## **SIEMENS**

## Product data sheet 6AU1435-0AA00-0AA1



SIMOTION DRIVE-BASED CONTROL UNIT D435; PROGRAMMABLE MOTION CONTROLLER; STANDARD PERFORMANCE; INTERFACES: 8 DI, 8 DI/DO, 4 DRIVE-CLIQ, 2 PROFIBUS, 2 ETHERNET, 2 USB, 1 OPTION SLOT

Fig. similar

| product brand name                                  | SIMOTION             |
|---|----------------------|
| Product-type designation                            | D435                 |
| Performance class for motion control system         | STANDARD Performance |
| Version of the motion control system                | Multiple-axis system |
| PLC and motion control performance                  |                      |
| Maximum number of axes                              | 32                   |
| Minimum PROFIBUS cycle clock                        | 1 ms                 |
| Minimum PROFINET send cycle clock                   | 0.5 ms               |
| Minimum servo cycle clock                           | 1 ms                 |
| Minimum interpolator cycle clock                    | 1 ms                 |
| Integrated drive control                            |                      |
| Maximum number of axes for integrated drive control |                      |
| • servo   | 6                    |
| • vector  | 4                    |
| • V/f   | 8                    |

| • note   | Alternative control modes; drive control based on SINAMICS S120 CU320, firmware version V2.x   |
|--|--|
| Memory   |  |
| RAM (work memory)                                | 48 Mbyte   |
| Additional RAM work memory for Java applications | 20 Mbyte   |
| RAM disk (load memory)                           | 29 Mbyte   |
| Retentive memory                                 | 364 kbyte  |
| Persistent memory (user data on CF)              | 300 Mbyte  |
| Communications                                   |  |
| Interfaces                                       | 4  |
| Interfaces                                       | 2  |
| Interfaces                                       | 2  |
| Interfaces                                       | 2  |
| • PROFIBUS                                       | Equidistant and isochronous; Can be configured as master or slave  |
| Interfaces                                       | 0  |
| • PROFINET                                       | Optional via CBE30; 1 interface with 4 ports; supports PROFINET IO with IRT and RT; configurable as a PROFINET IO controller and/or device   |
| General technical data                           |  |
| Fan  | Optional fan/battery module (single fan)   |
| Supply voltage                                   |  |
| rated value                                      | 24 V   |
| Making current, typ.                             | 6 A  |
| Power loss, typ.                                 | 15 W   |
| Ambient temperature                              |  |
| during storage                                   | -40 +70 °C   |
| during transport                                 | -40 +70 °C   |
| during operating                                 | 0 55 °C  |
| • note   | Maximum 5000 m (16405 ft) above sea level. Above an altitude of 2000 m (6562 ft), the max. ambient temperature decreases by 7 $^{\circ}$ C (44.6 $^{\circ}$ F) every 1000 m (3281 ft). |
| Relative humidity / without condensation         |  |
| during operating phase                           | 5 95 %   |
| Air pressure                                     | 700 1060 hPa   |

| Protection class IP                              | IP20  |
|--|---|
| Dimensions                                       | 380 mm  |
| Dimensions                                       | 50 mm   |
| Depth  | 270 mm  |
| • remark   | when the spacer is removed 230 mm deep  |
| Weight, approx.                                  | 2600 g  |
| Digital inputs                                   |   |
| Number of digital inputs                         | 8   |
| DC input voltage                                 |   |
| rated value                                      | 24 V  |
| • for signal "1"                                 | 15 30 V   |
| • for signal "0"                                 | -3 +5 V   |
| Electrical isolation                             | Yes   |
| • note   | Yes, in groups of 4   |
| Current consumption for "1" signal level, typ.   | 10 mA   |
| Input delay time for                             |   |
| • signal "0" → "1", typ.                         | 50 μs   |
| • signal "1" → "0", typ.                         | 150 µs  |
| Digital inputs/outputs                           |   |
| Number of digital inputs/outputs                 | 8   |
| Parameterization possibility of the digital I/Os | parameterizable as DI, as DO, as measuring input input (max. 6), as output of output cam (max. 8) |
| If used as an input                              |   |
| DC input voltage                                 |   |
| rated value                                      | 24 V  |
| • for signal "1"                                 | 15 30 V   |
| • for signal "0"                                 | -3 +5 V   |
| Electrical isolation                             | No  |
| Current consumption for "1" signal level, typ.   | 10 mA   |
| Input delay time for                             |   |
| • signal "0" → "1", typ.                         | 5 μs  |
| • signal "1" → "0", typ.                         | 50 μs   |
| Measuring input                                  |   |
| <ul> <li>reproducibility</li> </ul>              | 5 μs  |

| If used as an output                            |  |  |
|---|--|--|
| Load voltage                                    |  |  |
| rated value                                     | 24 V   |  |
| • minimum                                       | 20.4 28.8 V  |  |
| Electrical isolation                            | No   |  |
| Current carrying capacity for each output, max. | 500 mA   |  |
| Leakage current, max.                           | 2 mA   |  |
| Output delay for                                |  |  |
| • signal "0" → "1", typ.                        | 150 μs   |  |
| • signal "0" → "1", max.                        | 400 μs   |  |
| • signal "1" → "0", typ.                        | 75 μs  |  |
| • signal "1" → "0", max.                        | 100 μs   |  |
| • note  | Data for Vcc = 24 V; load 48 Ohm; "1" = 90 % VOut,<br>"0" = 10 % VOut  |  |
| Cam output                                      | 125 µs   |  |
| Switching frequency of the outputs for          |  |  |
| • resistive load, max.                          | 100 Hz   |  |
| • inductive load, max.                          | 2 Hz   |  |
| • lamp load, max.                               | 11 Hz  |  |
| Short-circuit protection                        | Yes  |  |
| If used as an current input                     |  |  |
| Backup of non-volatile data                     |  |  |
| of real-time clock, min.                        | 5 d  |  |
| • note  | longer buffer duration of the retentive data and the real -time clock using a battery inserted in the fan/battery module |  |
| Approvals                                       |  |  |
| • USA   | cULus  |  |
| Canada  | cULus  |  |
| Australia                                       | C-Tick   |  |
| Further information                             |  |  |

## Further information

Information and download center for Industry Automation and Drives

**Technical documentation (Motion Control)** 

Industry Mall (online ordering system)

Service & Support (FAQs, manuals, operating instructions, certificates, characteristics, ...)

last change: Mar 3, 2014