

Data sheet SM 022 (022-1DF00)

## Technical data

Order no.	022-1DF00
Туре	SM 022
Module ID	0113 2F48
General information	
Note	-
Features	8 outputs Output current 0.5 A diagnosis of wiríng errors
Current consumption/power loss	
Current consumption from backplane bus	70 mA
Power loss	1 W
Technical data digital outputs	
Number of outputs	8
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	DC 20.428.8 V
Current consumption from load voltage L+ (without load)	11 mA
Total current per group, horizontal configuration, 40°C	4 A
Total current per group, horizontal configuration, 60°C	4 A
Total current per group, vertical configuration	4 A
Output current at signal "1", rated value	0.5 A
Output delay of "0" to "1"	max. 350 µs
Output delay of "1" to "0"	max. 350 µs
Minimum load current	-
Lamp load	10 W
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	yes
Switching frequency with resistive load	max. 1000 Hz
Switching frequency with inductive load	max. 0.5 Hz
Switching frequency on lamp load	max. 10 Hz
Internal limitation of inductive shut-off voltage	L+ (-52 V)
Short-circuit protection of output	yes, electronic
Trigger level	1 A
Number of operating cycle of relay outputs	-
Switching capacity of contacts	-
Output data size	8 Bit
Status information, alarms, diagnostics	
Status display	green LED per channel
Interrupts	yes, parameterizable
Process alarm	no



Diagnostic interrupt	yes, parameterizable	A YASKAWA COMPANY	
Diagnostic functions	yes		
Diagnostics information read-out	possible		
Supply voltage display	green LED	green LED	
Group error display	red SF LED	red SF LED	
Channel error display	none	none	
Isolation			
Between channels	-		
Between channels of groups to	-		
Between channels and backplane bus	yes		
Insulation tested with	DC 500 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	7		
Diagnostic bytes	20		
Housing			
Material	PPE / PPE GF10		
Mounting	Profile rail 35 mm	Profile rail 35 mm	
Mechanical data			
Dimensions (WxHxD)	12.9 mm x 109 mm x 76.5 m	m	
Weight	60 g		
Environmental conditions			
Operating temperature	0 °C to 60 °C		
Storage temperature	-25 °C to 70 °C	-25 °C to 70 °C	
Certifications			
UL certification	in preparation		
KC certification	yes		