

Zentro Expand

S-013

Digital inputs

Nr. of inputs × groups	4 × 1, 8 × 1
Functions of inputs	Counter (incl. memory), Direct Switch
Input type	SINK
Input terminal	DI
Common ground	DIGND
Maximum voltage for log. 0	3 V _{DC}
Minimum voltage for log. 1	7 V _{DC}
Maximum voltage	35 V _{DC}
Non-defined state	3–7 V _{DC}
Input resistance for log. 1	6,200 Ω
Voltage drop on DI diode	1.2 V _{DC}
Minimum pulse length	20 μs
0→1 / 1→0 Delay	Typ. 20 μs / 60 μs
Maximum CNT counter input frequency	10 kHz
Galvanic isolation	Yes (between the groups)
Insulation voltage	2,000 V

Communication

Serial/bus channels	1 × RS485
RS485 transmission speed	134 baud – 115,200 baud
RS485 galvanic isolation	Yes
RS485 biasing resistors	No
RS485 terminating resistor	Builtin attachable, 120 Ω

Power supply

Rated voltage – SELV	24 V _{DC}
Power consumption	Typ. 2 W / Max. 11 W
Reverse polarity protection	Yes

Dimensions and weight

Dimensions	72 × 90 × 56 mm
Weight	320 g

Relay outputs

Nr. of outputs × groups	1 × 3, 2 × 5
Output type	Electromechanic non-shielded relay
Output terminal	RO
Common terminal	COM
Contact type	Normally open (SPST-NO)
Used relay type	FTR-F3AA024EHA
Maximum switching voltage	250 V _{AC} , 30 V _{DC}
Maximum switching current	5 A
Mechanical lifespan	5 000 000
Designed for load character	Resistive
Load handling	External (RC, varistor, diode, thermistor)
Short circuit protection	No
Overvoltage protection	No
Maximum common terminal current	10 A
Galvanic isolation	Yes
Operate/release time	10 ms
Electrical lifespan	Up to 100 000 (according to the connected load)
Short-term current overload	5 A

Installation and operating conditions

Operating conditions	0°C – +55°C, relative humidity 10% – 95%, without aggressive substances, condensing vapour and fog
Operation position	Horizontal
Connection	Pluggable terminal blocks
Wire gauge	Max. 2.5 mm ²
Installation	On 35mm DIN rail into distribution box (holder included)
Degree of protection IP (IEC 529)	IP 20
Storing conditions	–25°C – +70°C, relative humidity 10% – 95%, without aggressive substances, condensing vapour and fog

Directive compliance

EMC: 2014/30/EU
LVD: 2014/35/EU

RoHS: 2015/863/EU
WEEE: 2012/19/EU

