ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Siemens 6ES7 322-1EL00-0AA0* at our website: *Click HERE*

SIEMENS

## Data sheet 6ES7307-1BA01-0AA0



SIMATIC S7-300 STABILIZED POWER SUPPLY PS307 INPUT: 120/230 V AC OUTPUT: DC 24 V DC/2 A

| Technical specifications | |
|---|---|
| Product | PS 307 |
| Power supply, type | 24 V/2 A |

| Input | |
|---|---|
| Input | 1-phase AC |
| Supply voltage 1 with AC Rated value | 120 V |
| Supply voltage 2 with AC Rated value | 230 V |
| • Note | Automatic range selection |
| Input voltage 1 with AC | 85 ... 132 V |
| Input voltage 2 with AC | 170 ... 264 V |
| Wide-range input | No |
| Overvoltage resistance | 2.3 × Vin rated, 1.3 ms |
| Mains buffering at Iout rated, min. | 20 ms; at Vin = 93/187 V |
| Rated line frequency | 50 ... 60 Hz |
| Rated line range | 47 ... 63 Hz |
| Input current at rated input voltage 120 V Rated value | 0.9 A |
| Input current at rated input voltage 230 V Rated value | 0.5 A |
| Switch-on current limiting (+25 °C), max. | 22 A |
| Duration of inrush current limiting at 25 °C maximum | 3 ms |
| $I^2t$, max. | 1 $A^2 \cdot s$ |
| Built-in incoming fuse | T 1.6 A/250 V (not accessible) |
| Protection in the mains power input (IEC 898) | Recommended miniature circuit breaker: 3 A characteristic C |

| Output |
|---|


Changes preserved
© Copyright Siemens AG

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

| | |
|---|---|
| Output | Controlled, isolated DC voltage |
| Rated voltage Vout DC | 24 V |
| Total tolerance, static ± | 3 % |
| Static mains compensation, approx. | 0.1 % |
| Static load balancing, approx. | 0.2 % |
| Residual ripple peak-peak, max. | 50 mV |
| Residual ripple peak-peak, typ. | 5 mV |
| Spikes peak-peak, max. (bandwidth: 20 MHz) | 150 mV |
| Spikes peak-peak, typ. (bandwidth: 20 MHz) | 20 mV |
| Product function Output voltage adjustable | No |
| Output voltage setting | - |
| Status display | Green LED for 24 V OK |
| On/off behavior | No overshoot of Vout (soft start) |
| Startup delay, max. | 2 s |
| Voltage rise, typ. | 10 ms |
| Rated current value Iout rated | 2 A |
| Current range | 0 ... 2 A |
| Active power supplied typical | 48 W |
| Short-term overload current on short-circuiting during the start-up typical | 9 A |
| Duration of overloading capability for excess current on short-circuiting during the start-up | 90 ms |
| Short-term overload current at short-circuit during operation typical | 9 A |
| Duration of overloading capability for excess current at short-circuit during operation | 90 ms |
| Parallel switching for enhanced performance | Yes |
| Numbers of parallel switchable units for enhanced performance | 2 |

## Efficiency

| | |
|---|---|
| Efficiency at Vout rated, Iout rated, approx. | 84 % |
| Power loss at Vout rated, Iout rated, approx. | 9 W |

## Closed-loop control

| | |
|---|---|
| Dynamic mains compensation (Vin rated ±15 %), max. | 0.1 % |
| Dynamic load smoothing (Iout: 50/100/50 %), Uout ± typ. | 0.8 % |
| Load step setting time 50 to 100%, typ. | 0.5 ms |
| Load step setting time 100 to 50%, typ. | 0.5 ms |
| Setting time maximum | 1 ms |

## Protection and monitoring

| | |
|---|---|
| Output overvoltage protection | Additional control loop, shutdown at < 28.8 V, automatic restart |
| Current limitation | 2.2 ... 2.6 A |


Changes preserved
© Copyright Siemens AG

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

| | |
|---|---|
| Property of the output Short-circuit proof | Yes |
| Short-circuit protection | Electronic shutdown, automatic restart |
| Enduring short circuit current RMS value maximum | 2 A |
| Overload/short-circuit indicator | - |

| Safety | |
|---|---|
| Primary/secondary isolation | Yes |
| Galvanic isolation | Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178 |
| Protection class | Class I |
| Leakage current maximum | 3.5 mA |
| Leakage current typical | 0.5 mA |
| CE mark | Yes |
| UL/CSA approval | Yes |
| UL/cUL (CSA) approval | cULus-Listed (UL 508, CSA C22.2 No. 142), File E143289 |
| Explosion protection | ATEX (EX) II 3G Ex nA II T4; cULus (ISA 12.12.01, CSA C22.2 No.213) Class I, Div. 2, Group ABCD, T4, File E330455 |
| Certificate of suitability IECEx | No |
| Certificate of suitability NEC Class 2 | No |
| FM approval | Class I, Div. 2, Group ABCD, T4 |
| CB approval | No |
| Marine approval | In S7-300 system |
| Degree of protection (EN 60529) | IP20 |

| EMC | |
|---|---|
| Emitted interference | EN 55022 Class B |
| Supply harmonics limitation | not applicable |
| Noise immunity | EN 61000-6-2 |

| Operating data | |
|---|---|
| Ambient temperature during operation | 0 ... 60 °C |
| • Note | with natural convection |
| Ambient temperature during transport | -40 ... +85 °C |
| Ambient temperature during storage | -40 ... +85 °C |
| Humidity class according to EN 60721 | Climate class 3K3, no condensation |

| Mechanics | |
|---|---|
| Connection technology | screw-type terminals |
| Connections Supply input | L, N, PE: 1 screw terminal each for 0.5 ... 2.5 mm² single-core/finely stranded |
| Connections Output | L+, M: 2 screw terminals each for 0.5 ... 2.5 mm² |
| Connections Auxiliary | - |
| Width of the enclosure | 40 mm |
| Height of the enclosure | 125 mm |
| Depth of the enclosure | 120 mm |
| Weight, approx. | 0.4 kg |


Changes preserved
© Copyright Siemens AG

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

| | |
|---|---|
| Product property of the enclosure housing for side-by-side mounting | Yes |
| Installation | Can be mounted onto S7 rail |
| Mechanical accessories | Mounting adapter for standard mounting rail (6EP1971-1BA00) |
| Other information | Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified) |


Changes preserved
© Copyright Siemens AG

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP