

YM2N/24D5P(Z)22模块—— 5A 700V SSR module

概述 Features

- 调相型 Non zero-cross
- 负载电流至5A Load current up to 5A
- 阻断电压700V Repetitive peak off-state voltage 700V
- 介质耐压2500V Dielectric strength 2500V
- 带工作状态显示 Operating display
- 带导轨快连接安装 Rail fast mount
- 快连接接线端子 Quick-connect terminal

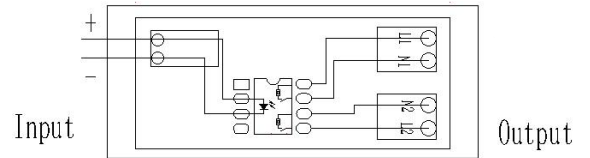


应用 Applications

- 工业控制 Industrial control

打印标志 Marking information

Part number	Package	Marking
YM2N/24D5P22	导轨快速安装	24D5P22
YM2N/24D5Z22	导轨快速安装	24D5Z22



极限值 Absolute maximum ratings (单个SSR)

(Ta=25°C)

特性参数/Parameter		符号/Symbol	测试条件/Test condition	最小值/Min.	典型值/Typ.	最大值/Max.	单位/Unit
输入端/Input	工作电压/Operating voltage	V_{in}		19	24	28.8	V
输出端/Output	阻断电压/Repetitive peak off-state voltage	V_{DRM}/V_{RRM}		700			V
	额定电流/On-state RMS current	$I_{T(RMS)}$	$V_{in}=24V$			5	A
	浪涌电流/Surge current	I_{TSM}	50Hz, 1 cycle		25		A
介质耐压/I/O Dielectric strength *		V_{ISO}	$I_{ISO} \leq 0.3mA$	2500			V_{rms}
工作温度/Operating temperature		T_{opr}		-30		85	°C
储存温度/Storage temperature		T_{stg}		-40		125	°C

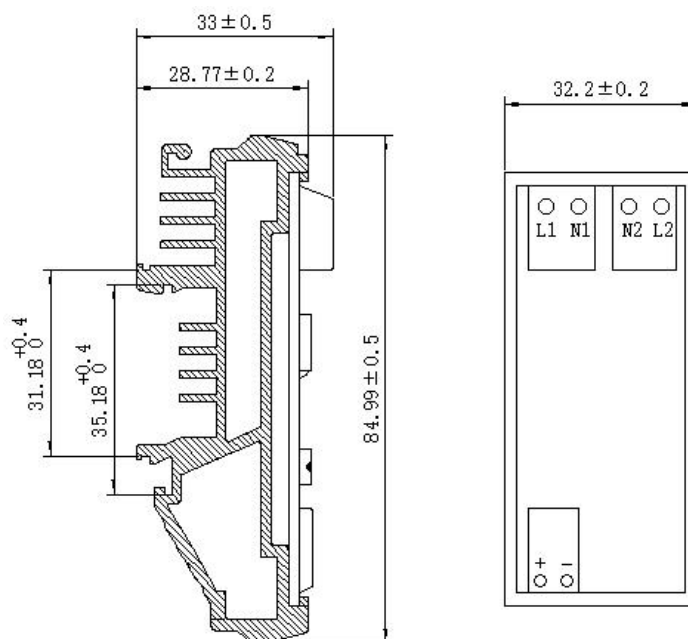
“*”：RH=40 to 60%, T=20~30°C, AC for 1minute.

电参数 Electrical parameters (单个SSR)

(Ta=25°C)

特性参数/Parameter		符号 /Symbol	测试条件 /Test condition	最小 值 /Min.	典型值 /Typ.	最大值 /Max.	单位 /Unit
输入端/Input	输入电流/Input current	I_{in}	$V_{in}=V_{in}+20\%$		14	18	mA
输出端/Output	断态泄漏电流/Output off-state leakage current	I_{DRM}	$V_{DRM} =700V$			10	μA
	断态泄漏电流/Output off-state leakage current	I_{RRM}	$V_{RRM} =700V$			10	μA
耦合特性 /Transfer characteristics	接通电压/Turn on voltage	V_{on}			8	18	V
	关断电压/Must release voltage	V_{off}		1.2			V
	导通电压降/Output on-state voltage drop	V_T	$V_{in}=24V, I_1=2A$		1.2	1.4	V
	过零电压/Zero-cross voltage (仅对过零型)	V_{zc}			15	30	V
	导通时间/Turn on time	T_{on}	$V_{in}=24V, I_1=600mA$			1	ms
	关断时间/Turn off time	T_{off}	$V_{in}=24V, I_1=600mA$			1+1/2cycle	ms

外形尺寸 Outline dimension :mm



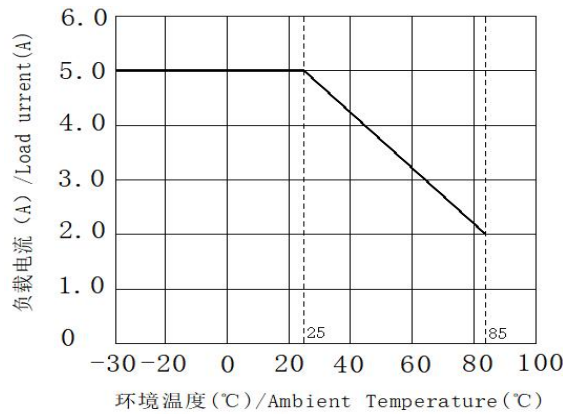
订货信息 Ordering information

订货信息/Ordering information							
	Y	M	2N	24D	5	P	22
公司商标代号 Company symbol							
交流输出型 SSR 模组 AC SSR Output module							
控制电路数 Number of control circuits 2: 2 组							
输入电压 Input voltage: 24Vdc							
负载电流 Load current: 5-5A							
P: 调相型 Non zero-cross Z: 过零型 Zero-cross							
负载电压 Load voltage: 22-220Vac							

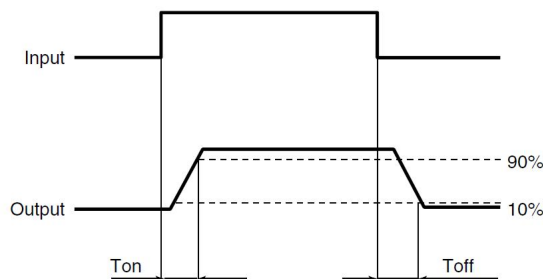
特性曲线 Characteristic data

1. 负载电流与环境温度关系曲线

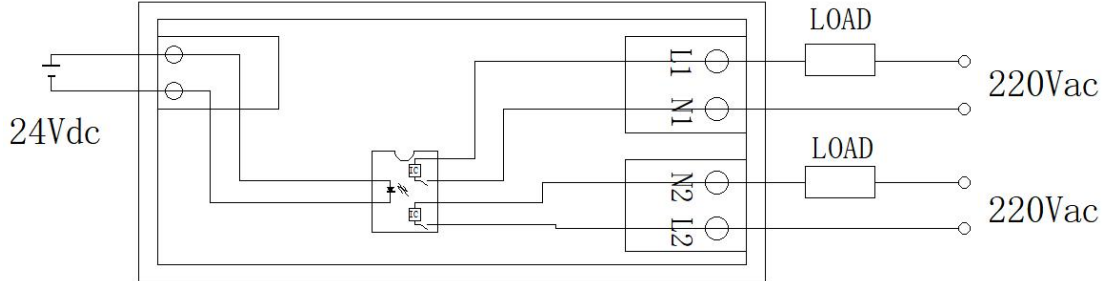
Load current VS. ambient temperature



接通和关断时间关系 Turn on and turn off time



接线图 Wiring diagram



注意事项 Notes

- 工作环境温度超过 25℃ 时请降额使用。参见特性曲线 1。
When ambient temperature is above 25℃, the load current must be reduced. (see characteristic data)
- 继电器接线时，务必保证输入端极性的正确，以免损坏继电器。
Ensuring the polarity is correct when connecting the input lines, otherwise the wrong connection will damage the relay.

关于防静电对策 Cautions for static electricity

- 操作 MOS 输出继电器的作业人员，请穿戴防静电工作服，通过 500kΩ~1MΩ 左右的保护电阻，实施人体接地。
a. Employees handling relays should wear anti-static clothes and should be grounded through protective resistance of 500kΩ to 1MΩ.
- 请在作业台上装有导电性的金属板或具有防静电的专用板，并对测量仪器和治具等实施接地。
b. A conductive metal sheet should be placed over the work table. Measuring instruments and jigs should be grounded.
- 组装时使用的设备等也应正确的接地。
c. Devices and equipment used in assembly should also be grounded.
- 对印刷电路板和机器进行包装时，请避免使用发泡苯乙烯、聚乙烯等带电性的高分子材料。
d. When packing printed circuit boards and equipment, avoid using high-polymer materials such as foam styrene, plastic, and other materials which carry an electrostatic charge.
- 对 MOS 输出继电器进行储存和搬运时，请在不易产生静电的环境(例如湿度 45~60%)中通过导电性包装材料进行保护。
e. When storing or transporting relays, the environment should not be conducive to generating static electricity (for instance, the humidity should be between 45 and 60%), and relays should be protected using conductive packing materials.