File E180881

Vol. 2 Sec. 11 and Report

Page 1

Issued: 12-20-99

Revised: 9-20-01

DESCRIPTION

PRODUCT COVERED:

*USL/CNL - Industrial Computer, Models IPC-610-26P-zzzz,
IPC-610-25P-zzzzz, IPC-610-260-zzzzz,
IPC-610xyy-26yy-zzzzz, IPC-610-250-zzzzz, IPC-610-30Pzzzzz, IPC-610-300-zzzzz, IPC-610xyy-25yy-zzzzz,
IPC-610xyy-30yy-zzzzz,
IPC-610Myy-25yy-zzzzz, IPC-610-25X-zzzzz,
IPC-610Pyy-25yy-zzzzz, IPC-610Byy-25yy-zzzzz,
IPC-610-30X-zzzzz, IPC-610Myy-30yy-zzzzz,
IPC-610Pyy-30yy-zzzzz, IPC-610yyy-25Ryy-zzzzz,
IPC-610Byy-30yy-zzzzz, IPC-610Byy-40yy-zzzzz,
*IPC-610Byy-30XFy, IPC-6606yy-25yy and IPC-6606yy-30zy;
where y can be 0-9, A-Z or blank and z can be 0-9, A-Z or blank, and x can be P or B.

ELECTRICAL RATING:

Model	Voltage	Frequency	Current
610-25P-zzzzz, 610-250-zzzzz, 610xyy-25yy-zzzzz, x =P or B; y, z can be 0-9, A-Z or blank	115/230 V ac	50/60 Hz	7/4 A
610-26P-zzzzz, 610-260-zzzzz, 610xyy-26yy-zzzzz, x = P or B; y, z can be 0-9, A-Z or blank	115/230 V ac	50/60 Hz	6/3 A
610-30P-zzzzz, 610-300-zzzzz, 610xyy-30yy-zzzzz, x = P or B; y, z can be 0-9, A-Z or blank	115/230 V ac	50/60 Hz	. 8/4 A
610-25X-zzzzz, 610Myy-25yy-zzzzz, 610Pyy-25yy-zzzzz, 610Byy-25yy-zzzzz, y, z can be 0-9, A-Z or blank	100-120/200-240 V ac	50/60 Hz	9/5 A
610-30X-zzzzz, 610Myy-30yy-zzzzz, 610Pyy-30yy-zzzzz, 610-Byy-30yy-zzzzz, where y, z can be 0-9, A-Z or blank	100-120/200-240 V ac	50/60 Hz	9.5/5.5 A
IPC-610yyy-25Ryy-zzzzz where y and z can be A-Z, 0-9 or blank	115/230 V ac	50/60 Hz	6/3 A
IPC-610yyy-30XFy and IPC-610yyy-40XFy where y can be 0-9, A-Z or blank	100-120/200-240 V ac	47-63 Hz	10/5A
*IPC-6606yy-25yy, where y may be 0-9, A-Z or blank	115/230 V ac	60/50 Hz	9/5 A
*IPC-6606yy-30zy, where y, z may be 0-9, A-Z or blank	100-127/200-240 V ac	47-63 Hz	9/4.5 A

File E180881 Vol. 2 Sec. 11 Page 2 Issued: 12-20-99 and Report

ENGINEERING CONSIDERATIONS: (Not For Field Representative's Use)

Special Considerations - The following items are considerations that were used when evaluating this product.

USL/CNL indicates investigation to the U.S. and Canadian (Bi-National) Standard for the Safety of Information Technology Equipment, UL 1950, Third Edition, dated July 26, 1995 / CSA C22.2 No. 950-M95.

The equipment is considered Stationary, Class I (earthed), pluggable Type A, uses a detachable power cord, and is intended for use on a TN power system.

SELV Circuits: All circuits external to the power supply enclosure are SELV circuits.

The equipment has been evaluated for a maximum ambient of 50°C.

The equipment has been evaluated for Pollution Degree 2 environment.

All ${\tt HAZ/V}$ and PRI circuits are contained in fully enclosed Earth Grounded power supply.

Disconnect Device - The following component is considered the equipment disconnect device: Appliance inlet provided on power supply.

File E180881 Vol. 2 Sec. 11 Page 3 Issued: 12-20-99 and Report

CONSTRUCTION DETAILS:

See Section General for additional details.

Information Markings - Listee's name, Trade Name, Trademark, or File Number "E180881"; Model Number and electrical ratings. Provided on self adhesive label or plastic molding. See Section General - Labeling Materials, for requirements.

Interconnecting Cables - If provided, cables and cable assemblies used for external interconnection between parts of equipment or between components of system are: If connected to a limited power source, FEP, PVC, PTFE, TEF or Neoprene or surface marked "VW-1," maximum 2 meters, coiled or uncoiled.

Cautionary/Warning Markings - The information noted below is marked in the noted location. See Section General for additional details concerning Warning/ Cautionary Markings.

"WARNING: - There is danger of an explosion if you replace the lithium battery incorrectly. We recommend that you replace the battery with the same type of battery, or with an equivalent type, originally installed in the unit. Be sure to discard all used batteries according to the manufacturer's instructions" - located in the manual.

Power Cord - Optional. Listed, detachable, maximum 4.5 m (14.76 ft) long; rated minimum 120 V, 10 A, Type SJT or SVT flexible cord; one end terminates in parallel blade (NEMA 5-15P) grounding-type attachment plug, other end in appliance coupler. \pm

Alternate - For units intended for 240 V ac (domestic use): Detachable, Listed cord set, rated 250 V, 6 A, consisting of a minimum No. 18 AWG, Type SVT or SJT, three conductor cord, maximum of 4.57 m (14.76 ft) in length and a parallel blade, grounding-type attachment plug at one end and cord connector body at the other end.

Alternate - For units intended for 240 V ac (outside of U.S.): Detachable, cord set consisting of minimum No. 18 AWG cord and grounding-type attachment plug, rated minimum 6 A, 250 V. The cord set should have the appropriate safety approvals for country in which the equipment will be installed and marked (HAR).

- User Installation/Safety Instructions - Provided with each unit.

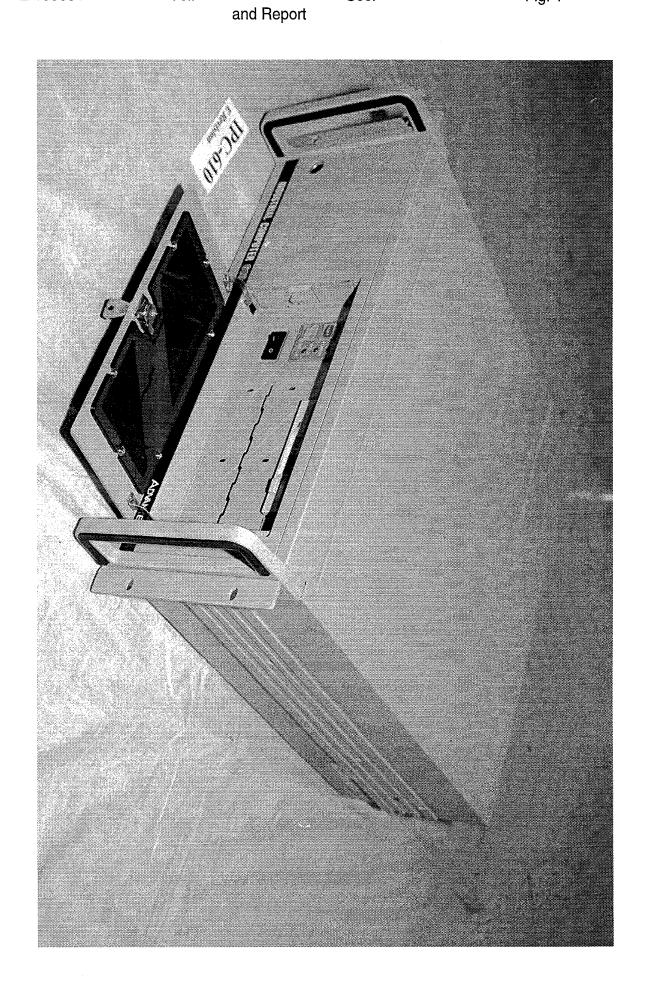
Model Differences - All models are identical except for power supply and input rating.

File E180881 Vol. 2 Sec. 11 Page 4 Issued: 12-20-99 and Report

MODEL IPC-610 SERIES - FIG. 1 (C9902473)

General - Shows front/top view of the subject unit. Represents all models.

- Base Chassis Steel metal, minimum 2 mm thick, overall 453 mm by 430 mm by 180 mm. Secured together by screws.
 - Alternate Same as above except for overall 503 mm by 430 mm by 180 mm.
- 2. Key Lock Front Door Metal frame. Plastic material window, R/C (QMFZ2), rated 94HB. Overall 120 mm by 270 mm.
- Floppy Disk Drive (Optional) R/C (NWGQ2). Rated 5 V dc, 0.6 A maximum. Front bezel rated minimum 94-5V.
- 4. Primary Power Switch R/C (WOYR2), marked with on/off symbol, (IEC 417, 5010). Rated 10/6 A, 120/250 V ac.
- 5. Ventilation Opening Two rows of 13 openings, each opening measures 40 mm by 3 mm.
- 6. Connectors (SELV) One provided, PS/2 Keyboard/Keypad/Mouse Connector. See Section General for Connector requirements.
- 7. Indicator LED (SELV) Lights indicate Reset, Keyboard-Lock.



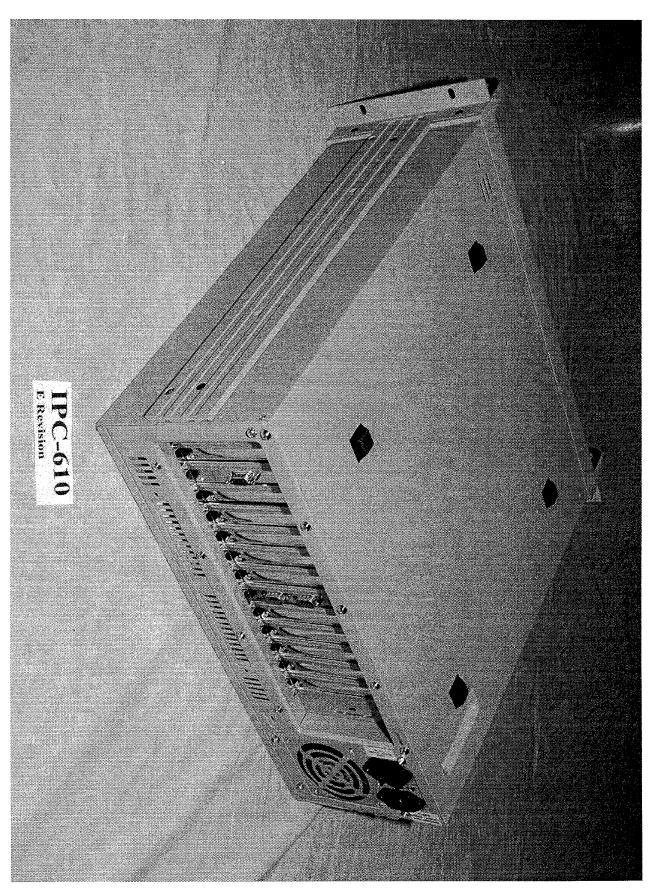
File E180881 Vol. 2 Sec. 11 Page 5 Issued: 12-20-99 and Report

MODEL IPC-610 SERIES - FIG. 2 (C9902474)

General - Shows the rear/bottom view of the subject unit. Represents all models.

- 1. Appliance Inlet Provided as part of the power supply.
- Voltage Switch Provided as part of the power supply.
- 3. Appliance Outlet (Optional) Provided as part of the power supply.
- 4. Connectors (SELV) Video, parallel and/or serial data connectors. See Section General for connector requirements.
- Ventilation Opening Located on rear of the enclosure. Each individual opening measures 20 mm by 3 mm, total 26 openings.

E 180881 Vol. 2 and Report



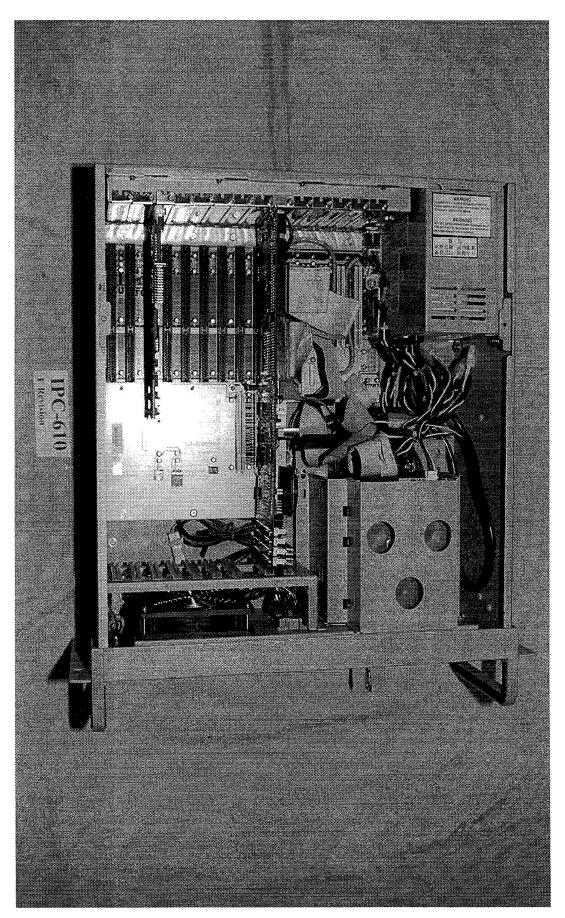
Issued: 12-20-99 Revised: 8-23-01

MODEL IPC-610 SERIES - FIG. 3 (C9902475)

General - Shows the top view with top cover removed of the subject unit. Represents all models.

- 1. Printed Wiring Boards - Optional. (SELV) See Sec. Gen. for printed wiring board requirements.
- Mother Board PWB (SELV) See Sec. Gen. for printed wiring board 2. requirements.
- 3. Lithium Battery - (Optional) R/C (BBCV2), Rayovac, Type BR2335, BR2032 or BF2325; Mitsubishi, Type CR2032; Sanyo, Type CR2032, rated 3 V, 300 mA hour. Provided with blocking resistor, R219, rated 1000 W and a diode, D38, in series to prevent the reverse charging current. Disposal marking or equivalent marking located adjacent to battery or in User/Service manual. See Construction Details.
- DC Fan R/C (GPWV2), Adda, Type AD1212HB-A70GL or AD1212HB-A71GL, rated 12 V dc, 0.37 A (88CFM). Secured by screws to the front of the enclosure.
- CPU Cooling Fan (Optional) R/C (GPWV2), ACT-RX, Type ACC6060-12 V, 5. rated 12 V dc, 0.12 A (8.47 CFM). Located on the CPU.
- Hard Disk Drive (Optional) R/C (NWGQ2), rated 5/12 V dc, 1.0/1.2 A maximum. Secured to enclosure by screws.

and Report



7. Power Supply - R/C (QQGQ2), for Models IPC-610-26P-zzzzz series, IPC-610-260-zzzzz series, or IPC-610xyy-26yy-zzzzz series. Skynet, Model ADT-925C. Input rated: 115/230 V ac, 50/60 Hz, 6/3 A. Output rated: +5 V/25 A, +12 V/9.0 A, -12 V/2.0 A, -5 V/0.5 A, maximum output 250 W.

Alternate - R/C (QQGQ2), for Models IPC-610-30P-zzzzz series, IPC-610-300-zzzzz series, or IPC-610xyy-30yy-zzzzz series. Skynet, Model ADT-930C. Input rated: 115/230 V ac, 50/60 Hz, 8/4 A. Output rated: +5 V/33 A, +12 V/9 A, -12 V/2.5 A, -5 V/0.5 A, maximum output 300 W.

Alternate - R/C (QQGQ2), for Models IPC-610-25X-zzzzz series, IPC-610Myy-25yy-zzzzz series, IPC-610Myy-25yy-zzzzz series, and IPC-610Myy-25yy-zzzzz series. Same as above except for Delta, Model DPS-200PB-103xx. Input rated: 100-120/200-240 V ac, 60/50 Hz, 9/5 A. Output rated: +5 V/25 A, +3.3 V/14 A, +12 V/8 A, -12 V/0.8 A, -5 V/0.5 A, +5 Vsb/1 A, +3.3 V and +5 V, 145 W, maximum output 200 W.

Alternate - For Models IPC-610-30X-zzzzz series, IPC-610Myy-30yy-zzzzz series, IPC-610Pyy-30yy-zzzzz series, and IPC-610Byy-30yy-zzzzz series. Same as above except for Delta, Model DPS-338AB xx. Input rated: 100-120/200-240 V ac, 50-60 Hz, 9.5/5.5 A. Output rated: +3.3 V/28 A, +5 V/32 A, +12 V/12 A, -12 V/0.5 A, -5 V/0.25 A, +5 Vsb/1.0 A, +3.3 V and +5 V, maximum output 220 W.

Alternate - For Models PIC-610yyy-25Ryy-zzzzz series, same as above, except for Skynet Electronic Co. Ltd., Type ADT-R232 input rated 115/230 V ac, 50/60 Hz, 6/3 A; output rated +5 V/20 A, +12 V/10 A, -5 V/0.5 A, -12 V/0.5 A.

Alternate - For Models IPC-610yyy-30XFy series. Same as above, except for Delta Electronics Co., Ltd. Type DPS-300KBxx, input rated 100-120/200-240 V ac, 47-63 Hz, 10A15A; output rated +3.3 V/26 A, +5 V/30 A, +12 V/13 A, -12 V/0.8 A, -5 V/0.5 A, +5 VSB/2 A, +3.3 and +5 V max. 220 W, total 300 W max.

Alternate - IPC-610BP-30ZF and IPC-610BP-40ZF Series. Same as above except for (QQGQ2), Delta, Model DPS-300GB-1. (Input rated 100-127/200-240 V, 9/4.5 A, 47-63 Hz. DC Output rated: +3.3 V/28 A; +5 V/30 A; +12 V/15 A; -12 V/0.8 A; -5 V/0.3 A; +5 VSB/2 A; total 300 W).

Alternate - Same as above except, Power Research Technology Co., Ltd., Model PRM401PFC. (Input rated 100-240 V, 8/5 A, 50/60 Hz. DC Output rated: +3.3 V/30 A; +5 V/50 A; +12 V/27 A; -12 V/3 A; -5 V/1 A; +5 VSB/1 A; +5 V and +.3 V total 250 W, total output 400 W).

* Alternate - For Models IPC-610yyy-25x series, same as above except Basted Power Electronics Corp., Type BPS-2504-4TU, input rated 115/230 V ac, 50/60 Hz, 6/3 A; output rated 5 V/ 24, 12 V/10 A, -5 V/0.5 A, -12 V/0.5 A, total 250 W maximum.

7. Power Supply - R/C (QQGQ2), for Models IPC-610-26P-zzzzz series, IPC-610-260-zzzzz series, or IPC-610xyy-26yy-zzzzz series. Skynet, Model ADT-925C. Input rated: 115/230 V ac, 50/60 Hz, 6/3 A. Output rated: +5 V/25 A, +12 V/9.0 A, -12 V/2.0 A, -5 V/0.5 A, maximum output 250 W.

Alternate - R/C (QQGQ2), for Models IPC-610-30P-zzzzz series, IPC-610-300-zzzzz series, or IPC-610xyy-30yy-zzzzz series. Skynet, Model ADT-930C. Input rated: 115/230 V ac, 50/60 Hz, 8/4 A. Output rated: +5 V/33 A, +12 V/9 A, -12 V/2.5 A, -5 V/0.5 A, maximum output 300 W.

Alternate - R/C (QQGQ2), for Models IPC-610-25X-zzzzz series, IPC-610Myy-25yy-zzzzz series, IPC-610Pyy-25yy-zzzzz series, and IPC-610Byy-25yy-zzzzz series. Same as above except for Delta, Model DPS-200PB-103xx. Input rated: 100-120/200-240 V ac, 60/50 Hz, 9/5 A. Output rated: +5 V/25 A, +3.3 V/14 A, +12 V/8 A, -12 V/0.8 A, -5 V/0.5 A, +5 Vsb/1 A, +3.3 V and +5 V, 145 W, maximum output 200 W.

Alternate - For Models IPC-610-30X-zzzzz series, IPC-610Myy-30yy-zzzzz series, IPC-610Pyy-30yy-zzzzz series, and IPC-610Byy-30yy-zzzzz series. Same as above except for Delta, Model DPS-338AB xx. Input rated: 100-120/200-240 V ac, 50-60 Hz, 9.5/5.5 A. Output rated: +3.3 V/28 A, +5 V/32 A, +12 V/12 A, -12 V/0.5 A, -5 V/0.25 A, +5 Vsb/1.0 A, +3.3 V and +5 V, maximum output 220 W.

Alternate - For Models PIC-610yyy-25Ryy-zzzzz series, same as above, except for Skynet Electronic Co. Ltd., Type ADT-R232 input rated 115/230 V ac, 50/60 Hz, 6/3 A; output rated +5 V/20 A, +12 V/10 A, -5 V/0.5 A, -12 V/0.5 A.

Alternate - For Models IPC-610yyy-30XFy series. Same as above, except for Delta Electronics Co., Ltd. Type DPS-300KBxx, input rated 100-120/200-240 V ac, 47-63 Hz, 10A15A; output rated +3.3 V/26 A, +5 V/30 A, +12 V/13 A, -12 V/0.8 A, -5 V/0.5 A, +5 VSB/2 A, +3.3 and +5 V max. 220 W, total 300 W max.

Alternate - IPC-610BP-30ZF Same as above except for (QQGQ2), Delta, Model DPS-300GB-1. (Input rated 100-127/200-240 V, 9/4.5 A, 47-63 Hz. DC Output rated: +3.3 V/28 A; +5 V/30 A; +12 V/15 A; -12 V/0.8 A; -5 V/0.3 A; +5 VSB/2 A; total 300 W).

Alternate - IPC-610BP-40ZF Series, same as above except, Power Research Technology Co., Ltd., Model PRM401PFC. (Input rated 100-240 V, 8/5 A, 50/60 Hz. DC Output rated: +3.3 V/30 A; +5 V/50 A; +12 V/27 A; -12 V/3 A; -5 V/1 A; +5 VSB/1 A; +5 V and + 3 V total 250 W, total output 400 W).

*Alternate - For Models IPC-610yyy-25x series, same as above except Bastec Power Electronics Co., Ltd., Type BPS-2504-4TU, input rated 115/230 V, 6/3 A, 50/60 Hz; output rated +5 V/24 A; +12 V/10 A; -12 V/3 A; -5 V/0.5 A, -12 V/0.5 A, total 250 W maximum.

File E180881

Vol. 2 Sec. 11 and Report

*Page 8

Issued: 12-20-99

New: 9-20-01

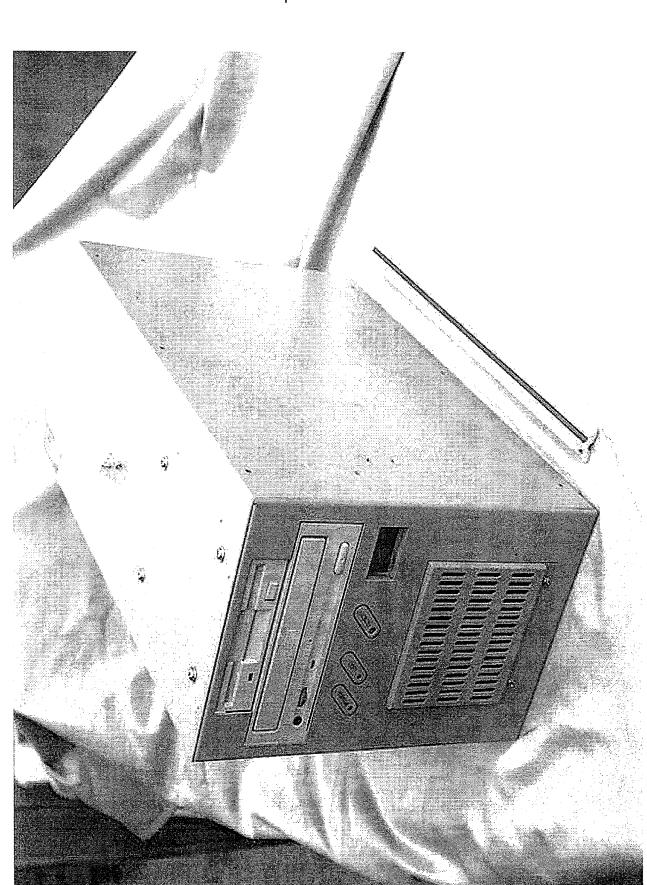
MODEL IPC-6606yy SERIES - FIG. 4

General - Similar to Fig. 1 except the following description.

- Enclosure Steel metal, minimum 1.2 mm thick, overall 173 mm by 256 mm by 395 mm. Secured together by screws.
- Floppy Disk Drive (Optional) R/C (NWGQ2). Rated 5 V dc, 0.6 A maximum. Front bezel rated minimum 94-V1.
- Drive (CD-ROM) Optional, (NWGQ2), generic, input voltage 5/12 V dc, loading current maximum 1.5/1.0 A. Bezel is (QMFZ2), rated 94 V-1 minimum, no internal components within 5 degrees of bezel.
- 4. Reset Switch (SELV).
- 5. Indicator LED (SELV) Lights indicator.

E180881 Vol. 2 Sec. 11 Fig. 4

and Report



File E180881

Vol. 2 Sec. 11 and Report

*Page 9

Issued: 12-20-99

New: 9-20-01

MODEL IPC-6606yy - SERIES - FIG. 5

General - Similar to Fig. 3 except the following description.

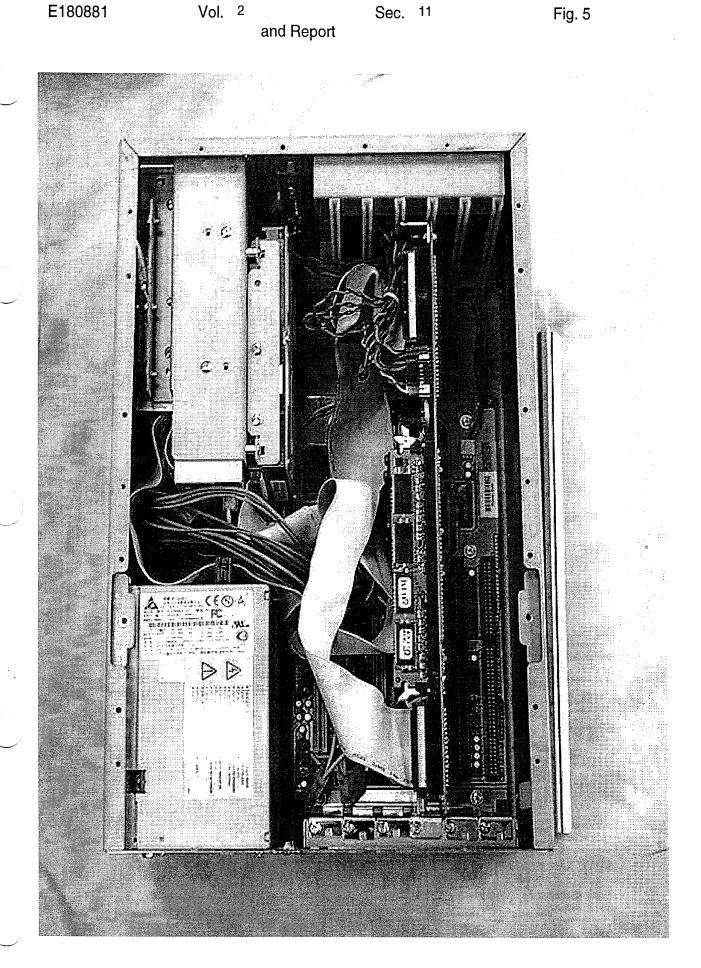
Power Supply - (QQGQ2), for Models IPC-6606yy-25yy. Delta Electronics Inc., Type DPS-200PB-103 D. Input rated: 115/230 V ac, 60/50 Hz, 9/5 A. Output rated: +5 V/25 A, +12 V/8.0 A, -12 V/0.8 A, -5 V/0.5 A, 3.3 V/14 A, 5 V sb/1 A, maximum output 250 W.

Alternate - (QQGQ2), for Models IPC-6606-30zy. Delta Electronics Inc., Type DPS-300GB-1 B. Input rated: 10-127/200-240 V ac, 47-63 Hz, 9/4.5 A. Output rated: +5 V/30 A, +12 V/15 A, -12 V/0.8 A, -5 V/0.3 A, 3.3 V/28, 5 V sb/2 A, maximum output 300 W.

2. Chassis DC Fan - Similar to Fig. 3 except (GPWV2). Sunonwealth, Type KD1209PTB1-6, rated 12 V dc, 0.19 A, 50 cfm.

Alternate - Same as above except Delta, Type AFB0912VH-F00, rated 12 V dc, 0.4 A, 67.8 cfm.

Alternate - Same as above except Adda Corp, Type AD0912HB-A71GL, rated 12 V dc, 0.25 A, 52.5 cfm.



CONCLUSION

A sample of the products covered by this Report has been found to comply with the requirements covering the class and the products are judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the Laboratories' Mark on such products which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the Laboratories' Mark are considered as Listed by Underwriters Laboratories Inc.

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