

# SINGLE PHASE FILTER Plastic Chassis

#### **High Performance**

#### **Features**

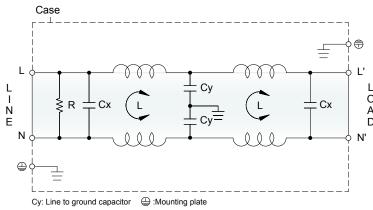
- Superior attenuation of common-mode noise
- 2-stage filter suitable for heavily noisy environment
- Current rating 1A~20A
- Integrated nut is in hinged cover for reliable ring lug wiring
- Light weight plastic housing design

## **M**arketing Applications

- Metal processing equipment
- Automation
- Assembly lines
- Computer numberical control (CNC)
- Packaging machine

### Electrical Schematic Special Features

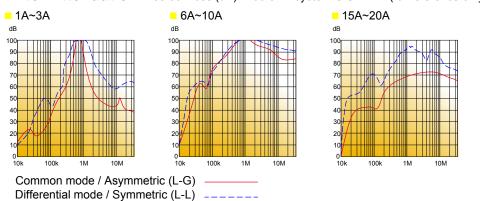
CNBC series: best frequency bands 150kHz~1MHz.



## **Technical Data and Measuring Conditions**

| No. | CNBC series Filter PRJ No. | 01CNBC472  | 03CNBC472 | 06CNBC472 | 10CNBC472 | 15CNBC472 | 20CNBC472 |
|-----|----------------------------|--|-----------|-----------|-----------|-----------|-----------|
| 1   | Rated voltage              | AC 1Ø 250V / DC250V  |           |           |           |           |           |
| 2   | Rated current              | 1A   | 3A        | 6A        | 10A       | 15A       | 20A       |
| 3   | Test voltage               | 2,500 VAC  |           |           |           |           |           |
|     |                            | (Cutoff current: 20mA), 1 min. at room temperature and humidity                      |           |           |           |           |           |
| 4   | Isolation resistance       | $500 \text{VDC } 100 \text{M}\Omega$ min. at room temperature and humidity           |           |           |           |           |           |
| 5   | Leakage current            | 1mA @250VAC/60Hz (max.)  |           |           |           |           |           |
| 6   | Cy cap. value              | 0.047 ~ 0.47nF   |           |           |           |           |           |
| 7   | Voltage drop               | 1.0V max.  |           |           |           |           |           |
| 8   | Safety approval temp.      | -25° ~ +100°   |           |           |           |           |           |
| 9   | Operating temperature      | -40° ~ +100°   |           |           |           |           |           |
| 10  | Operating humidity         | 20 ~ 95%RH (Non condensing)  |           |           |           |           |           |
| 11  | Storage temp. / humidity   | -40° ~ +100°; 20 ~ 95%RH (Non condensing)  |           |           |           |           |           |
| 12  | Vibration                  | $10 \sim 55$ Hz, $19.6$ m/s <sup>2</sup> (2G), 3 min. period, 1 hour each X,Y,Z axis |           |           |           |           |           |
| 13  | Impact                     | 196.1m/s² (20G), 11ms, once along X,Y,Z axis   |           |           |           |           |           |
| 14  | Safety approvals           | UL1283, CSA C22.2 No.8 (C-UL), VDE0565 Teil3-1, IEC/EN60939                          |           |           |           |           |           |
| 15  | DIN-rail type              | Adding suffix to PRJ. No. with D or DP (refer the Mechanical Drawing on page 2)      |           |           |           |           |           |

#### Filter Attenuation Insertion loss (dB) in 50 ohm system CISPR 17 (for reference only)











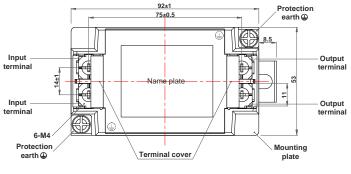


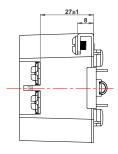


## Mechanical Drawing (unit: mm)

#### DIN-rail mounting PRJ. No.: with suffix D







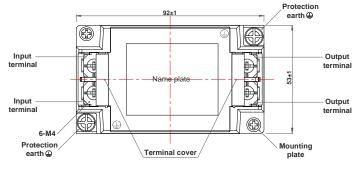
- 42±1
- ※ Tolerance: ±1

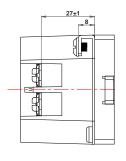
  ※ Case: PC

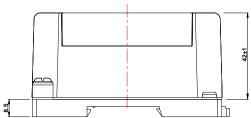
- Tolerance: ±1
   Case: PC
   Mounting plate: Iron
   (surface finishing: nickel plating) t= 1.2
   Terminal block screw tighting torque
   M4: 1.6N·m (16.9kgf-cm) max.

#### DIN-rail mounting PRJ. No.: with suffix DP









- ※ Tolerance: ±1
- ※ Case: PC
  ※ Mounting plate: Iron
- (surface finishing: nickel plating) t= 1.2

  \*\* Terminal block screw tighting torque
  M4: 1.6N-m (16.9kgf-cm) max.

#### Note when installing the EMI filter on a DIN rail:

When the EMI 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 filter body to the earth.

