

12 Point SR Machine Series



Function & Features:

This intelligent controller, adopting function block programming, having large programming capacity, being freely programmed according to different users and different fields, can run at your desired time table and the RTC accuracy can reach second and makes your time control more accurate. And 128 time sessions can be set mostly, especially suitable for time-control system. Safety password function makes your program absolutely safe. Before writing program, password can be set. And only after entering the correct password, the program can be modified.

It is equipped with a removable, convenient and programmable LCD, providing 64 friendly human-machine interfaces, 32 virtual keys, having the function to display the alarming message and parameter and to modify the parameter. When needed, it can be installed. And when not needed, it can be removed and replaced with an ordinary front panel. Thus the cost will be greatly reduced.

The input can receive not only the digital input but also the analogue input to perform the control and transmission of the temperature, moisture, pressure, flow level unit and so on. It has well-featured and compact design with 8 point input and 4 point output. Equipped with expansion module, it can be expanded into 72 I/O better, and to MAX 112 I/O. It can be connected with telephone voice module and remote control module to perform the notification and alarming function.

And the connection between the host and the module can be Bridge SR-CBA or flexible connection SR-ECBA.

The function is safer and superior.

The machine has short-circuit protection (internal) and relay output protection (external) function, which makes your usage safer and easier.

Free SR programming and monitoring software, makes you program on your PC free. When SR software is updated, you can download from the Internet freely.

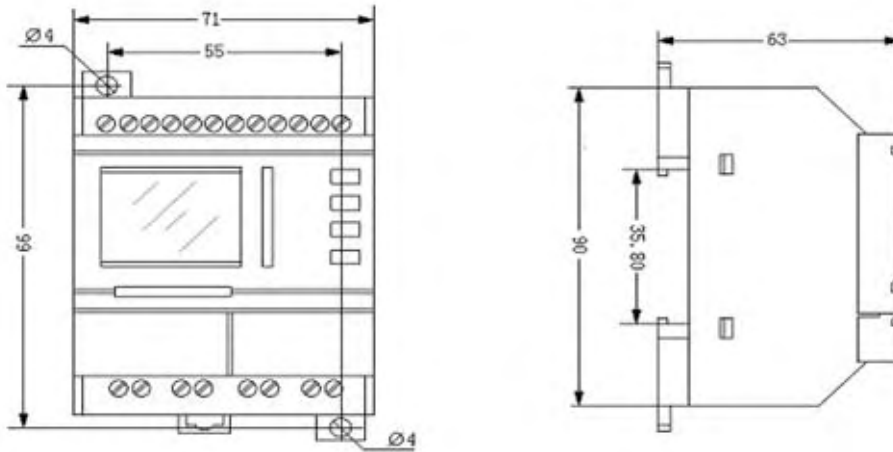
The product has a delicate and compact appearance and a highly integrated design, making your work more conveniently, using the super intelligent space technology.

Technical Data:

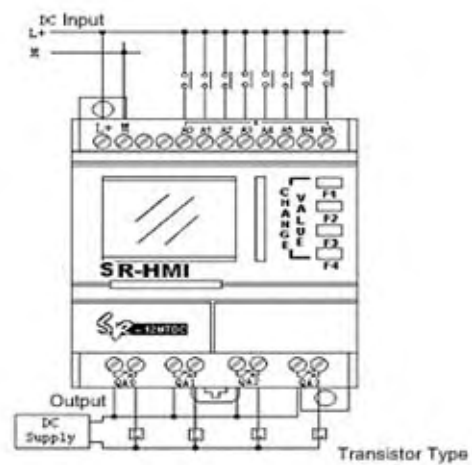
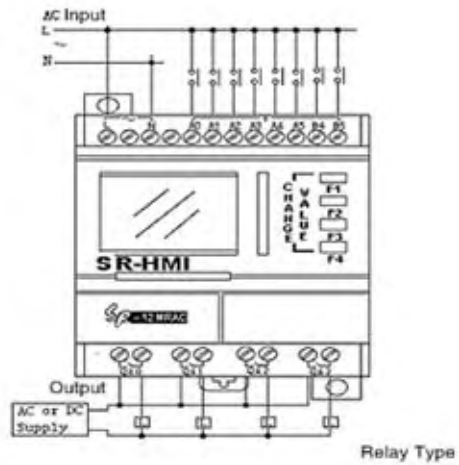
Type Parameter	SR-12MRAC	SR-12MRDC	SR-12MTDC	SR-12MGDC
Power	AC 110V~240V	DC 12V~24V	DC 12V~24V	DC 12V~24V
Input parameter:				
Input No.	8 (A0~A5, B4~B5)	8 (A0~A5, B4~B5)	8 (A0~A5, B4~B5)	8 (A0~A5, B4~B5)
Digital input	8 (A0~A5, B4~B5)	8 (A0~A5, B4~B5)	8 (A0~A5, B4~B5)	8 (A0~A5, B4~B5)
Analogue input	None	6 (A0~A5)	6 (A0~A5)	6 (A0~A5)
Power range	AC 0V~240V	DC 0V~24V (digital) DC 0V~10V (analogue)	DC 0V~24V (digital) DC 0V~10V (analogue)	DC 0V~24V (digital) DC 0V~10V (analogue)
Input signal 0	AC 0V~40V	DC 0V~5V	DC 0V~5V	DC 0V~5V
Input signal 1	AC 85V~240V	DC 10V~24V	DC 10V~24V	DC 10V~24V
Delay from 0 to 1	50ms	50ms	50ms	50ms
Delay from 1 to 0	50ms	50ms	50ms	50ms
Output parameter:				
Output No.	4 (QA0~QA3)	4 (QA0~QA3)	4 (QA0~QA3)	4 (QA0~QA3)
Output type	Relay output	Relay output	Transistor (equivalent NPN) output	Transistor (equivalent PNP) output
Output voltage	AC 0V~240V DC 0V~24V	AC 0V~240V DC 0V~24V	DC 0V~24V	DC 0V~24V
Output current	Resistor load 10A Sensitive load 2A	Resistor load 10A Sensitive load 2A	2A	2A
Response time from 1 to 0	8ms	8ms	DC 10V~24V	DC 10V~24V
Response time from 0 to 1	10ms	10ms	10ms	10ms
Environment temperature:				
Running temperature	0°C~55°C			
Storage/shipment	-40~+70°C			
Switch frequency				
Mechanism	10Hz			
Resistor/light load	2Hz			
Sensitive load	0.5Hz			
Other parameter				
Fixation	Use a standard 35mm DIN rail or screw for installation			
Clock buffer memory at 25°C	80h			
RTC accuracy	Max ±5s/day			
Protection	IP20			
Emission on line	EN55011 (B)			
The main frequency range	47~63Hz			
Function block No.	128			
Program storage capacity	64K			
Isolation intensity	IEC1131			

Installation & Wiring:

Installation Dimensions (mm): Top hat rail Din TS 35mm or screw fixing 2XM3 (diameter of pitch circle 4.00mm)

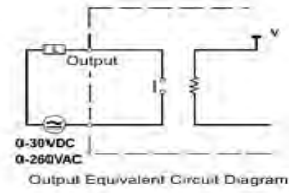
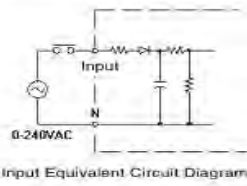


Wiring of the input & output:

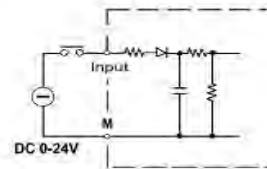
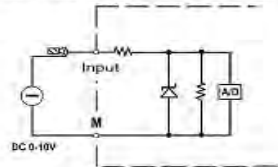


Input & Output Equivalent Circuit

SR-12MRAC Input/Output Equivalent Circuit Diagram

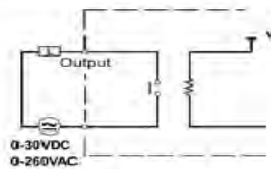


SR-12MRDC Input/Output Equivalent Circuit Diagram



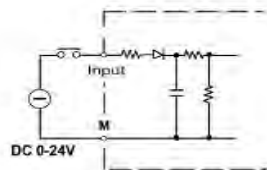
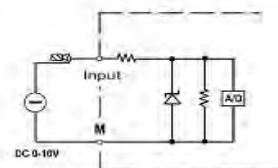
Analogue Input Equivalent Circuit Diagram

Digital Input Equivalent Circuit Diagram



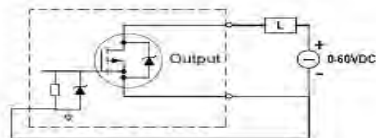
Output Equivalent Circuit Diagram

SR-12MTDC Input/Output Equivalent Circuit Diagram



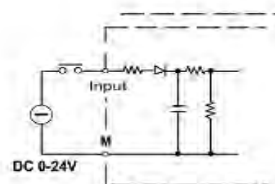
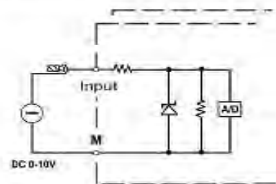
Analogue Input Equivalent Circuit Diagram

Digital Input Equivalent Circuit Diagram



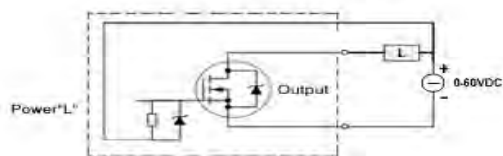
Transistor(NPN) Output Equivalent Circuit Diagram

SR-12MGDC Input/Output Equivalent Circuit Diagram



Analogue Input Equivalent Circuit Diagram

Digital Input Equivalent Circuit Diagram



Transistor (PNP) Output Equivalent Circuit Diagram

Wiring of the machine and the



Flexible Wiring of the machine



Notes:

AC type machine must be connected with AC type voice module and AC type expansion module and AC type remote module and all the input voltage is AC 110V—240V.

DC type machine must be connected with DC type voice module, DC type expansion module and DC type remote module and all the input voltage is DC 12V—24V.

22 Point SR Machine Series



Function & Features:

This intelligent controller, adopting function block programming, having large programming capacity, being freely programmed according to different users and different fields, can run at your desired time table and the RTC accuracy can reach second and makes your time control be more accurate. And 128 time sessions can be

set mostly, especially suitable for time-control system. Safety password function makes your program be

absolutely safe. Before writing program, password can be set. And only after entering the correct password, the program can be modified.

It is equipped with a freely removable, convenient and programmable LCD, providing 64 friendly human-machine

interfaces, 32 virtual keys, having the function to display the alarming message and parameter and to modify

the parameter. When needed, it can be installed. And when not needed, it can be removed and replaced with an ordinary front panel. Thus the cost will be greatly reduced.

The input can receive not only the digital input but also the analogue input to perform the control and transmission of the temperature, moisture, pressure, flow level unit and so on. It has well-featured and

compact design with 14 point input and 8 point output, Equipped with expansion module, it can be better expanded into 82 I/O and expanded MAX.122I/O. It can be connected with telephone voice module and remote control module to perform the notification, and alarming function. And the connection between the machine and the module can be Bridge SR-CBA or flexible connection SR-ECBA. The function is safer and superior.

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Free SR programming and monitoring software, makes you program freely on your PC. When SR software is updated, you can download from the internet freely.

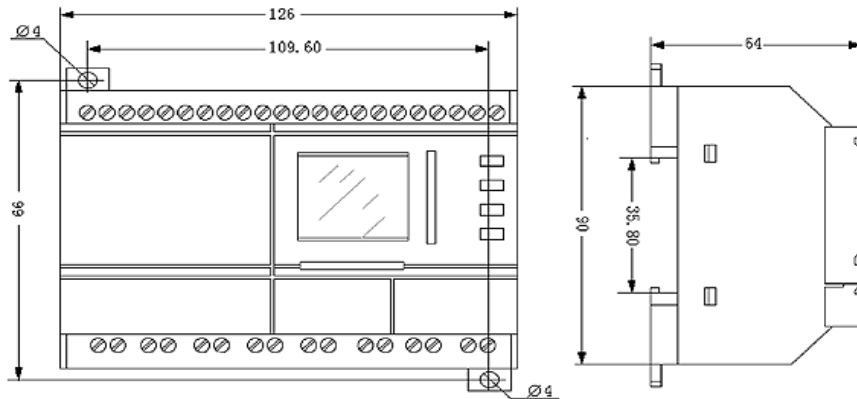
The product is has a delicate and compact appearance and with highly integrated design, making your work convenient (see corrections before).

Technical Data:

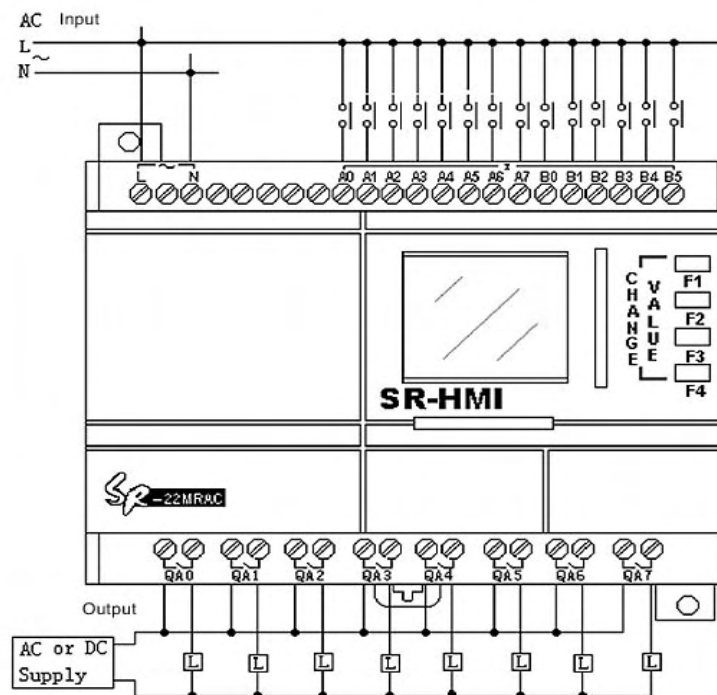
Type Parameter	SR-22RAC	SR-22RDC	SR-22TDC	SR-22GDC
Power	AC 110V~240V	DC 12V~24V	DC 12V~24V	DC 12V~24V
Input Parameter:				
Input No.	14 (A0~A7, B0~B5)	14 (A0~A7, B0~B5)	14 (A0~A7, B0~B5)	14 (A0~A7, B0~B5)
Digital input No.	14 (A0~A7, B0~B5)	14 (A0~A7, B0~B5)	14 (A0~A7, B0~B5)	14 (A0~A7, B0~B5)
Analogue input No.	None	8 (A0~A7)	8 (A0~A7)	8 (A0~A7)
Power range	AC 0V~240V	DC 0V~24V (Digital)	DC 0V~24V (Digital)	DC 0V~24V (Digital)
		DC 0V~10V (Analogue)	DC 0V~10V (Analogue)	DC 0V~10V (Analogue)
Input signal 0	AC 0V~40V	DC 0V~5V	DC 0V~5V	DC 0V~5V
Input signal 1	AC 85V~240V	DC 10V~24V	DC 10V~24V	DC 10V~24V
Lapse time from 0 to 1	50ms	50ms	50ms	50ms
Lapse time from 1 to 0	50ms	50ms	50ms	50ms
Output Parameter:				
Output No.	8 (QA0~QA7)	8 (QA0~QA7)	8 (QA0~QA7)	8 (QA0~QA7)
Output type	Relay output	Relay output	Transistor (equivalent MPN) output	Transistor (equivalent PNP) output
Output voltage	AC 0V~240V	AC 0V~240V	DC 0V~24V	DC 0V~24V
	DC 0V~24V	DC 0V~24V		
Output current	Resistor load 10A	Resistor load 10A	2A	2A
	Sensitive load 2A	Sensitive load 2A		
Response time from 1 to 0	8ms	8ms	8ms	8ms
Response time from 0 to 1	10ms	10ms	10ms	10ms
Environment temperature:				
Running temperature	0°C~55°C			
Storage/ shipment	-40~+70°C			
Switch frequency:				
Mechanism	10Hz			
Resistor/light load	2Hz			
Sensitive load	0.5Hz			
Fixation	Use a standard 35mm DIN rail or screw for installation			
Other parameter:				
Clock buffer memory at 25°C	80h			
RTC accuracy	MAX ±5S/day			
Protection	IP20			
Emission on line	EN55011 (B)			

Installation & Wiring:

Installation Dimensions (mm): Top hat rail Din TS 35mm or screw fixing 2XM3 (diameter of pitch circle 4.00mm)

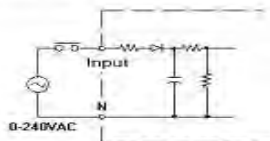


Wiring of the input & output:

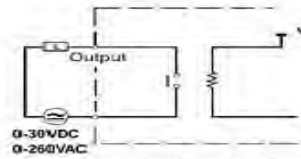


Input & Output Equivalent Circuit Diagram:

SR-22MRAC Input/Output Equivalent Circuit Diagram

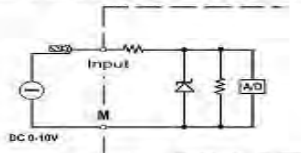


Input Equivalent Circuit Diagram

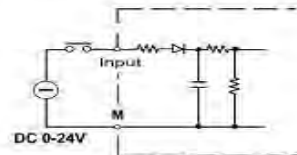


Output Equivalent Circuit Diagram

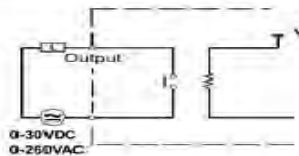
SR-22MRDC Input/Output Equivalent Circuit Diagram



Analogue Input Equivalent Circuit Diagram

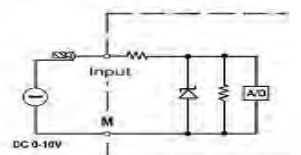


Digital Input Equivalent Circuit Diagram

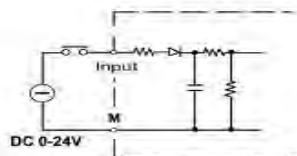


Output Equivalent Circuit Diagram

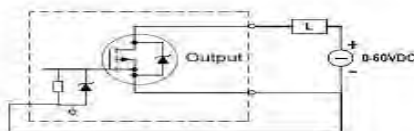
SR-22MTDC Input/Output Equivalent Circuit Diagram



Analogue Input Equivalent Circuit Diagram

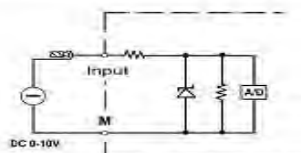


Digital Input Equivalent Circuit Diagram

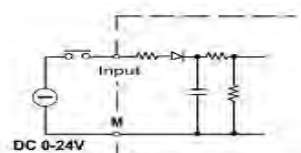


Transistor (NPN) Output Equivalent Circuit Diagram

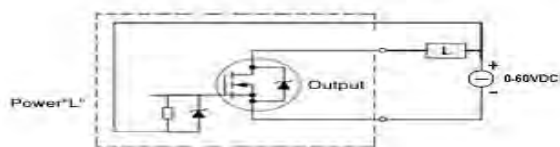
SR-22MGDC Input/Output Equivalent Circuit Diagram



Analogue Input Equivalent Circuit Diagram

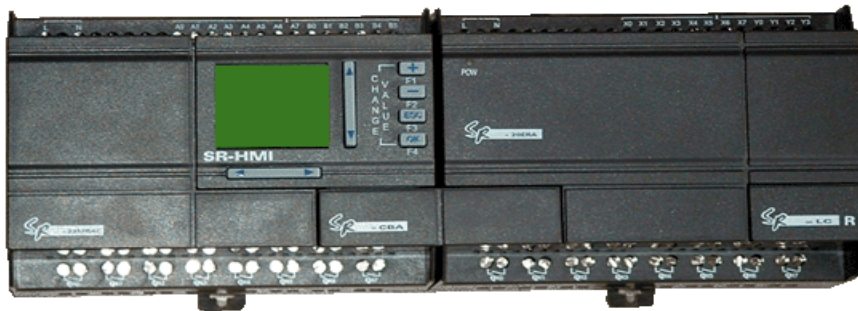


Digital Input Equivalent Circuit Diagram

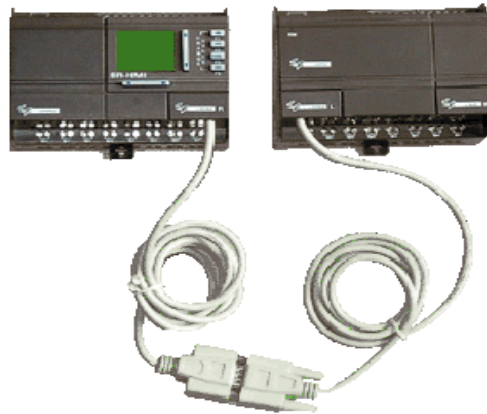


Transistor (PNP) Output Equivalent Circuit Diagram

Wiring of the SR host and the expansion module:



Flexible Wiring of the SR host and the expansion module:







Notes:




AC type machine must be connected with AC type voice module and AC type expansion module and AC type remote module and all the input voltage is AC 110V—240V.

DC type machine must be connected with DC type voice module, DC type expansion module and DC type remote module and all the input voltage is DC 12V—24V.


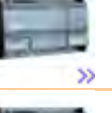
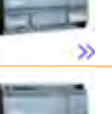
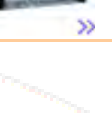
Remote Receiving Module






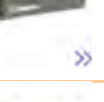
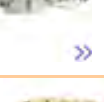
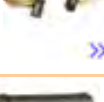


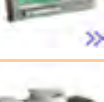



	SR-RCA	AC type Remote Receiving Module	To perform the record, broadcast and voice prompting function.
	SR-RCD	DC type Remote Receiving Module	
	SR-TC	Remote Transmitter	Two units of "AA" battery (DC1.5V)
	SR-EANT	Lengthened Connection Antenna	Set SR-RCA and SR-RCD free from the limitation of the receiving signals.

Telephone voice module

	SR-VPA	AC type telephone voice module	It may automatically dial the alarming telephone and to remote control by the telephone.
	SR-VPD	DC type telephone voice module	
	SR-AUD	Recording wire	The recording wire between the PC sound blaster and the SR-VPA or SR-VPD to record

Expansion Module

	SR-20ERA	20 Point AC Expansion Module	12 Point AC input, 8 point relay output
	SR-20ERD	20 Point AC Expansion Module	12 Point DC input, 8 point relay output
	SR-20ETD	20 Point DC Expansion Module	12 Point DC input, 8 point Transistor(equivalent NPN) output
	SR-20EGD	20 Point DC Expansion Module	12 Point DC input, 8 point Transistor(equivalent PNP) output

Operation Panel			
	SR-HMI	Monitor Operation Panel	64 pages of HMIs, with parameter self-modified and added, removable, convenient and easy to use
	SR-LED	Display panel	Displaying the state of the power, running and the operation state of the CPU
	SR-PC	Decoration Cover	Replacing SR-HMI, greatly reduce your cost
	SR-EHC	Connected set	To remotely connect the SR machine and SR-HMI, to set SR-HMI free from the machine.
	SR-CBA	AC Connection Bridge	Bridge between machine and the expansion, simple, convenient and beautiful
	SR-CBD	DC Connection Bridge	
	SR-ECBA	AC Lengthened Connection Bridge	To remotely connect the SR machine and the expansion module, to set the expansion module free from the machine (one on each side and one pair)
	SR-ECBD	DC Lengthened Connection Bridge	
	SR-LC L	Decoration Cover of the Connection Bridge	Protection connector, simple and beautiful (one on each side and one pair)
	SR-LC R		
	SR-WRT	Program Panel	User program in the field, debug, modify the program, set the time parameter, demarcate the value of analogue A and B.
	SR-CP	Communication Cable	Communication cable between SR and PC, to perform the program, simulation and monitor of the PC over the SR. (profile plug type)
	SR-DCP	Communication Cable	Communication cable between SR and PC, to perform the program, simulation and monitor of the PC over the SR.(frontispiece plug type)
	SR-DUSB	Communication Cable	Communication cable between SR and USB port, to perform the program, simulation and monitor of the PC over the SR.