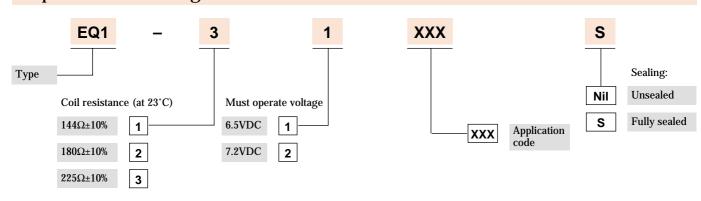


# **Automotive Power Relay**

- Pin compatible with MR301/SRMA
- Low profile with high performance
- Light weight
- Low cost



#### Options and ordering codes



Application		Part number	
Motor Standard		EQ1-31000S	
	Jump start	EQ1-11040S	
Lamp		EQ1-22111S	
		EQ1-11111S	

at 25°C

#### **Specifications**

		Motor	Lamp/Condenser		
Contact form		1C (SPDT)			
Contact rating Max. switching voltage		16VDC			
	Max. switching current	35A (at 16VDC)			
	Contact resistance	Typical 5mΩ (measure	ed at 6VDC, 7A) initial		
Contact material		Silver oxide complex alloy			
<b>Operate Time (exclud</b>	ing bounce)	10ms maximum (at nominal voltage) with diode			
Release time (excludit	ng bounce)	10ms maximum (at nominal voltage) with diode			
Nominal operate power	er	640mW	800mW		
Insulation resistance		100MΩ at 500VDC			
Breakdown voltage	Between open contact	500VAC (for 1 minute) 500VAC (for 1 minute)			
	Between contact and coil				
Shock resistance		10G (misoperation), 100G (destructive failure)			
Vibration resistance		4.4G (misoperation) 4.4G, 200h (destructive failure)			
Ambient temperature		-40 to +85°C			
Coil temperature rise		60°C/W			
Life expectancy	Mechanical	$1 \times 10^{6}$ operations $100 \times 10^{3}$ operations			
	Electrical Motor : 25A lock Lamp : 108W Tungsten Condenser : 70A peak				
Weight		Approximately 7.5G	Approximately 10G		

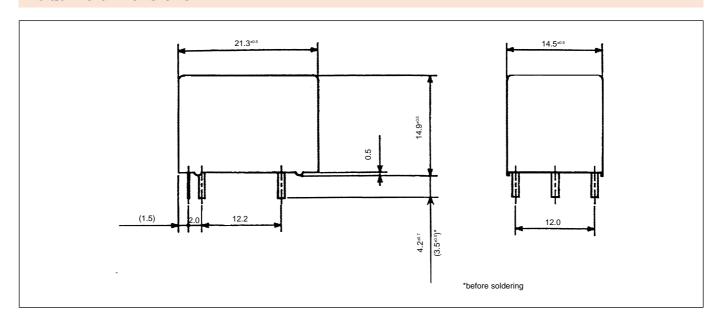


## Coil specification EQ1

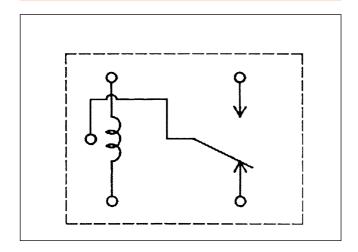
at 25°C (77°F)

Part numbers	Nominal Voltage (VDC)	Coil resistance (Ω±10%)	Must Operate voltage (VDC maximum)	Must Release voltage (VDC minimum)	Nominal Operate power (mW)
EQ1-31000S	12	225	6.5	0.9	640
EQ1-11040S	12	225	6.5	0.9	640
EQ1-22111S	12	180	7.2	0.9	800
EQ1-11111S	12	180	7.2	0.9	800

## Outline dimensions mm



## Schematic: bottom view



## PCB pad layout (mm) bottom view

