



TRS-CAT

GENERAL CHARACTERISTICS

The coupler TRS-CAT, suitable to be mounted on DIN rails, allows to connect the EtherCat bus to the TRS bus.

TRS-CAT is a slave complex device (bus coupler) as defined by the ETG specifications. TRS-CAT incorporates 16 lines of digital bi-directional I/Os; each line is configurable as input or output.

It is possible to expand the TRS-CAT module with any expansion unit of the series TRS up to a maximum of seven.

TRS-CAT complies with the directives EMC 2004/108/EC.

OUTPUT FUNCTIONS

- Maximum current for each output 0.5A.
- Protection of the outputs against overload and over-voltage (36V).
- Real time monitoring of the outputs (software diagnostics).
- Possible activation of outputs synchronous to the PLC scheduler.

INPUT FUNCTIONS

- Digital debounce filter.
- Possible input sampling synchronous to the PLC scheduler.

FUNCTIONAL SPECIFICATIONS

- Connection to control unit by EtherCAT bus.
- Logic Supply +24V.
- Field supply separated from the supply of the logic circuitry.
- Indication of the presence of supplies by means of luminous indicators.
- I/O stage indication with screw or spring terminals (AWG24,12).
- Protection against the inversion of the logic and field power supply.
- Mounting on DIN rails type EN 50022 and EN50035.
- Dimensions: 70 x 138 x 23.5 mm.



TRS FUNCTIONS

- TRS bus master expandable with a maximum of 7 modules of the series TRS.
- Logic supply propagated by the coupler to the expansions.
- Field supply propagated by the coupler to the expansions.
- Internal protection against connection errors.

MAXIMUM VALUES ALLOWED

	Min	Typ	Max
Vdc, logic supply	18 V		30 V
Maximum current of the outputs	Vo = 24 Vdc		0.5 A
VO, field supply	by an external power supply		36 V
Icc, max current for field supply	by an external power supply		8 A
Temperature	0 °C		65 °C

OPERATING PARAMETERS

	Min	Typ	Max
Vdd, Power Supply		24 V	
Iq, quiescent current	All outputs inactive, Vdc = 24V		40 mA
Ip, current in operating mode	All outputs active, Vdc = 24V		100 mA
Output Current	Vo = 24 V		0 A
VO, field supply	18 V	24 V	30 V
Voh, output voltage in active state	Vo = 24V, RL = 10KΩ, CL = 50pF		18 V
Vol, output voltage in inactive state	Vo = 24V, RL = 10KΩ, CL = 50pF		6 V
Vih, output voltage in inactive state	Vo = 24 V		18 V
Vil, input voltage in inactive state	Vo = 24 V		10 V
Operating Temperature	5 °C		60 °C

OTHER PARAMETERS

	Min	Typ	Max
Isolation from logic to outputs	1 min	500 Vac	
	100 ms	1100 Vac	
Isolation from inputs to logic	by an external power supply		2500 Vac