



## GENERAL CONTROL RELAY ETR EMR SERIES

### ■ FEATURES

- Dielectric Strength up to 4,000VAC.
- 8mm safety distance between coil and contact.
- Two pinning types available: 3.2 and 5.0mm.
- In accordance with IEC 60335-1 and IEC 60730-1.
- Comply with RoHS and REACH regulations.

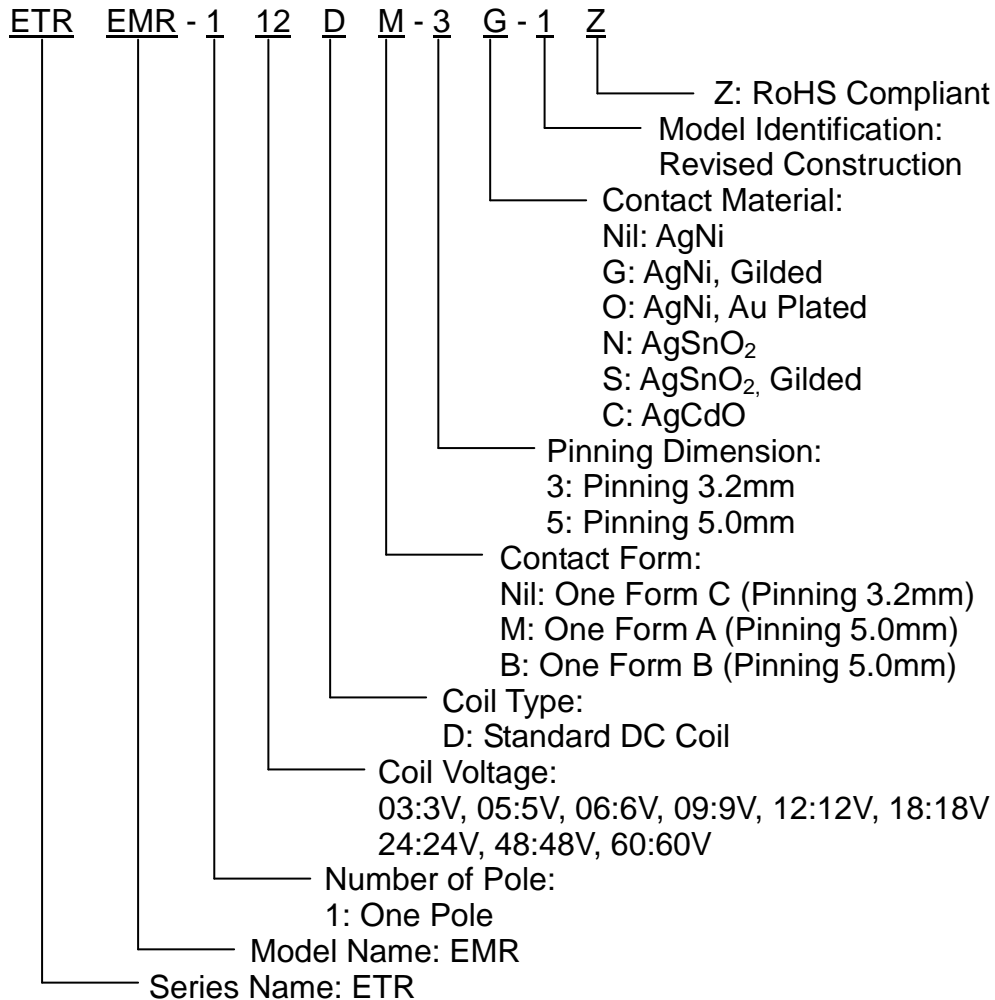
### ■ SPECIFICATIONS

Contact Resistance	Max. 100mΩ at initial value. @1A,6VDC
Contact Capacity	8 Amps at 250VAC Cosφ=1 5 Amps at 30VDC L/R=0
Operate Time	12m Sec. Max.
Release Time	4m Sec. Max.
Dielectric Strength	Between coil & Contact: 4000VAC at 50/60Hz for one minute Between Contacts: 1000VAC at 50/60Hz for one minute
Insulation Resistance	1000MΩ 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)
EMR	3	73	41	Abt. 0.22	EMR-D-3-1 80% Max.  EMR-DM(B)-5-1 75% Max.	5% Min.	135%
	5	44.2	113				
	6	36.6	164				
	9	24.4	368				
	12	18.3	650				
	18	12.2	1,475				
	24	9.2	2,620				
	48	5.2	9,210				
	60	3.7	16,364				

## ■ PART NUMBER SYSTEM



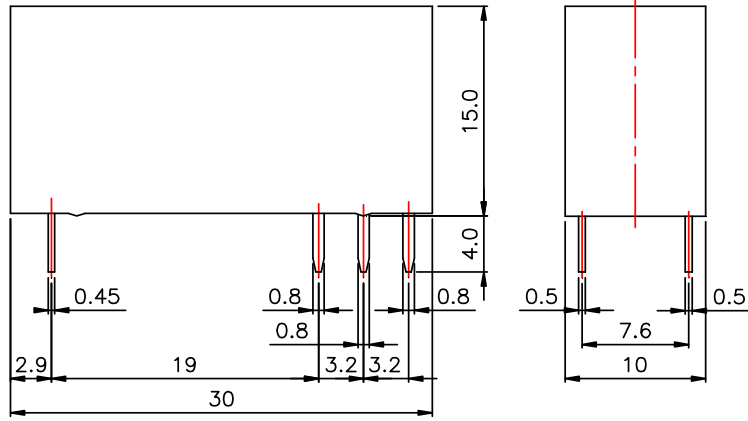
\*Marking without: "ETR" & "Z".

**ETR EMR-112D-3N**

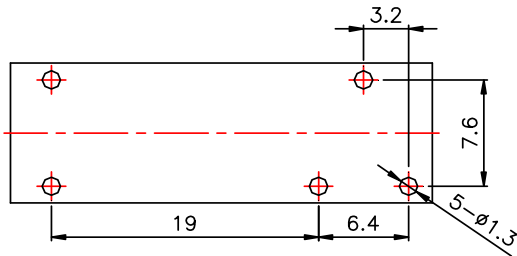


**DIMENSIONS** ( $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.1\text{mm}$ )

ETR EMR-D-3

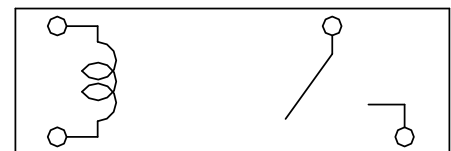
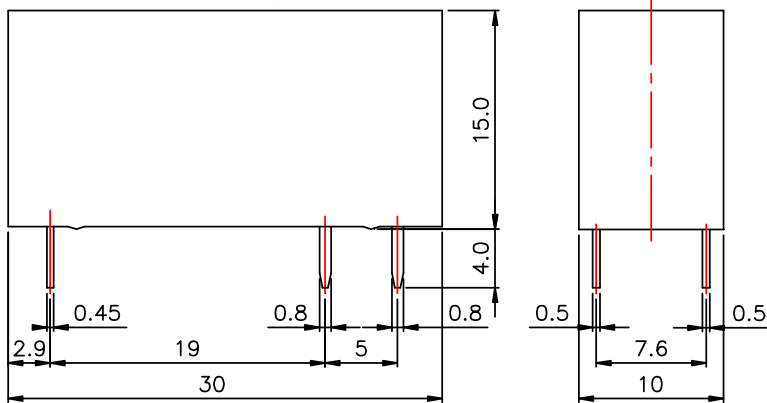


One Form C  
BOTTOM VIEW



P.C.B LAYOUT

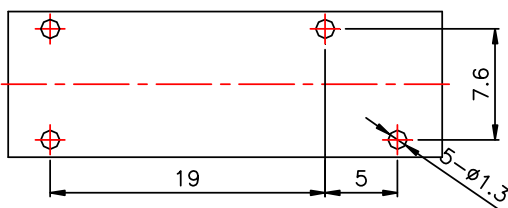
ETR EMR-DM-5/ETR EMR-DB-5



One Form A



One Form B  
BOTTOM VIEW



P.C.B LAYOUT