

IPC-6806
6-slot Node IPC Chassis

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Chapter 1 General Information

Introduction

Specially designed for the factory floor and other harsh industrial environments, the IPC-6806 Wall-mount IPC Chassis is ideal for system integrators or users who require a compact, rugged PC/AT compatible system. The IPC-6806 features a 6-slot passive backpanel and a 150-watt power supply. The chassis is only 6.5" wide and can easily be mounted on panels or walls with the supplied brackets.

Specifications

- **Construction:** Heavy-duty steel
- **Disk drive capacity:** One 3½" FDD and one 3½" HDD
- **Indicators:** LEDs for power On/Off and HDD
- **Controls:** Reset switch on front panel
- **Cooling fan:** One 49-CFM fan on front panel with air filter
- **Weight:** 12.3 lb (5.6 Kg)
- **Dimensions:** 6.5" (W) x 6.7" (H) x 15.5" (D)
(166 mm x 170 mm x 393 mm)
- **Paint color:** Pantone 415C

Passive Backplane (PCA-6106)

- **Slots:** 6 ISA bus, full size
- **PC board:** 4-layer PCB with ground and power planes for reduced noise and low power-supply impedance
- **Indicators:** LEDs for +5 V, +12 V, -5 V and -12 V

Passive Backplane (PCA-6106P3)

- **Slots:** 2 ISA/3 PCI/1 PICMG slots
- **PC board:** 4-layer PCB with ground and power planes for reduced noise and low power-supply impedance
- **Indicators:** LEDs for +5 V, +12 V, -5 V and -12 V

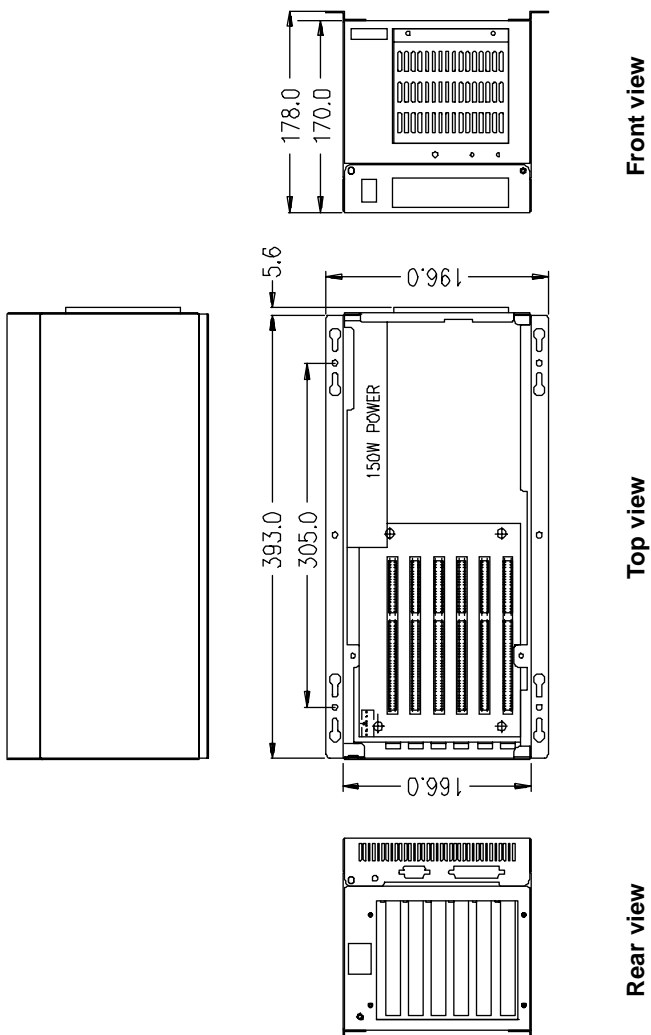
Power Supply (PS-150)

- **Output rating:** 150 watts max.
- **Input voltage:**
90 to 132 V_{AC} or 180 to 264 V_{AC} @ 47~63 Hz, autoranging
- **Output voltage:** +5 V @ 15 A, -5 V @ 1 A,
+12 V @ 5 A, -12 V @ 1 A
- **Min Load:** +5V @ 3A, -5V @ 0.2A, +12V @ 1A, -12V @ 0.2A
- **MTBF:** 50,000 hrs. at 70% load
- **Safety:** UL/CSA/TÜV approved
- **EMI:** Meets FCC/VDE Class A

Environmental Specifications

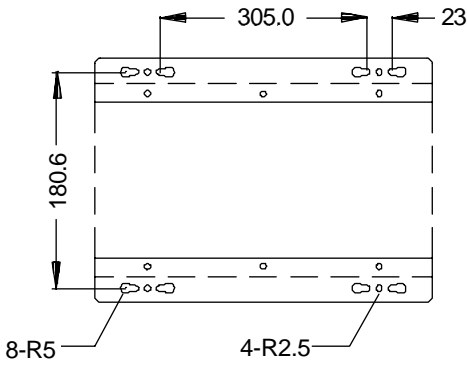
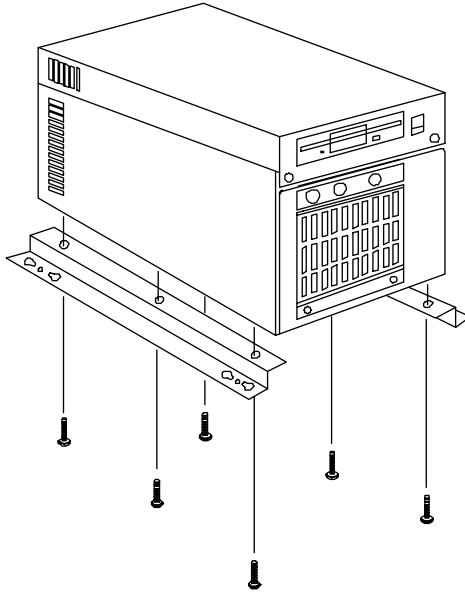
- **Operating temperature:** 32 to 122°F (0 to 50°C)
- **Relative humidity:** 10 to 95% @ 40°C, non-condensing
- **Vibration (operating):**
5 to 17 Hz, 0.1" double-amplitude displacement;
17 to 500 Hz, 1.5 G acceleration peak to peak
- **Shock (operating):**
10 G acceleration peak (11 msec. duration)
- **Safety:** Meets UL/CSA/TÜV
- **EMI:** Meets FCC/VDE Class A
- **CE Compliant**

Dimensions



Units = mm

Installation



Units = mm

Chapter 2 System Setup

The following procedures are provided to assist you in installing drives, plug-in cards and the hold-down clamp into the IPC-6806.

Removing the cover

To remove the cover, proceed as follows:

1. Remove two screws (one on each side) which secure the cover to the card cage (see Fig. 2-1). Lift the lid to expose the interior of the chassis.

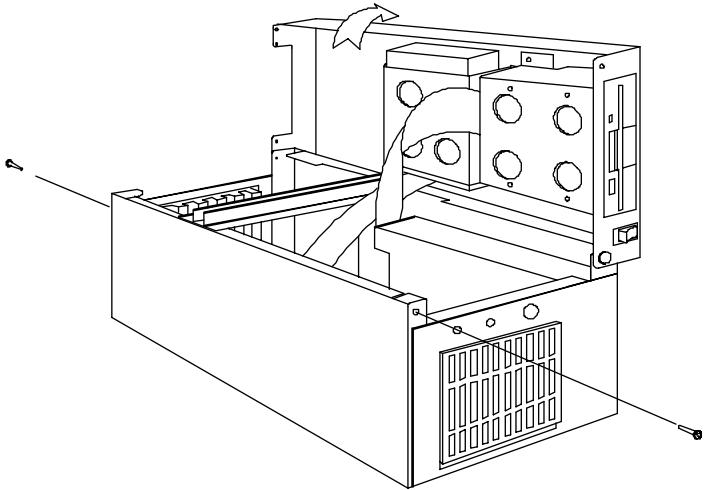


Figure 2-1. Removing the cover

Adding disk drives

To install a HDD or FDD, refer to Fig. 2-2 and proceed as follows:

1. Hard disk drive:

- a. Open the top cover of the chassis.

- b. Detach the flat-panel mounting bracket by removing the four retaining screws.
- c. Align the holes on the bottom of the HDD with those of the flat-panel mounting bracket.
- d. Attach the HDD to the flat-panel mounting bracket with the four screws removed in (a) above.
- e. Connect the 40-pin flat-cable and power cable to the HDD and attach the flat-panel mounting bracket to the chassis with four screws.

2. Floppy disk drive:

- a. Open the top cover to the chassis.
- b. Remove the cover to the floppy disk drive.
- c. Insert the FDD into the mounting bracket with its base facing inward.
- d. Connect a 34-pin flat-cable and power cable to the FDD and attach the FDD to the bracket with four screws.

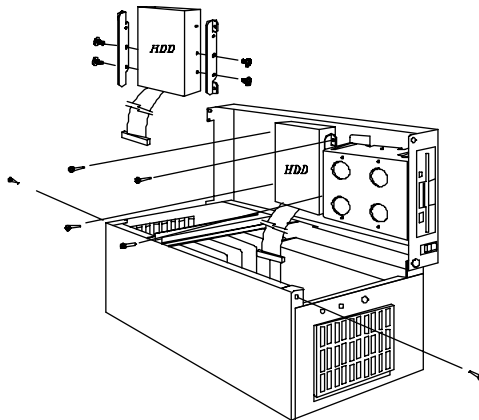
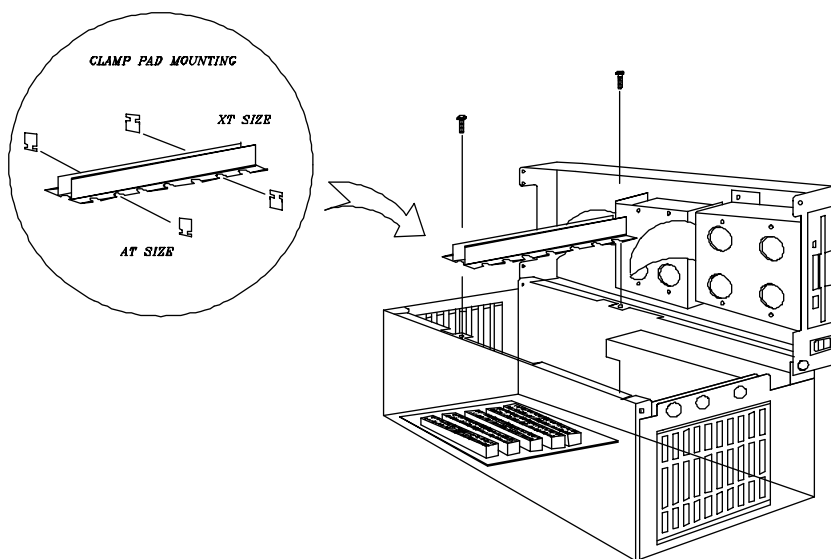


Figure 2-2. Installing the drives

Hold-down clamp

1. Insert the provided rubber buffers into the hold-down clamp (see Fig. 2-3). Buffers cushion plug-in cards from shock and vibration. They provide two settings:
 - a. For XT-size cards, the narrow end should face upward.
 - b. For AT-size cards, the wide end should face upward.
2. When you are finished inserting the rubber buffers, fasten the hold-down clamp to the card cage with the two screws provided (see Fig. 2-3).

Figure 2-3. Hold-down clamp installation



Wall-mounting

The IPC-6806 may be mounted on a wall, allowing more efficient use of space. To wall-mount your chassis proceed as follows:

1. Attach the brackets to the chassis by inserting the six provided screws as shown in Figure 2-4
2. Secure the chassis to the wall with the four screws provided. Be sure that the chassis is mounted securely.

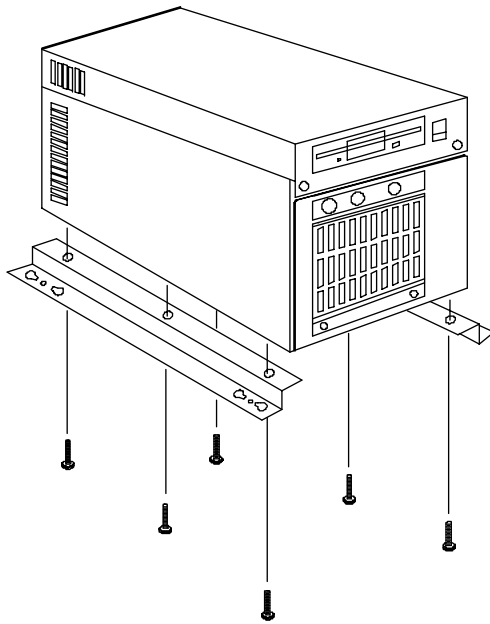


Figure 2-4. Wall-mounting the unit

Replacing the filter

To change the filter, located at the front end of the chassis, see Fig. 2-5 and proceed as follows:

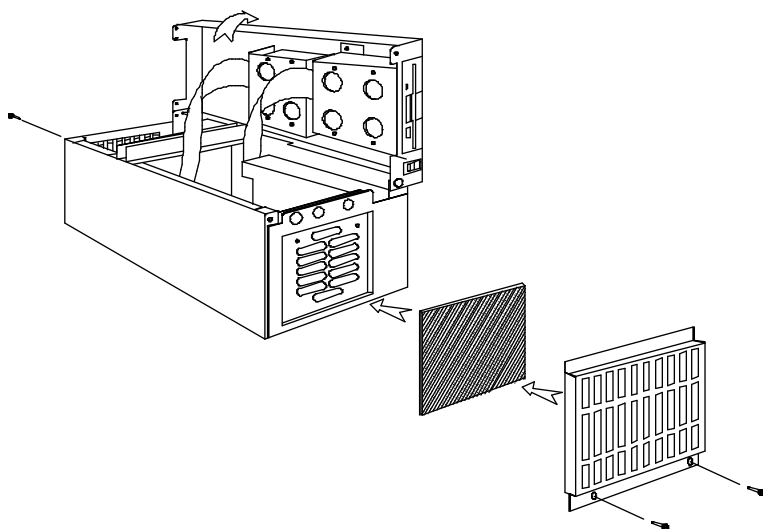
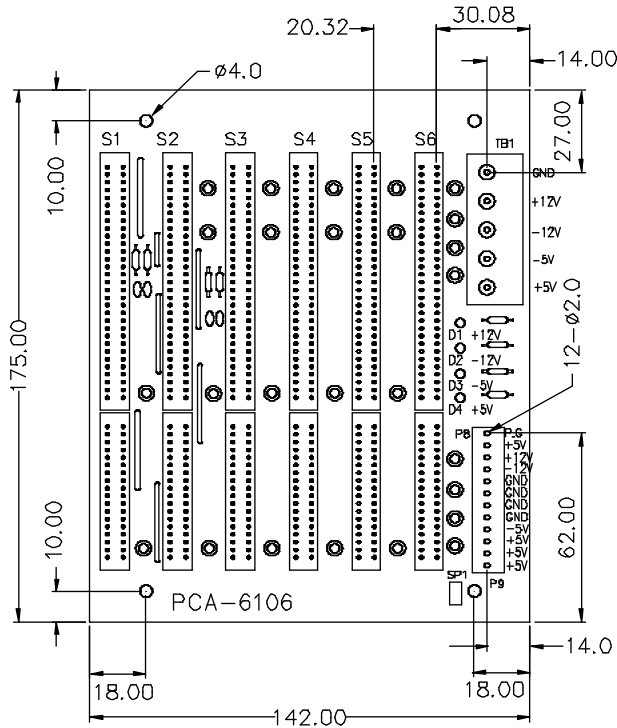


Figure 2-5 Changing the filter

1. Remove the two screws located at the bottom of the filter cover. Gently but firmly pull the cover free from the chassis.
2. Remove the filter and replace it with a new one.
3. Reinsert the filter and replace the cover onto the chassis.

Appendix A Passive Backplane

PCA-6106 : 6-Slot ISA Bus Backplane

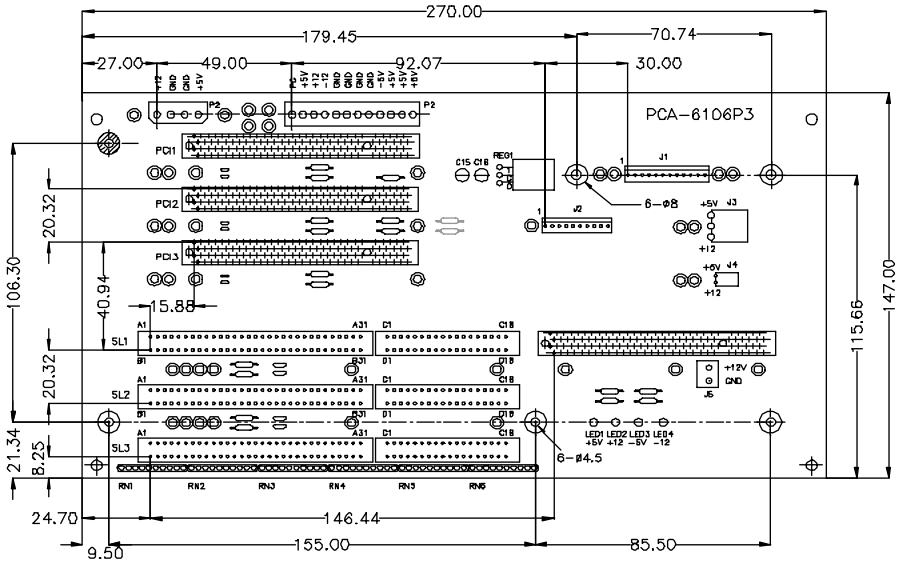


Bus Termination

Resistor Signals
 RP5 SA7-SA0
 RP4 SA15-SA8
 RP1 SD7-SD0
 RP7 SD8-SD15

Resistor Signals
 RP2 SMEMW,SMEMR,IOW,IOR
 RP6 SBHE,LA23-LA17
 RP3 LA19-LA16

PCA-6106P3 : 2ISA/3PCI/1PICMG-Slot Backplane



Bus Termination

Resistor Signals

RN4 SA7-SA0

RN3 SA15-SA8

RN2 SD7-SD0

RN6 SD8-SD15

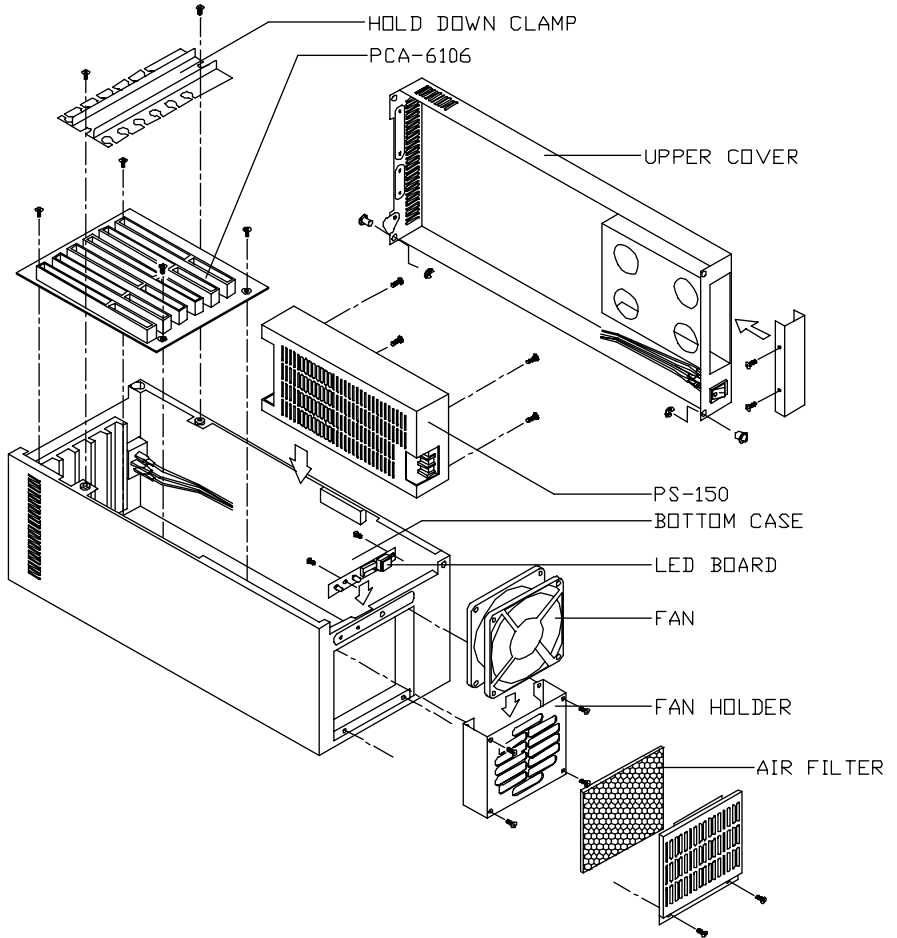
Resistor Signals

RP1 SMEMW,SMEMR,IOW,IOR

RN5 SBHE,LA23-LA17

RN1 LA19-LA16

Exploded Diagram



Appendix C Safety Instructions

1. Please read these safety instructions carefully.
2. Please keep this User's Manual for later reference.
3. Please disconnect this equipment from AC outlet before cleaning. Don't use liquid or sprayed detergent for cleaning. Use moisture sheet or cloth for cleaning.
4. For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.
5. Please keep this equipment from humidity.
6. Lay this equipment on a reliable surface when install. A drop or fall could cause injury.
7. The openings on the enclosure are for air convection hence protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source when connect the equipment to the power outlet.
9. Place the power cord such a way that people can not step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect the equipment from mains to avoid being damaged by transient overvoltage.
12. Never pour any liquid into opening, this could cause fire or electrical shock.
13. Never open the equipment. For safety reason, the equipment should only be opened by qualified service personnel.
14. If one of the following situations arises, get the equipment checked by a service personnel:
 - a. The power cord or plug is damaged.
 - b. Liquid has penetrated into the equipment.
 - c. The equipment has been exposed to moisture.
 - d. The equipment does not work well or you can not get it to work according to user's manual.
 - e. The equipment has dropped and damaged.
 - f. If the equipment has obvious sign of breakage.
15. **DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE BELOW -20°C (-4°F) OR ABOVE 60°C (140°F), IT MAY DAMAGE THE EQUIPMENT.**

The sound pressure level at the operators position according to IEC 704-1:1982 is equal to or less than 70dB(A).

Wichtige Sicherheitshinweise

1. Bitte lesen sie Sich diese Hinweise sorgfältig durch.
2. Heben Sie diese Anleitung für den späteren Gebrauch auf.
3. Vor jedem Reinigen ist das Gerät vom Stromnetz zu trennen. Verwenden Sie Keine Flüssig-oder Aerosolreiniger. Am besten dient ein angefeuchtetes Tuch zur Reinigung.
4. Die Netzanschlußsteckdose soll nahe dem Gerät angebracht und leicht zugänglich sein.
5. Das Gerät ist vor Feuchtigkeit zu schützen.
6. Bei der Aufstellung des Gerätes ist auf sicheren Stand zu achten. Ein Kippen oder Fallen könnte Verletzungen hervorrufen.
7. Die Belüftungsöffnungen dienen zur Luftzirkulation die das Gerät vor überhitzung schützt. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.
8. Beachten Sie beim Anschluß an das Stromnetz die Anschlußwerte.
9. Verlegen Sie die Netzanschlußleitung so, daß niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.
10. Alle Hinweise und Warnungen die sich am Geräten befinden sind zu beachten.
11. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.
12. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw. elektrischen Schlag auslösen.
13. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von autorisiertem Servicepersonal geöffnet werden.
14. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu trennen und von einer qualifizierten Servicestelle zu überprüfen:
 - a - Netzkabel oder Netzstecker sind beschädigt.
 - b - Flüssigkeit ist in das Gerät eingedrungen.
 - c - Das Gerät war Feuchtigkeit ausgesetzt.
 - d - Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erzielen.
 - e - Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.
 - f - Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.

Der arbeitsplatzbezogene Schalldruckpegel nach DIN 45 635 Teil 1000 beträgt 70dB(A) oder weiger.

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