I/O module, SmartWire-DT, 4DI-2DO relays

Part no. SWIRE-4DI-2DO-R
Article no. 107030
Catalog No. SWIRE-4DI-2DO-R

Powering Business Worldwide

Delivery programme

Subrange			Module
Basic function			Connection system SmartWire
Description			4 digital inputs 2 digital relay outputs

Notes

Max. 4 SmartWire I/O modules per rung.

Technical data

General

Standards			
General			IEC/EN 60947 EN 55011 EN 55022 IEC/EN 61000-4 IEC/EN 60068-2-27
Mounting			Top-hat rail IEC/EN 60715 (35mm) or screw fixing with fixing brackets ZB4-101-GF1 (accessories)
Dimensions (W x H x D)		mm	35 x 90 x 74
Weight		kg	0.12

Terminal capacities

Solid		mm^2	0.5…1.5
Flexible with ferrule		mm^2	0.5…1.5
Solid or stranded		AWG	22…16
Standard screwdriver		mm	3.5 x 0.8
Max. tightening torque		Nm	0.6

Climatic environmental conditions

Ambient temperature		°C	
Operation		°C	-25 - +55
Storage		°C	- 25 - + 70
Condensation			Take appropriate measures to prevent condensation
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 - 95
Air pressure (operation)		hPa	795 - 1080

Ambient conditions, mechanical

Protection type (IEC/EN 60529, EN50178, VBG 4)			IP20
Overvoltage category/pollution degree			2
Mounting position			Vertical

Electromagnetic compatibility (EMC)

Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)		kV	
Air discharge		kV	8
Electromagnetic fields (IEC/EN 61000-4-3, RFI)	V/m		10
Radio interference suppression EN 55011, EN 55022			Class A
Burst Impulse (IEC/EN 61000-4-4, Level 3)			
Supply cable		kV	2
power pulses (surge) (IEC/EN 61000-4-5, level 2)		kV	0.5 (supply cables, symmetrical)
Immunity to line-conducted interference to (IEC/EN 61000-4-6)		V	10

Insulation resistance

Clearance in air and creepage distances			EN 50178, EN 60947-1, UL 508, CSA C22.2 No 142
Insulation resistance			EN 50178, EN 60947-1

Voltage supply, Gateway electronic and SmartWire station electronics $U_{Gateway}$

Admissible range			Supply from gateway

LEDs

Ready for operation			Ready: green
Status Outputs			Q1, Q2: Green

Connection potential-free contacts

Number			4
Rated voltage (own supply)	U_e	V DC	17
Input current at “1” signal, typically		mA	5
max. conductor length		m	< 2.8

MODBUS

Potential isolation			
To SmartWire			to supply voltage U_{AUX}: no to supply voltage $U_{Gateway}$: no

SmartWire

Connection types			Plug, 6-pole
Data/power cable			6 core flat-band cable
maximum cable length System SmartWire		m	4
Bus termination			Connector plug
Station address			1…16
Station			Max. 4 SmartWire modules per rung.
Address allocation			Automatic via SmartWire
Function			SmartWire-Slave
Data transfer time System SmartWire			
Write switch			typically 20 ms for all stations
Read status information			typically 10 ms per station

Relay outputs

Rated impulse withstand voltage	U_{imp}	V AC	4000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V	250
Rated operational voltage	U_e	V	250
Making capacity		A	30
Breaking capacity	380 … 400 V	A	10
Rated operational current	I_e	A	
AC-15, 250 V	I_e	A	3
DC-12, 30 V	I_e	A	3
Conventional thermal current	I_{th}	A	6
Short-circuit rating without welding			
Max. fuse		A gG/gL	10

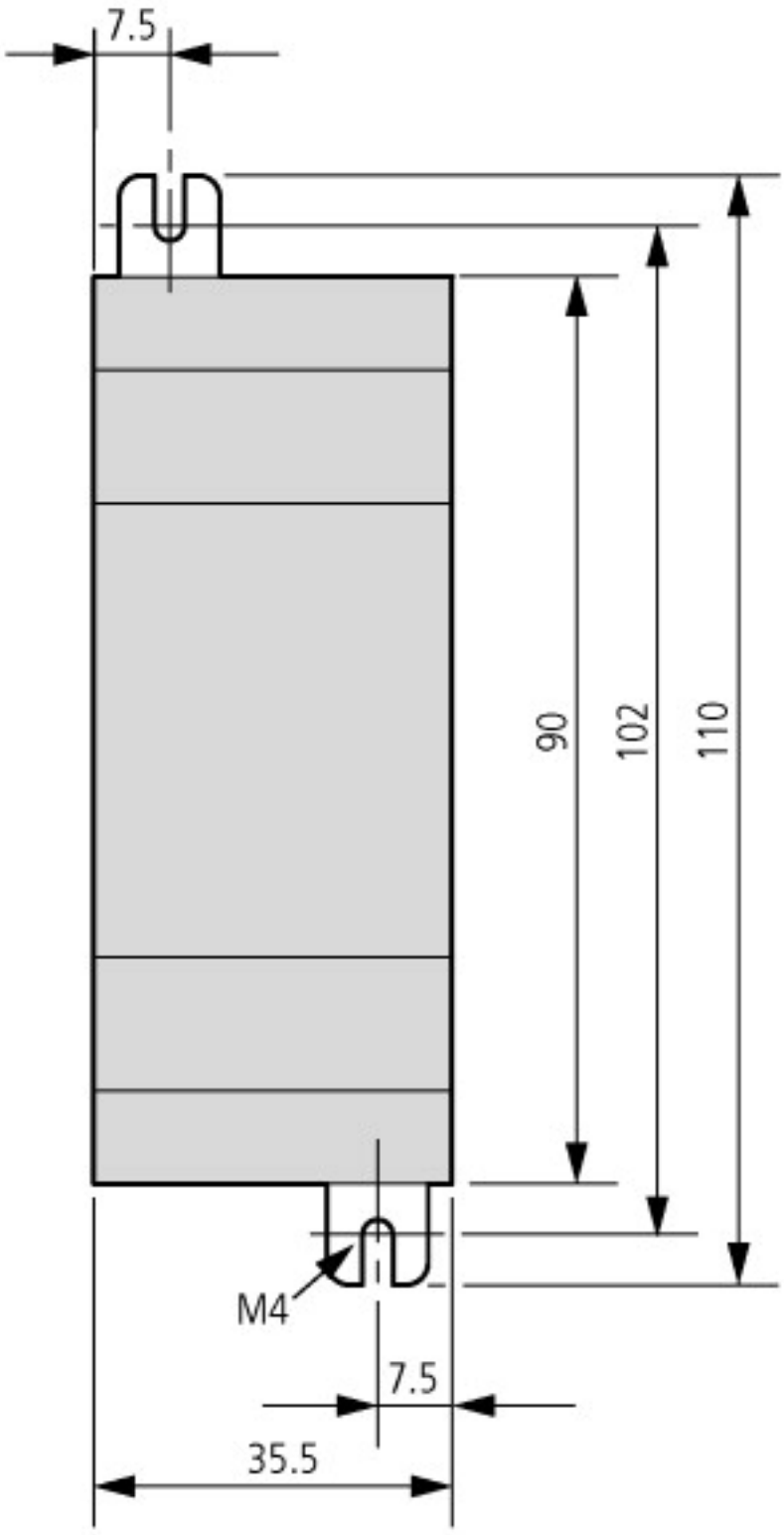
Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55

Approvals

Product Standards			IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.			E29184
UL Category Control No.			NKCR
CSA File No.			012528
CSA Class No.			2252-01
North America Certification			UL listed, CSA certified

Dimensions



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