 C, full load, method 1, case III		

Chapter 8: Power cord specifications

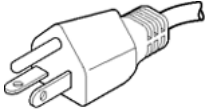
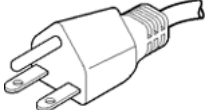
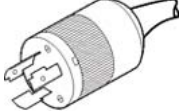
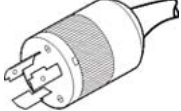
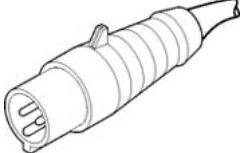
Power cords are included with the 9006AC power supplies.

The following table lists specifications for international power cords for the 9006AC power supply.

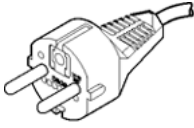

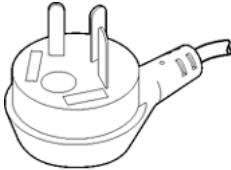
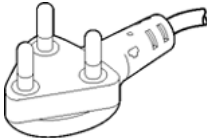
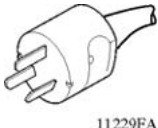
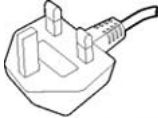

! Important:

If you use the NEMA5-20 male plug power cord AA0020076-E6, which is rated for lower input voltage conditions, the power supply output power is limited to 1140 watts (W).

Table 5: International power cord specifications for the 9006AC power supply

Avaya order number	Country Plug/Receptacle description	Specifications	Typical plug
AA0020076-E6	North America: • NEMA5-20 male plug	125 VAC/20 A 12 AWG length: 2.5 m	 11093FA
AA0020077-E6	North America: • NEMA6-15 male plug	250 VAC/15 A 14 AWG length: 2.5 m	 11094FA
AA0020083-E6	North America: • NEMA6-20 twist-lock male plug	250 VAC/20 A 12 AWG length: 8.2 ft	 11191FA
AA0020087-E6	North America: • NEMAL6-15 twist-lock male plug	250 VAC/15 A 14 AWG length: 8.2 ft.	 11191FA
AA0020082-E6	International: • IEC60309 male plug	230 VAC/16 A 1.5 mm ² length: 2.5 m	 11098FA

Power cord specifications

Avaya order number	Country Plug/Receptacle description	Specifications	Typical plug
AA0020078-E6	Continental Europe: • CEE7/7 male plug	250 VAC/16 A 1.5 mm ² length: 2.5 m	 228FA
AA0020079-E6	Italy: • CEI 23-50 S17 male plug	250 VAC/16 A 1.5 mm ² length: 2.5 m	 11095FA
AA0020080-E6	Israel: • SI-32 male plug	250 VAC/16 A 1.5 mm ² length: 2.5 m	 11096FA
AA0020081-E6	India/South Africa: • BS-546 male plug	250 VAC/15 A 1.5 mm ² length: 2.5 m	 11097FA
AA0020084-E6	Australia: • AS/NZ5 3112 male plug	250 VAC/15 A 1.5 mm ² length: 2.5 m	 11229FA
AA0020085-E6	United Kingdom and Ireland: • BS 1362	250 VAC/13 A 1.5 mm ² length: 2.5 m	 11230FA
AA0020086-E6	Greater China: • GB 11918-89	250 VAC/16 A 1.5 mm ² length: 2.5 m	 11229FAnew

Chapter 9: Customer service

Visit the Avaya Web site to access the complete range of services and support that Avaya provides. Go to www.avaya.com or go to one of the pages listed in the following sections.

Getting technical documentation

To download and print selected technical publications and release notes directly from the Internet, go to www.avaya.com/support.

Getting product training

Ongoing product training is available. For more information or to register, you can access the Web site at www.avaya.com/support. From this Web site, you can locate the Training contacts link on the left-hand navigation pane.

Getting help from a distributor or reseller

If you purchased a service contract for your Avaya product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller for assistance.

Getting technical support from the Avaya Web site

The easiest and most effective way to get technical support for Avaya products is from the Avaya Technical Support Web site at www.avaya.com/support.

