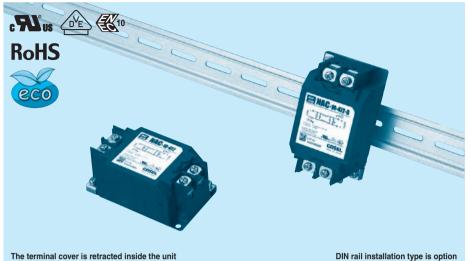
Ordering information

-10 -472



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

table1.1 Line to ground capacitor code

Code	N A C	N A M	N A H	N A P	Leakage Current (Input 125/250V 60Hz)			Line to ground capacitor (nominal value)
000					5	μΑ /	10μA max	Not Provided
101					12.5	μΑ /	25μA max	100pF
221					25	μΑ /	50μA max	220pF
331					37.5	μΑ /	75µA max	330pF
471					50	μΑ /	100µA max	470pF
681					75.5	μΑ /	150µA max	680pF
102					0.13	mA / (	0.25mA max	1,000pF
222					0.25	mA/	0.5 mA max	2,200pF
332					0.38	mA / (	0.75mA max	3,300pF
472	•			•	0.5	mA /	1.0 mA max	4.700pF

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

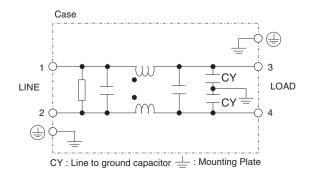
#### Features of NAC/NAM/NAH/NAP series

- · Single Phase 250VAC (1-Stage filter)
- · Quick and easy push-down terminal Just connect the wires, push-down and tighten the screws with a screwdriver
- NAC: High-attenuation type from 150kHz to 1MHz ■ NAM: Low leakage current type
- NAH: Ultra high-attenuation type from 9kHz to 1MHz NAP: Outside impulse high-attenuation type

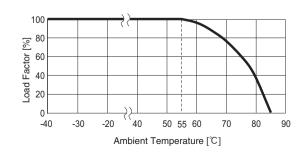
#### **Specifications**

						,		
		NAC-04-472	NAC-06-472	NAC-10-472	NAC-16-472	NAC-20-472	NAC-30-472	
No.	Items	NAM-04-000	NAM-06-000	NAM-10-000	NAM-16-000	NAM-20-000	NAM-30-000	
NO.	items	-	NAH-06-472	NAH-10-472	NAH-16-472	NAH-20-472	NAH-30-472	
		NAP-04-472	NAP-06-472	NAP-10-472	NAP-16-472	NAP-20-472	NAP-30-472	
1	Rated Voltage[V]	AC 1 φ 250 / DC250						
2	Rated Current[A]	4	6	10	16	20	30	
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 100M $\Omega$ min at room temperature and humidity						
5	Leakage current	Refer to table 1.1						
6	Voltage drop	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 (At only AC input)						
14	Case size (without projection) /Weight	53×41×92 mr	n [2.09×1.61×3.	62 inches] (WXH	IXD) /300g max (	(Option : -D refer t	o external view)	

#### Circuit Diagram



#### **Derating Curve**



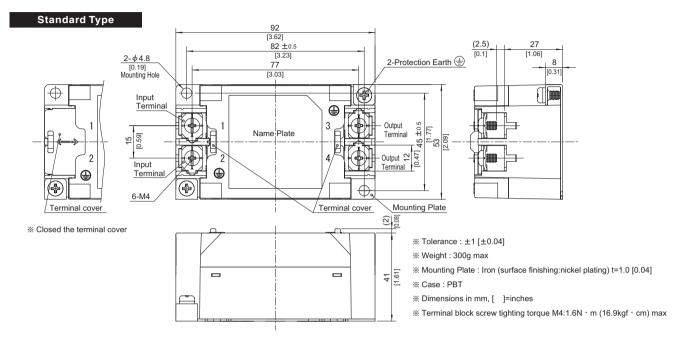


# NAC/NAM/NAH/NAP series(4-30A)

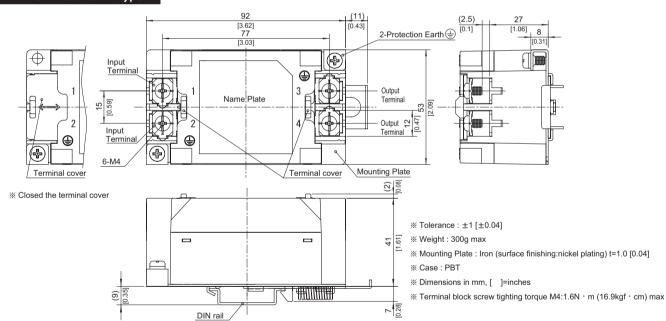
#### **External view**

This product is shipped in the following condition, because it is equipped with push-down terminals.

- 1)The terminal cover is retracted inside the unit.
- 2)The screws for connecting the terminals are held in the up right position.



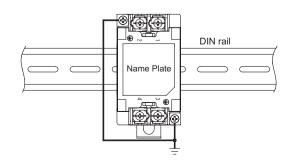
#### **DIN rail installation Type**



#### ■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. At least one PE connection is required.



# NAC/NAM/NAH/NAP series (40,50,60A)

NAC -50 -472 -



- ①Series Name
- (2) Rated Current
- ③Line to ground capacitor code:Refer to table 1.1 and table 1.2. ④ Option
- F:High input voltage (500VAC/600VDC)

table1.1 Line to ground capacitor code (Standard)

Code	N A C	N A M	NAH	N A P	Leakage Current (Input 125/250V 60Hz)			Line to ground capacitor (nominal value)
000					5	$\mu$ A/	10 μA max	Not Provided
471					50	μA/	100 μA max	470pF
222					0.25	mA/	0.5 mA max	2,200pF
472					0.5	mA/	1.0 mA max	4,700pF
223					1.25	mA/	2.5 mA max	0.022μF
683					1.75	mA/	3.5 mA max	0.068µF
224					6.0	mA/	12.0 mA max	0.22μF
155					27.5	mA/	55.0 mA max	1.5µF

#### table 1.2 Line to ground capacitor code (Option: F)

Code	N A M	N A H	N A P	Leakage Current (Input 250/500V 60Hz)	Line to ground capacitor (nominal value)
103				0.5 mA/ 1.0 mA max	0.01μF
223				1.0 mA/ 2.0 mA max	0.022µF
683				2.5 mA/ 5.0 mA max	0.068μF

<sup>\*</sup> When the line to ground capacitor code is different, the attenuation characteristic is different.

#### Features of NAC/NAM/NAH/NAP series

- Single Phase 277VAC/300VDC (1-stage filter)
   This product is available 277VAC equipment in factory switchboards and building equipment
- · Withstand voltage 4,000 VAC (Line to ground capacitor code -000 to -472)
- NAC : High-attenuation type from 150kHz to 1MHz NAM : Low leakage current type
- NAH: Ultra high-attenuation type from 9kHz to 1MHz NAP: Outside impulse high-attenuation type

#### **Specifications**

	,		\				
			NAC-40-472	NAC-50-472	NAC-60-472		
No.	Items		NAM-40-000	NAM-50-000	NAM-60-000		
NO.	items		NAH-40-472	NAH-50-472	NAH-60-472		
			NAP-40-472	NAP-50-472	NAP-60-472		
	Rated Voltage	[VAC]	277 (voltage range : 305 max) 1	$\phi$ 50/60Hz [Option : F 500 (voltage	je range : 528 max) 1 φ 50/60Hz]		
'	Hated voltage	[VDC]	300 (voltage range:400 max) [Option: F 600]				
2	Rated Current[A]		40	50	60		
3	Test Voltage (Terminal-Mountin	g Plate)	4,000 VAC (Cutoff Current = 25mA), 1minute at room temperature and humidity *1 *2				
4	Isolation Resistance (Terminal-	Mounting Plate)	500 VDC 100MΩ min at room temperature and humidity *3				
5	Leakage current		Refer to table 1.1 and table 1.2				
6	DC resistance		10mΩ max	6.0mΩ max	4.5mΩ max		
7	Safety agency approval temper	atures	-25 to +85°C (Refer to Derating	g Curve)			
8	Operating temperature		-40 to +85°C (Refer to Derating	g 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/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			UL60939 [Overvoltage Category : III Altitude:3000m], CSA C22.2 No.8 (C-UL)				
	Salety agency approvals		EN60939 (DEMKO) [Overvoltage Category: III Altitude:3000m], ENEC				
14	Case size (without projection) /	Weight	65×54×153mm [2.56×2.13×6.02 inches] (WxHxD) / 750g max				

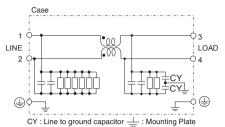
- \*2 Capacitor code "223", "683", "224" and "155" of "NA - - - : 2,800VDC (Cutoff Current = 10mA) , 1 minute at room temperature and humidity.



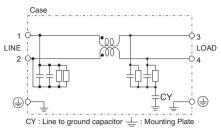
## NAC/NAM/NAH/NAP series (40,50,60A)

#### **Circuit Diagram**

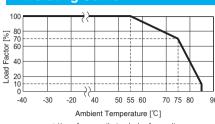
#### (1) Line to ground capacitor code :000,471,222,472,223



#### (2) Line to ground capacitor code :683

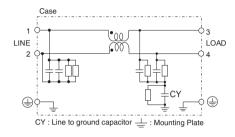


#### **Derating Curve**

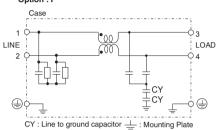


\* Keep free ventilation holes for cooling.

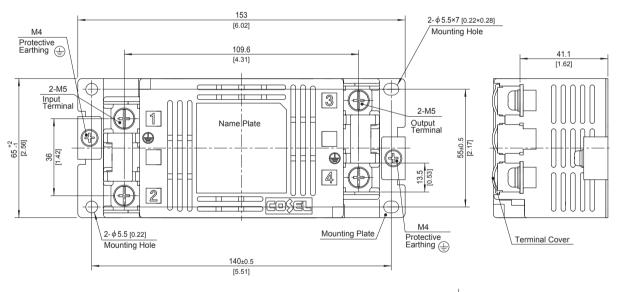
#### (3) Line to ground capacitor code :224,155

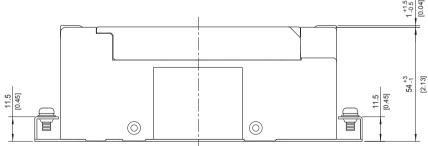


#### (4) Line to ground capacitor code :103,223,683



#### External view





- ※ Dimensions in mm, [ ]=inches
- ※ Tolerance: ±1 [±0.04]
- Weight:750g max
- Mounting Plate:Hot-dip 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
- Keep free ventilation holes for cooling.
- Can be mounted using the 2 corner mounting holes

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