

Data sheet SM 022 (022-1HD10)

Technical data

Order no.	022-1HD10
Type	SM 022
Module ID	010A AFA0
General information	
Note	-
Features	4x DO DC 30 V AC 230 V 1.8 A Potential separated per group (2 channel) Relay
Current consumption/power loss	
Current consumption from backplane bus	120 mA
Power loss	0.7 W
Technical data digital outputs	
Number of outputs	4
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	DC 30 V/ AC 230 V
Current consumption from load voltage L+ (without load)	-
Total current per group, horizontal configuration, 40°C	3.6 A
Total current per group, horizontal configuration, 60°C	3 A
Total current per group, vertical configuration	3.6 A
Output current at signal "1", rated value	1.8 A
Signal logic output	Isolated
Output delay of "0" to "1"	10 ms
Output delay of "1" to "0"	5 ms
Minimum load current	-
Lamp load	-
Parallel switching of outputs for redundant control of a load	not possible
Parallel switching of outputs for increased power	not possible
Actuation of digital input	-
Switching frequency with resistive load	max. 0.33 Hz
Switching frequency with inductive load	max. 0.33 Hz
Switching frequency on lamp load	max. 0.33 Hz
Internal limitation of inductive shut-off voltage	-
Short-circuit protection of output	-
Trigger level	-
Number of operating cycle of relay outputs	-
Switching capacity of contacts	5 A
Output data size	4 Bit
Status information, alarms, diagnostics	
Status display	green LED per channel

Interrupts	no
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	none
Supply voltage display	green LED
Group error display	red LED
Channel error display	none

Isolation

Between channels	-
Between channels of groups to	2
Between channels and backplane bus	yes
Insulation tested with	AC 2200 V

PWM data

PWM channels	-
PWM time basis	-
Period length	-
Minimum pulse width	-
Type of output	-

Safety

Safety protocol	-
Safety requirements	-
Secure user address	-
Watchdog	-
Two channels	-
Test pulse length	-
Circuit monitoring	-

Datasizes

Input bytes	0
Output bytes	1
Parameter bytes	0
Diagnostic bytes	0

Housing

Material	PPE / PPE GF10
Mounting	Profile rail 35 mm

Mechanical data

Dimensions (WxHxD)	12.9 mm x 109 mm x 76.5 mm
Net weight	69 g
Weight including accessories	69 g
Gross weight	83 g

Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

Certifications

UL certification	yes
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