FSB series(40,50,60A)

-60 -324



Features of FSB series

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

- Improve saturation resistance (There is such as performance improvement type "-324-HU")
- · Book type (Space-saving type)

- 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
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
324	12mA/24mA max 1.5mA/3.0mA max	0.1 <i>μ</i> F	0.22μF
355	180mA/270mA max 25mA/50mA max	0.22μF	3.3μF

- * 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)
- (4)Option
 - H:Ultra high-attenuation type

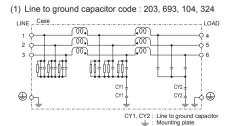
 - "355" is not applied.
 U:Improve differential mode attenuation (Rated voltage 250V)

Specifications

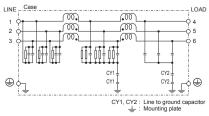
No.	Items	FSB-40-324	FSB-50-324	FSB-60-324	
1	Rated Voltage[V]	AC Three Phase 500 (voltage range:528 max) 50/60Hz *2 *3			
2	Rated Current[A]	40	50	60	
3	Test Voltage (Terminal-Mounting Plate)	2,800 VDC (Cutoff Current = 10mA), 1minute at room temperature and humidity *4			
4	Isolation Resistance (Terminal-Mounting Plate)	500 VDC 100M Ω min at room temperature and humidity $*5$			
5	Leakage current 250/500V 60Hz	12mA/24mA max			
6	DC resistance	17m $Ω$ max	14mΩ max	10mΩ 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 Teil 3-1, ENEC			
14	Case size (without projection)	90 X 125 X 290 mm (W X H X D)			
		[3.54×4.92×11.42 inches] (W×H×D)			
15	Weight	3.3kg max			

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

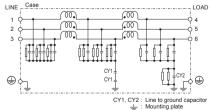
Circuit Diagram



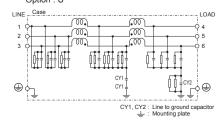
(3) Line to ground capacitor code : 203, 693, 104, 324 Option : U



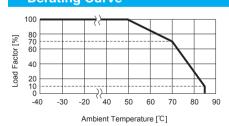




(4) Line to ground capacitor code : 355 Option : U



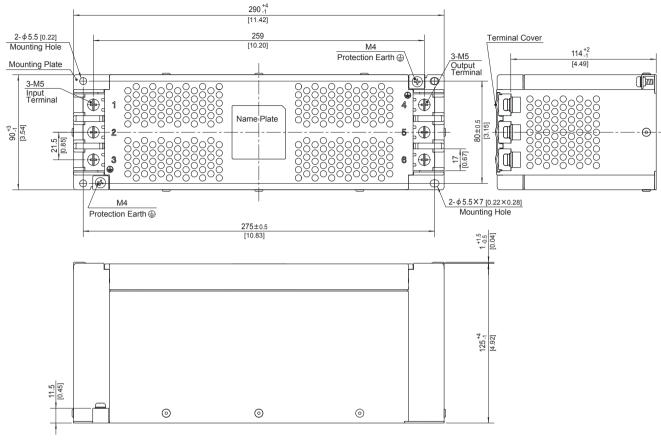
Derating Curve



*Keep free ventilation holes for cooling.



External view



- ※ Tolerance : ±1 [±0.04]
- * Weight: 3.3kg max
- Mounting Plate: Hot-dip Galvanized Steel board t=1.2 [0.05]
- **%** Case Material : PBT

- ** Terminal block screw tightening torque M5 : 3.0N · m(30.7kgf · cm)max

 ** Protection Earth(PE) 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