Ordering information

FSB series(10,20,30A)

-30 -324



The terminal cover is retracted inside the unit

Features of FSB series

EMI/EMC Filter for motor drive system (AC servo)

- Improve saturation resistance (There is such as performance improvement type "-254-HU")
- · Book type (Space-saving type)
- · Quick and easy push-down terminal Just connect the wires, push-down and tighten the screws with a screwdriver

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

table1.1 Line to ground capacitor code

Code	Leakage Current * 1 Upper row : ∆-connection Lower row : Y-connection	Line to ground capacitor CY1 (nominal value)	Line to ground capacitor CY2 (nominal value)
203	1.0mA/2.0mA max 0.1mA/0.2mA max	0.01μF	0.01μF
573 *2	2.5mA max/Not applicable 0.35mA max/Not applicable	0.01μF	0.047μF
693	2.5mA/5.0mA max 0.35mA/0.7mA max	0.022μF	0.047μF
104	3.5mA/7.0mA max 0.5mA/1.0mA max	0.033μF	0.068μF
254 *2	12mA max/Not applicable 1.5mA max/Not applicable	0.033μF	0.22 <i>μ</i> F
324	12mA/24mA max 1.5mA/3.0mA max	0.1 <i>μ</i> F	0.22μF
335 *2	160mA max/Not applicable 20mA max/Not applicable	0.033μF	3.3 <i>μ</i> F
355	180mA/270mA max 25mA/50mA max	0.22μF	3.3 <i>µ</i> F

- * When the line to ground capacitor code is different, the attenuation characteristic is different.
- *1 Input 250/500V 60Hz (Only △-connection of "355" is 250/400V 60Hz)
- *2 Only "U" type is applied.

4 Option

H:Ultra high-attenuation type

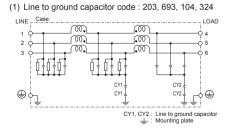
U:Improve differential mode attenuation (Rated voltage 250V) Only "573", "254", "335" is applied.

Specifications

No.	Items	FSB-10-324	FSB-20-324	FSB-30-324	
1	Rated Voltage[V]	AC Three Phase 500 (voltage range:528 max) 50/60Hz *3 *4			
2	Rated Current[A]	10	20	30	
3	Test Voltage (Terminal-Mounting Plate)	2,800 VDC (Cutoff Current = 10mA), 1minute at room temperature and humidity *5			
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 100M Ω min at room temperature and humidity $*6$			
5	Leakage current 250/500V 60Hz	12mA/24mA max			
6	DC resistance	100m Ω max	38mΩ max	20mΩ 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 Teil 3-1, ENEC			
14	Case size (without projection)	66 X 100 X 240 mm (W X H X D)			
		[2.60×3.94×9.45 inches] (W×H×D)			
15	Weight	1.8kg max			

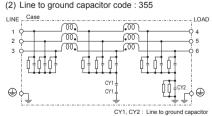
- *3 Only capacitor code "355", Three Phase Δ-connection: 400 (440 max), Y-connection: 500 (528 max)
- *4 Only "FSB-__-U", Three Phase 250 (275 max)
- *5 Only capacitor code "203", "573", "693", "104", 2,500VAC (Cutoff Current = 100mA), 1minute at room temperature and humidity.
- *6 Only capacitor code "335", "355", Isolation resistance specification is deleted.

Circuit Diagram

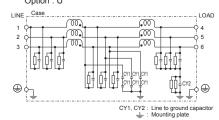


(3) Line to ground capacitor code : 573, 254 Option : U

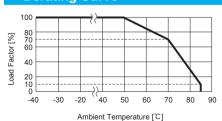
LINE -LOAD 000. 000 000 (00)



(4) Line to ground capacitor code : 335 Option : U



Derating Curve



*Keep free ventilation holes for cooling.

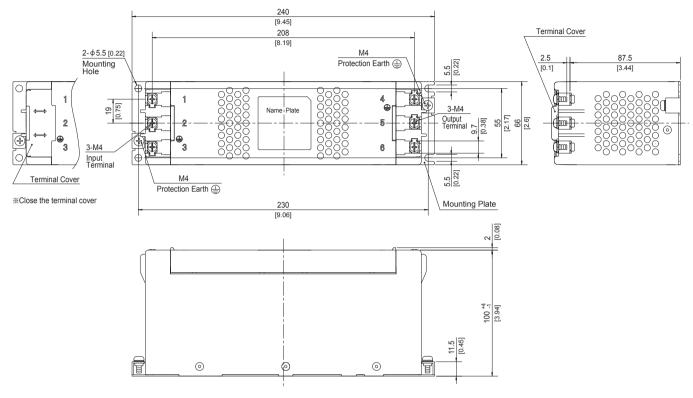
FSB series(10,20,30A)



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.



- ※ Tolerance : ±1 [±0.04]
- * Weight: 1.8kg max
- Mounting Plate: Hot-dip Galvanized Steel board t=1.2 [0.05]
- * Case : PBT
- ※ Dimensions in mm, []=inches
- ※ Terminal block screw tightening torque M4: 1.6N⋅m (16.9kgf⋅cm)max
- * Can not be mounted upside-down (mounted the top surface)
- * Keep free ventilation holes for cooling