

# MA-118\* series Distributed control system

## MA SERIES DISTRIBUTED CONTROL SYSTEM



**MA-1188S / MA-1189S**  
Stop production

### Specification

Model	MA-1188 MA-1188-T	MA-1188D MA-1188D-T	MA-1189 MA-1189-T	MA-1189D MA-1189D-T
Digital inputs		8		8
Analog inputs		—	4 (able to use in digital specification)	
Digital outputs		4		4
Input voltage range		Digital ON: 4~30 VDC / OFF: 2 VDC(max)	Digital ON: 4~30 VDC / OFF: 2 VDC(max) Analog: 0~10VDC	
Continuous current		Relay: 5A for resistive load, 2A for inductive load; Transistor: 10-60VDC/1.75A(OCP/OTP/UVLO)		
Incoming power		10~30 VDC		
Reserve power		> 10 years		
Operation temperature		−20~+75°C (No freezing)		
Storage temperature		−25~+80°C (No freezing)		
Linking of functions		1024 (max.)		
Real time clock		Yes / > 2 years		
Protocols		Modbus ASCII + Modbus RTU		
Incorporate operator interface		Yes (Modbus interface)		
Expansion maximum I/O		More than 10,000		
Input operating frequency		250KHZ (DI0-DI3)		
Output operating frequency		100KHz		
Message text/ display		4 lines of 12 characters		
Communication port	RS232 × 1	RS485 × 2 + RS232 × 1	RS485 × 2 + RS232 × 1	RS485 × 2 + RS232 × 1
Size (L × W × H)		120 × 77 × 40 mm (with bracket)		

### Features

- FBD + LD System.
- Support start-up screen (108 × 64 pixels)
- Multiple communication port.
- Password protection, copy protection.
- **104 FBD integrated functions, 97 LD integrated functions,** pre-tested functions.
- Linking of 1024 function block is possible.
- Display of message texts, adjust program parameter.
- Integrated data latch.
- Flexibly expandable up to 10000 points.
- Support full modbus protocol.
- Free PC software Mindman Editor + Mindman Utility.

### Order example

MA – 1188 – T



Blank: Relay output  
T: Transistor output

#### MODEL

Model	Type instruction
MA-1188	Digital Inputs
MA-1188D	LCD monitor
MA-1189	Digital & Analog Inputs
MA-1189D	LCD monitor

