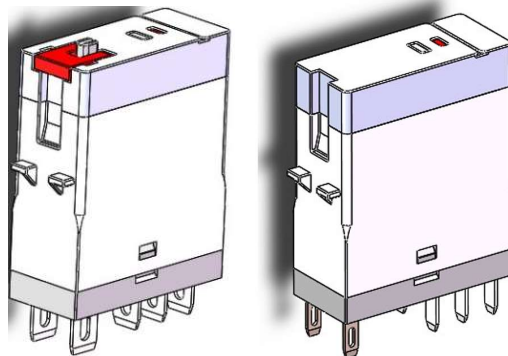


ST140-N/NB

工业控制继电器 Industry Control Relay

特性 Features

- 1组16A、两组12A负载开闭能力 1 Pole 16A、2Poles12A switching capability
- 承受 200A 冲击电流 Matching inrush current 200A
- 机械寿命 1000 万次以上 M-life 10KK cycles
- 空间距离大于 6.4mm，爬电距离大于 8mm Clearance distance: >6.4 mm, and creepage distance: >8 mm.
- 带指示灯和带测试按钮可选 LED Indicator and test button available
- UL绝缘系统:F级 UL insulation system: Class F
- 环保产品(符合RoHS标准) Environmental friendly product (RoHS compliant)
- 满足插座配套使用 Socket available
- 交流线圈和直流线圈可选 AC coil and DC coil available



典型应用 Application

- 工业设备/继电器模组/灯/逆变器/不间断电源/智能家居等 Industrial Equipment/Relay module/Lighting/Inverters/UPC/Smart home, etc

触点参数 Contact Data

触点形式 Contact Arrangement	1C	2C
触点额定 Contact Rating	NO: 16A 277VAC, COSΦ =1.0 NO: 16A 30VDC, L/R=0 NC: 16A 277VAC, COSΦ =1.0 NC: 16A 30VDC, L/R=0	NO: 12A 277VAC, COSΦ =1.0 NO: 10A 277VAC, COSΦ =1.0 NO: 12A 24VDC, L/R=0 NO: 10A 30VDC, L/R=0 NC: 12A 277VAC, COSΦ =1.0 NC: 10A 277VAC, COSΦ =1.0 NC: 12A 24VDC, L/R=0 NC: 10A 30VDC, L/R=0
最大切换电压 Max. Switching Voltage	277VAC/30VDC	
最大切换电流 Max. Switching Current	16A	12A
触点材质 Contact Material	银合金 Ag alloy	
接触电阻 Contact Resistance	Max.100mΩ (1A 5VDC)	
动作/释放时间 Operate Time/Release Time	DC Coil: ≤15ms/ ≤10ms AC Coil: ≤15ms/ ≤15ms	
最小切换负载 Min. switching load	100mA 10V	
电耐久性 Electrical Endurance	on : off=1.5s : 1.5s, @23°C CO: 16A 250VAC/24VDC 3*10 ⁴ ops 阻性负载 R-Load NO: 16A 250VAC/24VDC 1*10 ⁵ ops 阻性负载 R-Load NC: 16A 250VAC/24VDC 5*10 ⁴ ops 阻性负载 R-Load	on : off=1.5s : 1.5s, @23°C CO: 12A 250VAC 1*10 ⁴ ops 阻性负载 R-Load CO: 10A 250VAC 3*10 ⁴ ops 阻性负载 R-Load NO/NC: 12A 250VAC/24VDC 3*10 ⁴ ops 阻性负载 R-Load NO:10A 250VAC/24VDC 1*10 ⁵ ops 阻性负载 R-Load NC: 10A 250VAC/24VDC 5*10 ⁴ ops 阻性负载 R-Load
机械耐久性 Mechanical Endurance	1*10 ⁷ ops.	
最大切换功率 Max. Switching Power	4430VA/480W	3324VA/240W

性能参数 Characteristics

绝缘电阻 Insulation Resistance		1000MΩ Min (at 500VDC)
介质耐压 Dielectric Strength	断开触点间 Between Open Contacts	1000Vrms 1min
	触点组间 Between Contact sets	3000Vrms 1min
	线圈与触点间 Between Coil and Contact	5000Vrms 1min
温度范围 Temperature Range		-40~+85°C
湿度 Ambient Operating Humidity		5% ~ 85%RH
振动 Vibration Resistance		10Hz-55Hz, at double amplitude 1mm 频率 10Hz-55Hz, 双振幅 1mm
冲击 Shock	稳定性 Functional	10G
	强度 Destructive	100G
重量 Weight		Approx.19g

ST140-N/NB 工业控制继电器 Industry Control Relay Relay

线圈参数 Coil Data (0.53W)	
线圈电压范围 Coil Voltage Range	3~110 VDC
容许最大电压 Max. Continuous	额定电压的120% 120% of Rated Voltage
线圈绝缘等级 Coil Insulation System	Class F
额定线圈功率 Coil Rating Power	约Approx. 0.53W DC110V(0.53-0.6W)

线圈参数 Coil Data (1.2VA)	
线圈电压范围 Coil Voltage Range	6~240 VAC
容许最大电压 Max. Continuous	额定电压的110% 110% of Rated Voltage
线圈绝缘等级 Coil Insulation System	Class F
额定线圈功率 Coil Rating Power	约Approx. 1.0-1.4VA

注:

a) 所有数值均为在环境温度+23℃下未预通电的线圈 All the performance data are for coils that are not pre energized at 23℃ ambient temperature.

线圈规格 Coil Voltage Specifications(0.53W)			
额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	线圈电阻 Coil Resistance
VDC	VDC	VDC	Ω(±10%)
3	2.40	0.15	17
5	4.00	0.25	47
6	4.8	0.30	67
9	7.2	0.45	152
12	9.6	0.60	270
15	12.0	0.75	420
18	13.5	0.90	610
24	14.4	1.20	1080
36	28.8	1.80	2445
48	38.4	2.40	4345
60	48.0	3.00	6790
110	88.0	5.50	22800

线圈规格 Coil Voltage Specifications(1.2VA)			
额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	线圈电阻 Coil Resistance
VAC	VAC	VAC	Ω(±10%)
6	4.8	0.6	19
12	9.6	1.2	72
24	19.2	2.4	290
48	38.4	4.8	1200
60	48.0	6.0	1800
110	88.0	11.0	6000
120	96.0	12.0	6000
110/115	88.0/92.0	11.0/11.5	6000
220	176	22.0	23000
230	184	23.0	23000
240	192	24.0	23000
220/240	176/192	22.0/24.0	23000

注:

a) 以上值为初始值 All the performance data are initial values.

b) 线圈电阻是在线圈温度23℃，公差为±10% Coil resistance is tested at 23℃ ambient temperature, ±10% tolerance.

型号命名标准 Model Number Legend

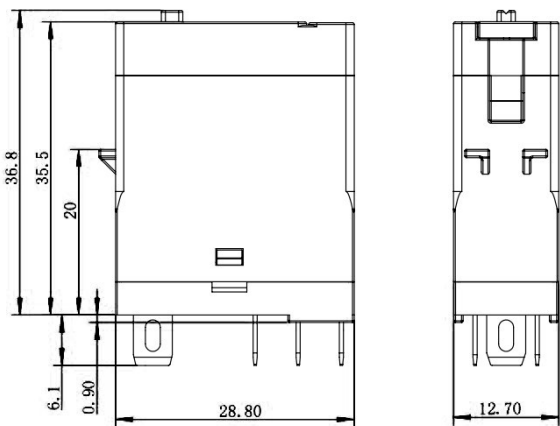
	ST140	-12	-2C	F	-NB	XXX	/DC12V
基本型号 Basic Type:							
ST140							
触点负载 Contact Rating:							
12: 12A; 16: 16A							
触点结构 Contact Arrangement:							
1C: 1组转换 1 Form C (只16A Only for 16A)							
2C: 2组转换 2 Form C (只12A Only for 12A)							
绝缘等级 Insulation class:							
F: F级 Class F							
指示灯 Indicator:							
N: 发光指示功能 Led indicator							
NB: 发光指示和测试按钮功能 Led indicator & Test Button Sealed							
特殊特性 Special Characteristic:							
Blank:标准型Standard; XXX: 客户特殊特性号 Customer Special Feature Number							
线圈电压 Coil Voltage:							
3, 5, 6, 9, 12, 15, 18, 24, 36, 48, 60, 110VDC							
6, 12, 24, 48, 60, 110, 120, 110/115, 220, 230, 240, 220/240VAC							

ST140-N/NB 工业控制继电器 Industry Control Relay Relay

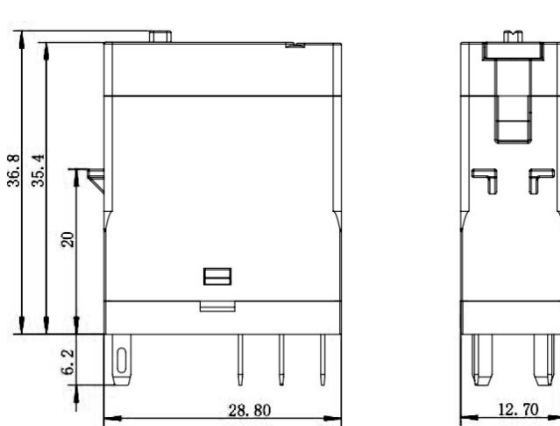
外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

外形尺寸 Outline Dimensions

16A 1C型 16A 1 Form C Type

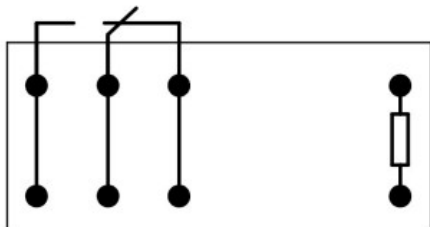


12A 2C型 12A 2 Form C Type

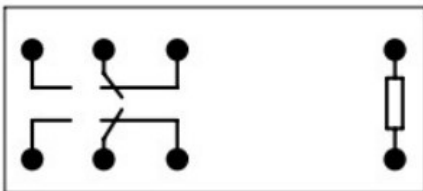


接线图 Wiring Diagram Bottom View

16A 1C型 16A 1 Form C Type



12A 2C型 12A 2 Form C Type



注 Note:

未注尺寸公差 Unspecified tolerance : <1mm: ± 0.2 mm, 1~5 mm: ± 0.3 mm, >5mm: ± 0.5 mm ;

安装孔尺寸中未注尺寸公差为 ± 0.1 mm PC board layout dimensions hadn't specified tolerance is ± 0.1 mm.

免责声明:

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Disclaimer:

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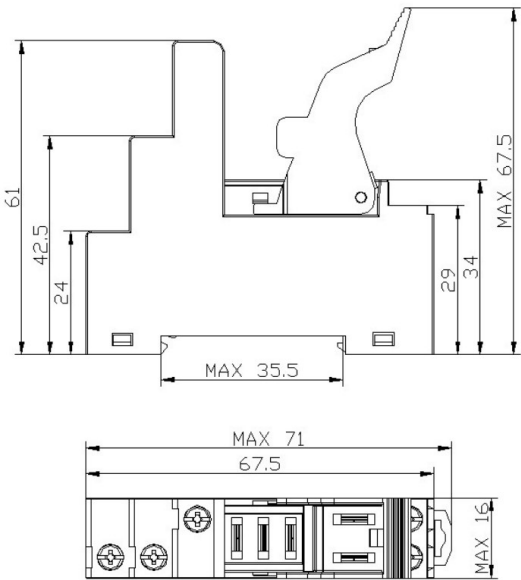
插座命名标准 Socket Number Legend

	ST140	-08E		,XXX
基本型号 Base Type:	ST140			
插座型号 Socket Type:	05E: 05E系列 05E Series (只1C型 Only for 1 Form C Type)			
	08E: 08E系列 08E Series (只2C型 Only for 2 Form C Type)			
安装类别 Mounting Classes:	Blank: 35mm 导轨 35mm DIN Rail			
特殊特性 Special Characteristic:	Blank:标准型Standard; XXX: 客户特殊特性号 Customer Special Feature Number			

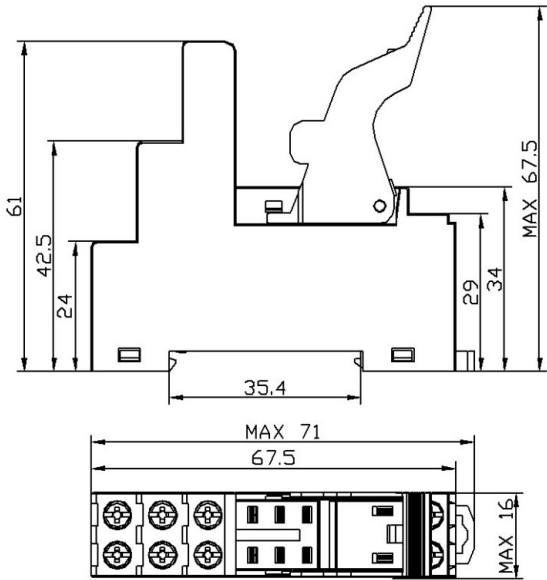
外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

外形尺寸 Outline Dimensions

05E

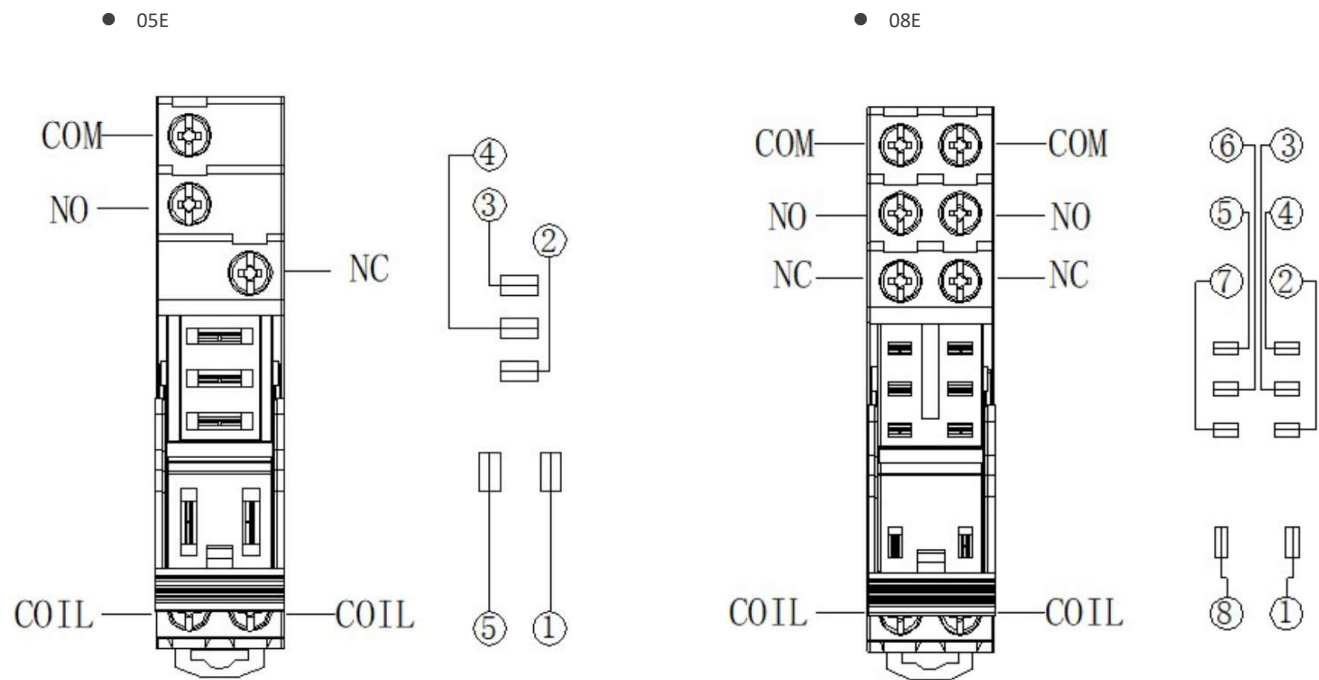


08E



■ 外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

◆ 插座接线图 Socket Wiring Diagram Top view



注 Note:
未注尺寸公差 Unspecified tolerance : <1mm: ± 0.2 mm, 1~5 mm: ± 0.3 mm, >5mm: ± 0.5 mm ;
安装孔尺寸中未注尺寸公差为 ± 0.1 mm PC board layout dimensions hadn't specified tolerance is ± 0.1 mm.

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