

Data sheet

SM 222 (222-1BH00)

Technical data

Order no.	222-1BH00
Туре	SM 222
General information	
Note	
Features	16x DO DC 24 V 0.5 A For conversion module UB4x With LED status display
Current consumption/power loss	
Current consumption from backplane bus	120 mA
Power loss	3.5 W
Technical data digital outputs	
Number of outputs	16
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	8 A
Total current per group, horizontal configuration, 60°C	8 A
Total current per group, vertical configuration	8 A
Output current at signal "1", rated value	0.5 A
Signal logic output	Sourcing output
Output delay of "0" to "1"	150 µs
Output delay of "1" to "0"	100 µs
Minimum load current	-
Lamp load	5 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	1.5 A
Number of operating cycle of relay outputs	-
Switching capacity of contacts	-
Output data size	2 Byte
Status information, alarms, diagnostics	
Status display	none
Interrupts	no
Process alarm	no

YASKAWA VIPA CONTROLS

Diagnostic functions no Diagnostics information read-out none Supply voltage display none Group error display none Channel error display none Isolation - Isolation - Between channels of groups to 16 Between channels and backplane bus yes Insulation itested with DC 500 V Datasizes - Input bytes 0 Output bytes 2 Parameter bytes 0 Diagnostic bytes 0 Housing Profile rail 35 mm 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 80 g Weight including accessories - Gross weight - Certifications -25 °C to 70 °C Certification yes	Diagnostic interrupt	no
Supply voltage display none Group error display none Channel error display none Isolation - Between channels - Between channels of groups to 16 Between channels and backplane bus yes Insulation tested with DC 500 V Datasizes 0 Input bytes 0 Output bytes 2 Parameter bytes 0 Diagnostic bytes 0 Housing Profile rail 35 mm Mechanical data Dimensions (WXHxD) Dimensions (WXHxD) 25.4 mm x 76 mm x 88 mm Net weight 80 g Weight including accessories - Gross weight - Environmental conditions - Operating temperature 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certifications yes	Diagnostic functions	no
Group error display none Channel error display none Isolation - Between channels - Between channels and backplane bus yes Insulation tested with DC 500 V Datasizes 0 Input bytes 0 Output bytes 2 Parameter bytes 0 Diagnostic bytes 0 Housing Profile rail 35 mm Mechanical data Dimensions (WXHxD) Diversories - Gross weight - Environmental conditions - Operating temperature 0 °C to 60 °C Storage temperature - Certifications yes	Diagnostics information read-out	none
Channel error display none Isolation - Between channels - Between channels of groups to 16 Between channels and backplane bus yes Insulation tested with DC 500 V Datasizes 0 Input bytes 0 Output bytes 2 Parameter bytes 0 Diagnostic bytes 0 Housing Profile rail 35 mm Material PPE / PA 6.6 Mounting Profile rail 35 mm Mechanical data Dimensions (WXHxD) Diweight 80 g Weight including accessories - Gross weight - Environmental conditions 0 °C to 60 °C Storage temperature 0 °C to 70 °C Certification yes	Supply voltage display	none
Isolation Between channels - Between channels of groups to 16 Between channels and backplane bus yes Insulation tested with DC 500 V Datasizes 0 Input bytes 0 Output bytes 2 Parameter bytes 0 Dlagnostic bytes 0 Housing 0 Material PPE / PA 6.6 Mounting Porfile rail 35 mm Mechanical data U Dimensions (WxHxD) 25.4 mm x 76 mm x 88 mm Net weight 80 g Weight including accessories - Gross weight - Environmental conditions 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certifications yes	Group error display	none
Between channels-Between channels of groups to16Between channels and backplane busyesInsulation tested withDC 500 VDatasizes0Input bytes0Output bytes2Parameter bytes0Diagonic bytes0HousingProfile rail 35 mmMechanical dataPPE / PA 6.6MountingProfile rail 35 mmMechanical data0Dimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight Including accessories-Environmental conditions0 °C to 60 °CStorage temperature0 °C to 60 °CStorage temperature25 °C to 70 °CCertificationyes	Channel error display	none
Between channels of groups to16Between channels and backplane busyesInsulation tested withDC 500 VDatasizes0Input bytes0Output bytes2Parameter bytes0Diagnostic bytes0HousingProfile rail 35 mmMechanical data25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditions0 °C to 60 °CStorage temperature0 °C to 60 °CEtrificationyes	Isolation	
Between channels and backplane bus yes Insulation tested with DC 500 V Datasizes 0 Input bytes 0 Output bytes 2 Parameter bytes 0 Diagnostic bytes 0 Housing Profile rail 35 mm Mechanical data Dimensions (WxHxD) Dimensions (WxHxD) 25.4 mm x 76 mm x 88 mm Net weight 80 g Weight including accessories - Gross weight - Environmental conditions 0 °C to 60 °C Storage temperature 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certification yes	Between channels	-
Insulation tested with DC 500 V Datasizes 0 Input bytes 0 Output bytes 2 Parameter bytes 0 Diagnostic bytes 0 Housing 0 Material PPE / PA 6.6 Mounting Profile rail 35 mm Mechanical data Dimensions (WxHxD) Dimensions (WxHxD) 25.4 mm x 76 mm x 88 mm Net weight 80 g Weight including accessories - Gross weight - Environmental conditions 0 °C to 60 °C Storage temperature 0 °C to 70 °C Certifications yes	Between channels of groups to	16
DatasizesInput bytes0Output bytes2Parameter bytes0Diagnostic bytes0HousingMaterialPPE / PA 6.6MountingProfile rail 35 mmMechanical dataDimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditionsO °C to 60 °CStorage temperature0 °C to 70 °CCertificationsyes	Between channels and backplane bus	yes
Input bytes0Output bytes2Parameter bytes0Diagnostic bytes0HousingPPE / PA 6.6MaterialPPE / PA 6.6MountingProfile rail 35 mmMechanical dataDimensions (WxHxD)Dimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditionsO °C to 60 °CStorage temperature-25 °C to 70 °CCertificationsyes	Insulation tested with	DC 500 V
Output bytes2Parameter bytes0Diagnostic bytes0HousingPPE / PA 6.6MountingProfile rail 35 mmMechanical dataDimensions (WxHxD)Dimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditions0 °C to 60 °CStorage temperature0 °C to 70 °CCertificationsyes	Datasizes	
Parameter bytes0Diagnostic bytes0HousingMaterialPPE / PA 6.6MountingProfile rail 35 mmMechanical dataDimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditions0 °C to 60 °CStorage temperature0 °C to 70 °CCertificationsyes	Input bytes	0
Diagnostic bytes 0 Housing Material Material PPE / PA 6.6 Mounting Profile rail 35 mm Mechanical data Material Dimensions (WxHxD) 25.4 mm x 76 mm x 88 mm Net weight 80 g Weight including accessories - Gross weight - Environmental conditions 0 °C to 60 °C Storage temperature 0 °C to 70 °C Certifications yes	Output bytes	2
Housing Material PPE / PA 6.6 Mounting Profile rail 35 mm Mechanical data Image: Second se	Parameter bytes	0
MaterialPPE / PA 6.6MountingProfile rail 35 mmMechanical dataProfile rail 35 mmDimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditions0 °C to 60 °COperating temperature0 °C to 60 °CStorage temperature-25 °C to 70 °CCertificationsyes	Diagnostic bytes	0
MountingProfile rail 35 mmMechanical dataDimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditions0 °C to 60 °COperating temperature0 °C to 70 °CCertificationsyes	Housing	
Mechanical data Dimensions (WxHxD) 25.4 mm x 76 mm x 88 mm Net weight 80 g Weight including accessories - Gross weight - Environmental conditions 0 °C to 60 °C Storage temperature 0 °C to 70 °C Certifications uL certification UL certification yes	Material	PPE / PA 6.6
Dimensions (WxHxD)25.4 mm x 76 mm x 88 mmNet weight80 gWeight including accessories-Gross weight-Environmental conditions-Operating temperature0 °C to 60 °CStorage temperature-25 °C to 70 °CCertificationsUL certificationUL certificationyes	Mounting	Profile rail 35 mm
Net weight 80 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 UL certification yes	Mechanical data	
Weight including accessories - Gross weight - Environmental conditions - Operating temperature 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certifications UL certification UL certification yes	Dimensions (WxHxD)	25.4 mm x 76 mm x 88 mm
Gross weight - Environmental conditions 0 °C to 60 °C Operating temperature 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certifications UL certification UL certification yes	Net weight	80 g
Environmental conditions Operating temperature 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certifications UL certification UL certification yes	Weight including accessories	-
Operating temperature 0 °C to 60 °C Storage temperature -25 °C to 70 °C Certifications UL certification	Gross weight	-
Storage temperature -25 °C to 70 °C Certifications UL certification	Environmental conditions	
Certifications UL certification yes	Operating temperature	0 °C to 60 °C
UL certification yes	Storage temperature	-25 °C to 70 °C
	Certifications	
KC certification -	UL certification	yes
	KC certification	-