



APPENDIX **A**

Power Supply Specifications

This appendix provides the specifications for the AC-input and DC-input power supplies supported on the Catalyst 4948E switch.



Tip

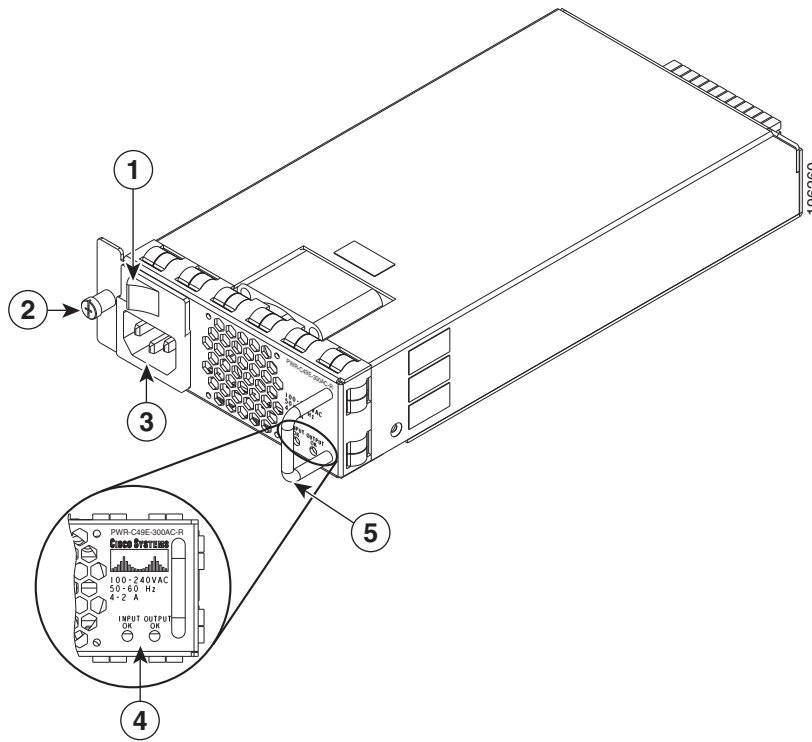
For additional information about the Cisco Catalyst 4948E and the Catalyst 4948E-F switches (including configuration examples and troubleshooting information), see the documents listed on this page:

http://www.cisco.com/en/US/products/ps6021/tsd_products_support_series_home.html

300 W AC-Input Power Supply (PWR-C49E-300AC-R)

The PWR-C49E-300AC-R 300 W AC-input power supply can be installed only in the Catalyst 4948E switch chassis. This power supply is not supported on the Catalyst 4948E-F switch. [Figure A-1](#) shows the 300 W AC-input power supply with the major features identified.

Figure A-1 AC-Input Power Supply (PWR-C49E-300AC-R) Features



1	AC power switch	4	Power supply LEDs
2	Captive installation screw	5	Power supply handle
3	AC power cord receptacle		

Table A-1 lists the specifications for the 300 W AC-input power supply (PWR-C49E-300AC-R).

Table A-1 300 W AC-Input Power Supply Specifications

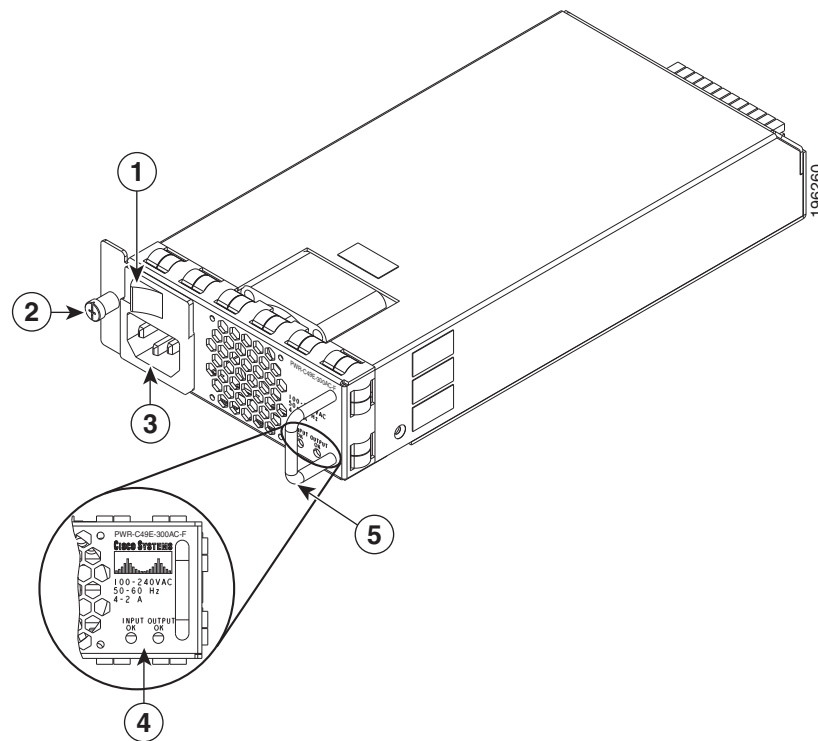
Item	Specification
AC-input type	<ul style="list-style-type: none"> • Autoranging input with power factor correction (PFC). • Power factor correction is a standard feature. PFC reduces the reactive component in the source AC current allowing higher power factors and lower harmonic current components.
AC-input voltage	<ul style="list-style-type: none"> • Low-line (120 VAC nominal)—85 VAC (min) to 132 VAC (max) • High-line (230 VAC nominal)—170 VAC (min) to 264 VAC (max)
AC-input current	<ul style="list-style-type: none"> • 4 A @ 100 VAC (maximum) • 2 A @ 240 VAC (maximum)
AC-input frequency	47 to 63 Hz
Branch circuit requirements	<p>Each chassis power supply should have its own dedicated, fused-branch circuit:</p> <ul style="list-style-type: none"> • For North America—15 A • For International—Circuits sized to local and national codes • All AC power supply inputs are fully isolated. <ul style="list-style-type: none"> – Source AC can be out of phase between multiple power supplies in the same chassis, which means that PS1 can be operating from phase A and PS2 can be operating from phase B. – For high-line operation, the power supply operates with the line conductor wired to a source AC phase and the neutral conductor wired either to neutral or to another source AC phase as long as the net input voltage is in the range of 170 to 264 VAC.
Power supply output	25 A @+12 VDC
Output holdup time	20 ms minimum
kVA rating ¹	0.375 kVA
Power supply fan	<ul style="list-style-type: none"> • One temperature-controlled, variable-speed fan • Airflow direction—Back to front • The power supply fan has four speed settings. The speed settings are dependent on the air temperature detected by the inlet air temperature sensor mounted in the chassis. See Table A-2 for inlet temperature ranges and corresponding fan speeds.

Table A-2 PWR-C49E-300AC-R Power Supply Inlet Temperature Versus Fan Speed

Fan Speed Level	Inlet Temperature (T) ($\pm 2^{\circ}\text{C}$)	Fan Speed (RPM) ($\pm 100\text{RPM}$)
L1	$-5^{\circ}\text{C} < T \leq 35^{\circ}\text{C}$	8900
L2	$35^{\circ}\text{C} < T \leq 42^{\circ}\text{C}$	9800
L3	$42^{\circ}\text{C} < T \leq 50^{\circ}\text{C}$	11100
L4	$T > 50^{\circ}\text{C}$	12700

300 W AC-Input Power Supply (PWR-C49E-300AC-F)

The PWR-C49E-300AC-F 300 W AC-input power supply can be installed only in the Catalyst 4948E-F switch chassis. This power supply is not supported on the Catalyst 4948E switch. [Figure A-2](#) shows the 300 W AC-input power supply with the major features identified.

Figure A-2 AC-Input Power Supply (PWR-C49E-300AC-F) Features

1	AC power switch	4	Power supply LEDs
2	Captive installation screw	5	Power supply handle
3	AC power cord receptacle		

Table A-1 lists the specifications for the 300 W AC-input power supply (PWR-C49E-300AC-F).

Table A-3 300 W AC-Input Power Supply (PWR-C49E-300AC-F) Specifications

Item	Specification
AC-input type	<ul style="list-style-type: none"> • Autoranging input with power factor correction (PFC). • Power factor correction is a standard feature. PFC reduces the reactive component in the source AC current allowing higher power factors and lower harmonic current components.
AC-input voltage	<ul style="list-style-type: none"> • Low-line (120 VAC nominal)—85 VAC (min) to 132 VAC (max) • High-line (230 VAC nominal)—170 VAC (min) to 264 VAC (max)
AC-input current	<ul style="list-style-type: none"> • 4 A @ 100 VAC (maximum) • 2 A @ 240 VAC (maximum)
AC-input frequency	47 to 63 Hz
Branch circuit requirements	<p>Each chassis power supply should have its own dedicated, fused-branch circuit:</p> <ul style="list-style-type: none"> • For North America—15 A • For International—Circuits sized to local and national codes • All AC power supply inputs are fully isolated. <ul style="list-style-type: none"> – Source AC can be out of phase between multiple power supplies in the same chassis, which means that PS1 can be operating from phase A and PS2 can be operating from phase B. – For high-line operation, the power supply operates with the line conductor wired to a source AC phase and the neutral conductor wired either to neutral or to another source AC phase as long as the net input voltage is in the range of 170 to 264 VAC.
Power supply output	25 A @ +12 VDC
Output holdup time	20 ms minimum
kVA rating ¹	0.4 kVA
Power supply fan	<ul style="list-style-type: none"> • One temperature-controlled, variable-speed fan • Airflow direction—Front to back • The power supply fan has four speed settings. The speed settings are dependent on the air temperature detected by the inlet air temperature sensor mounted in the chassis. See Table A-4 for inlet temperature ranges and corresponding fan speeds.

Table A-4 PWR-C49E-300AC-F Power Supply Inlet Temperature Versus Fan Speed

Fan Speed Level	Inlet Temperature (T) (± 2°C)	Fan Speed (RPM) (±100RPM)
L1	-3°C < T ≤ 37°C	8700
L2	37°C < T ≤ 44°C	10700
L3	44°C < T ≤ 52°C	12700
L4	T > 52°C	14700

300 W AC-Input Power Supply Power Cords

Table A-5 lists the specifications for the AC power cords that are available for both of the 300 W AC-input power supplies. The table includes references to illustrations of the AC power cords.

**Note**

All 300 W AC-input power supply power cords have an IEC60320/C15 appliance plug at one end. This plug connects to the AC-in receptacle on the power supply faceplate.

Table A-5 300 W AC-Input Power Supply Power Cords

Locale	Power Cord Part Number	AC Source Plug Type	Cordset Rating	Power Cord Reference Illustration
Argentina	CAB-IR2073-C15-AR= (was CAB-7KACR=)	IRAM 2073	10 A, 250 VAC	Figure A-3
Australia, New Zealand	CAB-AS3112-C15-AU= (was CAB-7KACA=)	SAA AS 3112	10 A, 250 VAC	Figure A-4
Continental Europe	CAB-CEE77-C15-EU= (was CAB-7KACE=)	CEE 7/7	10 A, 250 VAC	Figure A-5
Italy	CAB-C2316-C15-IT= (was CAB-7KACI=)	CEI 23-16/7	10 A, 250 VAC	Figure A-6
North America, Japan	CAB-US515-C15-US= (was CAB-7KAC=)	NEMA 5-15 ¹	13 A, 125 VAC	Figure A-7
North America	CAB-N5K6A-NA=	NEMA 6-15P	10 A, 250 VAC	Figure A-8
South Africa, India	CAB-SABS-C15-IND=	BS 546 (SABS 164-1)	10 A, 250 VAC	Figure A-9
Switzerland	CAB-9K10A-SW= (was CAB-7KACSW=)	SEV 1011	10 A, 250 VAC	Figure A-10
United Kingdom	CAB-BS1363-C15-UK= (was CAB-7KACU=)	BS 1363 ²	13 A, 250 VAC	Figure A-11

- For Japan, ask your local electrical contractor to prepare the NEMA 5-20 power plug.
- Plug contains a 13 A fuse.

Figure A-3 CAB-IR2073-C15-AR=, CAB-7KACR= (Argentina)

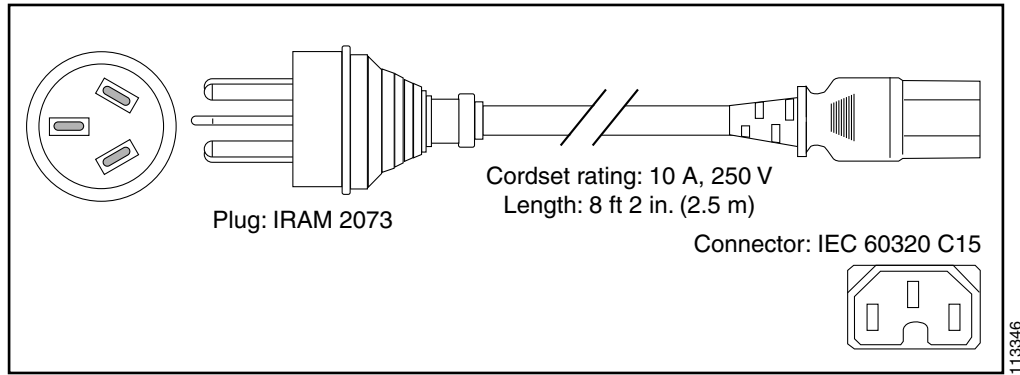


Figure A-4 CAB-AS3112-C15-AU=, CAB-7KACA= (Australia and New Zealand)

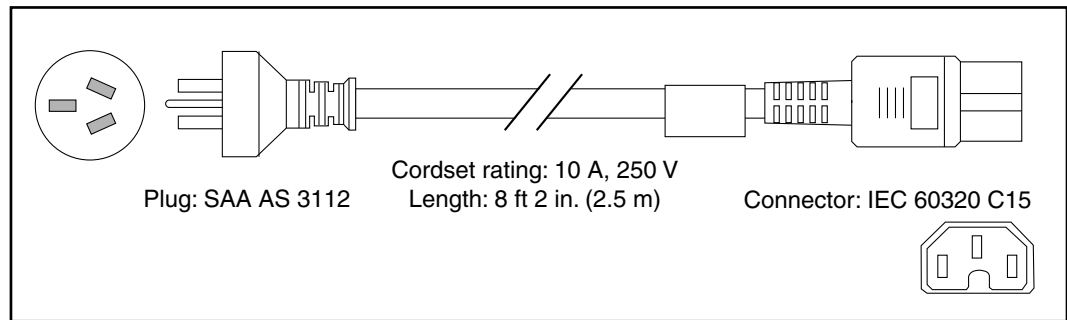


Figure A-5 CAB-CEE77-C15-EU=, CAB-7KACE= (Continental Europe)

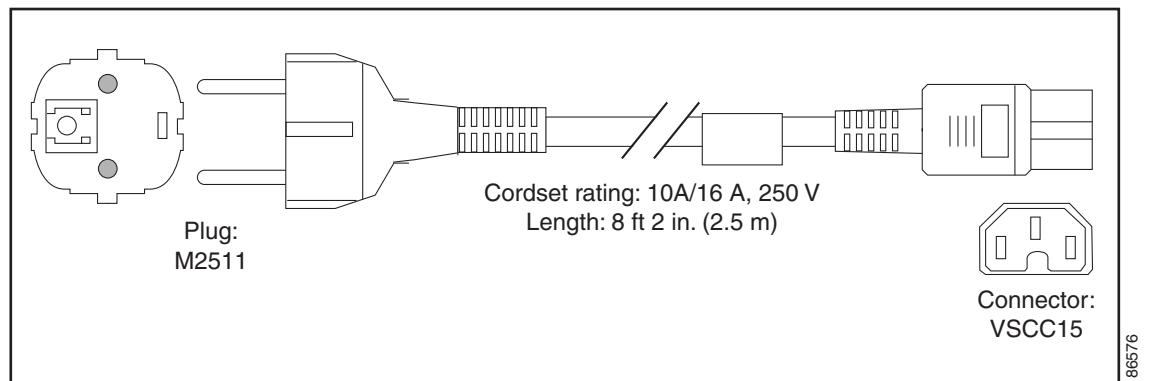


Figure A-6 CAB-C2316-C15-IT=, CAB-7KACI= (Italy)

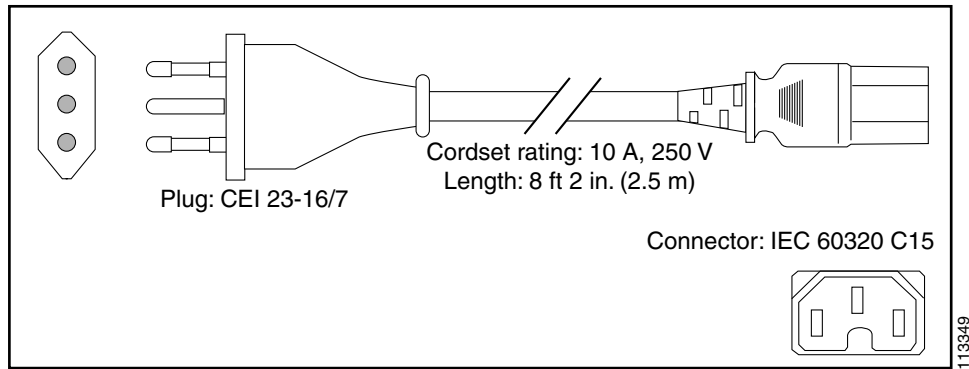


Figure A-7 CAB-US515-C15-US=, CAB-7KAC= (North America)

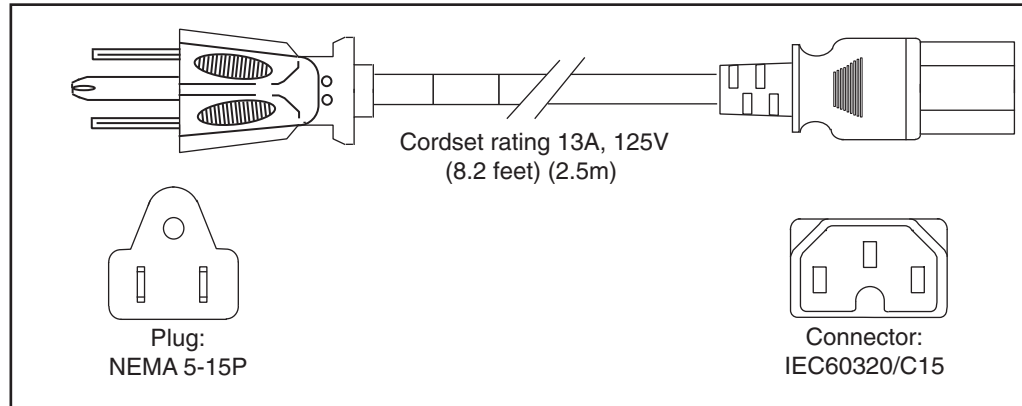


Figure A-8 CAB-N5K6A-NA (North America)

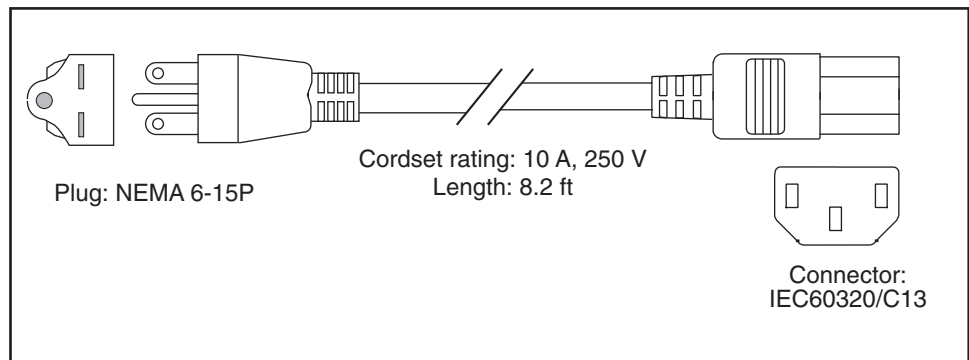


Figure A-9 CAB-SABS-C15-IND (South Africa, India)

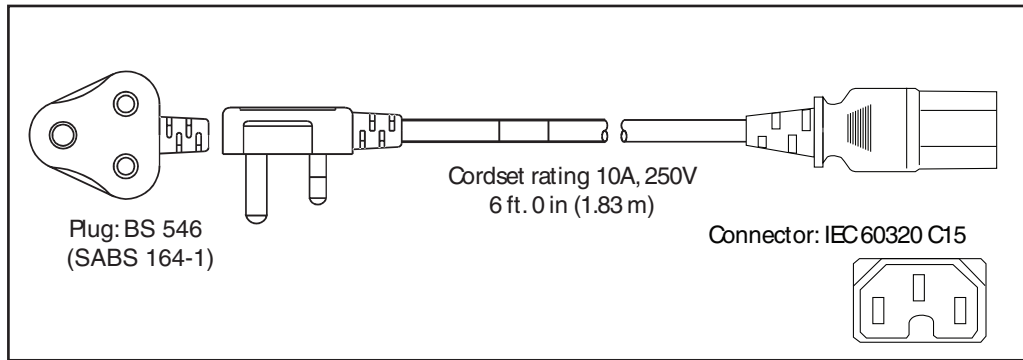


Figure A-10 CAB-9K10A-SW=, CAB-7KACSW= (Switzerland)

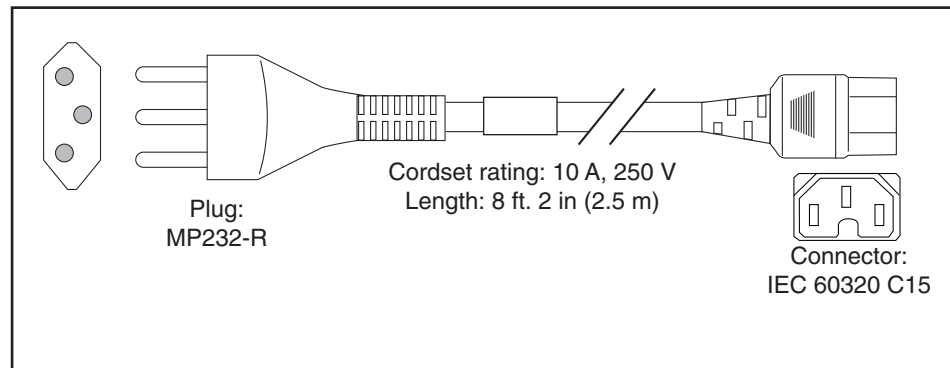
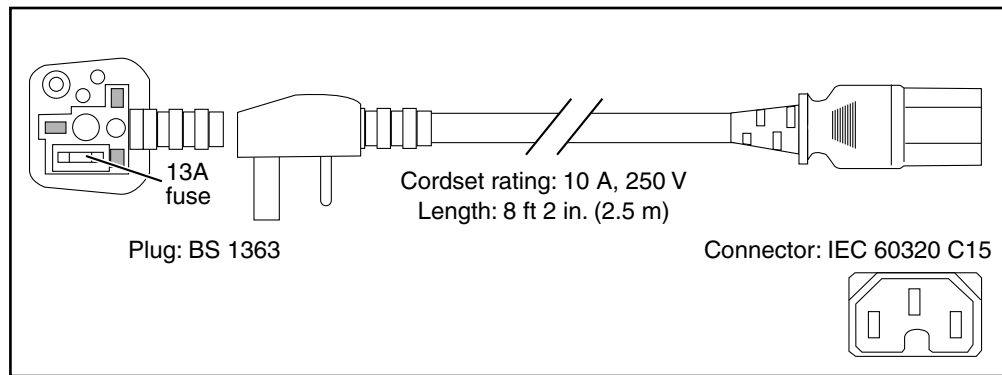


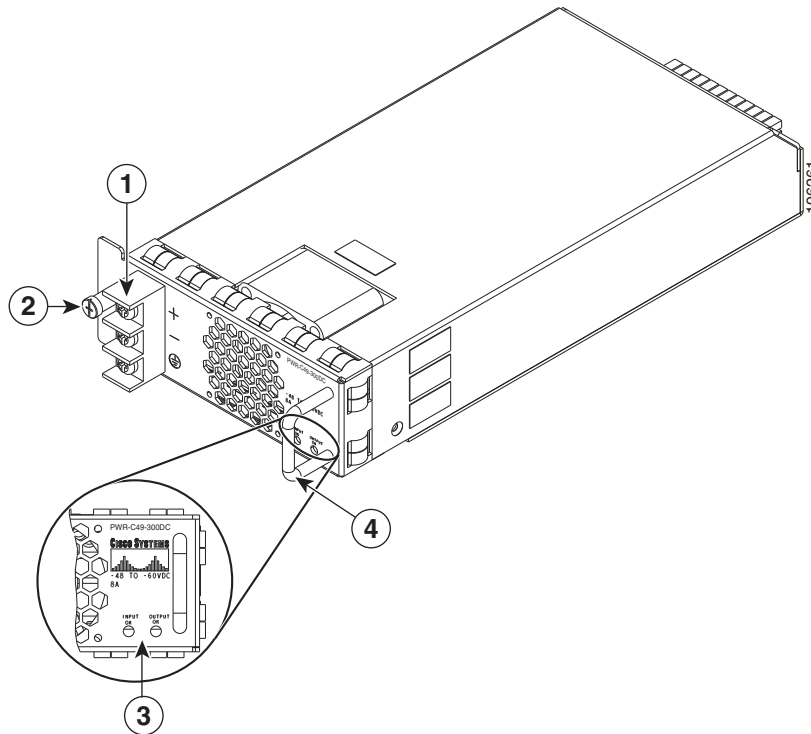
Figure A-11 CAB-BS1363-C15-UK=, CAB-7KACU= (United Kingdom)



300 W DC-Input Power Supply (PWR-C49-300DC)

Figure A-12 shows the 300 W DC-input power supply with the major features identified. The PWR-C49-300DC DC-input power supply is supported only on the Catalyst 4948E switch chassis.

Figure A-12 300 W DC-Input Power Supply (PWR-C49-300DC)



1	Source DC terminal block	3	Power supply LEDs
2	Captive installation screw	4	Power supply handle

Table A-6 lists the specifications for the 300 W DC-input power supply (PWR-C49-300DC).

Table A-6 300 W DC-Input Power Supply Specifications

Item	Specification
DC-input voltage	<ul style="list-style-type: none"> -48 VDC @ 8.33 A for nominal -48 V battery backup system (operating range: -40.5 VDC to -56 VDC) -60 VDC @ 6.66 A for nominal -60 V battery backup system (operating range: -55 VDC to -72 VDC)
DC-input current	Nominal range is 6.66 A to 8.33 A
Power supply output capacity	300 W
Power supply output	25 A @ 12 VDC
Output holdup time	8 ms (minimum)
Heat dissipation	341 BTU/hour (power supply only)

Table A-7 DC-Input Power Supply Inlet Temperature Versus Fan Speed

Fan Speed Level	Inlet Temperature (T) ($\pm 2^{\circ}\text{C}$)	Fan Speed (RPM) ($\pm 100\text{RPM}$)
L1	$-10^{\circ}\text{C} < T \leq 30^{\circ}\text{C}$	5100
L2	$30^{\circ}\text{C} < T \leq 37^{\circ}\text{C}$	6400
L3	$37^{\circ}\text{C} < T \leq 45^{\circ}\text{C}$	7700
L4	$T > 45^{\circ}\text{C}$	9500