

Data sheet SM 022 (022-1BB20)

## Technical data

Order no.	022-1BB20
Туре	SM 022
Module ID	0102 AF90
Our and information	
General information	
Note	-
Features	2 outputs Output current 2 A
Current consumption/power loss	
Current consumption from backplane bus	60 mA
Power loss	0.55 W
Technical data digital outputs	
	2
Number of outputs  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)	10 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	2 A
Output delay of "0" to "1"	100 μs
Output delay of "1" to "0"	250 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	✓
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	2.7 A
Number of operating cycle of relay outputs	-
Switching capacity of contacts	-
Output data size	2 Bit
Status information, alarms, diagnostics	
Status display	green LED per channel
Interrupts	no
Process alarm	no



Diagnostic interrupt	no	A YASKAWA COMPANY	
Diagnostic functions	no		
Diagnostics information read-out	none		
Supply voltage display	green LED	green LED	
Group error display	red LED		
Channel error display	none		
Isolation			
Between channels	-		
Between channels of groups to	-		
Between channels and backplane bus	✓		
Insulation tested with	DC 500 V		
PWM data			
PWM channels	-		
PWM time basis	-		
Period length	-		
Minimum pulse width	-		
PtP communication	-		
Safety			
Safety protocol	-		
Safety requirements	-		
Secure user address	-		
Watchdog	-		
Two channels	-		
Test pulse length	-		
Circuit monitoring	-		
Datasizes			
Input bytes	0		
Output bytes	1	1	
Parameter bytes	0		
Diagnostic bytes	0		
Housing			
Material	PPE / PPE GF10	PPE / PPE GF10	
Mounting	Profile rail 35 mm	Profile rail 35 mm	
Mechanical data			
Dimensions (WxHxD)	12.9 mm x 109 mm x 7	12.9 mm x 109 mm x 76.5 mm	
Weight	60 g	60 g	
Environmental conditions			
Operating temperature	0 °C to 60 °C		
Storage temperature	-25 °C to 70 °C		
Certifications			
UL508 certification	yes		