SIMOTION Motion Control System SIMOTION D — Drive-based

SIMOTION D4x5-2 Control Units

Technical specifications

| Order No. | | 6AU1425-2AA00- 0AA0 | 6AU1425-2AD00- 0AA0 | 6AU1435-2AA00- 0AA0 | 6AU1435-2AD00- 0AA0 | 6AU1445-2AD00- 0AA0 | 6AU1455-2AD00- 0AA0 |
|---|---------|---|---|---|---|---|---|
| Product brand name | | SIMOTION | SIMOTION | SIMOTION | SIMOTION | SIMOTION | SIMOTION |
| Product-type designation | | D425-2 DP | D425-2 DP/PN | D435-2 DP | D435-2 DP/PN | D445-2 DP/PN | D455-2 DP/PN |
| Performance class for motion control system | | BASIC Performance | BASIC Performance | STANDARD Performance | STANDARD Performance | HIGH Performance | ULTRA-HIGH Performance |
| Version of the motion control system | | Multiple-axis system | Multiple-axis system | Multiple-axis system | Multiple-axis system | Multiple-axis system | Multiple-axis system |
| PLC and motion control pe | erforma | nce | | | | | |
| Maximum number of axes | | 16 | 16 | 32 | 32 | 64 | 128 |
| Minimum PROFIBUS cycle clock | ms | 1 | 1 | 1 | 1 | 1 | 1 |
| Minimum PROFINET send cycle clock | ms | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Minimum servo cycle clock | ms | 0.5 | 0.5 | 0.5 | 0.25 | 0.25 | 0.25 |
| Minimum interpolator cycle clock | ms | 0.5 | 0.5 | 0.5 | 0.25 | 0.25 | 0.25 |
| Servo / IPO clock cycle, remark | | _ | _ | _ | 0.5 ms in conjunction with integrated SINAMICS S120 drives (SINAMICS Integrated); 0.25 ms in conjunction with SERVO _{FAST} and IPO _{FAST} | 0.5 ms in conjunction with integrated SINAMICS S120 drives (SINAMICS Integrated); 0.25 ms in conjunction with SERVO _{FAST} and IPO _{FAST} | 0.5 ms in conjunction with integrated SINAMICS S120 drives (SINAMICS Integrated); 0.25 ms in conjunction with SERVO _{FAST} and IPO _{FAST} |
| Integrated drive control | | | | | | | |
| Maximum number of axes for integrated drive control | | | | | | | |
| • servo | | 6 | 6 | 6 | 6 | 6 | 6 |
| • vector | | 6 | 6 | 6 | 6 | 6 | 6 |
| • V/f | | 12 | 12 | 12 | 12 | 12 | 12 |
| • remark | | Alternative control modes; drive control based on SINAMICS S120 CU320-2, firmware version V4.x | Alternative control modes; drive control based on SINAMICS S120 CU320-2, firmware version V4.x | Alternative control modes; drive control based on SINAMICS S120 CU320-2, firmware version V4.x |
| Memory | | | | | | | |
| RAM (work memory) | MB | 48 | 48 | 64 | 64 | 128 | 256 |
| Additional RAM work memory for Java applications | MB | 20 | 20 | 20 | 20 | 20 | 20 |
| RAM disk (load memory) | MB | 31 | 31 | 41 | 41 | 56 | 76 |
| Retentive memory | KB | 364 | 364 | 364 | 364 | 512 | 512 |
| Persistent memory (user data on CF) | MB | 300 | 300 | 300 | 300 | 300 | 300 |