

# YAC series(25,36,64,80A)

YAC -25 -685

①

②

③

① Series Name

② Rated Current

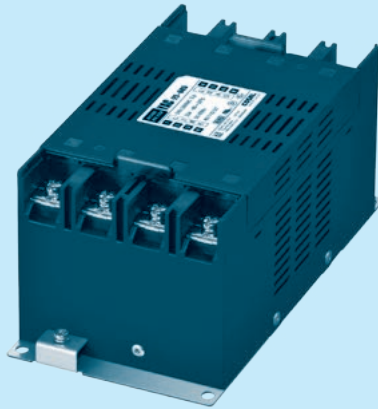
③ Line to Ground Capacitor Code: See Table 1.1.

Table 1.1. Line to Ground Capacitor Code

Code	Leakage Current Y-Connection	Line to Ground Capacitor (Nominal Value)
685	10.7mA typ *1 55mA max *2	6.8μF

\*1 At normal operation (Input 500V 50Hz) with applying 10V in between N (N') and FG (According to IEC60939).

\*2 At the worst case under normal operation (Input 500V 60Hz).



## Features of YAC series

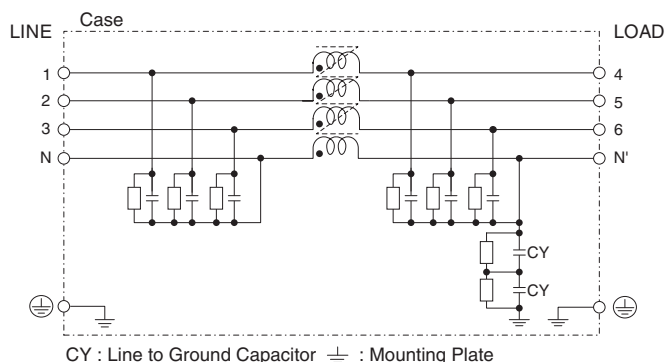
- Three-Phase Four-Wire System EMI/EMC Filter ideal for High-power office equipment and Energy storage systems
- Suitable for 150kHz to 1MHz conduction noise reduction
- Product lineup that can flexibly respond to system and capacity changes in a compact/same body size

## Specifications

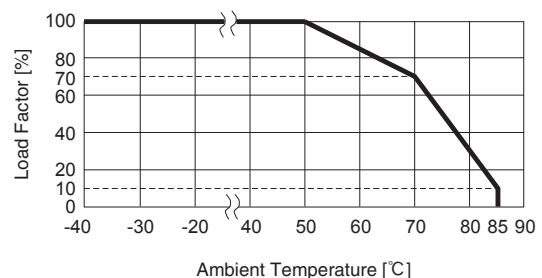
No.	Items	YAC-25-685	YAC-36-685	YAC-64-685	YAC-80-685
1	Rated Voltage[VAC]	Three-Phase Four-Wire System Y-Connection 500/289 (Voltage Range:528/305 max) 50/60Hz *3			
2	Rated Current[A]	25	36	64	80
3	Test Voltage (Terminal-Mounting Plate)	2,800 VDC (Cutoff Current = 10mA), 1minute at room temperature and humidity			
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 5MΩ min. at room temperature and humidity			
5	Leakage Current	Refer to table 1.1			
6	DC Resistance	15mΩ max	10mΩ max	3.5mΩ max	2.5mΩ max
7	Operating Temperature/Humidity	-40 to +85°C (Refer to Derating Curve)/20 to 95%RH (Non condensing)			
8	Storage Temperature/Humidity	-40 to +85°C/20 to 95%RH (Non condensing)			
9	Vibration	10 to 55Hz, 19.6m/s <sup>2</sup> (2G), 3min. Period, 1hour each X, Y and Z axis			
10	Impact	196.1m/s <sup>2</sup> (20G), 11ms Once each X, Y and Z axis			
11	Safety Agency Approvals	UL60939 [Overvoltage Category : III Altitude : 3000m] , CSA C22. 2 No. 8 (C-UL) EN60939 (DEMKO) [Overvoltage Category : III Altitude : 3000m] , ENEC			
12	Case Size (Without Projection)	100×88×179mm (W×H×D) [3.94×3.46×7.05 inches] (W×H×D)			
13	Weight	1.7kg max			

\*3 Voltage indicates "Line Voltage/Phase Voltage".

## Circuit Diagram



## Derating Curve

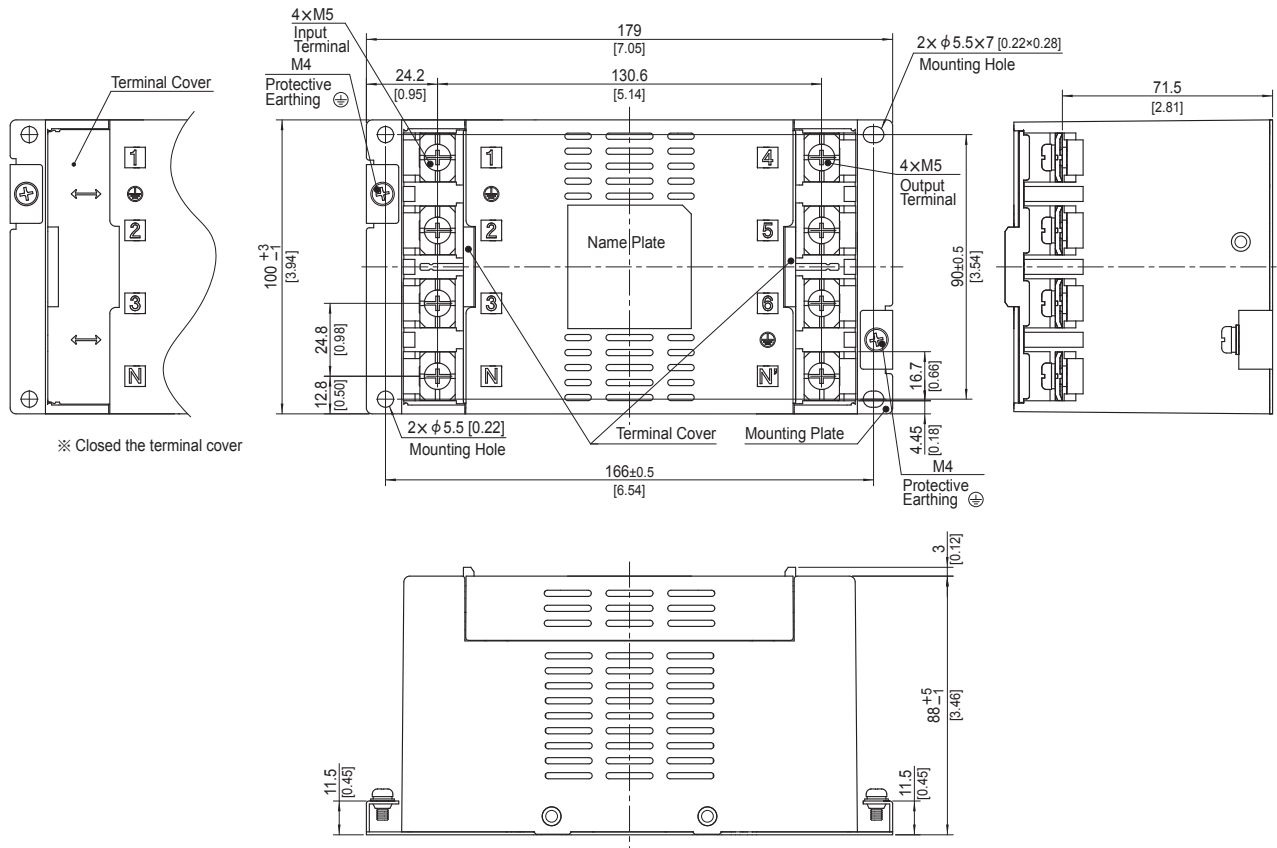


\*Keep free ventilation holes for cooling.



## External view

This product is shipped with the terminal cover retracted inside the unit.



※ Closed the terminal cover

- ※ Dimensions in mm, [ ] = inches
- ※ Tolerance : ± 1 [± 0.04]
- ※ Weight : 1.7kg max
- ※ Mounting Plate : Galvanized Steel board t=1.0 [0.04]
- ※ Case Material : PBT
- ※ Terminal block screw tightening torque M5 : 3.0N · m max
- ※ Protective Earthing (PE) screw tightening torque M4 : 1.6N · m max
- ※ Can not be mounted upside-down. (mounted the top surface)
- ※ Keep free ventilation holes for cooling.



- ① Series Name  
② Rated Current  
③ Line to Ground Capacitor Code: See Table 1.1.

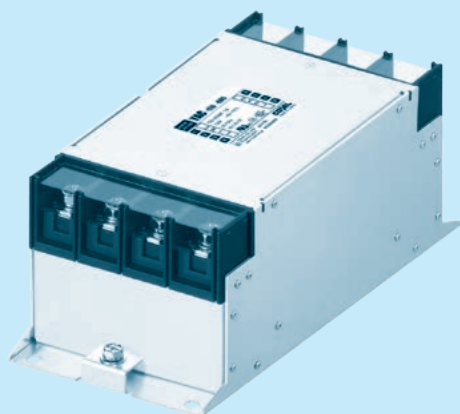
Table 1.1 Line to Ground Capacitor Code

Code	Leakage Current Y-Connection	Line to Ground Capacitor (nominal Value)	
		CY1	CY2
685	10.7mA typ *2 55mA max *3	6.8μF	Not provided
226 *1	41.5mA typ *2 220mA max *3	1.5μF	6.8μF × 3

\*1 "226" is applied only to "300A" type.

\*2 At normal operation (Input 500V 50Hz) with applying 10V in between N (N') and FG (According to IEC60939).

\*3 At the worst case under normal operation (Input 500V 60Hz).



### Features of YAC series

- Three-Phase Four-Wire System EMI/EMC Filter ideal for High-power office equipment and Energy storage systems
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- Product lineup that can flexibly respond to system and capacity changes in a compact/same body size

### Specifications

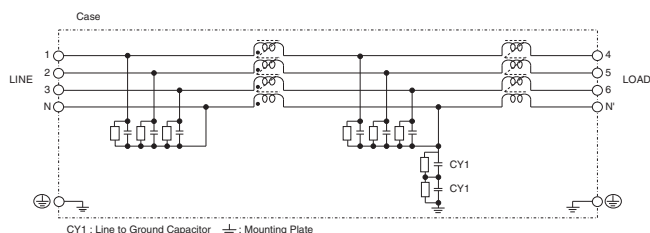
No.	Items	YAC-120-685	YAC-160-685	YAC-200-685	YAC-300-685
1	Rated Voltage[VAC]	Three-Phase Four-Wire System Y-Connection 500/289 (Voltage Range:528/305 max) 50/60Hz *4			
2	Rated Current[A]	120	160	200	300
3	Test Voltage (Terminal-Mounting Plate)	2,800 VDC (Cutoff Current = 10mA), 1minute at room temperature and humidity			
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 5MΩ min. at room temperature and humidity *5			
5	Leakage Current	Refer to table 1.1			
6	DC Resistance	4.5mΩ max	3.0mΩ max	2.5mΩ max	1.5mΩ max
7	Operating Temperature/Humidity	-40 to +85°C (Refer to Derating Curve)/20 to 95%RH (Non condensing)			
8	Storage Temperature/Humidity	-40 to +85°C/20 to 95%RH (Non condensing)			
9	Vibration	10 to 55Hz, 19.6m/s <sup>2</sup> (2G), 3min. Period, 1hour each X, Y and Z axis			
10	Impact	196.1m/s <sup>2</sup> (20G), 11ms Once each X, Y and Z axis			
11	Safety Agency Approvals	UL60939 [Overvoltage Category : III Altitude : 3000m], CSA C22. 2 No. 8 (C-UL) EN60939 (DEMKO) [Overvoltage Category : III Altitude : 3000m], ENEC			
12	Case Size (Without Projection)	157×140×340mm (W×H×D) [6.18×5.51×13.39 inches] (W×H×D)			
13	Weight	9.0kg max			5.5kg max

\*4 Voltage indicates "Line Voltage/Phase Voltage".

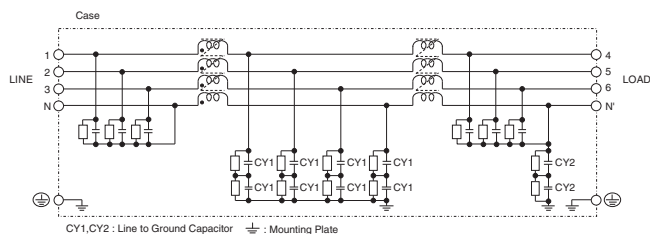
\*5 Only "YAC-300-226", Isolation Resistance specification is deleted.

### Circuit Diagram

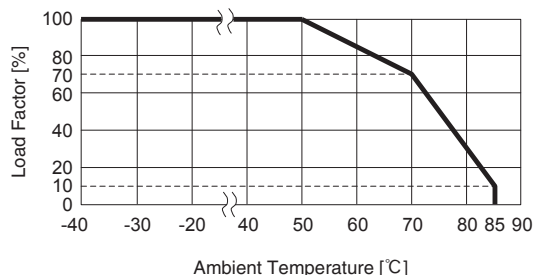
(1)Line to Ground Capacitor Code : 685



(2)Line to Ground Capacitor Code : 226

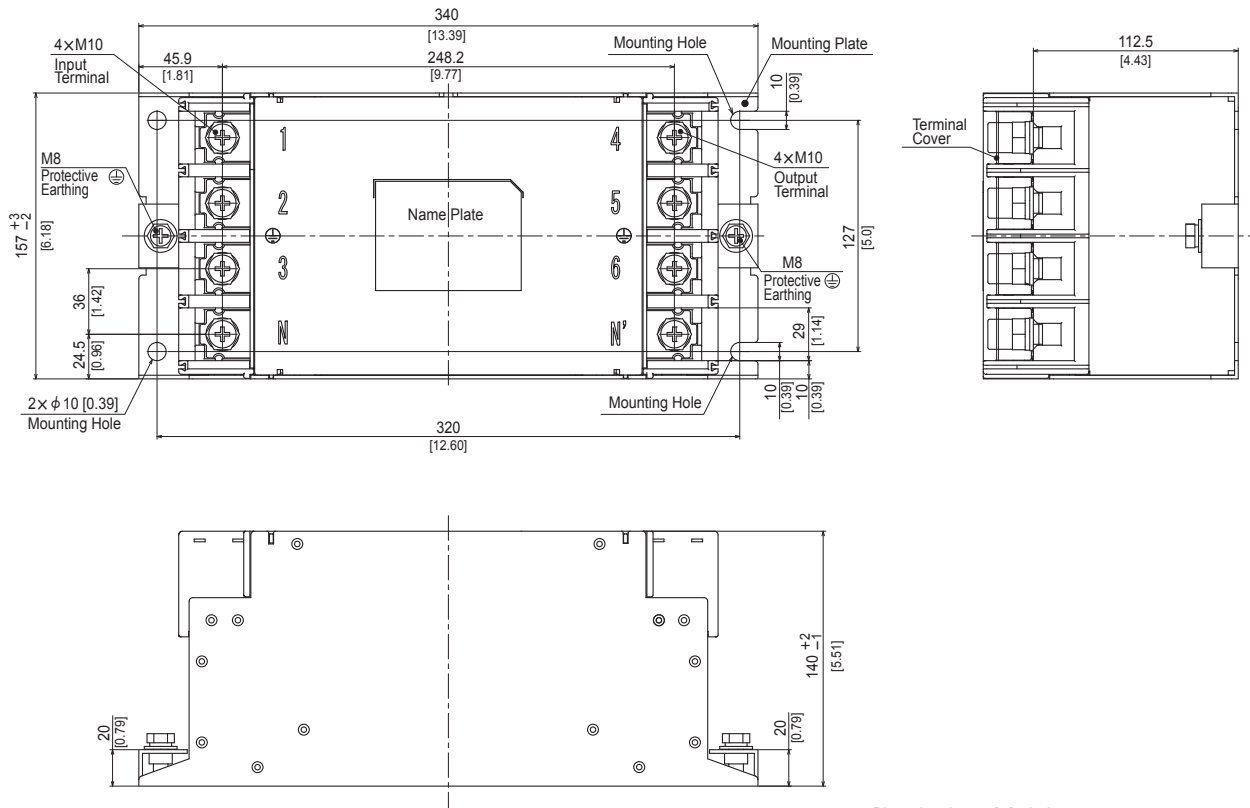


### Derating Curve





## External view



- ※ Dimensions in mm, [ ] = inches
- ※ Tolerance :  $\pm 1$  [ $\pm 0.04$ ]
- ※ Weight : 9.0kg max (120A, 160A, 200A)  
5.5kg max (300A)
- ※ Mounting Plate Material : Aluminum  $t \approx 2.0$  [0.08]
- ※ Terminal block screw tightening torque M10 : 14.2N · m max
- ※ Protective Earthing (PE) screw tightening torque M8 : 9.2N · m max
- ※ Can not be mounted upside-down. (mounted the top surface)