

# TBC series(50,60,80,100,150A)

**TBC -50 -683**

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① Model Name

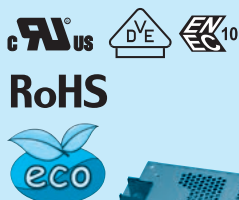
② Rated Current

③ Line to ground capacitor code: See table 1.1.

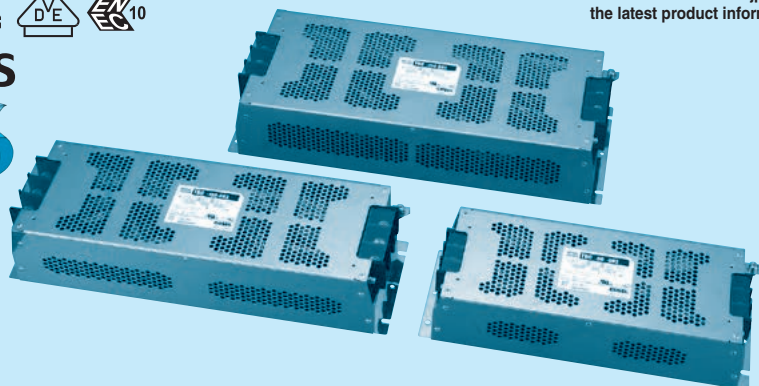
table 1.1 Line to ground capacitor code

Code	Leakage Current (Input 250/500V 60Hz)	Line to ground capacitor (nominal value)
223	1.0mA/2.0mA max	22,000pF
683	2.5mA/5.0mA max	68,000pF
104	3.5mA/7.0mA max	100,000pF

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



\* Link to [www.cosal.co.jp/en](http://www.cosal.co.jp/en) for the latest product information.



## Features of TBC series

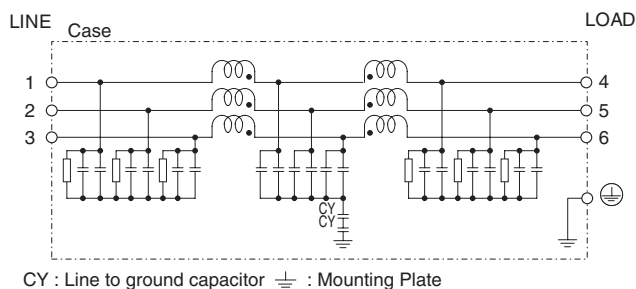
### High-attenuation type of common mode noise from 150kHz to 1MHz (2-stage filter)

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

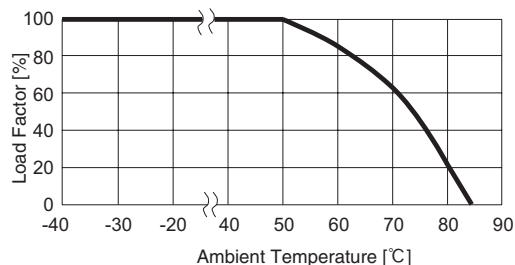
## Specifications

No.	Items	TBC-50-683	TBC-60-683	TBC-80-683	TBC-100-683	TBC-150-683
1	Rated Voltage[V]	AC Three Phase 500 (voltage range: 528 max) 50/60Hz				
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 250/500V 60Hz	2.5mA/5.0mA max				
6	DC resistance	14mΩ max	10mΩ max	10mΩ max	8mΩ max	6mΩ max
7	Safety agency approval temperatures	-25 to +85°C (Refer to Derating Curve)				
8	Operating temperature	-40 to +85°C (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/s <sup>2</sup> (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)	140 X 80 X 374 mm (W X H X D)		150 X 92 X 456 mm (W X H X D)		190 X 92 X 482 mm (W X H X D)
		[5.51 X 3.15 X 14.72 inches]		[5.91 X 3.62 X 17.95 inches]		[7.48 X 3.62 X 18.98 inches]
15	Weight	4.3kg max		7.7kg max		9.6kg max

## Circuit Diagram



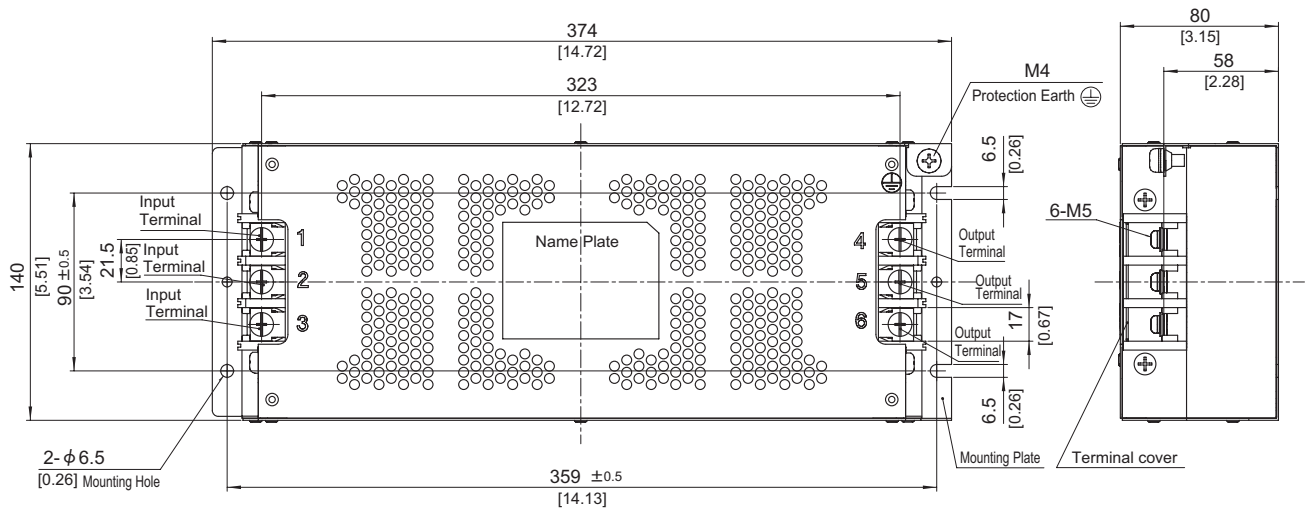
## Derating Curve



\* Keep free ventilation holes for cooling.

## External view

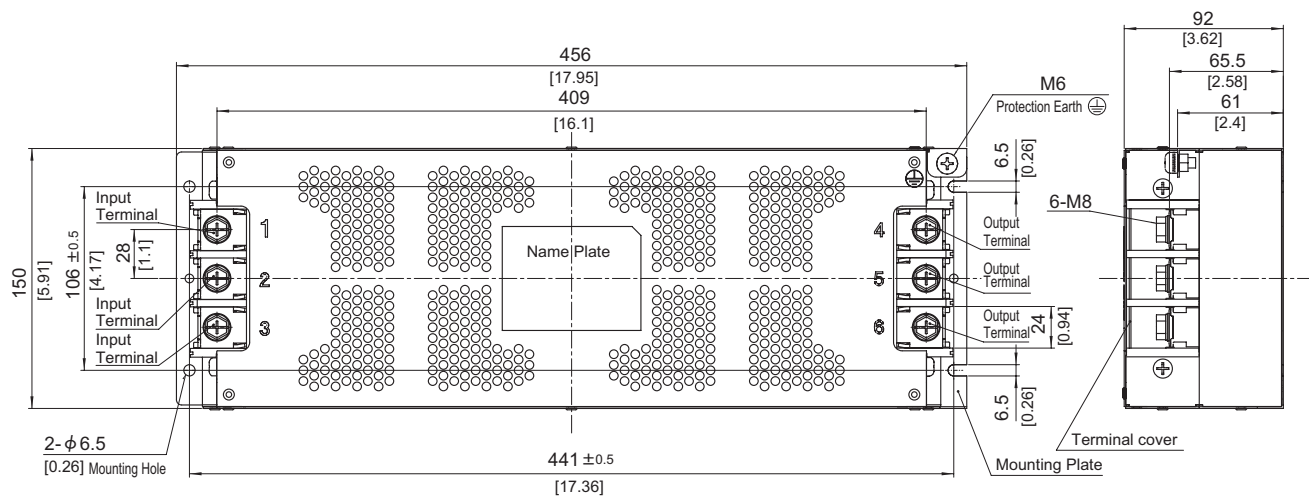
TBC-50-□□□ / TBC-60-□□□



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

※ Tolerance :  $\pm 1$  [ $\pm 0.04$ ]  
 ※ Weight : 4.3kg max  
 ※ Chassis Material : Stainless steel  $t=1.0$  [0.04]  
 ※ 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

TBC-80-□□□ / TBC-100-□□□

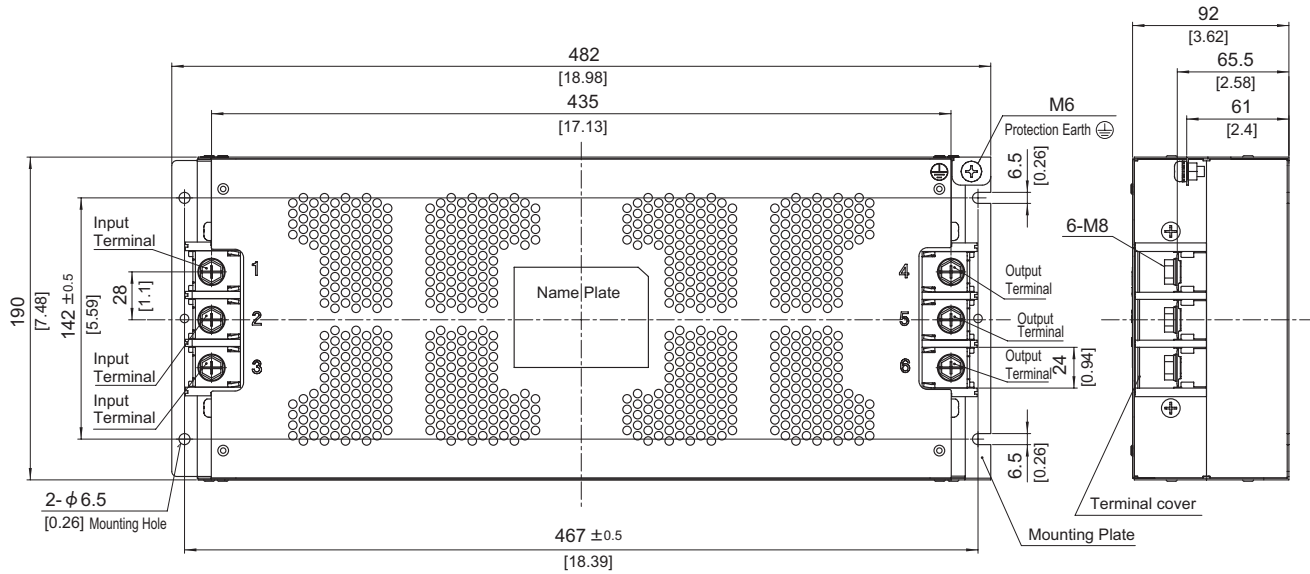


※ Can not be mounted upside-down.  
(mounted the top surface)

※ Tolerance :  $\pm 1$  [ $\pm 0.04$ ]  
 ※ Weight : 7.7kg 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

TBC-150-□□□



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

※ Tolerance : ±1 [±0.04]  
 ※ Weight : 9.6kg 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

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