

# EMC Components

## ZCW Series

### EMC Filters for AC Power Supply Cased (3-Phase, Mid-Size)

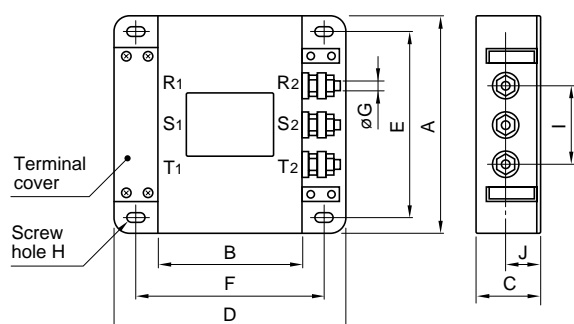
#### FEATURES

- Superior performance and reliability. Outstanding attenuation of differential mode noise.
- High current applications possible due to an SF coil equipped with a high magnetic flux dust core.
- Leakage current limited to below 1mA.
- Can also be used with single-phase three wire type power.

#### APPLICATIONS

General control equipment, numerical control devices, computers, and other industrial equipment.

#### SHAPES AND DIMENSIONS



Dimensions in mm

Part No.	A	B	C	D	E	F	øG	H	I	J
ZCW2210-01	150	100	40	160	132	132	M4	5	60	20
ZCW2220-01	150	100	60	160	132	132	M4	5	60	26
ZCW2230-01	220	100	80	160	200	132	M6	5	120	40
ZCW2240-01	220	100	80	160	200	132	M6	5	120	40
ZCW4240-02	220	110	80	220	200	200	M6	5.5	120	45

- Case: metal, terminal: stud type, terminal cover: metal
- The 4 line type ZCW4240-02 is provided with N and G terminals.

#### ELECTRICAL CHARACTERISTICS

Part No.	ZCW2210-01	ZCW2220-01	ZCW2230-01	ZCW2240-01	ZCW4240-02
Rated voltage Eac (V)	250	250	250	250	450
Rated current (A)	10	20	30	40	40
Test voltage Eac (V)[Between terminal and case]	1500	1500	1500	1500	2000
Insulation resistance (MΩ) [DC.500V,1min/between terminal and case]	100min.	100min.	100min.	100min.	100min.
Leakage current (mA) [250V • 60Hz/450V • 60Hz*]	1max.	1max.	1max.	1max.	1max.*
DC resistance (mΩ)	30max.	30max.	40max.	10max.	7max.
Operating temperature range (°C) [Including self-temperature rise]	-10 to +85	-10 to +85	-10 to +85	-10 to +85	-10 to +85
With derating over(°C)	55	55	55	55	55
Temperature rise (°C)	40max.	40max.	40max.	40max.	40max.
Attenuation frequency range (MHz)[+5 to +35°C]	Differential mode at 20dB 0.2 to 30 Differential mode at 40dB 0.5 to 20	0.2 to 30 0.5 to 20	0.2 to 30 0.5 to 20	0.2 to 30 0.5 to 20	3 to 20 0.6 to 15
Weight (kg)	1.3	1.9	4.6	4.6	5

\* The 1mA maximum leakage current of the ZCW4240-02 was determined at 450V, 60Hz.

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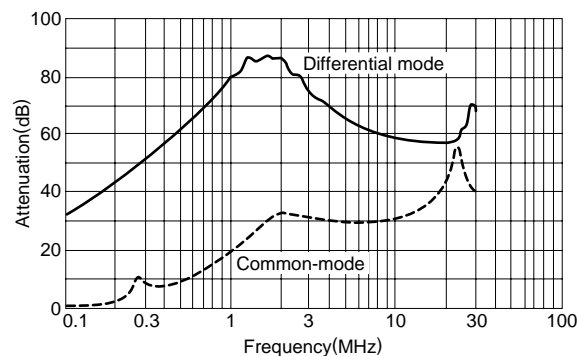
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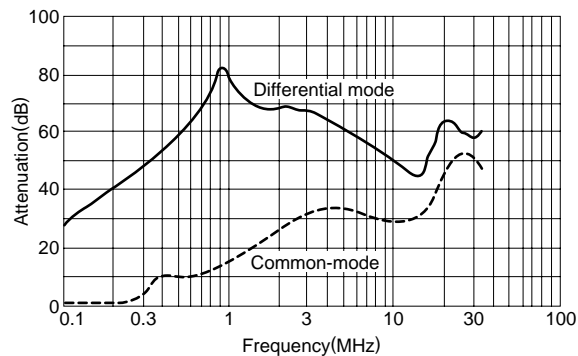
#### TYPICAL ELECTRICAL CHARACTERISTICS

#### ATTENUATION vs. FREQUENCY CHARACTERISTICS

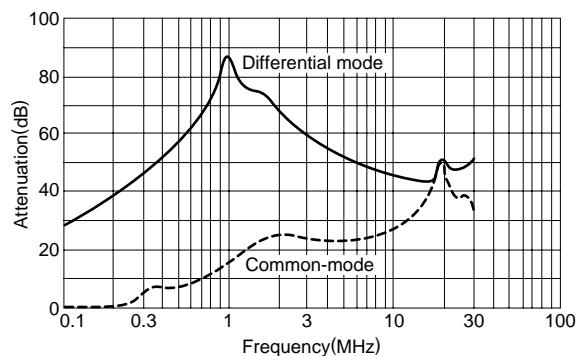
##### ZCW2210-01



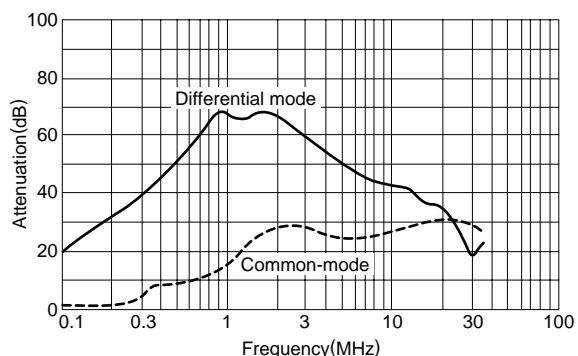
##### ZCW2220-01



##### ZCW2230-01

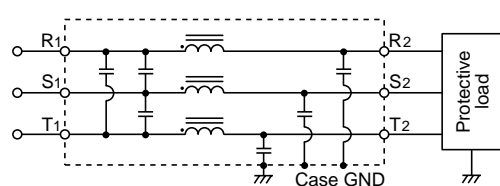


##### ZCW4240-02



#### CIRCUIT DIAGRAM

##### ZCW-01 TYPE



#### TYPICAL APPLICATIONS

##### ZCW-01 TYPE

