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Cisco 200/CiscoPro CPA200 Public Network Certification

This publication provides international regulatory and safety compliance information for the Cisco 200/CiscoPro CPA200. Use this publication with the *Cisco 200 ISDN Adapter Hardware Installation and Configuration Guide* and the *CiscoPro CPA200 ISDN Adapter Hardware Installation and Configuration Guide*.

Note These publications are available on the Cisco Connection Documentation CDs and on the World Wide Web URL http://www.cisco.com. In addition, printed copies may be ordered.

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Safety Information for the Cisco 200/CiscoPro CPA200

The following statements are general warnings or safety guidelines that apply to all countries. A warning means danger. You are in a situation that could cause bodily injury. Before working on equipment, be aware of the hazards involved with electrical circuitry and standard safety practices to prevent accidents.

- Before opening the chassis, disconnect the telephone-network cables to avoid contact with telephone-network voltages.
- Do not work on the system or connect or disconnect cables during periods of lightning activity.
- The ISDN connection is regarded as a source of voltage that should be inaccessible to user contact. Users should not attempt to tamper with or open any public telephone operator (PTO)–provided equipment or connection hardware. Any hardwired connection (other than by nonremovable, connect-one-time-only lug) must be made only by PTO staff or suitably trained engineers.
- This card is approved only for installation in a PC and with attachments that are either type approved for such apparatus or covered by a general approval.

Operating Conditions for Canada

All warnings and safety guidelines listed in “Safety Information for the Cisco 200/CiscoPro CPA200” apply to Cisco 200/CiscoPro CPA200 models used in Canada. In addition, the following warnings apply only to Cisco 200/CiscoPro CPA200 products used in Canada:

- The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.
- Before installing the equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.
- Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.
- Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

- The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the sum of the Load Numbers of all the devices does not exceed 100.

Operating Conditions for the United Kingdom

In addition to the warnings and safety guidelines listed in "Safety Information for the Cisco 200/CiscoPro CPA200," the following warnings apply to Cisco 200/CiscoPro CPA200 models used in the United Kingdom:

- The Cisco 200/CiscoPro CPA200 ISDN Adapter is designed to meet the requirements of NET1 and NET2 for products with serial interfaces, and NET3 for products with a BRI interface.
- Interconnection directly, or by way of other apparatus, of ports marked "BRI" with ports marked or not so marked may produce hazardous conditions on the network, and that advice should be obtained from a competent engineer before such a connection is made.
- The BRI connector must be hardwired permanently to the S-reference connection point by using a connect one-time-only, nonremovable plug (RJ-45 with the latch tab removed).
- This apparatus must be connected to a main socket outlet with a protective earth contact.

Maintaining Safe Installation Distances

In order to maintain the independent approval of this card, it is essential that, when other option cards are installed that use or generate a hazardous voltage, the minimum creepage and clearance specified in Table 1, Creepage and Clearance Distances Based on Voltage, are maintained. A hazardous voltage is one that exceeds 42.4 volts peak AC or 60 volts DC. If you have any doubt, seek advice from a competent engineer before installing other adapter cards in the PC.

The equipment must be installed such that, with the exception of the connections to the PC, creepage and clearance distances shown in Table 1, Creepage and Clearance Distances Based on Voltage, are maintained between the card and any other assemblies that use or generate a voltage shown in Table 1, Creepage and Clearance Distances Based on Voltage. The larger distance shown in parentheses applies where the local environment within the PC is subject to conductive pollution or dry non-conductive pollution that could become conductive due to condensation. Failure to maintain these minimum distances would invalidate the approval.

Except at the edge connector that plugs into the PC expansion slot, creepage and clearance distances of X millimeters (mm) and Y mm as listed in Table 1 must be maintained between the cards and other parts of the PC including any other expansion cards fitted.

Note that in Table 1 the following definitions apply:

- Clearance distances are defined as the minimum distance measured in air between two points (i.e., line of sight).
- Creepage distances are defined as the minimum distance measured across the surface of an insulator between two points (i.e., following the contour of the insulator).

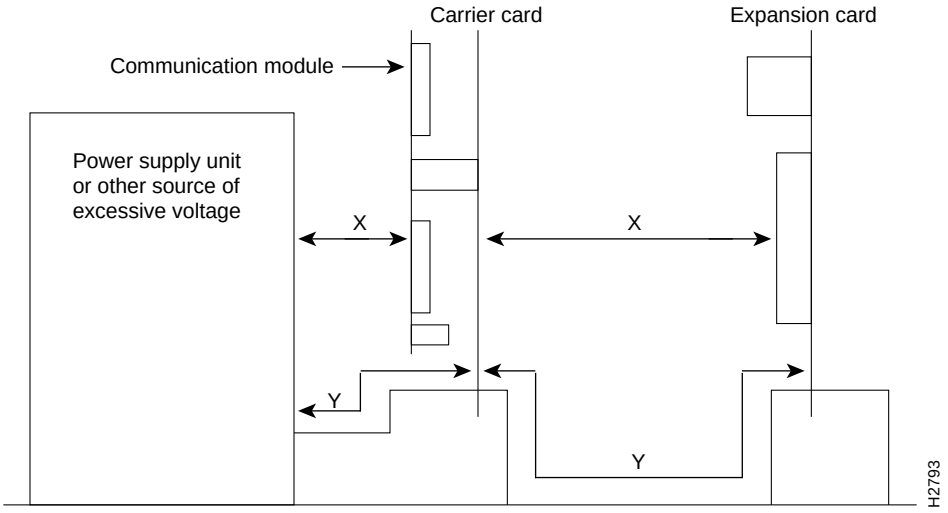
Table 1 Creepage and Clearance Distances Based on Voltage

Voltage Used or Generated by Other Parts of the PC or Expansion Card (Vrms[1] or VDC[2])	Creepage (Y mm)[3]	Clearance (X mm)
Up to 50	2.4 (3.8)	2.0
Up to 125	3.0 (4.8)	2.6
Up to 250	5.0 (8.0)	4.0
Up to 300[4]	6.4 (10.0)	4.0

1. Vrms = root mean square voltage.
2. VDC = volts direct current.
3. The creepage distances not in parentheses apply when the equipment is installed in a normal office environment. The larger dimensions, given in parentheses, must be applied when the equipment is installed in an environment in which dust and other types of pollution could conduct electricity because of the effects of dampness and condensation. This applies to locations subject to high humidity.
4. For an expansion card fitted in the PC using or generating voltage greater than 300V (rms or dc), advice from a competent telecommunications safety engineer must be obtained before installation of the relevant equipment.

Creepage and clearance distances are measured between adjacent parts as shown in Figure 1.

Figure 1 Creepage and Clearance Distances between BRI Module and Components



Note that in Figure 1, X indicates the clearance distances between cards and between adjacent cards and components, and Y shows the creepage path across the surface of an insulator and between the two points indicated by X.

Agency Approvals

- Cisco 201/CiscoPro CPA201 (S/T interfaces, used primarily outside the United States)
  - EMI: FCC Part 15 Class B, DOC Class A, EN55022 Class B, VCCI Class 2, IEC 801-2, IEC 801-3 (RFI), IEC 801-4, IEC 801-5
  - Telecom Compatibility: Canadian CS03

- Cisco 202/CiscoPro CPA200 (U interface, available only in North America)
  - EMI: FCC Part 15 Class B
  - Telecom Compatibility: Canadian CS03

Directives Compliance

The CE-0167-X mark signifies that the equipment complies with the following European Directives: 91/263/EEC (public telecommunications network compatibility), 89/336/EEC (electromagnetic compatibility), 73/23/EEC (low voltage), and 92/59/EEC (general product safety).

Obtaining Service and Support

For service and support for a product purchased from a reseller, contact the reseller. Resellers offer a wide variety of Cisco service and support programs, which are described in the section "Service and Support" in the information packet that shipped with your chassis.

Note If you purchased your product from a reseller, you can access Cisco Connection Online (CCO) as a guest. CCO is Cisco Systems' primary, real-time support channel.Your reseller offers programs that include direct access to CCO's services.

For service and support for a product purchased directly from Cisco, use CCO.

Cisco Connection Online

CCO is Cisco Systems' primary, real-time support channel. SMARTnet customers and partners can self-register on CCO to obtain additional content and services.

Note If you purchased your product from a reseller, you can access CCO as a guest. Your reseller offers programs that include direct access to CCO's services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO services include product information, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously—a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- World Wide Web:
  - http://www.cisco.com
  - http://www-europe.cisco.com
  - http://www-china.cisco.com
- Telnet: cco.cisco.com.
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and baud rates up to 14.4 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

Note If you need technical assistance with a Cisco product that is under warranty or covered by a Cisco maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com.

Please use CCO to obtain general information about Cisco Systems, Cisco products, or upgrades. If CCO is not accessible, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

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