

Data sheet

SM 222 (222-1FF00)

Technical data

Type SM 222 General Information Note	Order no.	222-1FF00
Note - Features 8x DO C2 400 V AC 230 V Current consumption/power loss Current consumption from backplane bus 150 mA Power loss 1.5 W Technical data digital outputs Number of outputs 8 Cable length, shielded 1000 m Cable length, unshielded 600 m Ratect load voltage AC 230 V Permitted range - Current consumption from power section supply (without load) - Total current per group, horizontal configuration, 40°C 4 A Total current per group, horizontal configuration, 60°C 4 A Total current per group, horizontal configuration, 60°C 4 A Output delay of "0" to "1" 10 ms Output delay of "0" to "1" 10 ms Output delay of "0" to "1" 10 ms Parallel switching of outputs for increased power not possible Parallel switching of outputs for increased power not possible Actuation of digital input - Switching frequency with resistive load max. 0.5 Hz	Туре	SM 222
Features SADO DC 400 V A20 V BC 400 V BC 400 V A20 V BC 400	General information	
Current consumption/power loss Current consumption from backplane bus 150 mA Power loss 150 mA Tachnical data digital outputs Number of outputs 8 Cable length, shielded 1000 m Cable length, shielded 600 m Rated load voltage AC 230 V Permitted range - Current consumption from power section supply (without load) - Total current per group, horizontal configuration, 40°C 4 A Cuterent per group, horizontal configuration, 40°C 4 A Cuterent per group, horizontal configuration, 40°C 4 A Cuterent per group, vertical configuration 40°C 4 A Cuterent per group, vertical configuration 50°C 5 A Signal logic output Sourcing output Sourcing output Cuterent at signal "1" rated value 5.5 A Signal logic output 50°C 10°C 3 ms. Minimum load current 10°C 3 ms. Minimum load current 10°C 4 Ms. Parallel switching of outputs for redundant control of a load 5 not possible 6 Parallel switching of outputs for increased power 6 not possible 7 ms. Minimum load current 8 ms. Minimum load current 9 ms. Minimum load 10 ms. Mi	Note	
Current consumption from backplane bus 1.5 W Technical data digital outputs Number of outputs 8 Cable length, shielded 1000 m Rated load voltage AC 230 V Permitted range Current consumption from power section supply (without load) Total current per group, horizontal configuration, 40°C 4 A Total current per group, horizontal configuration, 60°C 4 A Total current per group, horizontal configuration 4 A Output current at signal "1", rated value 0.5 A Signal logic output Sourcing output Sourcing output Curput delay of "1" to "0" 3 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 Ratculation of digital input Switching frequency with inductive load Switching frequency on lamp load Internal limitation of inductive shut-off voltage Switching frequency on lamp load Internal limitation of inductive shut-off voltage Switching capacity of contacts Output data size 1 Byte Status display green LED per channel Interrupts no Perchannel Interrupts Green LED per channel Interrupts Interrupts Perchannel Interrupts Perchannel Interrupts Perchannel Perchannel	Features	DC 400 V AC 230 V 0.5 A
Power loss 1.5 W Technical data digital outputs Number of outputs 8 Cable length, shielded 1000 m Rated load voltage AC 230 V Permitted range - Current consumption from power section supply (without load) - 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 Cutput current at signal "1", rated value 0.5 A Signal logic output Signal logic output Source AC 3 ms Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 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 Switching frequency with resitive load max. 0.5 Hz Switching frequency with resitive load max. 0.5 Hz Switching frequency with rinductive load - Switching frequency with rinductive load - Switching frequency with rotestive load max. 0.5 Hz 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 apacity of contacts - Output data size 1 Byte Status display green LED per channel Interrupts note than a signal size and	Current consumption/power loss	
Number of outputs 8 Cable length, shielded 1000 m Cable length, unshielded 600 m Rated load voltage AC 230 V Permitted range Current consumption from power section supply (without load) - 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, 60°C 4 A Total current at signal "1", rated value 0.5 A Signal logic output Sourcing output Output delay of "0" to "1" 10 ms Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 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 0.5 Hz Switching frequency with inductive load Switching frequency with roticitive sub-off voltage Switching frequency with roticitive sub-off voltage Switching frequency on lamp load Internal limitation of inductive shut-off voltage Switching frequency on lamp load Trigger level Number of operating cycle of relay outputs Switching requency and pound Switching frequency on lamp load Switching frequency with resistive load Switching frequency with resisti	Current consumption from backplane bus	150 mA
Number of outputs 8 Cable length, shielded 1000 m Cable length, unshielded 600 m Rated load voltage AC 230 V Permitted range - Current consumption from power section supply (without load) - 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 Signal logic output Sourcing output Output delay of *0° to *11* 10 ms Output delay of *1* to *0° 3 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. 0.5 Hz Switching frequency with inductive load - Switching frequency on lamp load - Internal limitation of inductive shut-off voltage	Power loss	1.5 W
Number of outputs 8 Cable length, shielded 1000 m Cable length, unshielded 600 m Rated load voltage AC 230 V Permitted range - Current consumption from power section supply (without load) - Total current per group, horizontal configuration, 40°C 4 A Total current per group, horizontal configuration, 60°C 4 A Output current at signal "1", rated value 0.5 A Signal logic output Sourcing output Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 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. 0.5 Hz Switching frequency with inductive load - Switching frequency on lamp load - Internal limitation of inductive shut-off voltage - Short-circuit protection of output -	Technical data digital outputs	
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Rated load voltage AC 230 V Permitted range - Current consumption from power section supply (without load) - Total current per group, horizontal configuration, 40°C 4 A Total current per group, vertical configuration, 60°C 4 A Total current per group, vertical configuration 4 A Output current a signal "1", rated value 0.5 A Signal logic output 0.5 A Output delay of "0" to "1" 10 ms Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 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 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 contacts - Output data size Brack and signal	Cable length, shielded	1000 m
Permitted range - Current consumption from power section supply (without load) - 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 Signal logic output Sourcing output 0.00 ms Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 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 Switching frequency with resistive load max. 0.5 Hz Switching frequency with inductive load - Switching 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 contacts - Output data size 1 Byte Status display green LED per channel Interrupts - Interru		600 m
Current consumption from power section supply (without load) 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 Signal logic output Sourcing output Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 ms Minimum load current	Rated load voltage	AC 230 V
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 Signal logic output Sourcing output Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 ms Minimum load current	Permitted range	-
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 Signal logic output Sourcing output Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 ms Minimum load current	Current consumption from power section supply (without load)	-
Total current per group, vertical configuration 4 A Output current at signal "1", rated value 0.5 A Signal logic output Sourcing output Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 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. 0.5 Hz Switching 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 contacts - 1 Byte Status information, alarms, diagnostics Status display green LED per channel Interrupts Sourcing output 4 A A A 4 A 4 A 5 A 4 A 5 Surcing output 6 Output delay of "0" to "1" output 7 Output data size green LED per channel Interrupts	Total current per group, horizontal configuration, 40°C	4 A
Output current at signal "1", rated value Signal logic output Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 ms Minimum load current	Total current per group, horizontal configuration, 60°C	4 A
Signal logic output Output delay of "0" to "1" Output delay of "0" to "1" Output delay of "1" to "0" 3 ms Minimum load current	Total current per group, vertical configuration	4 A
Output delay of "0" to "1" 10 ms Output delay of "1" to "0" 3 ms Minimum load current	Output current at signal "1", rated value	0.5 A
Output delay of "1" to "0" Minimum load current Lamp load Parallel switching of outputs for redundant control of a load Parallel switching of outputs for increased power Parallel switching frequency with inductive load Parallel switching frequency with resistive load Parallel switching frequency with inductive shutching frequency besible Parallel switching for possible Parallel switching for po	Signal logic output	Sourcing output
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Lamp load	Output delay of "1" to "0"	3 ms
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. 0.5 Hz Switching 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 contacts Output data size Status information, alarms, diagnostics Status display Interrupts no not possible not possible	Minimum load current	-
Parallel switching of outputs for increased power Actuation of digital input Switching frequency with resistive load max. 0.5 Hz Switching 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 contacts Output data size Status information, alarms, diagnostics Status display Internupts not possible nax. 0.5 Hz nax. 0.5 Hz	Lamp load	-
Actuation of digital input - Switching frequency with resistive load max. 0.5 Hz Switching frequency with inductive load - Switching frequency on lamp load - Internal limitation of inductive shut-off voltage - Short-circuit protection of output - Trigger level - Switching capacity of contacts - Utput data size 1 Byte Status information, alarms, diagnostics Status display green LED per channel Interrupts - Internal Imput Capacity of contacts - Internal Imput Capacity of contacts - Internal Imput Capacity of contacts - Internal Imput Capacity of Capac	Parallel switching of outputs for redundant control of a load	not possible
Switching frequency with resistive load max. 0.5 Hz Switching 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 contacts - Output data size 1 Byte Status information, alarms, diagnostics Status display green LED per channel Interrupts no mo	Parallel switching of outputs for increased power	not possible
Switching frequency with inductive load Switching frequency on lamp load Internal limitation of inductive shut-off voltage Short-circuit protection of output	Actuation of digital input	-
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 contacts - Output data size 1 Byte Status information, alarms, diagnostics Status display green LED per channel Interrupts no	Switching frequency with resistive load	max. 0.5 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 Output data size Status information, alarms, diagnostics Status display Interrupts Status information Interrupts Interrupts	Switching frequency with inductive load	-
Short-circuit protection of output Trigger level Number of operating cycle of relay outputs Switching capacity of contacts Output data size 1 Byte Status information, alarms, diagnostics Status display green LED per channel Interrupts no	Switching frequency on lamp load	-
Trigger level	Internal limitation of inductive shut-off voltage	-
Number of operating cycle of relay outputs - Switching capacity of contacts - Output data size 1 Byte Status information, alarms, diagnostics Status display green LED per channel Interrupts no	Short-circuit protection of output	-
Switching capacity of contacts - Output data size 1 Byte Status information, alarms, diagnostics Status display green LED per channel Interrupts no	Trigger level	-
Output data size 1 Byte Status information, alarms, diagnostics Status display 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	-
Status display green LED per channel Interrupts no	Output data size	1 Byte
Interrupts no	Status information, alarms, diagnostics	
	Status display	green LED per channel
Process alarm no	Interrupts	no
	Process alarm	no



Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	none
Supply voltage display	none
Group error display	none
Channel error display	none
Isolation	
Between channels	-
Between channels of groups to	-
Between channels and backplane bus	yes
Insulation tested with	DC 500 V
Datasizes	
Input bytes	0
Output bytes	1
Parameter bytes	0
Diagnostic bytes	0
Housing	
Material	PPE / PA 6.6
Mounting	Profile rail 35 mm
Mechanical data	
Dimensions (WxHxD)	25.4 mm x 76 mm x 88 mm
Net weight	100 g
Weight including accessories	-
Gross weight	-
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL certification	yes
KC certification	-