# ESM series

Ordering information

-10 -000





- ①Model Name ②Rated Current
- (3)Line to ground capacitor code: See table 1.1.

table1.1 Line to ground capacitor code

	Code	Leakage Current (Input 125/250V 60Hz)	Line to ground capacitor (nominal value)	
	000	5 μ A/ 10 μ A max	Not Provided	
	101	12.5 μ A/ 25 μ A max	100pF	
	221	25 μ A/ 50 μ A max	220pF	
Ì	331	37.5 μ A/ 75 μ A max	330pF	
	471	50 μ A/100 μ A max	470pF	

- When the line to ground capacitor code is different, the attenuation characteristic is different.
- **4**Options
  - D:DIN rail installation type
  - $\boldsymbol{\ast}$  The dimensions change when the option is set. Refer to External view.

## Features of ESM series

# Small, Low leakage current type(1-Stage filter)

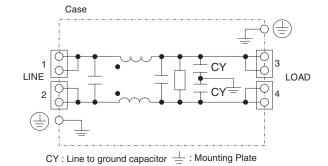
- · Small EMI/EMC Filters that change input-output terminal and protection earth terminal of EA series into screwless terminal type
- · Single Phase 250VAC

· Torque management is unnecessary with screwless

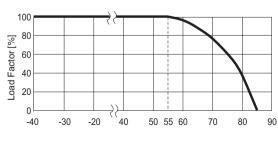
# **Specifications**

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No.	Items	ESM-03-000	ESM-06-000	ESM-10-000	ESM-16-000
1	Rated Voltage[V]	AC 1 φ 250 / DC250			
2	Rated Current[A]	3	6	10	16
3	Test Voltage (Terminal-Mounting Plate)	2,500 VAC (Cutoff Current = 20mA), 1minute at room temperature and humidity			
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 500M $\Omega$ min at room temperature and humidity			
5	Leakage current 125/250V 60Hz	5μA/10μA max			
6	DC registance	180m $\Omega$ max	110m $\Omega$ max	$40 \text{m}\Omega$ max	$20 m\Omega$ max
7	Safety agency approval temperatures	-25 to +85℃ (Refer to Derating Curve)			
8	Operating temperature	-40 to +85℃ (Refer to Derating Curve)			
9	Operating humidity	20 to 95%RH (Non condensing)			
10	Storage temperature/humidity	-40 to +85°C/20 to 95%RH (Non condensing)			
11	Vibration	10 to 55Hz, 19.6m/s <sup>2</sup> (2G), 3min. Period, 1hour each X, Y and Z axis			
12	Impact	196.1m/s² (20G), 11ms Once each X, Y and Z axis			
13	Safety agency approvals	UL1283, CSA C22.2 No.8 (C-UL), DIN EN60939 VDE0565 Teil3-1, ENEC (At only AC input)			
14	Case size (without projection) /Weight	39 X 30 X 85 mm [1.54 X 1.18 X 3.35 inches] (W X H X D) /170g max (Option : -D refer to external view)			

#### **Circuit Diagram**



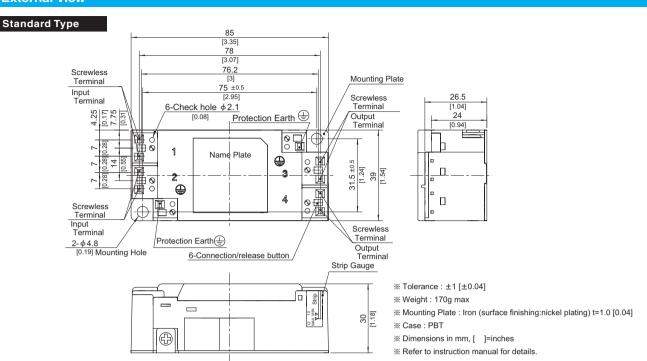
#### **Derating Curve**



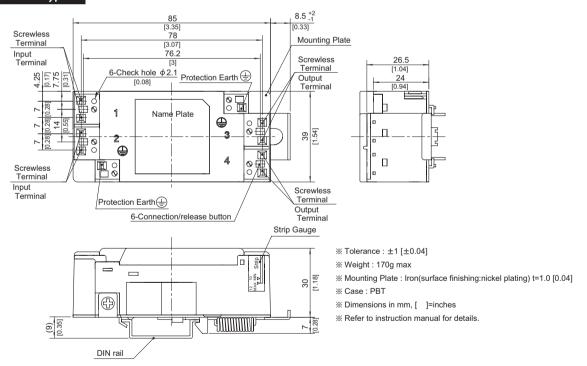
Ambient Temperature [°C]



#### **External view**



#### DIN rail installation Type



## ■Note when installing the EMI/EMC Filter on a DIN rail.

When the EMI/EMC Filter is grounded through the DIN rail, the proper noise attenuation may not be achieved.

Be sure to connect the protection earth (PE) of the EMI/EMC Filter body to the earth.

It can connect the ground to either one only.

