



## GENERAL CONTROL RELAY ETR EMI-1P SERIES

### ■ FEATURES

- Slim size with 12A rated loaded.
- Low power consumption; AC/ DC coil available.
- Proper insulation distance with 5,000VAC dielectric strength between contact and coil.
- UL Class F insulation available.
- In accordance with IEC 60335-1 and IEC 60730-1.
- Halogen Free series available.
- Comply with RoHS and REACH regulations.

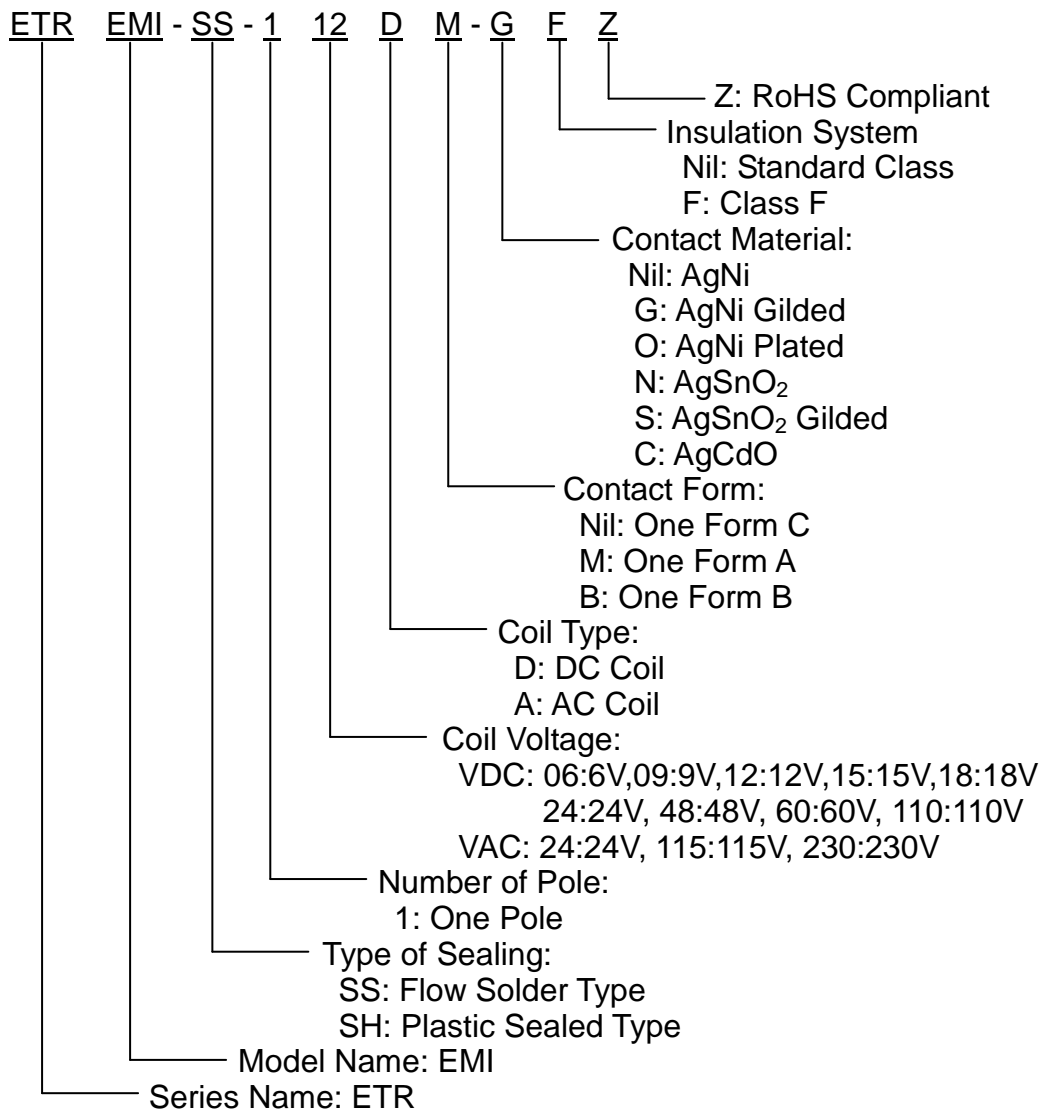
### ■ SPECIFICATIONS

Contact Resistance	Max. 100mΩ at initial value. @1A,6VDC
Contact Capacity	12 Amps at 250VAC Cosφ=1 12 Amps at 30VDC L/R=0
Operate Time	12m Sec. Max. (DC coil only) 20m Sec. Max. (DC coil only)
Release Time	8m Sec. Max. (DC coil only) 20m Sec. Max. (AC coil only)
Dielectric Strength	Between coil & Contact: 5000VAC at 50/60Hz for one minute Between Contacts: 1000VAC at 50/60Hz for one minute
Insulation Resistance	100MΩ Min. at 500VDC

### ■ COIL SPECIFICATION AT 20°C

Coil Sensitivity	Nominal Voltage	Nominal Current (mA)		Coil Resistance (Ω±10%)	Power Consumption (W)		Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max. Allowable Voltage (VDC)
		50Hz	60Hz		50Hz	60Hz			
EMI DC Coil	6	66.7		90	Abt. 0.4		80% Max.	5% Min.	130%
	9	44.6		202					
	12	33.3		360					
	15	26.6		560					
	18	22.3		810					
	24	16.7		1,440					
	48	8.7		5,520					
	60	8.2		7,340	Abt. 0.5		80% Max.	5% Min.	130%
110	4.1		26,530						
EMI AC Coil	24	29.75	25.35	350	0.71	0.61	80% Max.	15% Min.	130%
	115	7.65	6.3	8,100	0.88	0.73			
	230	3.42	2.72	32,500	0.79	0.63			

## ■ PART NUMBER SYSTEM



**\*Marking without: "ETR" & "Z".**

**ETR EMI-SH-124A**



**■ DIMENSIONS** ( $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.1\text{mm}$ )

