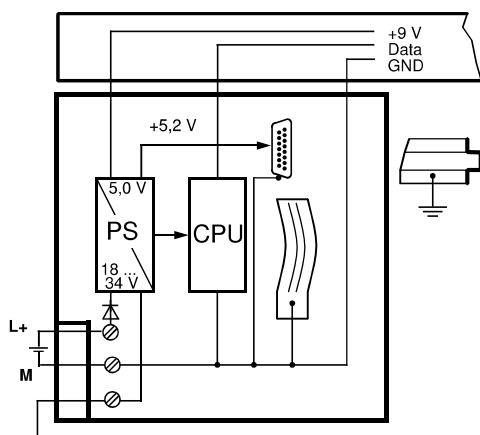
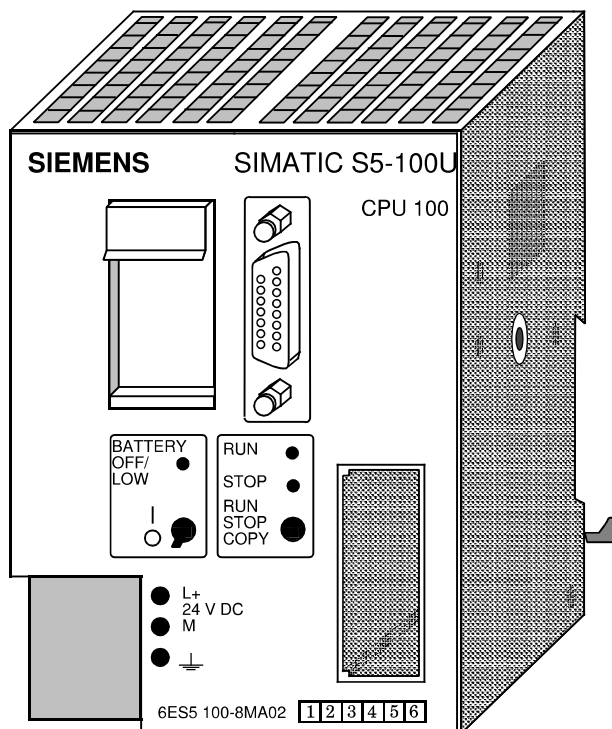


14.3 Central Processing Units (CPUs)

CPU 100

(6ES5 100-8MA02)



Technical specifications

Memory configuration
 - internal memory RAM 1024 statements
 - memory submodule EPROM/EEPROM

Execution times
 - per binary operation approx. 70 μ s
 - per word operation approx. 125 μ s
 Scan monitoring time approx. 300 ms
 Flags 1024; 512 retentive

Timers: Number/range approx. 16; 0.01 to 9990 s
 Counters: Number/range 16; 8 retentive
 0 to 999 (up/down)

Digital inputs, Digital outputs together max. 256

Analog inputs, Analog outputs together max. 8

Organization blocks OB1, 21, 22, and 34
 Program blocks 0 to 63

Function blocks
 - programmable 0 to 63
 - integrated none

Sequence blocks none
 Data blocks 2 to 63

Number of operations approx. 60

Power supply (internal)

Input voltage
 - nominal value 24 V DC
 - permiss. range 18 to 34 V

Current consumption from +24 V 1 A

Output voltage
 - V 1 (for I/Os) +9 V
 - V 2 (for programmer) +5.2 V

Output current
 - from V 1 1 A
 - from V 2 0.65 A

Short-circuit protection electronic

Protection class class 1

Galvanic isolation no

Backup battery Lithium Battery
 (3.4 V/ 850 mAh)

- Backup time min. 1 year (at 25 °C
 [77 °F]) and
 uninterrupted
 backup of CPU)

- Service life approx. 5 years (at 25 °C
 [77 °F])

Permissible ambient temperature

- horizontal arrangement 0 to 60 °C (32 to 140 °F)
 - vertical arrangement 0 to 40 °C (32 to 104 °F)

Connector cross-sectional area

- stranded, with core end sleeves 2x0.5 to 1.5 mm²
 - solid 2x0.5 to 1.5 mm²

Power losses of the module typ. 10.7 W

Dimensions (WxHxD) in mm 91.5x135x120
 in. (3.6 x 5.3 x 4.7)

Weight

- CPU module approx. 0.65 kg (1.4 lbs)
 - memory submodule approx. 0.1 kg (0.2 lbs)