# SYSTEM 21 POWER SUPPLY

PM2198

4822 872 30316

851127

#### INTRODUCTION

The PM2198 power supply unit can be connected to the System 21 bus to provide additional supply current when the current supplied by the System 21 master is not sufficient.

It is allowed to connect more PM2198's to the System 21 bus when the system requires more supply current.



#### IMPORTANT

In correspondence concerning this instrument, please quote the type number and serial number as given on the type plate.

Note:

The design of this instrument is subject to continuous development and improvement. Consequently, this instrument may incorporate minor changes in detail from the information contained in this manual.

#### **WICHTIG**

Bei Schriftwechsel über dieses Gerät wird gebeten, die genaue Typenbezeichnung und die Gerätenummer anzugeben. Diese befinden sich auf dem Leistungsschild.

Bemerkung:

Die Konstruktion und Schaltung dieses Geräts wird ständig weiterentwickelt und verbessert. Deswegen kann dieses Gerät von den in dieser Anleitung stehenden Angaben abweichen.

#### IMPORTANT

Dans votre correspondance et dans vos réclamations se rapportant à cet appareil, veuillez toujours indiquer le numéro de type et le numéro de série qui sont marqué's sur la plaquette de caractéristiques.

Remarque:

Cet appareil est l'objet de développements et améliorations continuels. En conséquence, certains détails mineurs peuvent différer des informations données dans la présente notice d'emploi.

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#### SAFETY

Read this page carefully before installing and using the instrument.

#### 1.1 INTRODUCTION

The instrument described in this manual is designed to be used by properly trained personnel only. Adjustment, maintenance and repair of the exposed equipment shall be carried out only by qualified personnel, who are aware of the hazards involved.

#### 1.2 SAFETY PRECAUTIONS

For the correct and safe use of this instrument it is essential that both operating and servicing personnel follow generally-accepted safety procedures in addition to the safety precautions specified in this manual. Specific warning and caution statements, where they apply, will be found throughout the manual. Where necessary, the warning and caution statements and/or symbols are marked on the apparatus.

#### 1.3. CAUTION AND WARNING STATEMENTS

CAUTION: is used to indicate correct operating or maintenance procedures in

order to prevent damage to or destruction of the equipment or

other property.

WARNING: calls attention to a potential danger that requires correct

procedures or practices in order to prevent personal

injury.

#### 1.4 IMPAIRED SAFETY-PROTECTION

Whenever it is likely that safe operation is impaired, the instrument **must** be made inoperative and secured against any unintended operation.

The appropriate servicing authority must then be informed.

#### 2 GENERAL INFORMATION

#### 2.1 CHARACTERISTICS

#### 2.1.1 Technical data

Power supply:

Mains voltages

110, 128, 220 or 238 V

(±10% ac 50 or 60 Hz)

Power consumption

<25 W

Power supply to the System 21 bus

7.5 to to 15 Vdc. max. 750 mA.

### 2.1.2 Safety Characteristics

The PM2198 has been designed and tested in accordance with Safety Class II requirements of IEC Publication 348, Safety Requirements for Electronic Measuring Apparatus and has been supplied in a safe condition.

WARNING:

Notwithstanding the Class II safety, the cabinet of the PM2198 is grounded via a three-core mains cable only to meet the requirements of Electromagnetic Interference and Susceptibility. However the cabinet may not be considered as a protective ground and the earth leads may not be tested with 25 amperes.

This manual contains information and warnings which must be followed to ensure safe operation and to retain the instrument in a safe condition.

#### 2.1.3 Initial Characteristics

- Overall dimensions:

Height (excluding feet) : 44.4 mm
Width (excluding handle) : 111 mm
Depth (excluding controls) : 228 mm

Climatic conditions

In accordance with IEC-publ. 359.

Rated range of use -10 °C ... +50 °C Limit range of storage and transport -40 °C ... +70 °C

Relative humidity 20% ... 80% max, dew-point 25 °C

## 2.1.5 Mechanical requirements

In accordance with IEC-publ. 68 test Fc and Eb

## 2.1.6 Mains Supply conditions

In accordance with IEC-publ. 359 Group S2 public mains

Mains supply voltage

• rated range of use 100, 128, 220 or 238 Vac ±5%

Mains supply frequency

• rated range of use 50 to 60 Hz  $\pm 10\%$ 

Power consumption

at nominal mains voltages
 25 VA max.

#### 2.1.7 Electromagnetic Interference

The PM2198 meets the requirements of CISPR-Publ. 14 and VDE-0875 Class B only if the device is properly grounded according the directions mentioned in section 3.2.1. "Earthing".

#### 2.1.8 Electromagnetic Susceptibility

To meet the Philips requirements of Electromagnetic Susceptibility, it is necessary to follow the directions given in section 3.2.1. "Earthing".

#### 2.1.9 Environmental characteristics

The environmental data mentioned in this manual are based on the results of the manufacturer's checking procedures. Details of these procedures and failure criteria are supplied on request by the PHILIPS organisation in your country, or by PHILIPS, INDUSTRIAL & ELECTRO-ACOUSTICAL EQUIPMENT DIVISION, EINDHOVEN, THE NETHERLANDS.

#### 2.2 ACCESSORIES

### Supplied with the instrument

- Mains supply cable (three-core).
- Fuses:
  - 1 Spare-fuse available in the fuse-holder at the device.
     value 125 mAT / 250 V when connected for 220 V Slow blow or 250 mAT / 250 V when connected for 110 V acc. DIN 41571
  - 2 Fuses (1 spare), which can only be used when the mains voltage setting is to be changed.
- Three stickers 110 V, 128 V and 238 V for marking different mains voltage settings.
- 1 Protection cover for the System 21 bus connector (female) at the upper side.
- Documentation:
  - Operating Manual for the PM2198

## 3. INSTALLATION INSTRUCTIONS

#### 3.1 INITIAL INSPECTION

Check the contents of the shipment for completeness and note whether any damage has occurred during transport. If the contents are incomplete, or there is damage, a claim should be filed with the carrier immediately, and the Philips Sales or Service organisation should be notified in order to facilitate the repair or replacement of the instrument.

#### 3.2 SAFETY INSTRUCTIONS

## 3.2.1 Earthing (Grounding)

Though the PM2198 is a Safety Class II device, it is provided with a grounded cabinet. However this cabinet may never be considered as a protective ground; it only serves as a grounded shield to reduce noise generation and susceptibility.

WARNING: Always use the supplied three-core mains cable connected to an outlet with earth contact. If this is not done, the requirements of Electromagnetic Interference and Susceptibility, mentioned in sections 2.1.6 and 2.1.7 are not guaranteed.

### 3.2.2 Mains voltage setting and fuses

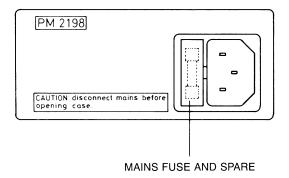
- Before inserting the mains plug into the mains socket, make sure that the PM2198 is set to the local mains voltage.

Note: If the mains plug has to be adapted to the local situation it should only be done by a qualified person.

- The instrument shall be set to the local mains voltage only by a qualified person who is aware of the hazards involved.
- Make sure that only fuses of the required current rating, and specified type are used for renewal. The use of repaired fuses, and/or the short-circuiting of fuse holders, is prohibited.
- Fuses shall only be renewed by a qualified person who is aware of the hazard involved

WARNING: The PM2198 shall be disconnected from all voltage sources when a fuse is to be renewed, or when it is to be adapted to a different mains voltage.

The mains fuse is located in a holder at the rear, adjacent to the mains socket. To replace it, first remove the mains cable and prize out the lift-out lug with a screwdriver.



#### 3.3 OPERATING POSITION OF THE PM2198

- The PM2198 may be used in any position.
- Do not place the PM2198 on any surface which produces or radiates heat, or in direct sunlight.

#### 3.4 SWITCHING ON

First read the safety instructions of sections 3.2.1 and 3.2.2.

The PM2198 does not have a mains switch. Switching on can only be done by means of the mains cable.

WARNING: Connect the mains cable to the socket at the rear of the PM2198 before plugging into the mains socket outlet.

When the PM2198 is switched on, indicated at the frontpanel by the "POWER" led on, it is immediately ready for use.

CAUTION: Do not connect units to the PM2198 while the power is on. Connect all units before switching on the power.