**MODBUS TABLE ORGANIZATION**

| Starting Address of the Group Registers (Dec) | Starting Address of the Group Registers (Hex) | System Version (Release) | System Version (Build) | Group Name (Text) | Group Code (Hex) | Group Complexity (Hex) | Group Version (Hex) | Object Code |
|---|---|---|---|---|---|---|---|---|
| 16384 | 4000 | 01 | 16 | Breaker State | 51 02 | 10 | 01 00 | |

**MODBUS PROTOCOL DETAILS**

| Function Code (Dec) | Exception Codes (Dec) | Data Encoding |
|---|---|---|
| 2 (Read Discrete Inputs) | 1, 2, 3 | "Big Endian" (most significant byte first) |
| 1 (Read Coils) | 1, 2, 3 | "Big Endian" (most significant byte first) |
| 5/15 (Write Single/Multiple Coils) | 1, 2, 3 | "Big Endian" (most significant byte first) |
| 4 (Read Input Registers) | 1, 2, 3 | "Big Endian" (most significant byte first) |
| 3 (Read Holding register) | 1, 2, 3 | "Big Endian" (most significant byte first) |
| 6/16 (Write Single/Multiple Holding register) | 1, 2, 3 | "Big Endian" (most significant byte first) |

**MODBUS OVER SERIAL DETAILS**

| Physical Layer | Trasmission Modes | Device Addressing | Baud Rates (bit/s) | Data Bits | Data bits trasmission sequence | Parity | Stop Bits |
|---|---|---|---|---|---|---|---|
| standard EIA/TIA 485 (RS-485) two-wire configuration | RTU | 1÷247 | programmable (1200, 2400, 4800, 9600, 19200, 38400) | 8 | Least significant bit first | NONE | 1 |

**MASTER/SLAVE COMMUNICATION TIMING**

| Timer Description | Timer Value (msec) |
|---|---|
| Inter-character time-out | < 1,5 character times |
| Response delay (from master request) | - |
| Delay Time (between two master trasmissions) | - |

REFER ALSO TO: www.modbus.org
- MODBUS over serial line specification and implementation guide V1.02
- MODBUS APPLICATION PROTOCOL SPECIFICATION V1.1b

NOTE: File and printed copies of this document are not subject to document change control.

| Register Number | Register Address (Dec) | Register Address (Hex) | Dimension [bit] | Description | Note | Read Function Codes (Dec) | Data Storing |
|---|---|---|---|---|---|---|---|
| **16385** | **16384** | **4000** | **3** | **Breaker State** | | | |
| 16385 | 16384 | 4000 | 1 | Open | *See Note 1* | 2 | |
| 16386 | 16385 | 4001 | 1 | Closed | *See Note 1* | 2 | |
| 16387 | 16386 | 4002 | 1 | Tripped | *See Note 1* | 2 | |

| **Note 1** |
|---|
| The information reported here "self-resets" when the condition that generated it ends. |

| Register Number | Register Address (Dec) | Register Address (Hex) | Dimension [bit] | Description | Note | Read Function Codes (Dec) | Write Function Codes (Dec) | Data Storing |
|---|---|---|---|---|---|---|---|---|
| (no COILS availables) | | | | | | | | |

| Register Number | Register Address (Dec) | Register Address (Hex) | Dimension [word] | Bit Position | Description | Type | Scale | Unit | Range | Note | Read Function Code (Dec) | Data Storing |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (no INPUT REGISTERS availables) | | | | | | | | | | | | |

| Register Number | Register Address (Dec) | Register Address (Hex) | Dimension [word] | Bit Position | Description | Type | Scale | Unit | Range | Note | Read Function Codes (Dec) | Write Function Codes (Dec) | Data Storing |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (no HOLDING REGISTERS availables) | | | | | | | | | | | | | |