TRIDIUM Distributor & Developer
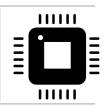
Product Overview

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 TCP-CON, CON and CON-R modules provide a convenient means to connect power and either ethernet or 2-wire RS485 Modbus communications to one or more I/O modules without any extra wiring.

The IP20 rated modules may be plugged together with other modules on standard TS35 DIN rail or direct mounting.

The TCP-CON & CON module contains over-voltage protection on the power terminals and an electromagnetic interference (EMI) filter on the communications terminals. It also contains termination and bias resistors.

The CON-R module simply contains connection terminals. It is used in combination with a TCP-CON or CON module to provide a cost effective solution for the protection and connection of local and remote I/O modules in a communications network.

Connectivity

The TCP-CON, CON and CON-R modules have screw terminal connectors for power and communications cabling.
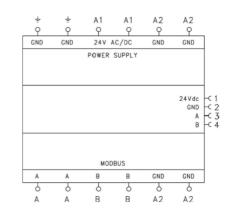
Engineering

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

Applications
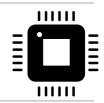
BMS and monitoring.

Features

‣ Convenient power and Modbus connection for the range of eBMS/ IO input and output modules (TCP-CON, CON & CON-R)

‣ Over voltage protection on power terminals (TCP-CON & CON)

‣ EMI filter on communications terminals (TCP-CON & CON)

‣ Integrated termination and bias resistors activated by dip switches (TCP-CON & CON)

‣ TCP-CON may be used as standalone Modbus TCP Gateway

‣ TCP-CON has onboard web server for configuration of IP address and RS485 communications settings

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General:

module power supply	20v to 28v ac or dc
module current	30ma ac or 10ma 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

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 on TCP-CON & CON module