

20 Point Expansion Module Series
Super Relay Expansion Module

SR-20 point expansion module can be connected to the machine to expand the I/O for 20 points (12 points input, 8 points output). Each SR machine can be connected with three expansion modules maximum at one time, thus 12 Point machine can be expanded to 72 I/O(44 point input and 28 point output) and 22 point machine can be expanded to 82 I/O (50 point input and 32 point output).

The large input & output capacity and superior system function will make your control absolutely more convenient.

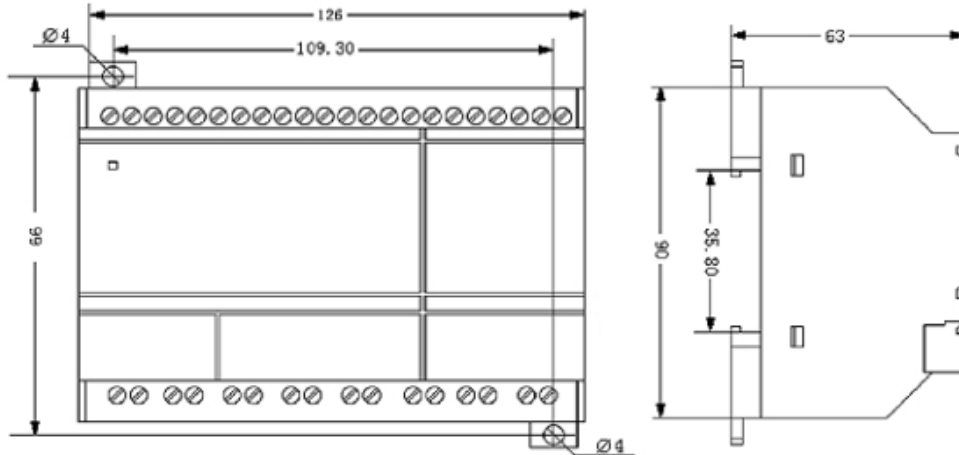
Technical Specifications

Parameter \ Type	LBSR-1320ERA	LBSR-1320ERD	LBSR-1320ETD	LBSR-1320EGD
Power	AC 100V ~ 240V	DC 12V ~ 24V	DC 12V ~ 24V	DC 12V ~ 24V
Input Parameter:				
Input No.	12 (X0~X7,Y0~Y3)	12 (X0~X7,Y0~Y3)	12 (X0~X7,Y0~Y3)	12 (X0~X7,Y0~Y3)
Digital Input No.	12 (X0~X7,Y0~Y3)	12 (X0~X7,Y0~Y3)	12 (X0~X7,Y0~Y3)	12 (X0~X7,Y0~Y3)
Power Range	AC 0V~240V	DC 0V~24V	DC 0V~24V	DC 0V~24V
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 (QX0~QX7)	8 (QX0~QX7)	8 (QX0~QX7)	8 (QX0~QX7)
Output Type	Relay Output	Relay Output	Transistor (Equivalent NPN) Output)	Transistor (Equivalent NPN) 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 Inductive Load 2A	Resistor Load 10A Inductive Load 2A	2A	2A
Response time form 1 to 0	8ms	8ms	8ms	8ms
Response time form 0 to 1	10ms	10ms	10ms	10ms
Enviromon Temperature:				
Running Temperature	0°C ~ 55°C			
Storage/Shipment	-40°C ~ +70°C			

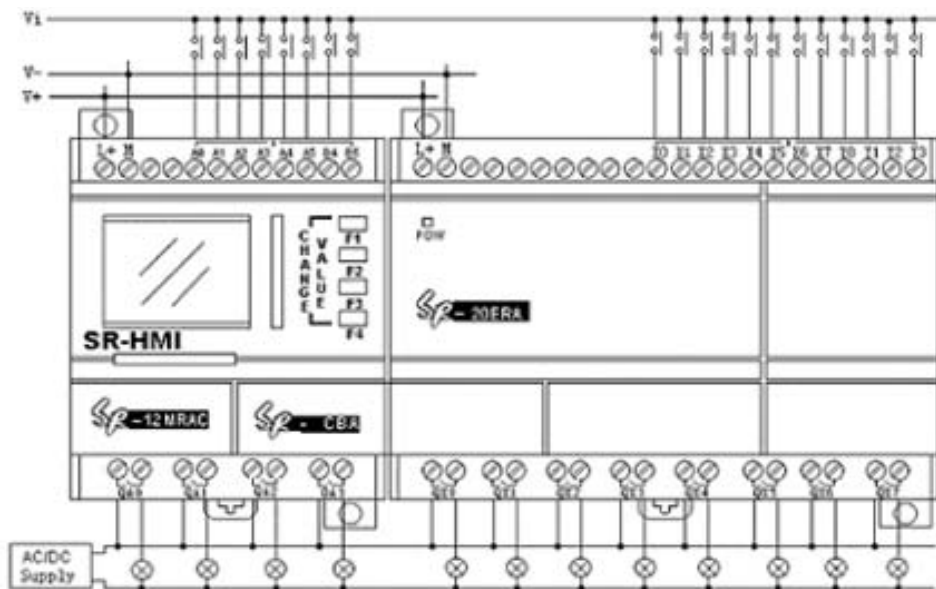
Switch Frequency:	
Mechanism	10Hz
Resistor/Light Load	2Hz
Sensitive Load	0.5Hz
Fixation	Use a standard 35mm DIN rail or screw for installation
Other Parameter:	
Protection	IP20
Emission On Line	EN55011 (B)
The Main Frequency	47 ~ 63Hz
Isolation Intensive	IEC1131

Installation and 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:



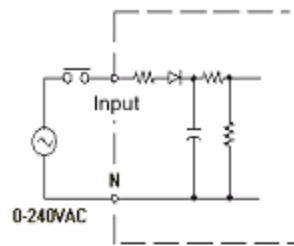
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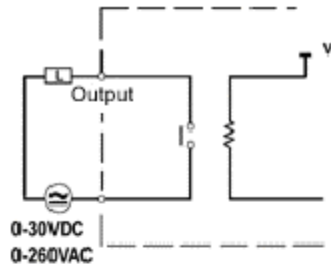
Alcalde # 1822 Col. Miraflores C.P. 44270 Guadalajara, Jal. Mexico
 MX 01 (33) 3854-5975 y 3823-4349 USA 001 (619)- 884-94-93 (San Diego, CA. Office)

Input & Output Equivalent Circuit Diagram:

SR-20ERA Input/Output Equivalent Circuit Diagram

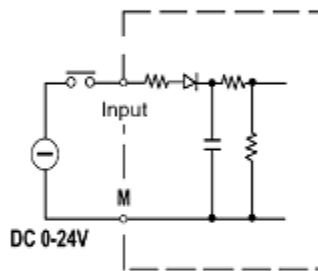


Input Equivalent Circuit Diagram

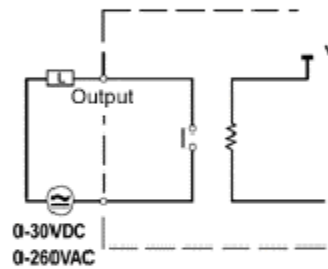


Output Equivalent Circuit Diagram

SR-20ERD Input/Output Equivalent Circuit Diagram

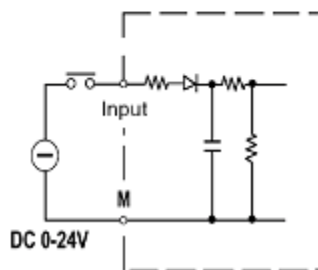


Input Equivalent Circuit Diagram

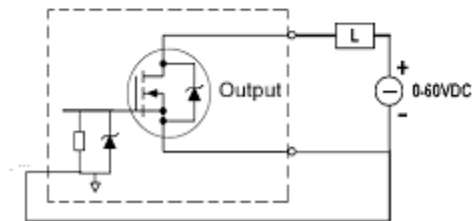


Output Equivalent Circuit Diagram

SR-20ETD Input/Output Equivalent Circuit Diagram



Input Equivalent Circuit Diagram



Transistor Output Equivalent Circuit Diagram

Flexible Wiring of the SR host and the expansion module:



Address Setup:

Expansion modules can be connected to the machine to expand the input & output points; the maximum number of expansion modules is five. When the expansion modules are used, the address of each module must be defined. The designated address range is 1~5. Only after the correct address is set can the control be performed, the address set diagram is shown as follows:



Explanation:

1. The AC type machine can only be connected with AC expansion module and the input voltage is AC 110V ~ 240V
The DC type machine can only be connected with DC expansion module and the input voltage is DC 12V ~ 24V
2. Each one machine can be connected with five expansion modules of the same type
3. The expansion modules connecting together must be allocated with different addresses. And the address cannot be outside of the designated range: (Ext. 1 ~ Ext. 5)
4. The address set must be finished before the power is on. The modification of the address value after power on wouldn't take any effect.
5. After wiring the expansion module and setting the address, particular expansion module, voice module or remote module must be chosen when programming. Otherwise they cannot be programmed. The diagram is shown as follows:

Hardware Configuration

Controller

- SR-12MxAC 8 Input, 4 Output
- SR-22MxAC 14 Input, 8 Output
- SR-12MxDC 8 Input, 4 Output (With Available Analog Input)
- SR-22MxDC 14 Input, 8 Output (With Available Analog Input)

Extended Module

- Remote Control Input
- Voice Modules (Play Message, Dial in and Dial out)
- Ext Module #1 (INPUT: ICO---IC7, IDO---ID3. OUTPUT: QCO---QC7)
- Ext Module #2 (INPUT: IEO---IE7, IFO---IF3. OUTPUT: QEO---QE7)
- Ext Module #3 (INPUT: IGO---IG7, IHO---IH3. OUTPUT: QGO---QG7)
- Ext Module #4 (INPUT: IIO---II7, IJO---IJ3. OUTPUT: QIO---QI7)
- Ext Module #5 (INPUT: IKO---IK7, ILO---IL3. OUTPUT: QKO---QK7)

Schematic Page Size

A4 (297 x 210 mm / 9.7 x 7.2 inch)

OK Cancel

Caution:

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

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