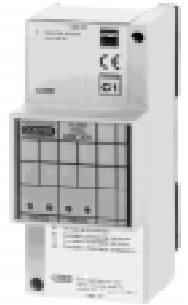


CONVERTOR OF THREE-WIRE MODULATING SIGNAL TO 0 ... 10 V – ANALOGUE SIGNAL

CSC 304 Eng. C1



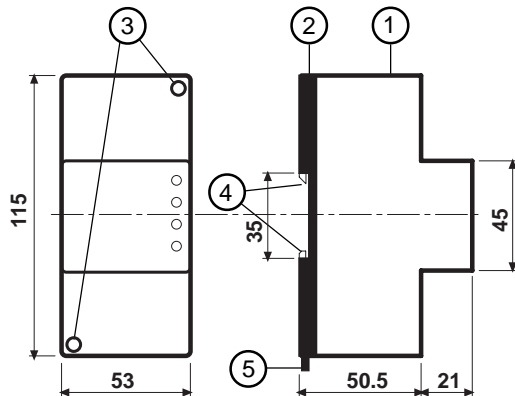
- 1 three-wire modulating input, voltage-free or powered by 24 V~
- 1 analogue 0...10 V– output
- Power supply 24 V~ , DIN rail mounting



1. APPLICATION

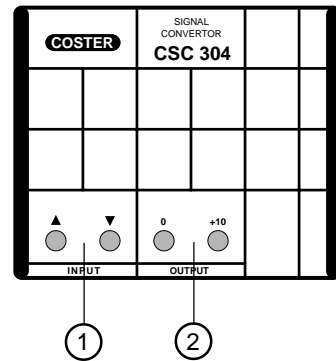
Converts three-wire modulating signal to 0...10 V – analogue signal

2. OVERALL DIMENSIONS



- 1 - Protective cover for electronic components
- 2 - Base with transformer, relay and terminal blocks
- 3 - Screws for fixing cover to base
- 4 - DIN rail securing elements
- 5 - DIN rail release lever

3. FACIA



- 1 - Three-wire input LED
- 2 - Output 0...10 V– LED

4. TECHNICAL DATA

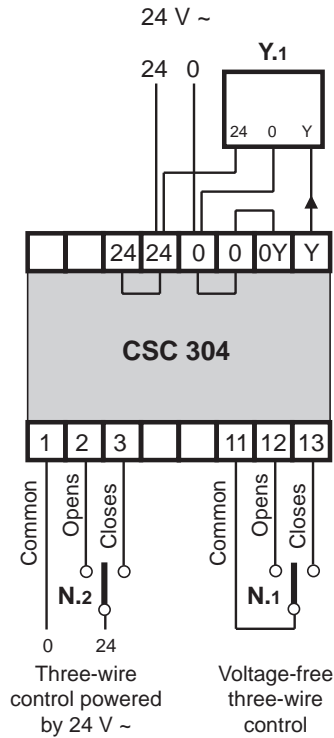
Power supply	24 V~ ± 10%	Materials:	base	NYLON
Frequency	50V... 60 Hz		cover	ABS
Consumption	3 VA	Ambient temperature:	operation	0 ... 45 °C
Protection	IP40		storage	- 25 ... + 60 °C
Radio disturbances	VDE0875/0871	Ambient humidity		Class F DIN 40040
Vibration test	with 2g (DIN 40 046)	Weight		0.31 kg
Construction standard	Italian Electrotechnical Comm. (CEI)	Input signal		three-wire modulating
Case	DIN 3E module	Output signal		0 ...10V – analogue
Installation	on DIN 35 rail			

5. INSTALLATION

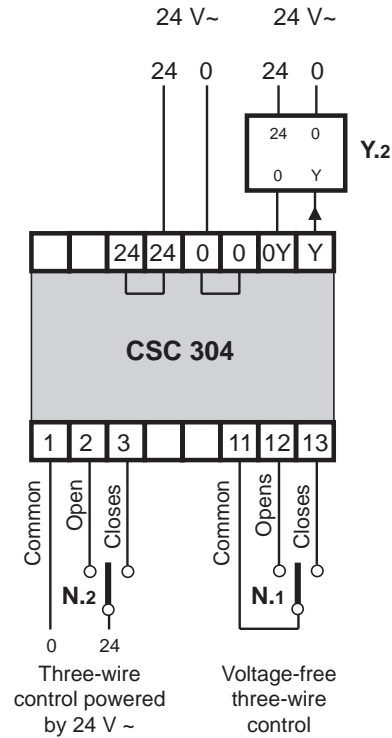
CSC 304 must be sited in a dry space which meets the relevant ambiantal conditions included under 4. *Technical Data*. If sited in spaces classified as "Dangerous" it must be installed in cabinets for electrical appliances constructed according to the standards in force for the danger class involved. The unit may be installed on DIN rail or in DIN modular enclosure

6. WIRING DIAGRAMS

6.1 Control regulating device with power supply in parallel to CSC 304



6.2 Control regulating device with separate power supply



- N.1 – Voltage-free three-wire control (as alternative to N.2)
 N.2 – Three-wire control, powered by 24 V~ (as alternative to N.1)
 Y.1 – Control device with parallel power supply (as alternative to Y.2) with link 0Y-Y.
 Y.2 – Control device with separate power supply (as alternative to Y.1) without link 0Y-Y.

7. WIRING

Proceed as follows :

- Separate base and cover
- Mount base on DIN rail and check that securing elements (2.4) hold it firmly in place.
- Carry out the wiring according to the diagram and in respect of the regulations in force. Use following cable types:
 - 1,5 mm² for power supply
 - 1 mm² for input and output signals
- Switch on power (24 V~) and check the voltage across terminals 24 and 0.
- Switch off power, replace cover on base and secure it with the two screws supplied (2.3).

It is recommended not to insert more than two cables in a single terminal of the controller and, if necessary, to use external junction boxes.

8. OPERATION

CSC 304 converts a *three-wire modulating signal* coming from a controller :

- voltage-free (N.1 - terminals 11-12-13)
- or
- powered by 24 V~ (N.2 - terminals 1-2-3)

in an *analogue 0...10 V~* signal for control of :

- a regulating devices Y.1 powered by 24 V~ parallel to CSC 304 (with link 0Y-Y).
- or
- a regulating device Y.2 powered by 24 V~ autonomous (without link 0Y-Y).

Warning!

The control regulator N must be configured with ACTUATOR RUN TIME = 120 seconds