TRIDIUM ▸ Distributor & Developer

Product Overview

The eBMS/IO range of I/O modules are designed for use as local I/O within motor control cabinets or as remote I/O connected via TCP or RS485 Modbus.

The eBMS/IO Sunblind module provides 2 independent 250vac/16A rated digital relay output channels, each of which switch the connected supply voltage. Two digital inputs can be used for the local control of the sun blinds. The output function can be exchanged in the software.

The IP20 rated module may be plugged together with other modules on standard TS35 DIN rail or direct mounting; the cascadable design allows power and 2-wire RS485 Modbus communications to connect through without any extra wiring.

Modbus address setting is by rotary switches which are easily accessible underneath the top cover. A bi- colour LED indicates the communications status.

Connectivity

The Sunblind module has one 2-wire RS485 port supporting a Modbus communications network connection to the JACE® controller.
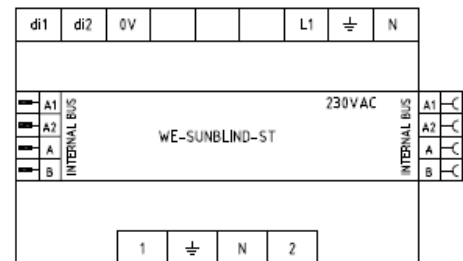
Modules can be networked via TCP, RS485 or mixed networking.

Engineering

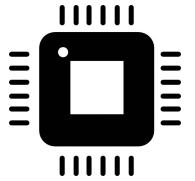Can be engineered via any system with a Modbus interface. Palette files available for Tridium AX and N4.

Applications

BMS and monitoring.

Features

‣ Dedicated module for sun blind control

‣ 2 digital inputs, 2 relay outputs

‣ DIN rail or direct mounting

‣ 24v ac or dc power operation

‣ Supports RS485 2-wire Modbus Open Communication network

‣ Failsafe outputs to predefined state on communications failure

‣ Easy address setting using rotary switches

‣ Bi-colour LED for module status information

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Output data:

number of outputs	2
rated switching voltage	250v ac
rated / inrush current (resistive load)	8A / 12A
maximum total module current	16A
electrical life expectancy at rated / 2A load	1×10^5 cycles / 4×10^5 cycles @ 23°C & resistive load
mechanical life expectancy	30×10^6 cycles

LED status indication:

module status	bi-colour: red / green

Communications:

bus protocol	Modbus RTU
bus interface	RS485, half duplex, non isolated
bus topology	multidrop
bus speed	19200 bps
bus line termination	integrated termination and biasing resistors

General:

module power supply	20v to 28v ac or dc
module current	275ma ac or 110ma dc
operating temperature range	0°C to +50°C
CE marking	EMC directive 2004/108/EC according requirements of EN 55011 and EN 61326-1
mounting	DIN-rail TS35 (35mm x 7.5mm) or direct mounting by M3 fixing
assembly	up to 15 in a row with zero spacing
module size (l x w x h-TS35 / direct)	53mm x 95mm x 60mm / 58mm
insulating material / flammability class	Housing: Noryl. Terminals: Polyamid 6.6 V0 / UL94-V0
protection degree (DIN 40050)	IP 20