

Data sheet SM 022 (022-1HB10)

Technical data

Type SM 022 Module ID 0109 AF90 General information - Restures 2 relay outputs DC 30 V/ AC 230 V Output corner 3 A Current consumption/power loss - Current consumption from backplane bus 120 mA Power loss 0.7 W Technical data digital outputs - Number of outputs 2 Cable length, shielded 1000 m Cable length, shielded 600 m Rated load voltage L + (without load) - Total current per group, horizontal configuration, 40°C - Total current per group, horizontal configuration, 40°C - Output days of '1' to '1' 10 ms Output days of victorial configuration on possible - Parallel switching of outputs for increased power - Parallel switching of outputs for increased power - Switching frequency on lamp load - Parallel switching of outputs for increased power	Order no.	022-1HB10
Module ID 0109 AF80 General information	Туре	SM 022
Note - Features 2 relay outputs DC 30 V/ AC 20 V Output current 3 A Current consumption from backplane bus 120 mA Power loss 0.7 W Technical data digital outputs 2 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 - Total current per group, horizontal configuration, 60°C - Total current per group, horizontal configuration, 60°C - Total current per group, verical configuration - Output delay of '0' to '1' 10 ms Output delay of '0' to '1' 10 ms Output delay of '1' to '0' 5 ms Minimun load current - Lamp load - Parallel switching of outputs for increased power not possible Parallel switching of outputs for increased power not possible Parallel switching frequency with inductive load - Switching frequency with inductive load	Module ID	0109 AF90
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Lamp load-Parallel switching of outputs for redundant control of a loadnot possibleParallel switching of outputs for increased powernot possibleActuation of digital input-Switching frequency with resistive loadmax. 0.33 HzSwitching frequency with inductive load-Switching frequency on lamp load-Internal limitation of inductive shut-off voltage-Short-circuit protection of output-Trigger level-Number of operating cycle of relay outputs-Switching capacity of contacts3 AOutput data size2 BitStatus displaygreen LED per channelInterruptsno	Output delay of "1" to "0"	5 ms
Parallel switching of outputs for redundant control of a loadnot possibleParallel switching of outputs for increased powernot possibleActuation of digital input-Switching frequency with resistive loadmax. 0.33 HzSwitching frequency with inductive load-Switching frequency on lamp load-Internal limitation of inductive shut-off voltage-Short-circuit protection of output-Trigger level-Number of operating cycle of relay outputs-Switching capacity of contacts3 AOutput data size2 BitStatus displaygreen LED per channelInterruptsno	Minimum load current	-
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Trigger level - Number of operating cycle of relay outputs - Switching capacity of contacts 3 A Output data size 2 Bit Status information, alarms, diagnostics green LED per channel Interrupts no	Internal limitation of inductive shut-off voltage	-
Number of operating cycle of relay outputs - Switching capacity of contacts 3 A Output data size 2 Bit Status information, alarms, diagnostics green LED per channel Interrupts no	Short-circuit protection of output	-
Switching capacity of contacts 3 A Output data size 2 Bit Status information, alarms, diagnostics green LED per channel Interrupts no	Trigger level	-
Output data size 2 Bit Status information, alarms, diagnostics green LED per channel Interrupts no	Number of operating cycle of relay outputs	-
Status information, alarms, diagnostics Status display green LED per channel Interrupts no	Switching capacity of contacts	3 A
Status display green LED per channel Interrupts no	Output data size	2 Bit
Interrupts no	Status information, alarms, diagnostics	
	Status display	green LED per channel
Process alarm no	Interrupts	no
	Process alarm	no



Diagnostic interrupt	no A YASKAWA COMPANY
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	yes
Between channels of groups to	-
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
Weight	60 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL certification	yes
KC certification	yes
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