MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Selected official pages for procurement and maintenance review

PRODUCT BRAND

Siemens

PRODUCT MODEL

6ES7307-1KA00-0AA0

Ten-Ampere Regulated Power Supply. Relevant section pages: 41, 42, 43, 44, 45. Adjacent model text on shared pages is outside this product reference.

OFFICIAL SOURCE

S7-300 and M7-300 Programmable Controllers Module Specifications; Edition 2; EWA 4NEB 710 6067-02 01; copyright 1998

Original Siemens manual supplied in the authorized local document pack; public source URL not confirmed.

AMIKON PRODUCT SUPPORT

+86-18020776786 INFO@AMIKON.CN

AMIKONG.COM

Amikon Limited prepared this independent reference package. Selected manufacturer pages follow with their original content and pagination visible.

SIEMENS

SIMATIC

S7-300 and M7-300 Programmable Controllers Module Specifications

Reference manual

This manual is part of the following documentation packages with order nos:
S7–300 Programmable Controller:
6ES7 398–8AA03–8BA0
ET 200M Distributed I/O Device:
6ES7 153–1AA00–8BA0

EWA 4NEB 710 6067-02 01

Edition 2

Preface, Contents

General Technical Specifications 1

Power Supply Modules 2

Digital Modules 3

Analog Modules 4

Other Signal Modules 5

Interface Modules 6

RS 485 Repeater 7

SIMATIC TOP connect 8

SIMATIC TOP connect TPA 9

Appendices

Parameter Sets for Signal Modules A

Diagnostics Data of the Signal Modules B

Dimension Drawings C

Spare Parts and Accessories for S7-300 Modules D

Guidelines for Handling Electro-static Sensitive Devices (ESD) E

List of Abbreviations F

Glossary, Index

Safety Guidelines

This manual contains notices which you should observe to ensure your own personal safety, as well as to protect the product and connected equipment. These notices are highlighted in the manual by a warning triangle and are marked as follows according to the level of danger:



Danger

indicates that death, severe personal injury or substantial property damage **will** result if proper precautions are not taken.



Warning

indicates that death, severe personal injury or substantial property damage **can** result if proper precautions are not taken.



Caution

indicates that minor personal injury or property damage can result if proper precautions are not taken.

Note

draws your attention to particularly important information on the product, handling the product, or to a particular part of the documentation.

Qualified Personnel

Only **qualified personnel** should be allowed to install and work on this equipment. Qualified persons are defined as persons who are authorized to commission, to ground, and to tag circuits, equipment, and systems in accordance with established safety practices and standards.

Correct Usage

Note the following:



Warning

This device and its components may only be used for the applications described in the catalog or the technical descriptions, and only in connection with devices or components from other manufacturers which have been approved or recommended by Siemens.

This product can only function correctly and safely if it is transported, stored, set up, and installed correctly, and operated and maintained as recommended.

Trademarks

SIMATIC®, SIMATIC HMI® and SIMATIC NET® are registered trademarks of SIEMENS AG.

Some of other designations used in these documents are also registered trademarks; the owner's rights may be violated if they are used by third parties for their own purposes.

Copyright Siemens AG 1998 All rights reserved

The reproduction, transmission or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

Disclaimer of Liability

We have checked the contents of this manual for agreement with the hardware and software described. Since deviations cannot be precluded entirely, we cannot guarantee full agreement. However, the data in this manual are reviewed regularly and any necessary corrections included in subsequent editions. Suggestions for improvement are welcomed.

Siemens AG
Automation and Drives (A&D)
Industrial Automation Systems (AS)
Postfach 4848, D- 90327 Nürnberg

© Siemens AG 1998
Technical data subject to change.

2.3 The PS 307 Power Supply Module (10 A)

Order Number

6ES7 307-1KA00-0AA0

Characteristics

The PS 307 power supply module (10 A) has the following salient features:

- Output current 10 A
- Output voltage 24 VDC; proof against short-circuit and open circuit
- Connection to single-phase AC system
  (input voltage 120/230 VAC, 50/60 Hz)
- Reliable isolation to EN 60 950
- Can be used as load power supply

Wiring Schematic

Figure 2-5 shows the wiring schematic of the PS 307 power supply module (10 A). You will find a detailed technical description of the module on the following pages.

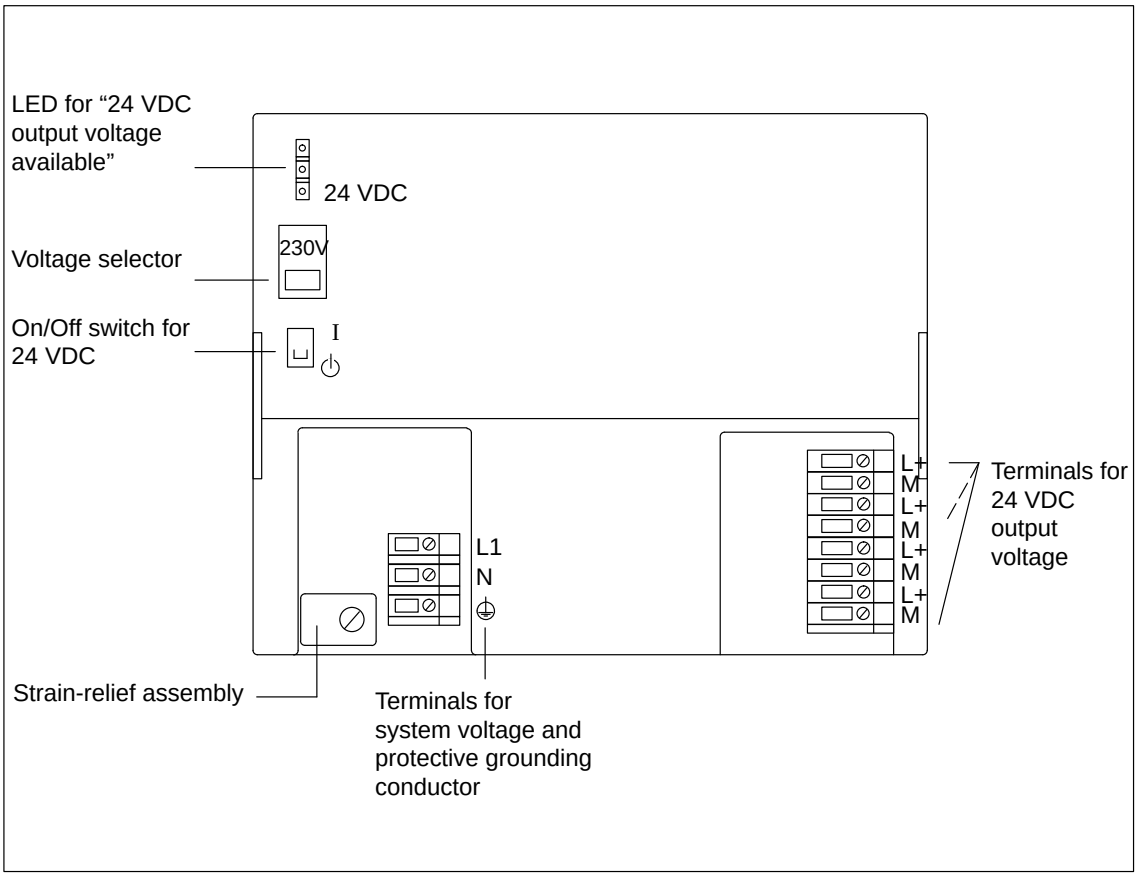


Figure 2-5 Wiring Schematic of the PS 307 Power Supply Module (10 A)

Basic Circuit Diagram

Figure 2-6 shows the basic circuit diagram of the PS 307 power supply module (10 A).

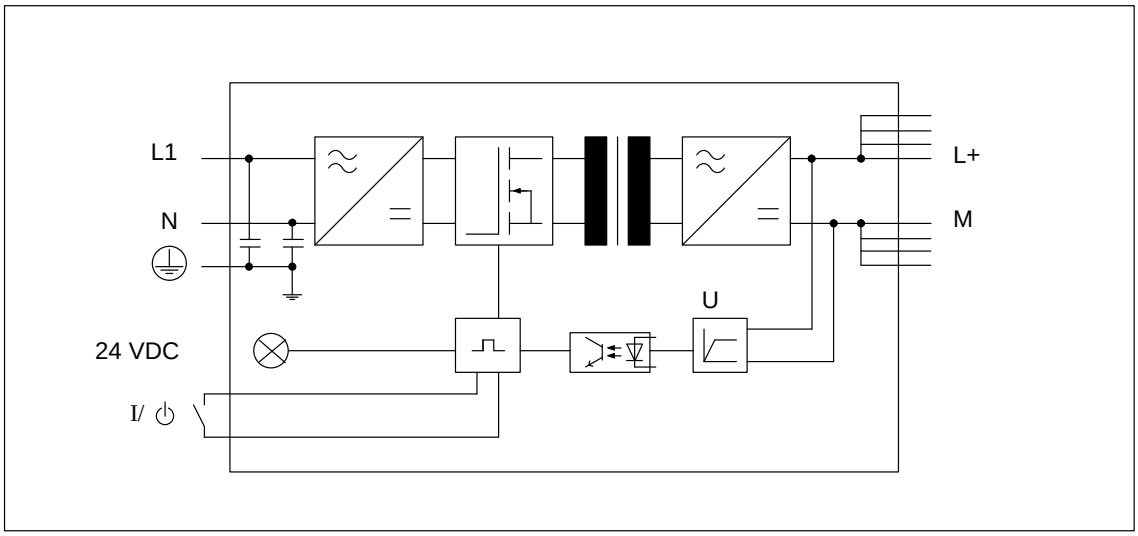


Figure 2-6 Basic Circuit Diagram of the PS 307 Power Supply Module (10 A)

Line Protection

We recommend that you install a miniature circuit-breaker (MCB) (for example, Siemens 5SN1 series) with the following rating to protect the incoming supply cable of the PS 307 power supply module (10 A):

- Rated current at 230 VAC: 16 A
- Tripping characteristic (type): B or C

Reaction to Atypical Operating Conditions

Table 2-3 gives information on the reaction of the power supply module to atypical operating conditions.

Table 2-3 Reaction of the PS 307 Power Supply Module (10 A) to Atypical Operating Conditions

If ...	... Then ...	24 VDC LED
... the output circuit is overloaded: • I > 13 A (dynamic) • 10 A < I ≦ 13 A (steady state)	 Voltage dip, automatic voltage recovery Voltage drop, shortening of service life	Flashes
... the output is short-circuited	Output voltage 0 V; automatic voltage recovery after short circuit has been eliminated	Dark
an overvoltage occurs on the primary side	Possible destruction	–
there is an undervoltage on the primary side	Automatic disconnection; automatic voltage recovery	Dark

Technical Specifications

The technical specifications of the PS 307 power supply module (10 A) are listed below.

Dimensions and Weight	
Dimensions (W × H × D)	200 × 125 × 120 mm (7.8 × 4.88 × 4.68 in.)
Weight	1.2 kg (2.64 lb.)
Input Rating	
Input voltage	
• Rated value	120 V/230 VAC
System frequency	
• Rated value	50 Hz or 60 Hz
• Permiss. range	47 Hz to 63 Hz
Rated input current	
• at 230 V	1.7 A
• at 120 V	3.5 A
Inrush current (at 25°C/77°F)	55 A
I^2t (at inrush current)	9 A^2s
Output Rating	
Output voltage	
• Rated value	24 VDC
• Permiss. range	24 V ± 5 %, proof against open circuit
• Ramp-up time	max. 2.5 s
Output current	
• Rated value	10 A, cannot be connected in parallel configurations
Short-circuit protection	Electronic, nonlatching 1.1 to 1.3 × I_N
Residual ripple	max. 150 mVss

Other Parameters	
Protection class to IEC 536 (DIN VDE 0106, Part 1)	I, with protective grounding conductor
Insulation	
• Rated insulation level (24 V to L1)	250 VAC
• Tested with	2800 VDC
Reliable isolation	to DIN VDE 0106, Part 101
Bridging of power failures (at 93 and/or 187 V)	min. 20 ms
• Repeat rate	min 1 s
Efficiency	89 %
Power input	270 W
Power losses	typ. 30 W
Diagnostics	
LED for output voltage available	Yes, green LED