

# GS30 Optional Accessories – EMC Filter & Zero-Phase Reactor

## GS30 Standard Footprint EMC Filter and Zero-Phase Reactor

If electromagnetic noise is harmful to your manufacturing environment, we recommend that you select an EMC filter as shown below. For some drive models, you may need to use zero-phase reactors to be compliant with EMC regulations. Refer to the table and figures below for the recommended model, setting method, and maximum motor cable length of the EMC filter and zero-phase reactor. The filter's footprint allows mounting of the drive on top of the recommended filter, saving panel space and wiring. For more information and installation instructions, please see the GS30 User Manual.

GS30 EMC Filter and Zero-Phase Reactor, Frames A-F															
Frame	Drive Model	Input Current (A)	Footprint* Filter Model #	Price	Recommended Zero-Phase Reactor	Conducted Emission						Radiated Emission			
						C1-motor cable length-30m			C2-motor cable length-100m			C2-motor cable length-100m			
						Zero-Phase Reactor Position									
1	2	3	n/a			1	2	3							
A	<a href="#">GS31-20P5</a>	6.7	<a href="#">EMF11AM21A</a>	\$53.00	RF008X00A		✓	✓	N/A				✓	✓	
	<a href="#">GS33-20P5</a>	3.8	<a href="#">EMF10AM23A</a>	\$73.00			✓	✓	N/A				✓	✓	
	<a href="#">GS33-21P0</a>	6	<a href="#">EMF10AM23A</a>	\$73.00			✓	✓	N/A				✓	✓	
	<a href="#">GS33-40P5</a>	2.5	<a href="#">EMF6A0M43A</a>	\$67.00				✓	N/A					✓	
	<a href="#">GS33-41P0</a>	4.2	<a href="#">EMF6A0M43A</a>	\$67.00				✓	N/A					✓	
B	<a href="#">GS31-21P0</a>	10.5	<a href="#">EMF11AM21A</a>	\$53.00				✓	✓	N/A				✓	✓
	<a href="#">GS33-22P0</a>	9.6	<a href="#">EMF10AM23A</a>	\$73.00				✓	✓	N/A				✓	✓
	<a href="#">GS33-42P0</a>	6.4	<a href="#">EMF6A0M43A</a>	\$67.00					✓	N/A					✓
C	<a href="#">GS31-22P0</a>	17.9	<a href="#">EMF27AM21B</a>	\$94.00					✓	N/A					✓
	<a href="#">GS31-23P0</a>	26.3	<a href="#">EMF27AM21B</a>	\$94.00					✓	N/A					✓
	<a href="#">GS33-23P0</a>	15	<a href="#">EMF24AM23B</a>	\$115.00				✓	✓	N/A				✓	✓
	<a href="#">GS33-25P0</a>	23.4	<a href="#">EMF24AM23B</a>	\$115.00				✓	✓	N/A				✓	✓
	<a href="#">GS33-43P0</a>	7.2	<a href="#">EMF12AM43B</a>	\$118.00					✓	N/A					✓
D	<a href="#">GS33-45P0</a>	11.6	<a href="#">EMF12AM43B</a>	\$118.00				✓	✓	N/A				✓	✓
	<a href="#">GS33-27P5</a>	32.4	<a href="#">EMF33AM23B</a>	\$167.00			✓	✓		N/A			✓	✓	
	<a href="#">GS33-47P5</a>	17.3	<a href="#">EMF23AM43B</a>	\$161.00		✓	✓	✓	N/A			✓	✓	✓	
E	<a href="#">GS33-4010</a>	22.6	<a href="#">EMF23AM43B</a>	\$161.00		✓	✓	✓	N/A			✓	✓	✓	
	<a href="#">GS33-2010</a>	43.2	<a href="#">B84143D0050R127</a>	\$711.00			✓	✓	N/A				✓	✓	
	<a href="#">GS33-2015</a>	61.2	<a href="#">B84143D0075R127</a>	\$799.00			✓	✓	N/A				✓	✓	
	<a href="#">GS33-4015</a>	30.8	<a href="#">B84143D0050R127</a>	\$711.00					N/A						
F	<a href="#">GS33-4020</a>	39.6	<a href="#">B84143D0050R127</a>	\$711.00			✓	✓	N/A				✓	✓	
	<a href="#">GS33-2020</a>	82.8	<a href="#">B84143D0090R127</a>	\$879.00			✓	✓	N/A				✓	✓	
	<a href="#">GS33-4025</a>	45.7	<a href="#">B84143D0050R127</a>	\$711.00			✓	✓	N/A				✓	✓	
	<a href="#">GS33-4030</a>	53.9	<a href="#">B84143D0075R127</a>	\$799.00			✓	✓	N/A				✓	✓	

Note: It is not necessary to add a zero-phase reactor to pass the C2 conducted emission test.

\* The B8xxx series filters are not footprint filters and must be mounted separately.

GS30 EMC Filter and Zero-Phase Reactor, Frames G-I																	
Frame	Drive Model	Input Current (A)	Filter Model #	Price	Recommended Zero-Phase Reactor	Conducted Emission									Radiated Emission		
						C1-motor cable length-10m			C2-motor cable length-20m			C3-motor cable length 100m			C2-motor cable length-100m		
						Zero-Phase Reactor Position											
1	2	3	1	2	3	1	2	3	1	2	3						
G	<a href="#">GS33-2025</a>	85	<a href="#">B84143A0120R105</a>	\$695.00	RF008X00A		✓	✓		✓					✓	✓	
	<a href="#">GS33-2030</a>	103	<a href="#">B84143A0120R105</a>	\$695.00			✓	✓		✓						✓	✓
	<a href="#">GS33-4040</a>	72.5	<a href="#">B84143A0120R105</a>	\$695.00			✓	✓		✓							
H	<a href="#">GS33-4050</a>	77	<a href="#">B84143D0150R127</a>	\$1,056.00	RF002X00A	✓		✓		✓					✓	✓	
	<a href="#">GS33-4060</a>	97	<a href="#">B84143D0150R127</a>	\$1,056.00		✓		✓		✓						✓	✓
I	<a href="#">GS33-2040</a>	126	<a href="#">B84143D0200R127</a>	\$1,565.00	RF002X00A	✓	✓	✓							✓	✓	
	<a href="#">GS33-2050</a>	151	<a href="#">B84143D0200R127</a>	\$1,565.00		✓	✓									✓	✓
	<a href="#">GS33-4075</a>	123	<a href="#">B84143D0200R127</a>	\$1,565.00			✓										
	<a href="#">GS33-4100</a>	173	<a href="#">B84143D0200R127</a>	\$1,565.00			✓										

Note: It is not necessary to add a zero-phase reactor to pass the C2 conducted emission test.