

# Can Open standard SDOs

## SDO Areas

| Address<br>HEX   | Address<br>DEC | Register Area or single parameter            |
|------------------|----------------|----------------------------------------------|
| 0x1000           | 4096           | Device type                                  |
| 0x1001           | 4097           | Error register                               |
| 0x1002           | 4098           | Alarm register                               |
| 0x100C           | 4108           | NodeGuard Guard Time (ms)                    |
| 0x1017           | 4119           | Heartbeat producer Time (ms)                 |
| 0x1018           | 4120           | Vendor ID                                    |
| 0x1019 to 0x1FFF | 4121 to 8191   | Modbus RTU Drive Registers from 1793 to 5836 |
| 0x2000 to 0x3FA4 | 8192 to 16292  | Modbus RTU Drive Registers from 0 to 8100    |
| 0x3FA5 to 0x6502 | 16293 to 25858 | SDO area - see the list below                |

### Alarm Register Bits

| Alarm type        | D0 | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
|-------------------|----|----|----|----|----|----|----|----|
| OVERLOAD I2T      | 1  | X  | X  | X  | X  | X  | X  | X  |
| SINCOS OVERRANGE  | X  | 1  | X  | X  | X  | X  | X  | X  |
| MOTOR OVERTEMP    | X  | X  | 1  | X  | X  | X  | X  | X  |
| DCLINK OVRANGE    | X  | X  | X  | 1  | X  | X  | X  | X  |
| MOTOR OVERCURRENT | X  | X  | X  | X  | 1  | X  | X  | X  |

## SDO list

|    | Address<br>HEX | Address<br>DEC | Description                    | Access         |
|----|----------------|----------------|--------------------------------|----------------|
| 1  | 0x603F         | 24639          | Error Code                     | Read only      |
| 2  | 0x6040         | 24640          | Controlword                    | Read and write |
| 3  | 0x6041         | 24641          | Statusword                     | Read only      |
| 4  | 0x605A         | 24666          | Quick stop option code         | Read and write |
| 5  | 0x605B         | 24667          | Shutdown option code           | Read and write |
| 6  | 0x605C         | 24668          | Disable operation option code  | Read and write |
| 7  | 0x605E         | 24670          | Fault reaction option code     | Read and write |
| 8  | 0x6060         | 24672          | Modes of operation             | Read and write |
| 9  | 0x6061         | 24673          | Modes of operation display     | Read only      |
| 10 | 0x6062         | 24674          | Position demand value          | Read only      |
| 11 | 0x6063         | 24675          | Position actual internal value | Read only      |
| 12 | 0x6064         | 24676          | Position actual value          | Read only      |
| 13 | 0x6065         | 24677          | Following error window         | Read and write |
| 14 | 0x6066         | 24678          | Following error time out       | Read and write |
| 15 | 0x6067         | 24679          | Position window                | Read and write |
| 16 | 0x6068         | 24680          | Position window time           | Read and write |

|    |        |       |                             |                |
|----|--------|-------|-----------------------------|----------------|
| 17 | 0x606B | 24683 | Velocity demand Value       | Read only      |
| 18 | 0x606C | 24684 | Velocity Actual Value       | Read only      |
| 19 | 0x606D | 24685 | Velocity window             | Read and write |
| 20 | 0x606E | 24686 | Velocity window time        | Read and write |
| 21 | 0x606F | 24687 | Velocity threshold          | Read and write |
| 22 | 0x6070 | 24688 | Velocity threshold time     | Read and write |
| 23 | 0x6071 | 24689 | Target torque               | Read and write |
| 24 | 0x6072 | 24690 | Max torque                  | Read and write |
| 25 | 0x6077 | 24695 | Torque actual value         | Read only      |
| 26 | 0x607A | 24698 | Target position             | Read and write |
| 27 | 0x607B | 24699 | Position range limit        | Read and write |
| 28 | 0x607C | 24700 | Home offset                 | Read and write |
| 29 | 0x607D | 24701 | Software position limit     | Read and write |
| 30 | 0x607E | 24702 | Polarity                    | Read and write |
| 31 | 0x607F | 24703 | Max profile velocity        | Read and write |
| 32 | 0x6081 | 24705 | Profile velocity            | Read and write |
| 33 | 0x6082 | 24706 | End velocity                | Read and write |
| 34 | 0x6083 | 24707 | Profile acceleration        | Read and write |
| 35 | 0x6084 | 24708 | Profile deceleration        | Read and write |
| 36 | 0x6085 | 24709 | Quick stop deceleration     | Read and write |
| 37 | 0x6086 | 24710 | Motion profile type         | Read and write |
| 38 | 0x6087 | 24711 | Torque slope                | Read and write |
| 39 | 0x6088 | 24712 | Torque profile type         | Read only      |
| 40 | 0x608F | 24719 | Position encoder resolution | Read and write |
| 41 | 0x6098 | 24728 | Homing methods              | Read only      |
| 42 | 0x6099 | 24729 | Homing speeds               | Read and write |
| 43 | 0x609A | 24730 | Homing acceleration         | Read and write |
| 44 | 0x60B0 | 24752 | Position offset             | Read and write |
| 45 | 0x60B1 | 24753 | Velocity offset             | Read and write |
| 46 | 0x60B2 | 24754 | Torque offset               | Read and write |
| 47 | 0x60C2 | 24770 | Interpolation time period   | Read and write |
| 48 | 0x60FD | 24829 | Digital inputs              | Read only      |
| 49 | 0x60FE | 24830 | Digital output              | Read and write |
| 50 | 0x60FF | 24831 | Target velocity             | Read and write |
| 51 | 0x6502 | 25858 | Supported drive modes       | Read only      |

From:  
<https://dokuwiki.nilab.at/> - **NiLAB GmbH**  
**Knowledgebase**

Permanent link:  
[https://dokuwiki.nilab.at/doku.php?id=en:integrated\\_drive\\_motors:canopen\\_sdo](https://dokuwiki.nilab.at/doku.php?id=en:integrated_drive_motors:canopen_sdo)

Last update: **2026/09/11 07:55**

