



**Rely on ECE's Relays,  
and You Always Relax!**

## GENERAL CONTROL RELAY ETR MI/MIH SERIES

### ■ FEATURES

- Slim type with 16A rated load.
- 8 mm insulation distance.
- Dielectric strength 5,000V and surge strength up to 10,000V.
- UL Class F insulation available.
- High sensitivity DC coil type of low power consumption available.
- Halogen Free series available.
- Comply with RoHS and REACH regulations.
- Safety standard & File number: UL&C-UL E141060 / TUV(MI) R09552084  
TUV(MIH) R09854160 / VDE(MI-L/LM/D/DM TYPE) 40013086

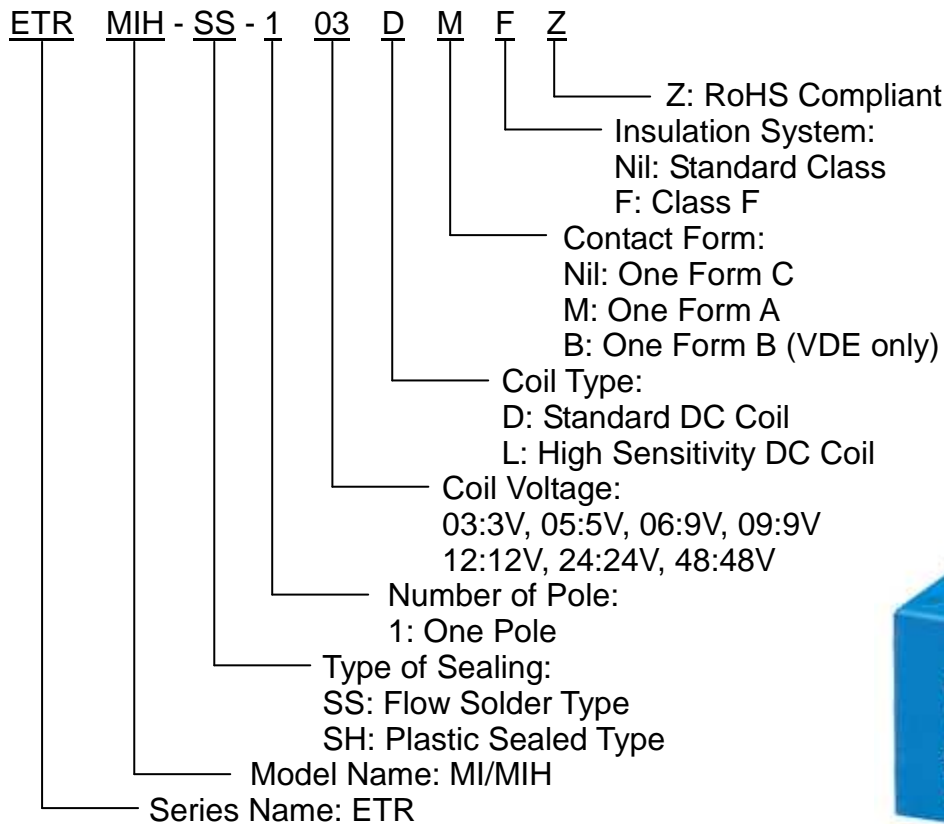
### ■ SPECIFICATIONS

Contact Resistance	Max. 100mΩ at initial value. @1A,6VDC	
Contact Capacity	MI	10 Amps at 250VAC Cosφ=1 10 Amps at 30VDC L/R=0
	MIH	16 Amps at 240VAC Cosφ=1 16 Amps at 24VDC L/R=0
Operate Time	15m Sec. Max. (D Type) 20m Sec. Max. (L Type)	
Release Time	8m Sec. Max.	
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 (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max. Allowable Voltage (VDC)
MI/MIH D/DM/DB	3	240	12.5	Abt. 0.72	80% Max.	5% Min.	130%
	5	138.9	36				
	6	120	50				
	9	78.3	115				
	12	60	200				
	24	29.3	820				
MI/MIH L/LM/DB	3	176.5	17	Abt. 0.54	80% Max.	5% Min.	130%
	5	106.4	47				
	6	88	68				
	9	58	155				
	12	54.4	270				
	24	21.8	1,100				
	48	10.9	4,400				

## ■ PART NUMBER SYSTEM



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

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

