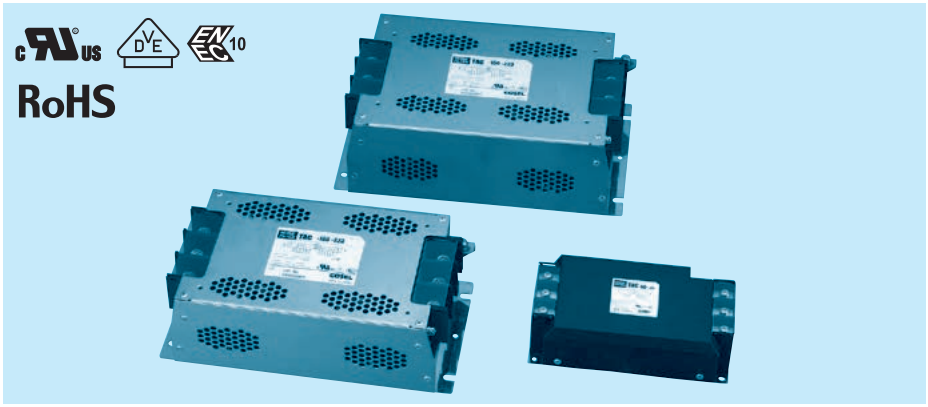
COSEL Three phase input type (1-Stage filter)

TAC/TAH series (50,60,80,100,150A)

Ordering information

TAC -50 -223 -□

① ② ③ ④



①Series Name
②Rated Current
③Line to ground capacitor code: Refer to table 1.1.

table1.1 Line to ground capacitor code

Code	Leakage Current (Input 250/500V 60Hz)	Line to ground capacitor (nominal value)
103	1.0mA/2.0mA max	10,000pF
223	2.5mA/5.0mA max	22,000pF
333	3.5mA/7.0mA max	33,000pF

＊When the line to ground capacitor code is different, the attenuation characteristic is different.

④Option
U:Improve differential mode attenuation (Rated voltage 250V)

Features of TAC/TAH series

- Three phase rated voltage 500VAC (voltage range:528V max) (1-Stage filter)
- Selectable leakage current value

■ TAC: High-attenuation type from 150kHz to 1MHz

■ TAH: Ultra high-attenuation type from 9kHz to 1MHz

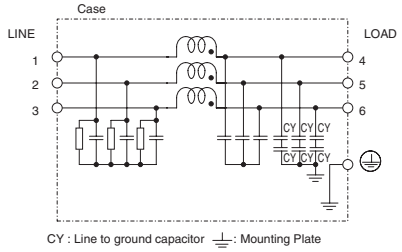
Specifications

No.	Items	TAC-50-223 TAH-50-223	TAC-60-223 TAH-60-223	TAC-80-223 TAH-80-223	TAC-100-223 TAH-100-223	TAC-150-223 TAH-150-223
1	Rated Voltage[V]	AC Three Phase 500 (voltage range:528 max) 50/60Hz ＊1				
2	Rated Current[A]	50	60	80	100	150
3	Test Voltage (Terminal-Mounting Plate)	2,500 VAC (Cutoff Current = 100mA), 1minute at room temperature and humidity				
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 100MΩ min at room temperature and humidity				
5	Leakage current	Refer to table 1.1				
6	DC resistance	7mΩ max	5mΩ max	5mΩ max	4mΩ max	3mΩ 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℃/20 to 95%RH (Non condensing)				
11	Vibration	10 to 55Hz, 19.6m/s²(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				
14	Case size (without projection)	90×54×179 mm (W×H×D) [3.54×2.13×7.05 inches]		140×85×267 mm (W×H×D) [5.51×3.35×10.51 inches]		170×92×285 mm (W×H×D) [6.69×3.62×11.22 inches]
15	Weight	1.4kg max		3.8kg max		4.8kg max

＊1 Only "TAC/TAH-□□□-□□□-U", Three Phase 250 (275 max)

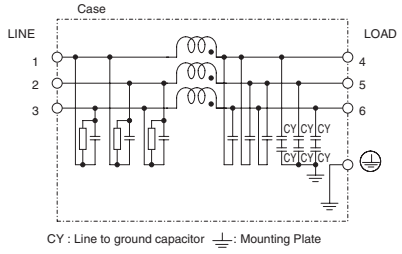
Circuit Diagram

(1) TAC-□□□-□□□



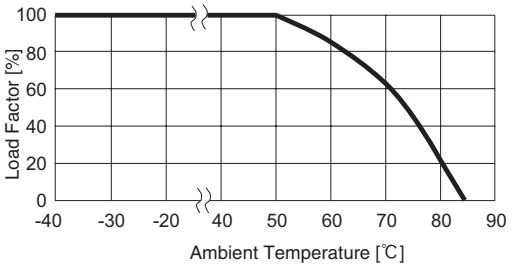
CY : Line to ground capacitor ⏚: Mounting Plate

(2) TAC-□□□-□□□-U (Option : U)



CY : Line to ground capacitor ⏚: Mounting Plate

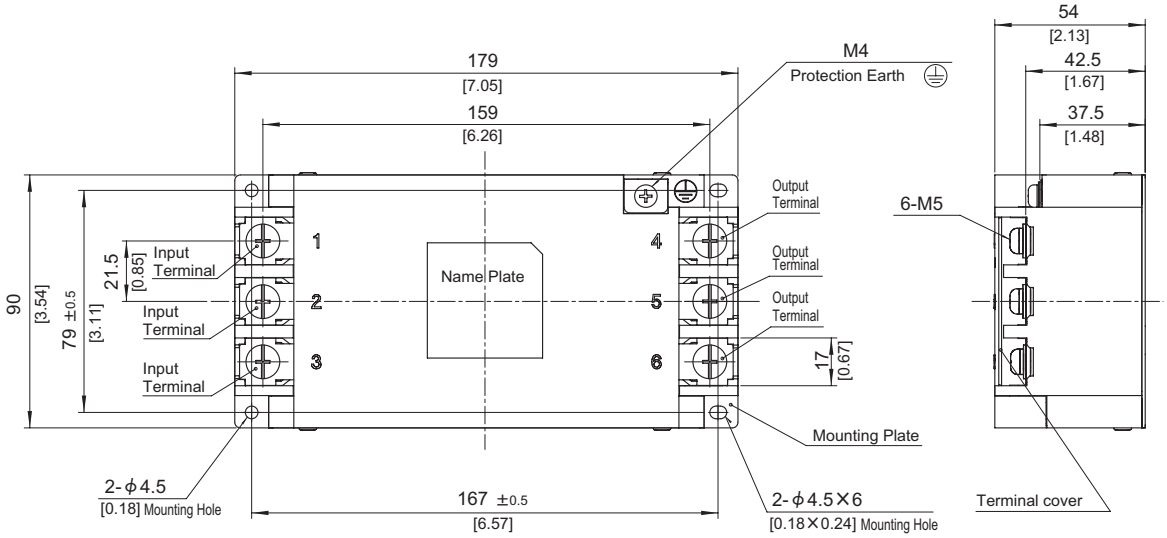
Derating Curve



＊Keep free ventilation holes for cooling.

External view

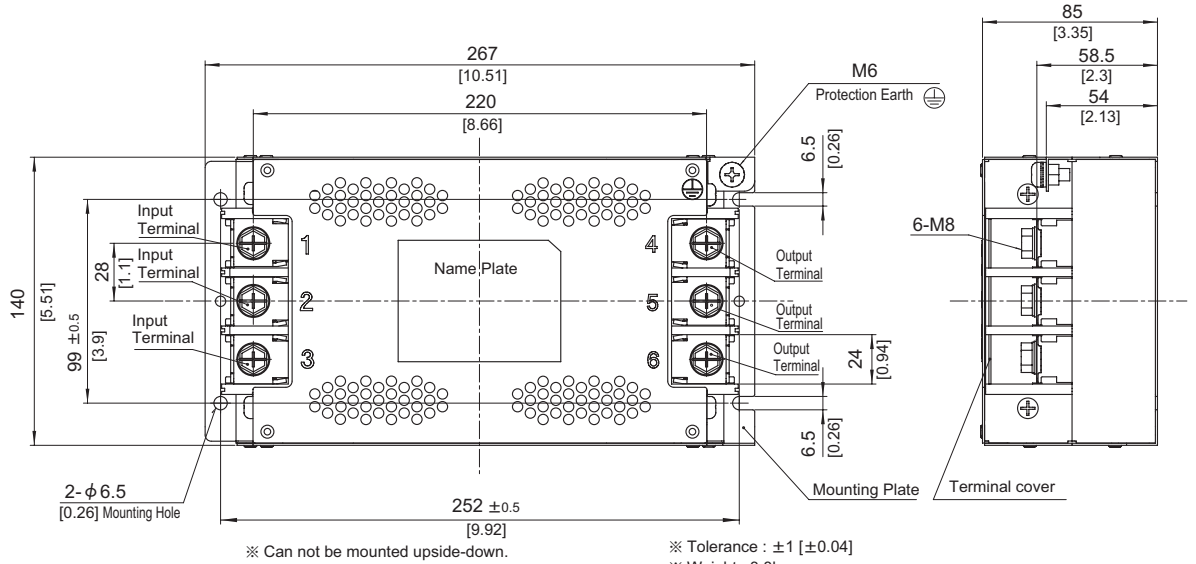
TAC-50-□□□ / TAC-60-□□□
TAH-50-□□□ / TAH-60-□□□



※ Can not be mounted upside-down.
(mounted the top surface)

※ Tolerance : ±1 [±0.04]
※ Weight : 1.4kg max
※ Mounting Plate : Iron (surface finishing:nickel plating) t=1.2 [0.05]
※ Case : PBT
※ Dimensions in mm, [ ]=inches
※ Terminal block screw tightening torque M5:3.0N・m (30.7kgf・cm) max
※ Protection Earth screw tightening torque M4:1.6N・m (16.9kgf・cm) max

TAC-80-□□□ / TAC-100-□□□
TAH-80-□□□ / TAH-100-□□□

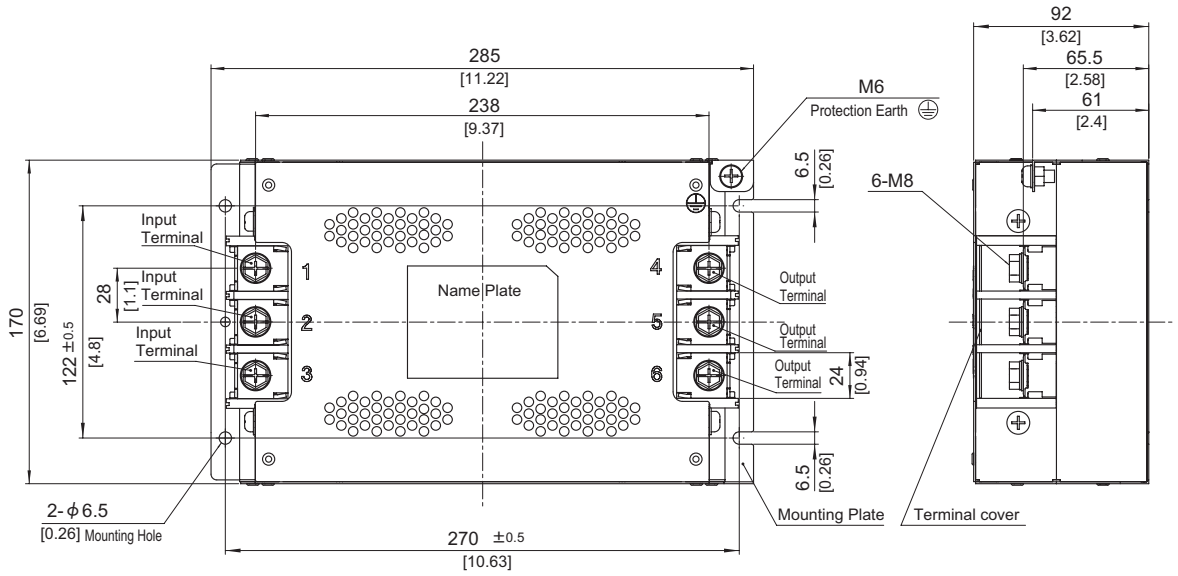


※ Can not be mounted upside-down.
(mounted the top surface)

※ Tolerance : ±1 [±0.04]
※ Weight : 3.8kg max
※ Chassis Material : Stainless steel t=1.0 [0.04]
※ Dimensions in mm, [ ]=inches
※ Terminal block screw tightening torque M8:9.2N・m (93.9kgf・cm) max
※ Protection Earth screw tightening torque M6:5.8N・m (59.2kgf・cm) max

External view

TAC-150-□□□
TAH-150-□□□



※ Can not be mounted upside-down.
(mounted the top surface)

※ Tolerance : ±1 [±0.04]
※ Weight : 4.8kg max
※ Chassis Material : Stainless steel t=1.0 [0.04]
※ Dimensions in mm, [ ]=inches
※ Terminal block screw tightening torque M8:9.2N・m (93.9kgf・cm) max
※ Protection Earth screw tightening torque M6:5.8N・m (59.2kgf・cm) max

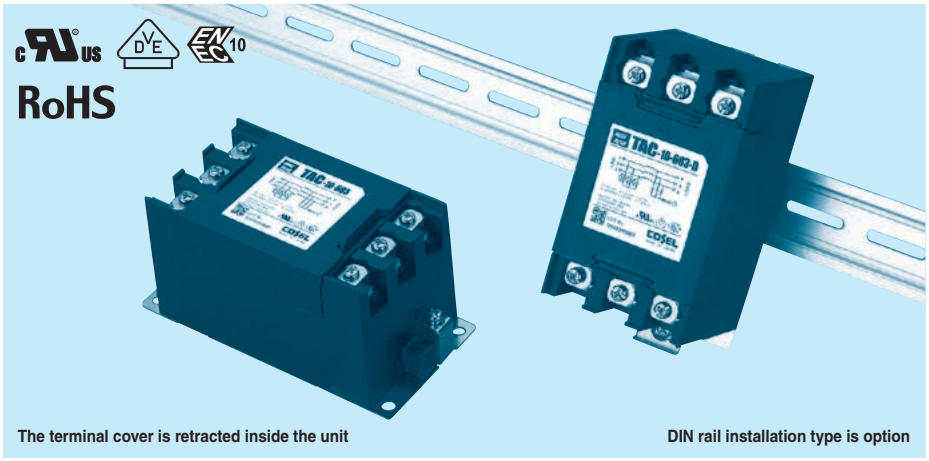
COSEL Three phase input type (1-Stage filter)

TAC/TAH series (4-30A)

Ordering information

TAC -10 -683 -□

① ② ③ ④



①Series Name
②Rated Current
③Line to ground capacitor code: Refer to table 1.1.

table1.1 Line to ground capacitor code

Code	Leakage Current (Input 250/500V 60Hz)	Line to ground capacitor (nominal value)
103	0.5mA/1.0mA max	10,000pF
223	1.0mA/2.0mA max	22,000pF
683	2.5mA/5.0mA max	68,000pF

* When the line to ground capacitor code is different, the attenuation characteristic is different.

④Option
D:DIN rail installation type

* The dimensions change when the option is set. Refer to External view.

Features of TAC/TAH series

- Three phase rated voltage 500VAC (voltage range:528V max) (1-Stage filter)
- Selectable leakage current value
- Quick and easy push-down terminal
  Just connect the wires, push-down and tighten the screws with a screwdriver.

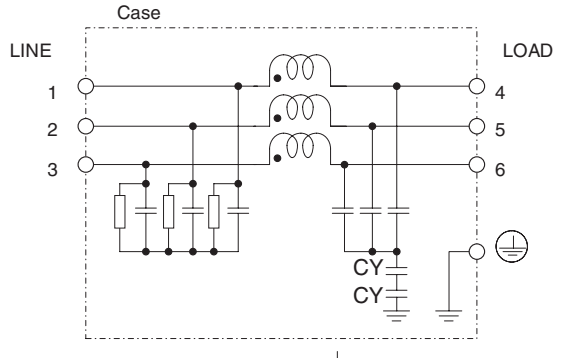
■ TAC: High-attenuation type from 150kHz to 1MHz

■ TAH: Ultra high-attenuation type from 9kHz to 1MHz

Specifications

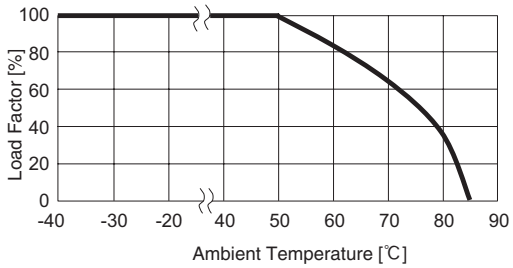
No.	Items	TAC-04-683 / TAH-04-683	TAC-06-683 / TAH-06-683	TAC-10-683 / TAH-10-683	TAC-20-683 / TAH-20-683	TAC-30-683 / TAH-30-683
1	Rated Voltage[V]	AC Three Phase 500 (voltage range:528 max) 50/60Hz				
2	Rated Current[A]	4	6	10	20	30
3	Test Voltage (Terminal-Mounting Plate)	2,000 VAC (Cutoff Current = 100mA), 1minute at room temperature and humidity				
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 100MΩ min at room temperature and humidity				
5	Leakage current	Refer to table 1.1				
6	Voltage drop	1.5V max		1.0V 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℃/20 to 95%RH (Non condensing)				
11	Vibration	10 to 55Hz, 19.6m/s²(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				
14	Case size (without projection) /Weight	63×64×128 mm [2.48×2.52×5.04 inches] (W×H×D) / 620g max (Option : -D refer to external view)				

Circuit Diagram



CY : Line to ground capacitor ⏚ : Mounting Plate

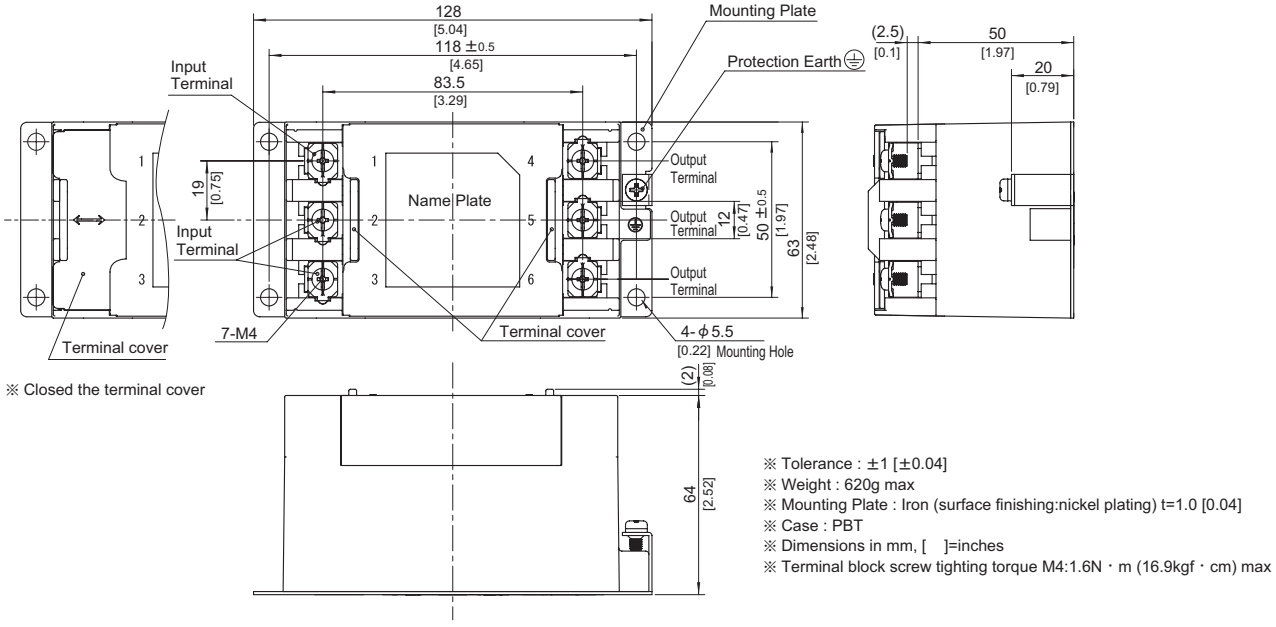
Derating Curve



External view

This product is shipped in the following condition, because it is equipped with push-down terminals.
①The terminal cover is closed.
②The screws for connecting the terminals are held in the up right position.

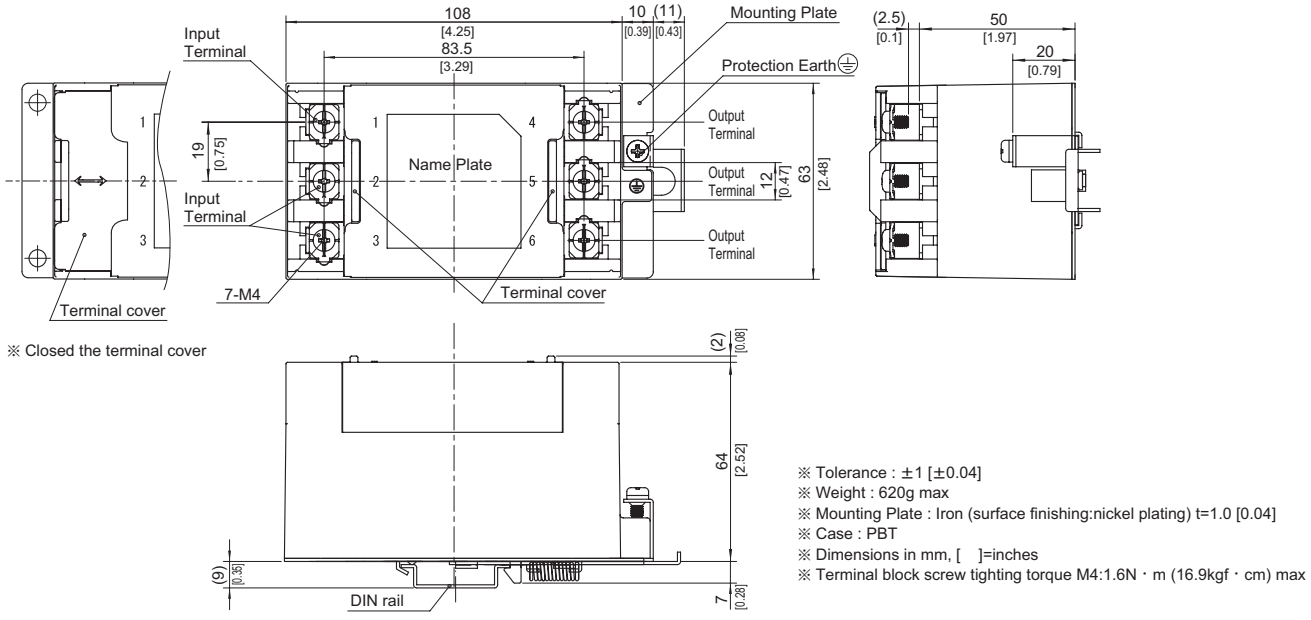
Standard Type



※ Closed the terminal cover

※ Tolerance : ±1 [±0.04]
※ Weight : 620g max
※ Mounting Plate : Iron (surface finishing:nickel plating) t=1.0 [0.04]
※ Case : PBT
※ Dimensions in mm, [ ]=inches
※ Terminal block screw tighting torque M4:1.6N・m (16.9kgf・cm) max

DIN rail installation Type



※ Closed the terminal cover

※ Tolerance : ±1 [±0.04]
※ Weight : 620g max
※ Mounting Plate : Iron (surface finishing:nickel plating) t=1.0 [0.04]
※ Case : PBT
※ Dimensions in mm, [ ]=inches
※ Terminal block screw tighting torque M4:1.6N・m (16.9kgf・cm) max

■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.