

# **CONTROL DEVICES & ACCESSORIES**





## Control Devices & Accessories Models

MVS

MFS



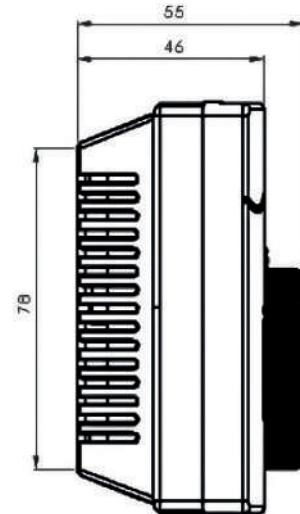
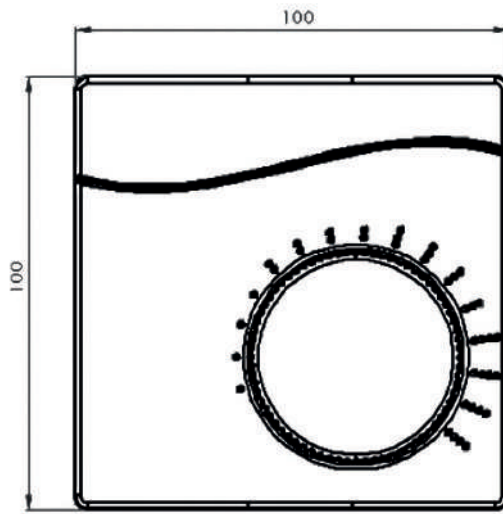
## **MVS**

### **ANALOG MONO-PHASE CONTROL DEVICES**

MVS Serie Analog Mono-phase control devices are designed for proportional control of single-phase Fan Motors. Can be used in many fan speed control applications such as heat recovery devices where resistive and inductive loads at small powers are manually controlled proportionally, kitchen hoods, aspirators and ventilators. Maximum load capacity from 2.5 A to 7.5 A.

## Technical Information

<b>Operating Temperature</b>	0 ... +40°C / -25 ... +70°C (No Icing and Condensation conditions)
<b>Protection Class</b>	EN 60529 according to IP 20
<b>Mounting Type</b>	Wall Mounted
<b>Dimensions</b>	G100xY100xD56 mm
<b>Weight</b>	130 gr
<b>Control</b>	Internal Potency
<b>Voltage Feed</b>	230 VAC $\pm$ %10, 50/60 Hz
<b>Output</b>	Phase Break Voltage
<b>Güç Power</b>	1 VA
<b>Connection</b>	1,5 mm <sup>2</sup> klemens



Weight 125 g.



# MFS

## ANALOG MONO-PHASE CONTROL DEVICES

MFS-M Serie Monophase Frequency Invertor's general purpose, for wide range applications as in the industries of process-automation, machine-tools, fanpumps, building automation, material handling, automotive, textile, dyeing, printing, packaging, robotics, centrifugal, woodprocessing, foodbeverage, cemical industry, oilgas, public-community, steel-mill, miningretrofit. All products are compliant with international standards.

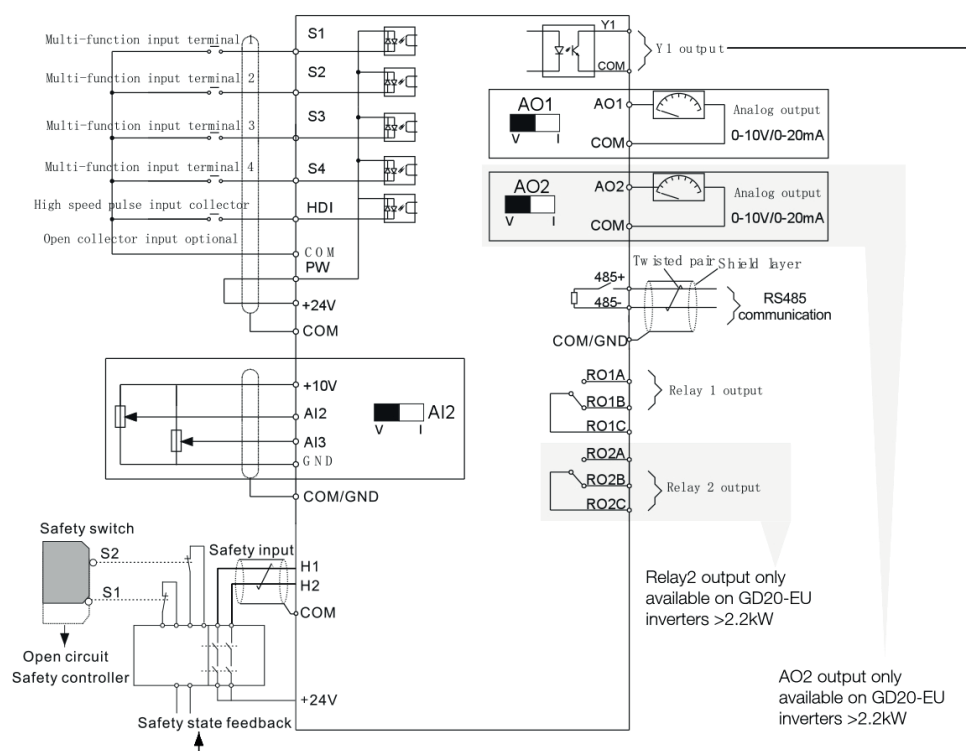
CE,UL individual approvals. Flexible inverter control, dual high resolution analogue inputs, free mapping for all I/O channels. Intelligent AUTOTUNING functions for easy setup.

## Technical Information

Model Type	Max m³/h	W	rpm d/d	Hz	Voltage	Sound dB
MAW-S 200	680	70	2650	50	230	50
MAW-S 250	1500	100	2700	50	230	52
MAW-S 300	2025	163	2550	50	230	54
MAW-S 350	3110	240	2250	50	230	58

### Main Features

- V/F and Sensorless Vector Control
- External keypad for parameters copy
- Common DC bus solution (400V; ≥4kW)
- Starting torque up to 0,5Hz/150%
- Built-in DC reactor for inverters ≥ 18,5kW
- Built-in braking unit (Standard ≤ 37kW, optional ≥ 45kW)
- Standard C3 filter (≥4kW), optional C3 filter (≤2,2kW) and C2 filter





FUNCTION		SPECIFICATION
POWER INPUT	Input Voltage (V)	1 PH 220 V (-15%) ~ 240 V (+10%) 3 PH 220 V (-15%) ~ 240 V (+10%) 3 PH 380 V (-15%) ~ 440 V (+10%)
	Input Current (A)	Refer to the rated value
POWER INPUT	Input Frequency (Hz)	50Hz or 60Hz, allowed range: 47 ~ 63Hz
	Output Motor Capacity (kW)	Refer to the rated value
	Output Current (A)	Refer to the rated value
	Output Voltage (V)	0~input voltage, error<5%
	Output Frequency (Hz)	0~400Hz
TECHNICAL CONTROL FEATURE	Control Mode	SVPWM, SVC
	Adjustable-Speed Ratio	0:100
	Speed Control Accuracy	±0,2% (SVC)
	Speed Fluctuation	±0,3% (SVC)
	Torque Response	<20ms (SVC)
	Torque Control Accuracy	10%
	Starting Torque	0,5HZ/150% (SVC)
	Overload Capability	150 of rated current: 1 minute 180 of rated current: 10 minute 200 of rated current: 1 second
RUNNING CONTROL FEATURE	Frequency Setting Method	Digital setting, analog setting, pulse frequency setting, multi-step speed running setting, simple PLC setting, PID setting, MODBUS communication setting. Shift between the set combination and set channel
	Auto-adjustment of the Voltage	Keep a stable voltage automatically when the grid voltage transients
	Fault Protection	Provide comprehensive fault protection functions: over-current, over-voltage, under-voltage, over-heating, phase loss and overload etc.
PERIPHERAL INTERFACE	Analog Input	1 (AI2) 0~10V/0~20mA and 1 (AI3) - 10~10V
	Analog Output	2 (AO1,AO2) 0~10V/0~20mA (Only 1 AO for inverters ≤2,2kW)
	Digital Input	4 common inputs, the Max. frequency: 1kHz; 1 high speed input, the Max. frequency: 50kHz
	Digital Output	1 Y1 terminal output
	Relay Output	2 programmable relay outputs (Only 1 Relay output for inverters ≤2,2kW) RO1A NO, RO1B NC, RO1C common terminal RO2A NO, RO2B NC, RO2C common terminal Contactor capacity: 3A/AC250V
OTHERS	Mountable Method	Wall and rail mountable
	Braking Unit	≤35kW Standard built-in. 45~110kW Optional built-in (model "-B")
	EMI Filter	Optional filter: meet the degree requirement of IEC61800-3 C2, IEC61800-3 C3
	Temperature of the Running Environment	-10~50°C , Above 40°C, derate 1% for every additional 1°C
	Altitude	<1000m , Above 1000m, derate 1% for every additional 100m.
	Protective Degree	IP20
	Safety	Meet the requirement of CE
	Cooling	Fan cooling