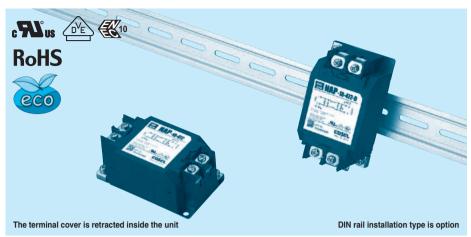
# **CD\$EL** High-voltage pulses high-attenuation type

# NAP series

### Ordering information

NAP -10 -472





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

table1.1 Line to ground capacitor code

Code	Leakage Current (Input 125/250V 60Hz)	Line to ground capacitor (nominal value)
000	5 μA/ 10μA max	Not Provided
101	12.5 μA/ 25μA max	100pF
221	25 μA/ 50μA max	220pF
331	37.5 μA/ 75μA max	330pF
471	50 μA/100μA max	470pF
681	75.5 μA/150μA max	680pF
102	0.13mA/0.25mA max	1000pF
222	0.25mA/0.5 mA max	2200pF
332	0.38mA/0.75mA max	3300pF
472	0.5 mA/1.0 mA max	4700pF

- When the line to ground capacitor code is different, the attenuation characteristic is different.
- **4**Options
  - D:DIN rail installation type
  - \* The dimensions change when the option is set. Refer to External view.

# **Features of NAP series**

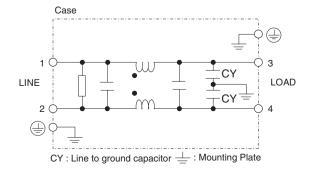
# **High-voltage pulses high-attenuation type**

- · Single Phase 250 VAC
- · Push down type terminal block

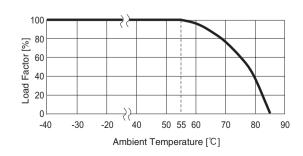
# **Specifications**

No.	Items	NAP-04-472	NAP-06-472	NAP-10-472	NAP-16-472	NAP-20-472	NAP-30-472
1	Rated Voltage[V]	AC 1 \( \phi \) 250 / DC250					
'_	• • • • • • • • • • • • • • • • • • • •						
2	Rated Current[A]	4	6	10	16	20	30
3	Test Voltage (Terminal-Mounting Plate)	2,500 VAC (Cutoff Current = 20mA), 1 minute at room temperature and humidity					
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 100M $\Omega$ min at room temperature and humidity					
5	Leakage current 125/250V 60Hz	0.5mA/1.0mA max					
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°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	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 mm [2.09 × 1.61 × 3.62 inches] (W × H × D) /300g max (Option : -D refer to external view)					

# **Circuit Diagram**



# **Derating Curve**



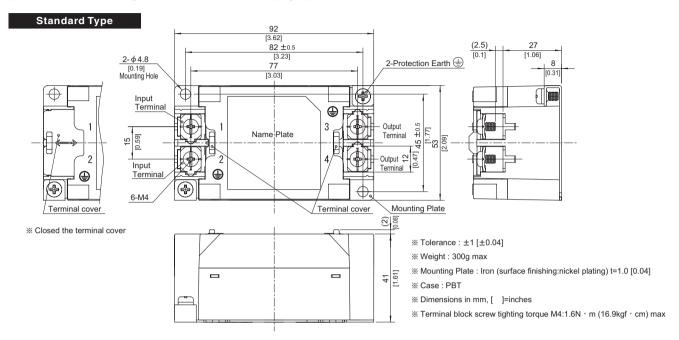


# NAH,NAC,NAM,NAP series

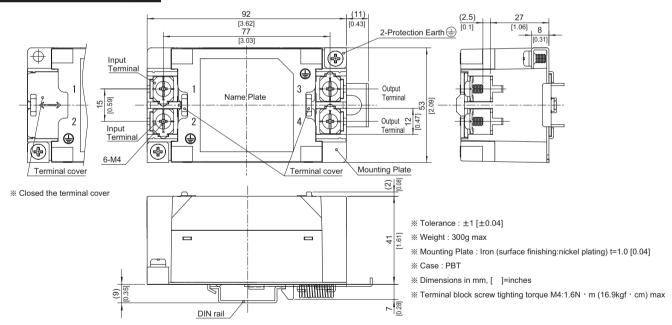
# **External view**

As this product is adopted push-down type terminal block, this appearance is as follows.

- (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**

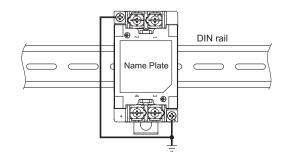


# ■Note when installing the EMI/EMC Filter on a DIN rail.

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.

It can connect the ground to either one only.



NA-5

### Ordering information

-50



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

table1.1 Line to ground capacitor code

Code	N A M		Leakage Current (Input 125/250V 60Hz) Line to groun capacitor (nominal value)	
000			5 μA/ 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

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

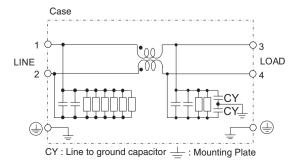
# Features of NAC/NAM/NAH/NAP series

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

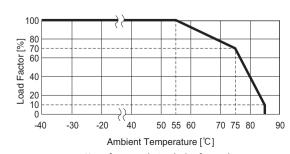
# **Specifications**

			NAC-40-472	NAC-50-472	NAC-60-472		
			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		
	Date d Valtage	[VAC]	277 (voltage range:305 max) 1 φ 50/60Hz				
'	Rated Voltage	[VDC]	300 (voltage range:400 max)				
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				
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	DC resistance		10mΩ max	6.0mΩ max	4.5mΩ max		
7	Safety agency approval temper	atures	-25 to +85℃ (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/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	13 Safety agency approvals		UL60939[Overvoltage Category: III Altitude:3000m], CSA C22.2 No.8 (C-UL) EN60939(DEMKO)[Overvoltage Category: III Altitude:3000m], ENEC				
14	Case size (without projection) /	Weight	65x54x153mm[2.56x2.13x6.02 inches](WxHxD) / 750g max				

# **Circuit Diagram**



# **Derating Curve**

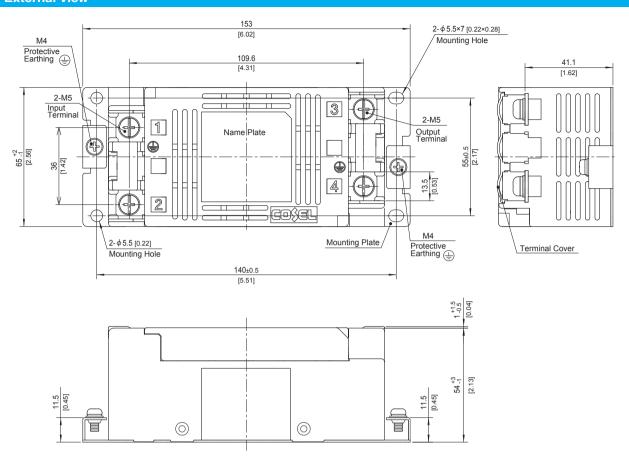


\*Keep free ventilation holes for cooling.



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

# **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]
- ★ Terminal block screw tightening torque M5:3.0N·m max
- Can not be mounted upside-down. (mounted the top surface)
- \* Keep free ventilation holes for cooling.
- \* Can be mounted using the 2 corner mounting holes.