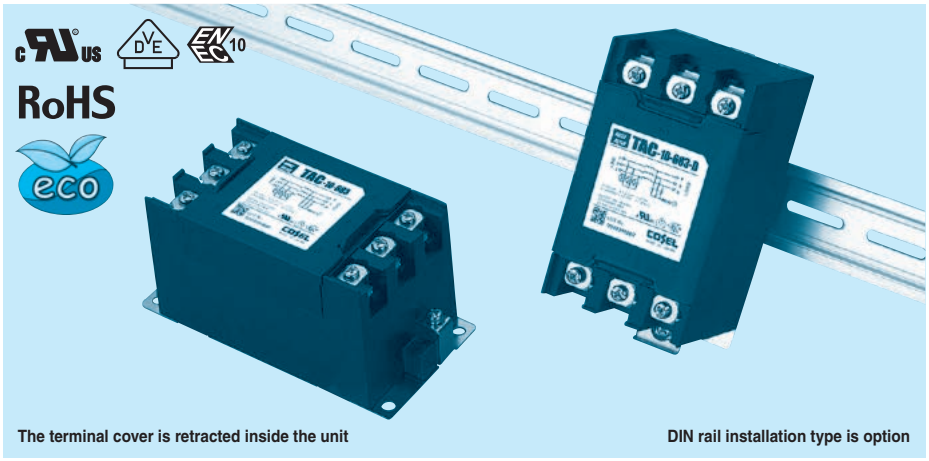
COSEL Three phase input type (1-Stage filter)

# TAC/TAH series (4-30A)




## Ordering information

TAC ① -10 ② -683 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.

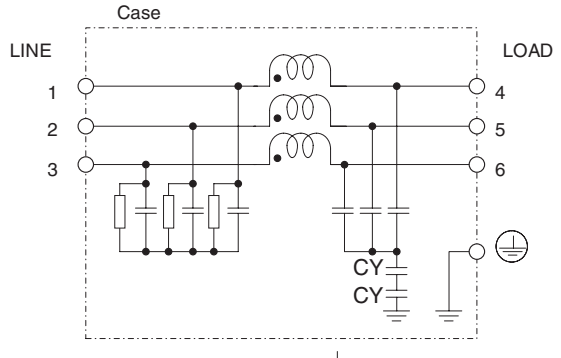
**■ TAC: High-attenuation type from 150kHz to 1MHz**

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

## Specifications

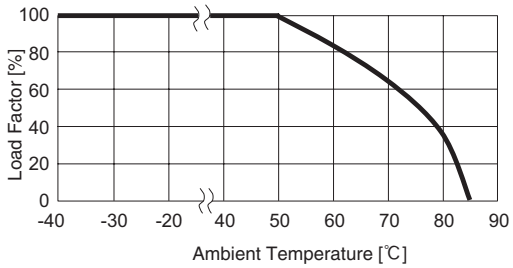
| No. | Items | TAC-04-683 / TAH-04-683 | TAC-06-683 / TAH-06-683 | TAC-10-683 / TAH-10-683 | TAC-20-683 / TAH-20-683 | TAC-30-683 / TAH-30-683 |
|---|---|---|---|---|---|---|
| 1 | Rated Voltage[V] | AC Three Phase 500 (voltage range:528 max) 50/60Hz | | | | |
| 2 | Rated Current[A] | 4 | 6 | 10 | 20 | 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

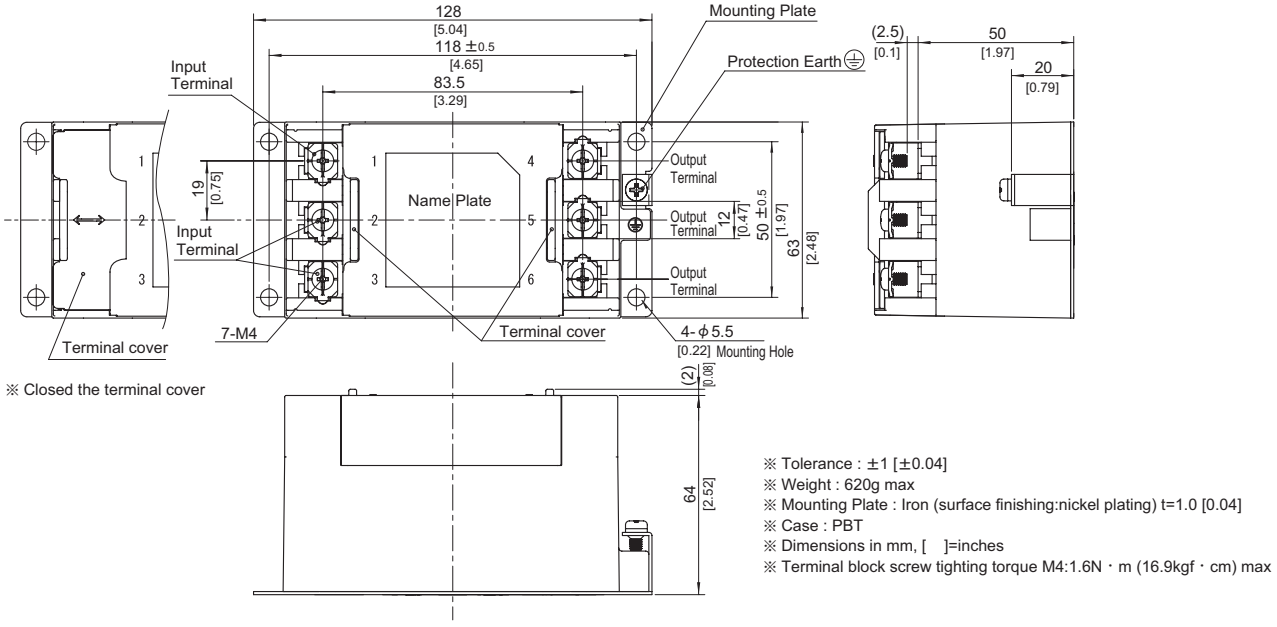
## Derating Curve



## External view

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

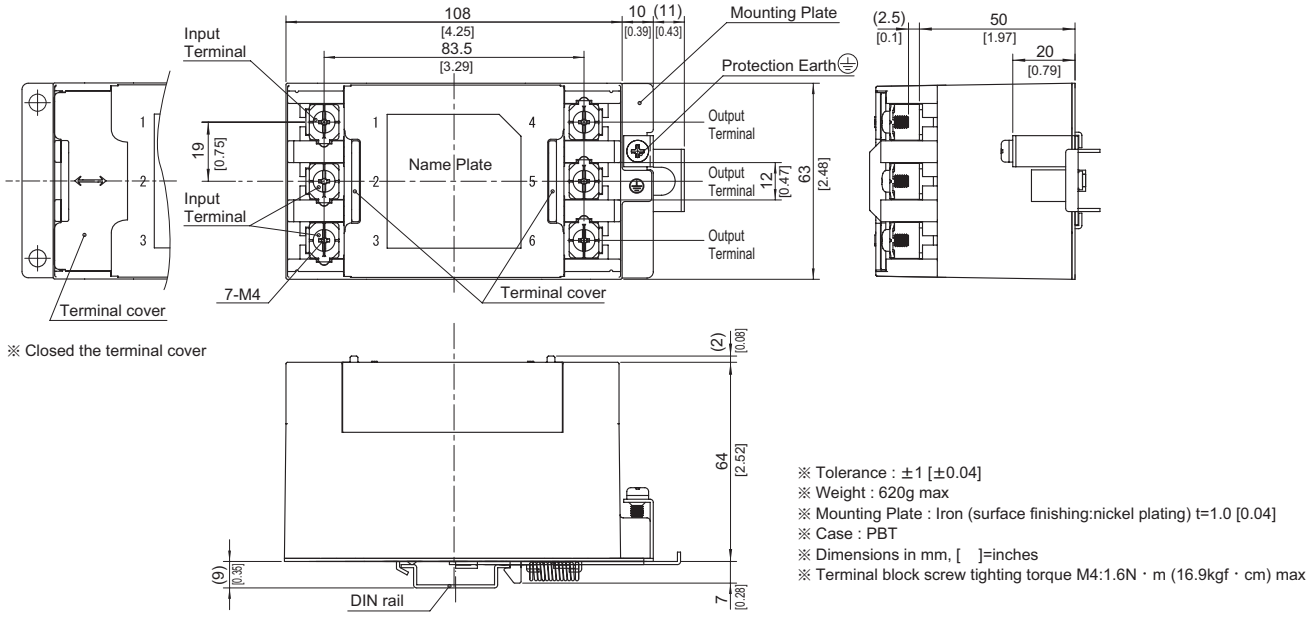
### Standard Type




※ 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

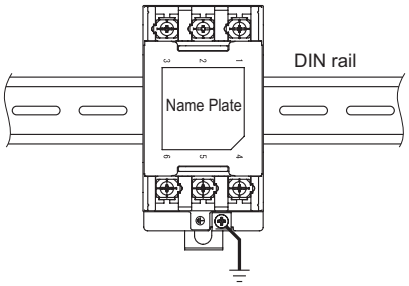



※ Closed the terminal cover

※ 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.**



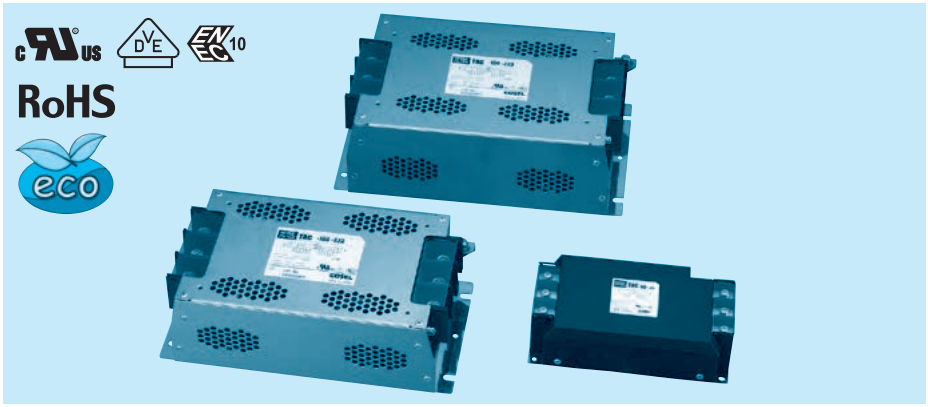
COSEL Three phase input type (1-Stage filter)

# 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

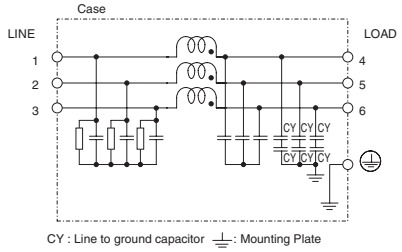
## Specifications

| 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)

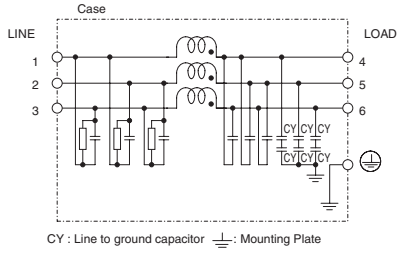
## Circuit Diagram

(1) TAC-□□□-□□□



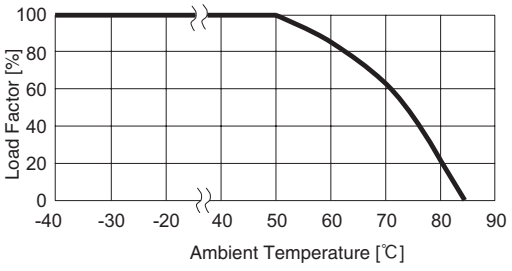

CY : Line to ground capacitor ⏚: Mounting Plate

(2) TAC-□□□-□□□-U (Option : U)




CY : Line to ground capacitor ⏚: Mounting Plate

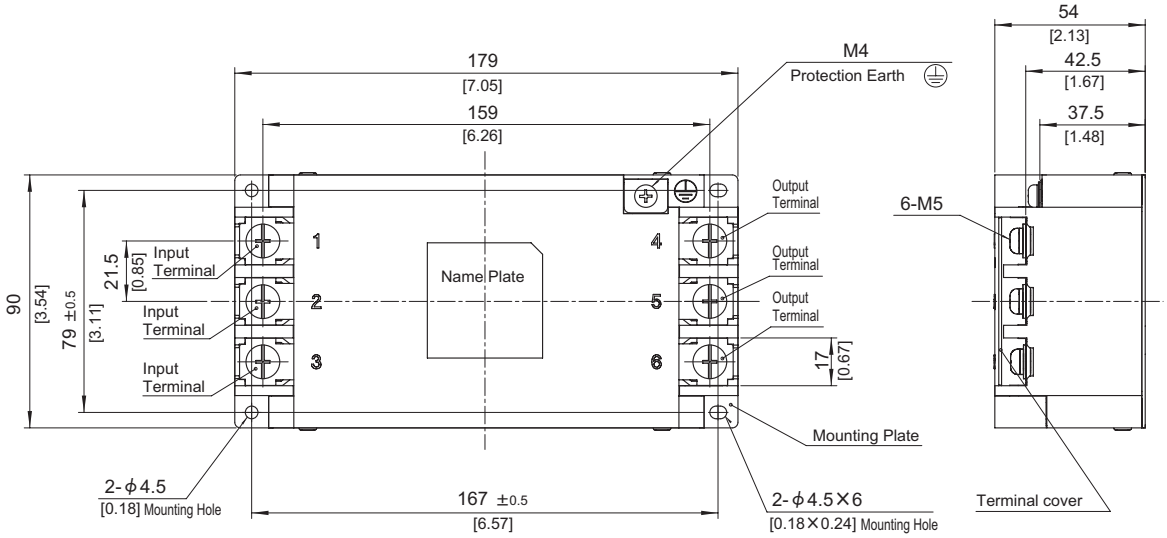
## Derating Curve




＊Keep free ventilation holes for cooling.

## External view

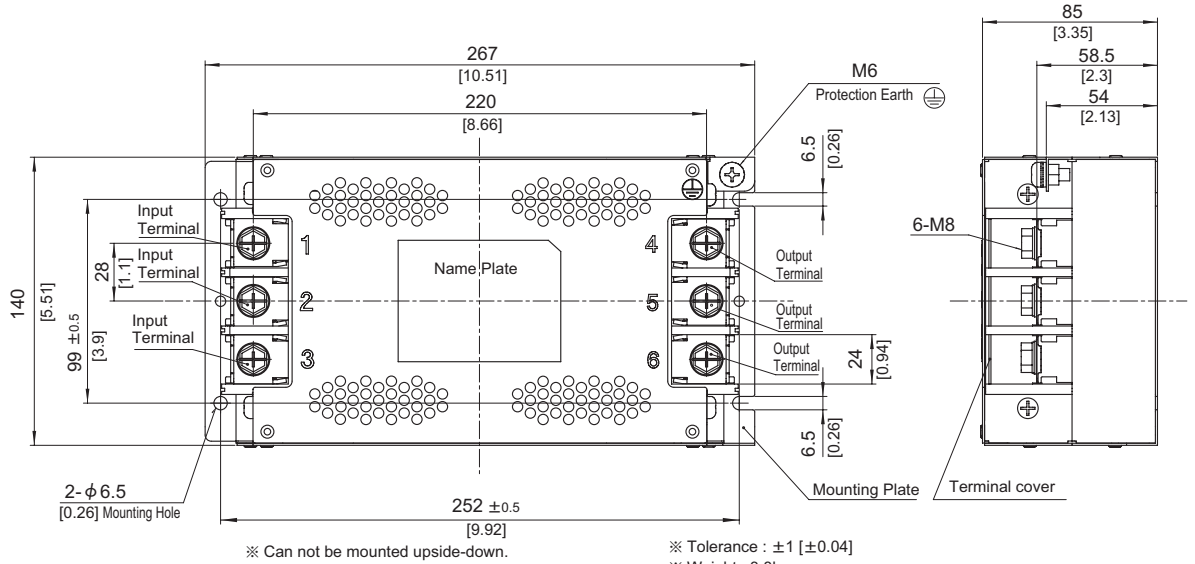
**TAC-50-□□□ / TAC-60-□□□**
**TAH-50-□□□ / TAH-60-□□□**




※ 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-□□□**

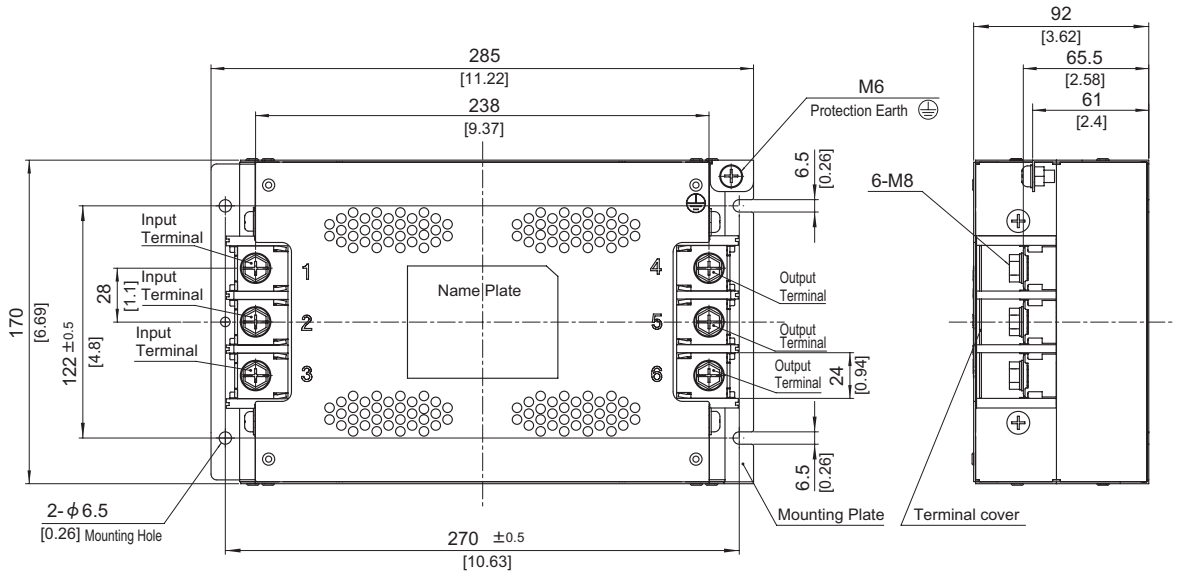



※ Can not be mounted upside-down.
(mounted the top surface)

※ 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

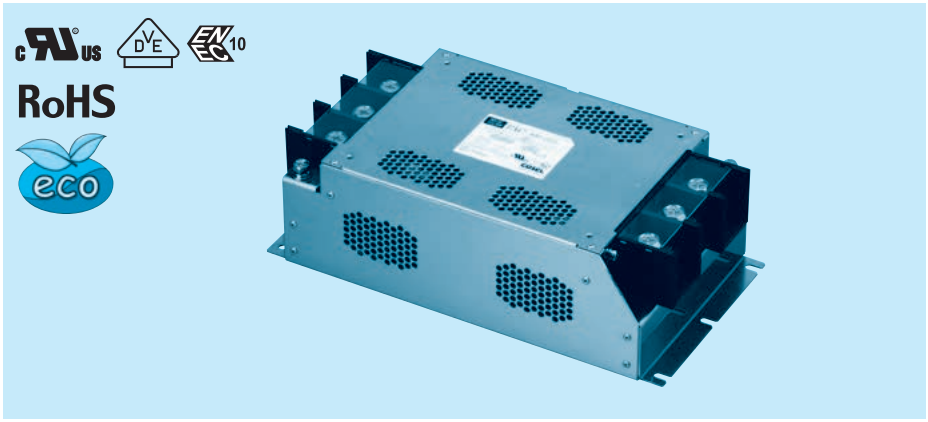
COSEL Three phase input type(1-stage filter)

# TAC series(200,250,300A)

## Ordering information

TAC -200 -223 -□

① ② ③ ④



①Model Name
②Rated Current
③Line to ground capacitor code:See 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 series

### High-attenuation type of common mode noise from 150kHz to 1MHz (1-stage filter)

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

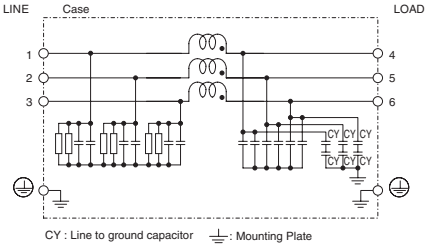
## Specifications

| No. | Items | TAC-200-223 | TAC-250-223 | TAC-300-223 |
|---|---|---|---|---|
| 1 | Rated Voltage[V] | AC Three Phase 500 (voltage range:528 max) 50/60Hz ＊1 | | |
| 2 | Rated Current[A] | 200 | 250 | 300 |
| 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 250/500V 60Hz | 2.5mA/5.0mA max | | |
| 6 | DC resistance | 2mΩ max | 1.5mΩ max | 1mΩ 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) | 190×110×360 mm [7.48×4.33×14.17 inches] (W×H×D) | | |
| 15 | Weight | 8.0kg max | | |

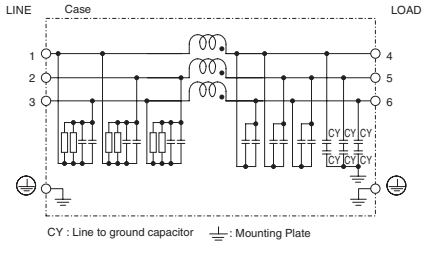
＊1 Only "TAC-□□□-□□□-U", Three Phase 250 (275 max)

## Circuit Diagram

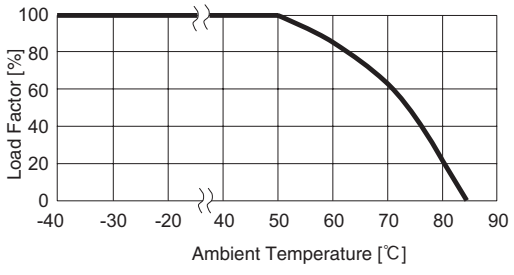
(1) TAC-□□□-□□□




(2) TAC-□□□-□□□-U (Option : U)

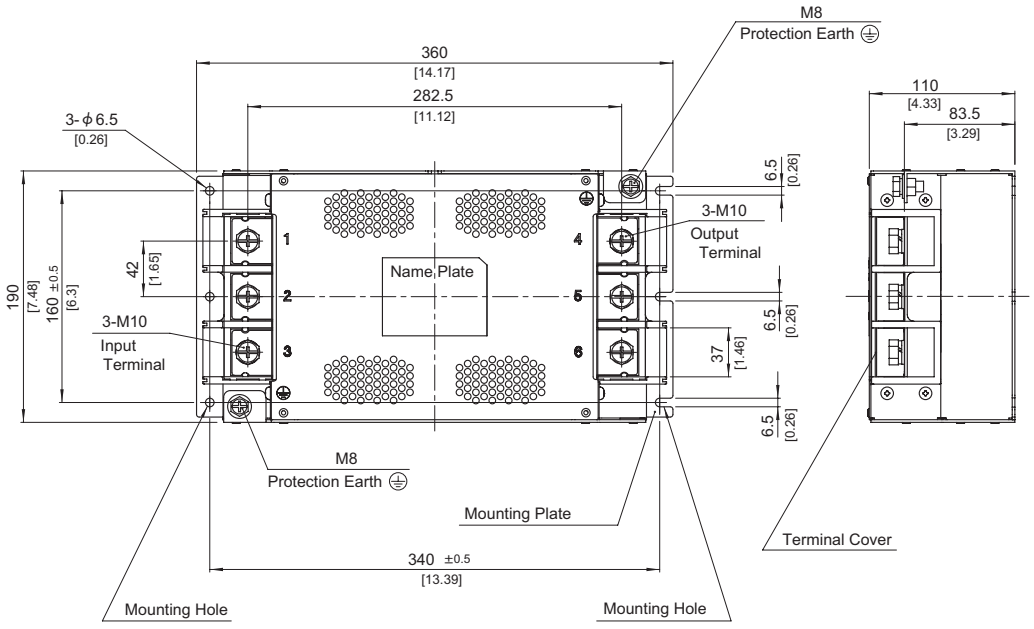



## Derating Curve




＊Keep free ventilation holes for cooling.

## External view




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

※ Tolerance : ±1 [±0.04]
※ Weight : 8.0kg max
※ Mounting Plate : Stainless steel t=2.0 [0.08]
※ Dimensions in mm, [ ]=inches
※ Terminal block screw tightening torque M10 : 14.2N・m (144.9kgf・cm) max
※ Protection Earth screw tightening torque M8 : 9.2N・m (93.9kgf・cm) max