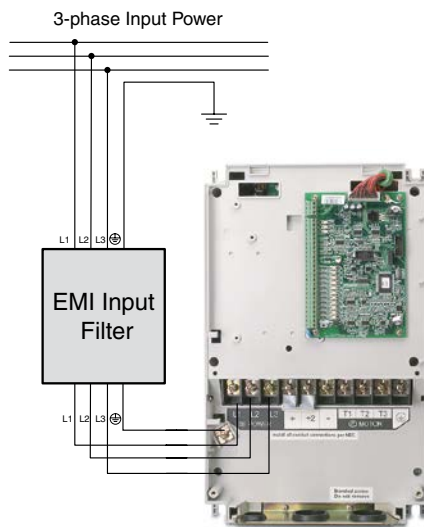


GS2 & GS3 DURAPULSE Accessories – EMI Filters

Overview

The CE Declaration of Conformity for the GS2 and **DURAPULSE** GS3 AC drives was completed in conjunction with the EMI filters listed. Use the following table to specify the corresponding EMI filter for each AC drive model.

CE compliance requires the use of EMI filters for GS2 and **DURAPULSE** GS3 AC drives. GS1 AC drives have internal EMI filtering, and do not require separate filters.



GS3-4030 shown

EMI Input Filter Specifications						
GS AC Drive 115V / 230V	GS AC Drive 460V / 575V	AC Servo Drive	EMI Filter	Price	Input Power	Dimensions
GS2-1xxx	-	SVA-2040 (1-ph) *	20DRT1W3S	\$79.00	1-phase, 20A	Figure 1
GS2-20P5 (1-ph)		SVA-2100 (1-ph) *				
GS2-21P0 (1-ph)						
GS2-22P0 (1-ph)						
GS3-21P0 (1-ph)						
GS3-22P0 (1-ph)						
GS2-23P0 (1-ph)	-	-	32DRT1W3C	\$101.00	1-phase, 32A	Figure 2
GS3-23P0 (1-ph)						
GS2-25P0	-	-	40TDS4W4B	\$119.00	3-phase, 40A	Figure 3
GS2-27P5						
-	GS2-41P0	-	11TDT1W4S	\$107.00	3-phase, 11A	Figure 4
	GS2-42P0					
	GS2-43P0					
-	GS2-45P0	-	17TDT1W44	\$107.00	3-phase, 17A	Figure 5
	GS2-47P5					
-	GS2-4010	-	26TDT1W4B4	\$127.00	3-phase, 26A	Figure 6
GS2-20P5 (3-ph)	GS2-5xxx	-	not available	n/a		
GS2-21P0 (3-ph) *	-	SVA-2040 (3-ph) *	10TDT1W4C	\$84.00	3-phase, 10A	Figure 7
GS2-22P0 (3-ph) *		SVA-2100 (3-ph) *				
GS3-21P0						
GS3-22P0						
GS2-23P0 (3-ph) *	-	SVA-2300 (3-ph) *	26TDT1W4C	\$117.00	3-phase, 26A	Figure 8
GS3-23P0						
GS3-25P0						
GS3-27P5	GS3-4020	-	50TDS4W4C	\$179.00	3-phase, 50A	Figure 9
GS3-2010	GS3-4025					
GS3-2015	GS3-4030	-	100TDS84C	\$282.00	3-phase, 100A	Figure 10
GS3-2020	GS3-4040					
-	GS3-4050					
GS3-2025	GS3-4060	-	150TDS84C	\$317.00	3-phase, 150A	Figure 11
GS3-2030						
GS3-2040						
GS3-2050	-	-	180TDS84C	\$300.00	3-phase, 180A	Figure 12
-	GS3-41P0	-	RF022B43AA	\$80.00	3-phase, 5.9A	Figure 13
	GS3-42P0					
	GS3-43P0					
-	GS3-45P0	-	RF037B43BA	\$115.00	3-phase, 11.2A	Figure 14
-	GS3-47P5	-	RF110B43CA	\$162.00	3-phase, 25A	Figure 15
	GS3-4010					
	GS3-4015					
-	GS3-4075	-	200TDS84C	\$1,001.00	3-phase, 200A	Figure 16
	GS3-4100					

* EMI filters 10TDT1W4C and 26TDT1W4C mount underneath DURApulse drives, but do NOT mount underneath GS2 drives. They also do NOT mount underneath SureServo AC Servo drives.

GS2 & GS3 DURAPULSE Accessories – EMI Filters

Dimensions

Figure 1 [units = mm]

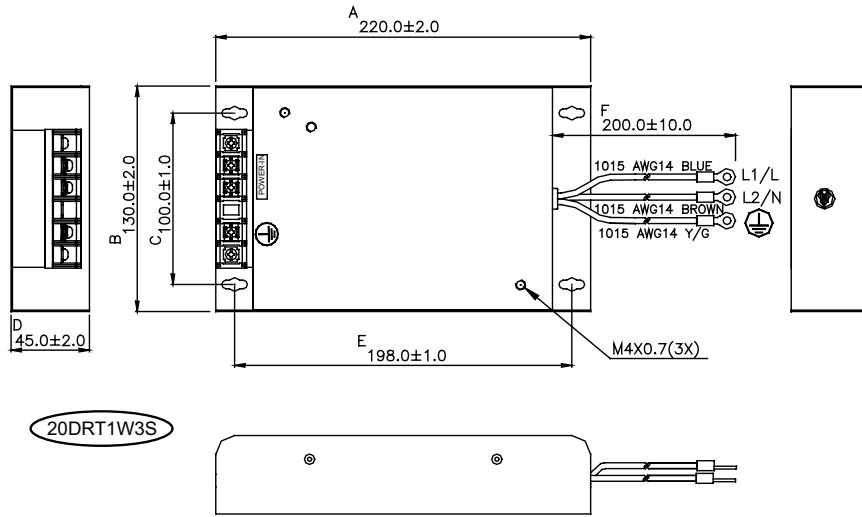


Figure 2 [units = mm]

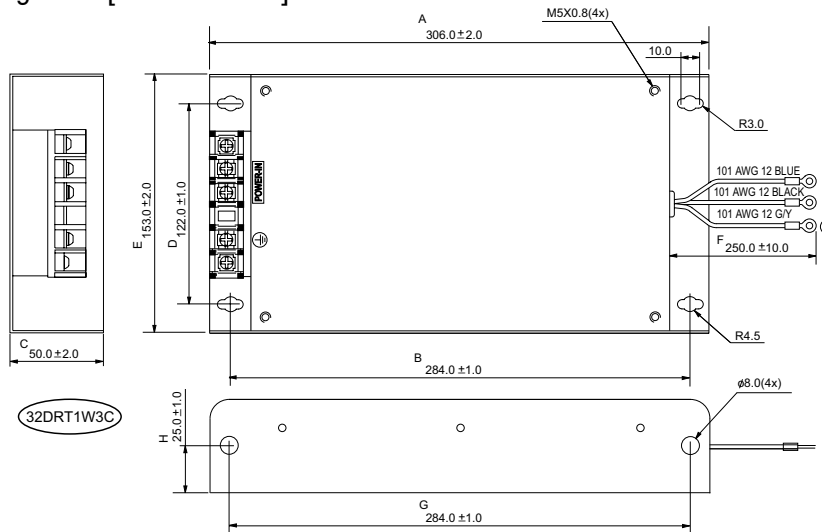
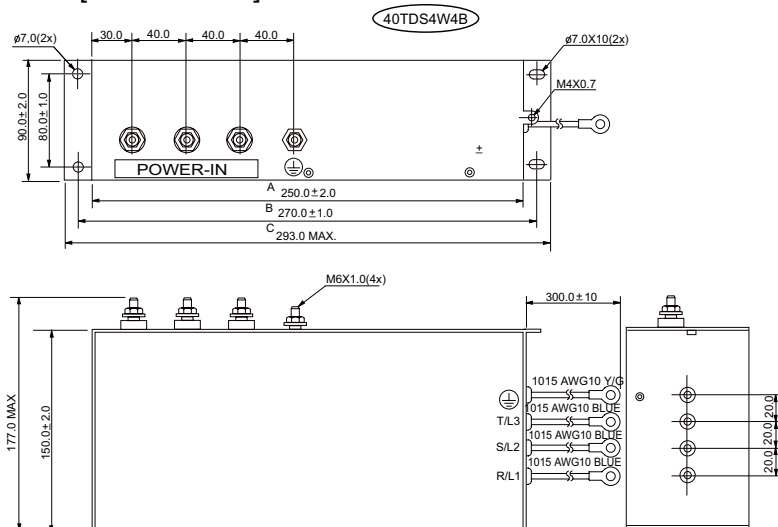


Figure 3 [units = mm]



GS2 & GS3 DURAPULSE Accessories – EMI Filters

Figure 4 [units = mm]

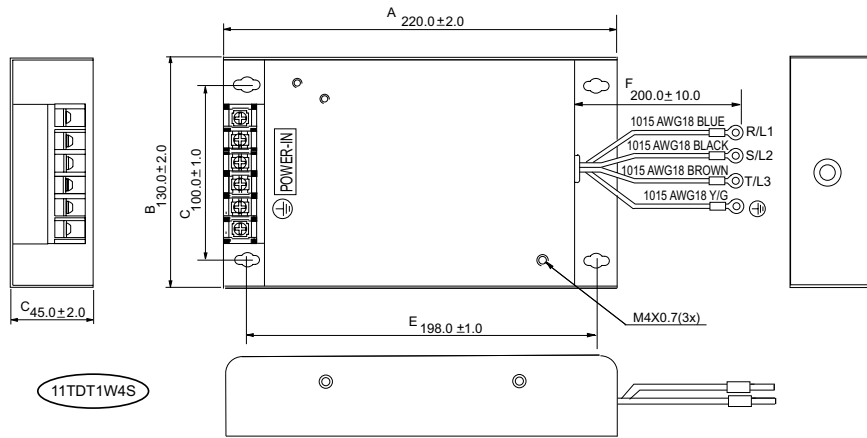


Figure 5 [units = mm]

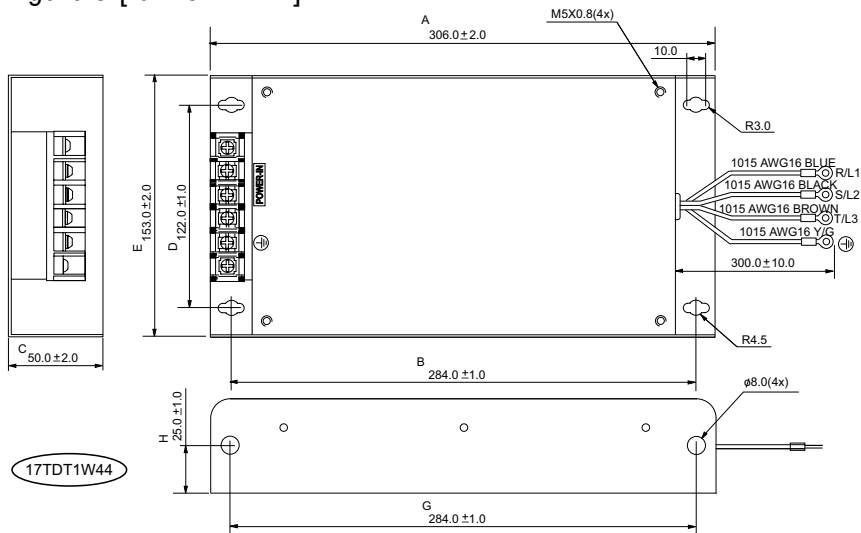
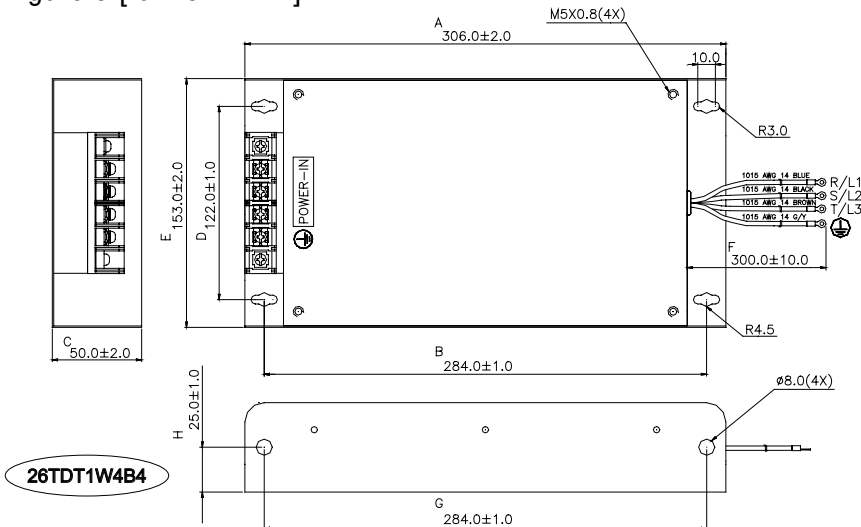


Figure 6 [units = mm]



GS2 & GS3 DURAPULSE Accessories – EMI Filters

Figure 7 [units = mm (in)]

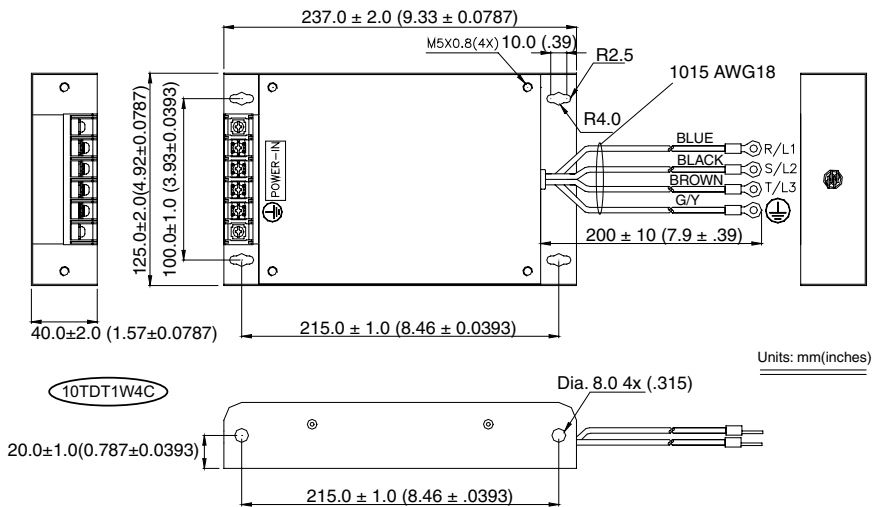


Figure 8 [units = mm (in)]

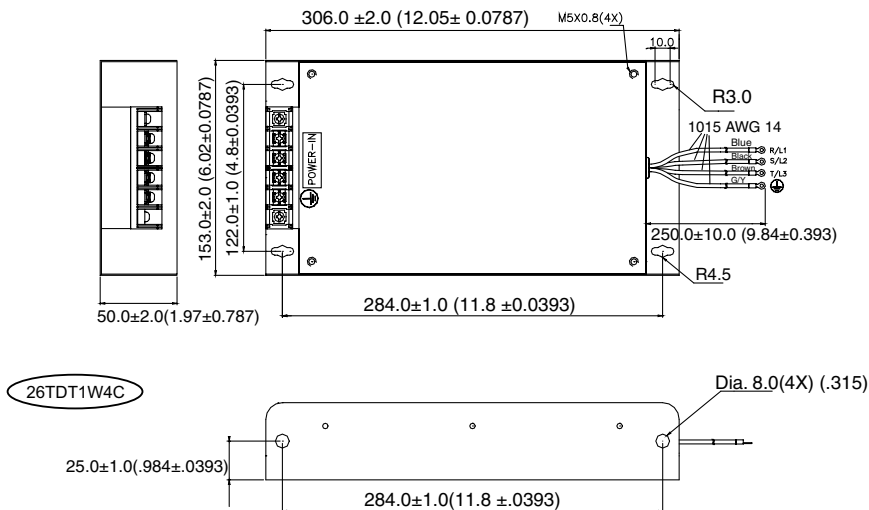
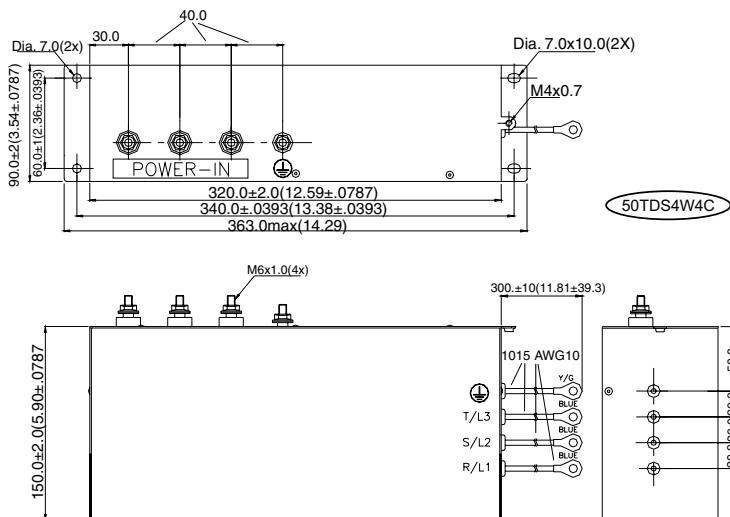


Figure 9 [units = mm (in)]



GS2 & GS3 DURAPULSE Accessories – EMI Filters

Figure 10 [units = mm (in)]

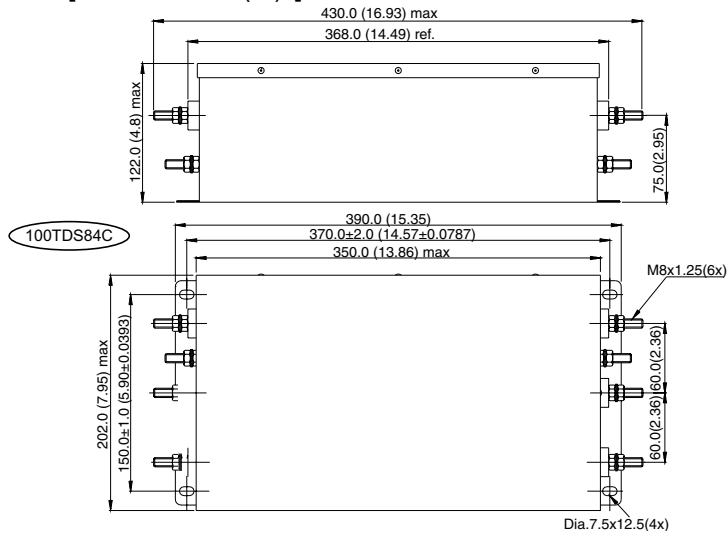


Figure 11 [units = mm (in)]

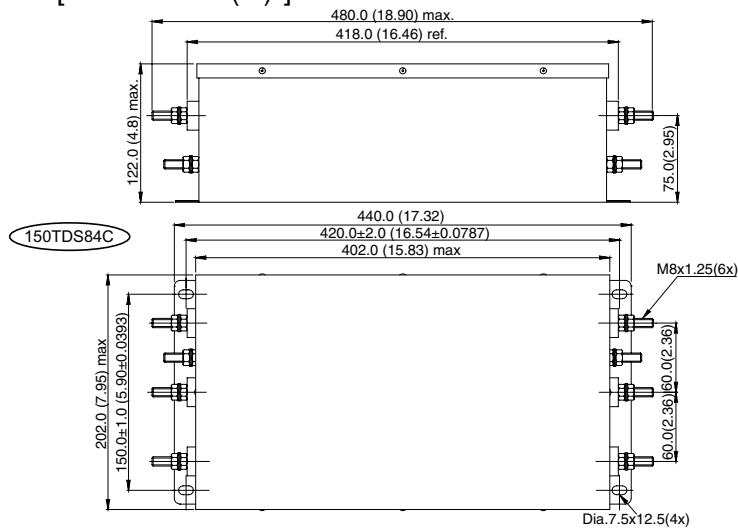
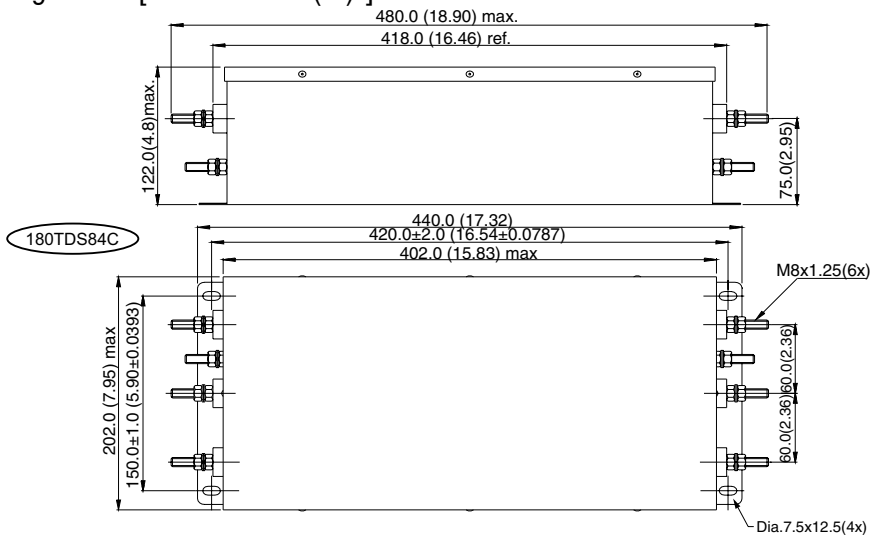


Figure 12 [units = mm (in)]



GS2 & GS3 DURAPULSE Accessories – EMI Filters

Figure 13 [units = mm (in)]

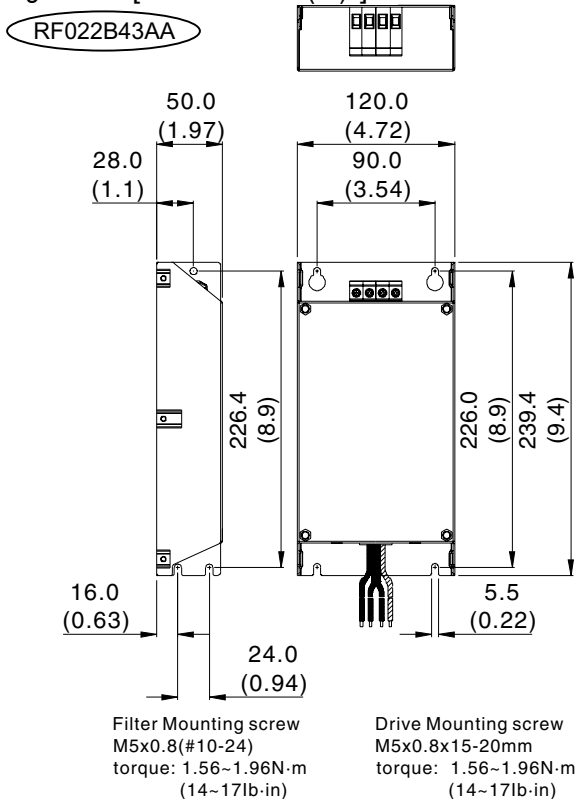


Figure 14 [units = mm (in)]

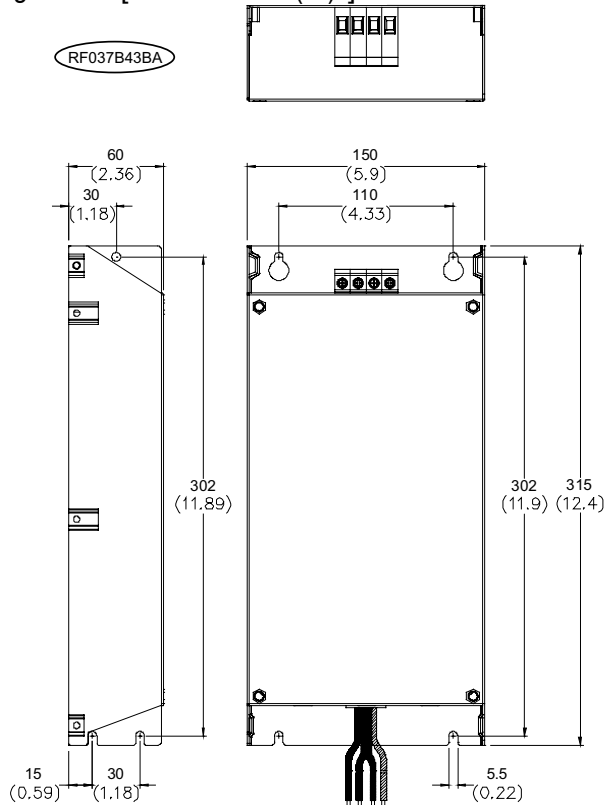


Figure 15 [units = mm (in)]

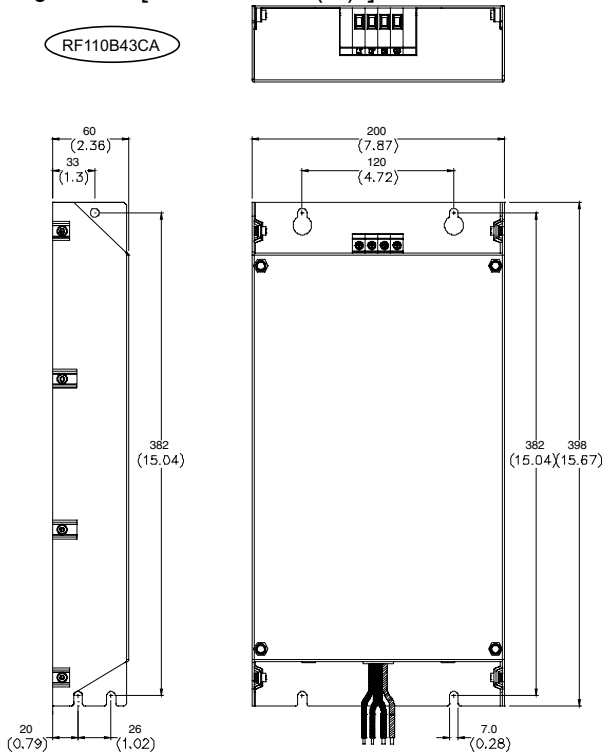
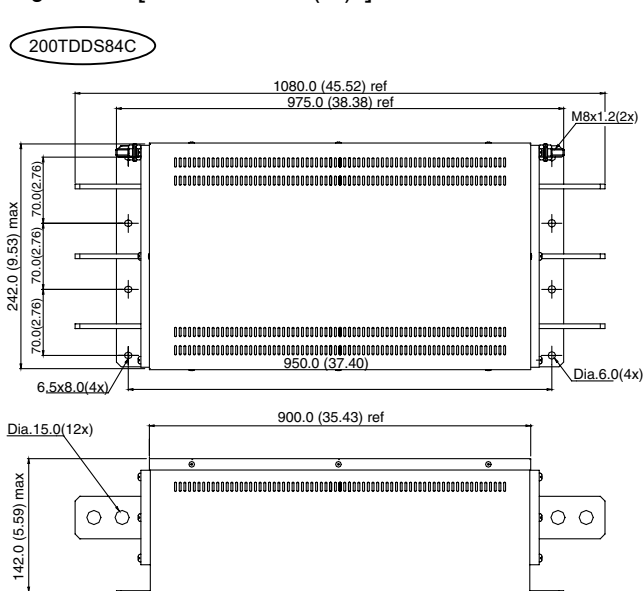


Figure 16 [units = mm (in)]



GS4 DURAPULSE Accessories – EMI Filters Selection

Selection (GS4)

The optional EMI Filters listed here are available for use with the GS4 drive. Selection of these accessories is application-specific and may improve drive performance. Additional information regarding filter installation and operation is available in the AutomationDirect white paper, "Applied EMI/RFI Techniques," downloadable from AutomationDirect.com.

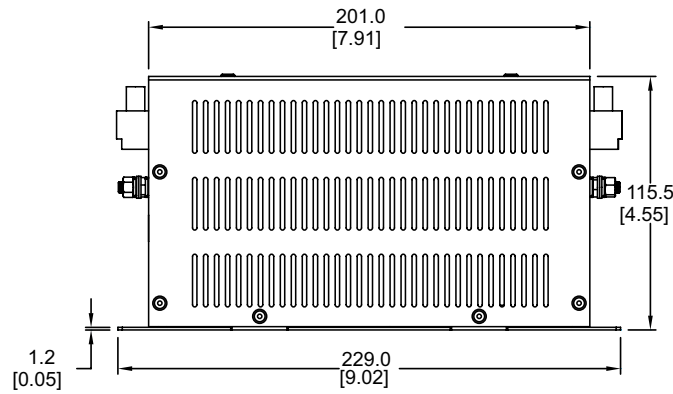
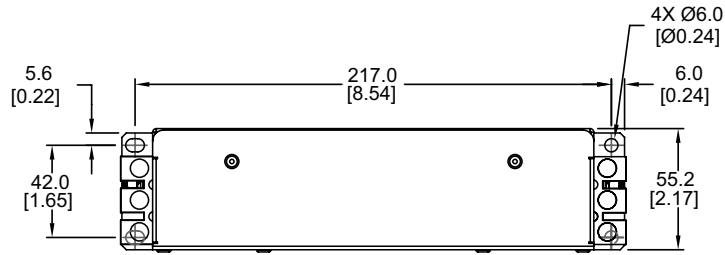
EMI Filters Selection for GS4 AC Drives					
Model*	Description	EMI Filter **	Max Power kW [max/ph]	Max Torque kg-cm [lb-in]	SCCR Rating (kA)
GS4-21P0	230V 1ph/3ph 1.0 hp	KMF325A	20.8 [6]	17.7 [2]	5
GS4-22P0	230V 1ph/3ph 2.0 hp				
GS4-23P0	230V 1ph/3ph 3.0 hp				
GS4-25P0	230V 1ph/3ph 5.0 hp				
GS4-27P5	230V 1ph/3ph 7.5 hp	KMF370A	58.1 [16.8]	44.2 [5]	5
GS4-2010	230V 1ph/3ph 10hp				
GS4-2015	230V 1ph/3ph 15hp				
GS4-4025	460V 3ph 25hp				
GS4-4030	460V 3ph 30hp				
GS4-4040	460V 3ph 40hp	KMF3100A	83 [24]	44.2 [5]	10
GS4-2020	230V 3ph 20hp				
GS4-2025	230V 3ph 25hp				
GS4-2030	230V 3ph 30hp	KMF318A	14.9 [4.3]	17.7 [2]	5
GS4-41P0	460V 3ph 1.0 hp				
GS4-42P0	460V 3ph 2.0 hp				
GS4-43P0	460V 3ph 3.0 hp				
GS4-45P0	460V 3ph 5.0 hp				
GS4-47P5	460V 3ph 7.5 hp				
GS4-4010	460V 3ph 10hp	KMF350A	41.5 [12]	44.2 [5]	10
GS4-4015	460V 3ph 15hp				
GS4-4020	460V 3ph 20hp				
GS4-4050	460V 3ph 50hp	MIF375	62.3 [18]	53.1 [6]	10
GS4-2040	230V 3ph 40hp	MIF3150	124.6 [36]	177 [20]	10
GS4-2050	230V 3ph 50hp				
GS4-4060	460V 3ph 60hp				
GS4-4075	460V 3ph 75hp				
GS4-4100	460V 3ph 100hp				
GS4-2060	230V 3ph 60hp	MIF3400B	332.2 [96]	265.5 [30]	30
GS4-2075	230V 3ph 75hp				
GS4-2100	230V 3ph 100hp				
GS4-4125	460V 3ph 125hp				
GS4-4150	460V 3ph 150hp				
GS4-4175	460V 3ph 175hp				
GS4-4200	460V 3ph 200hp				
GS4-4250	460V 3ph 250hp	MIF3800 & Qty. 3 TOR254	664.3 [192]	265.5 [30]	30
GS4-4300	460V 3ph 300hp				

* EMI filter selections for GS4-2xxx models are the same whether that particular model is supplied 1-Phase or 3-Phase 230VAC.
** Part numbers are Roxburgh EMI Filters available from AutomationDirect at the web link embedded with each part number listed above.

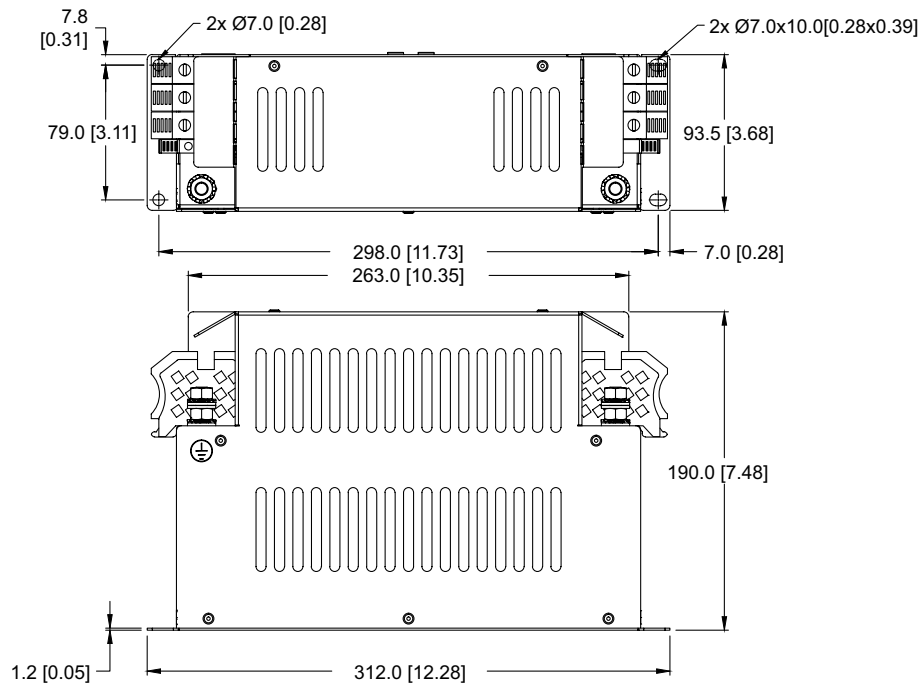
GS4 DURAPULSE Accessories – EMI Filters

Dimensions (Units = mm [in])

See our website: www.AutomationDirect.com for complete engineering drawings.



KMF318A KMF325A

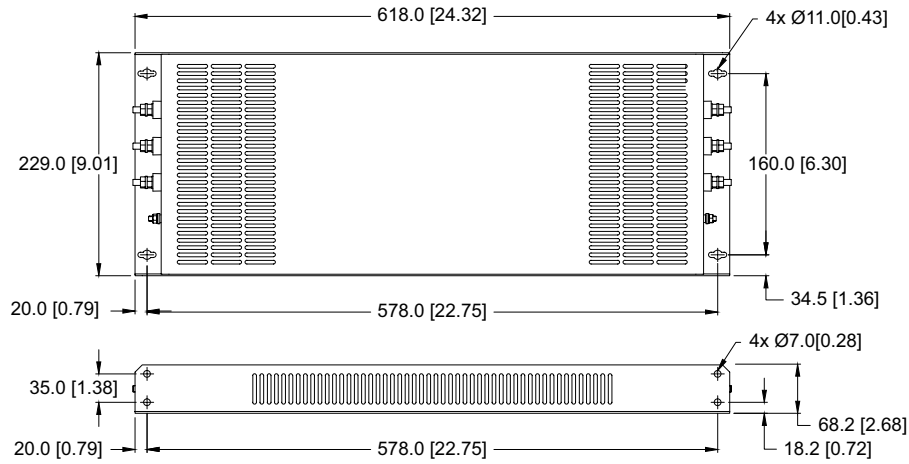


KMF350A KMF370A KMF3100A

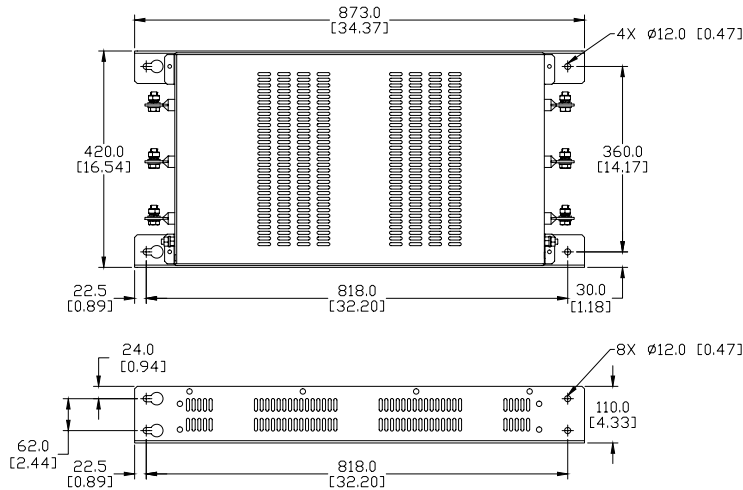
GS4 DURAPULSE Accessories – EMI Filters

Dimensions (Units = mm [in])

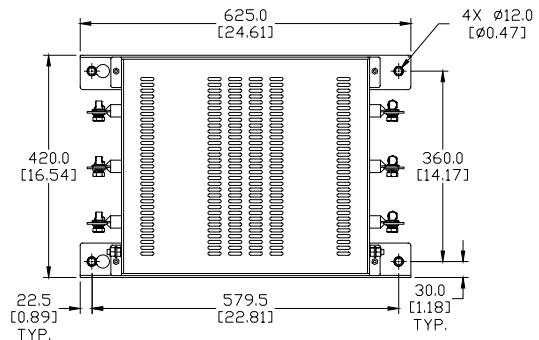
See our website: www.AutomationDirect.com for complete engineering drawings.



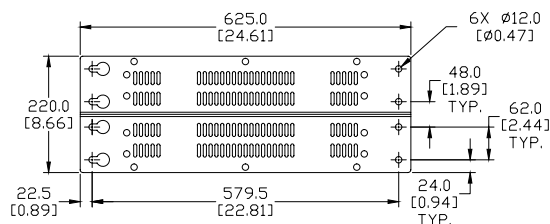
MIF3150



MIF3400B

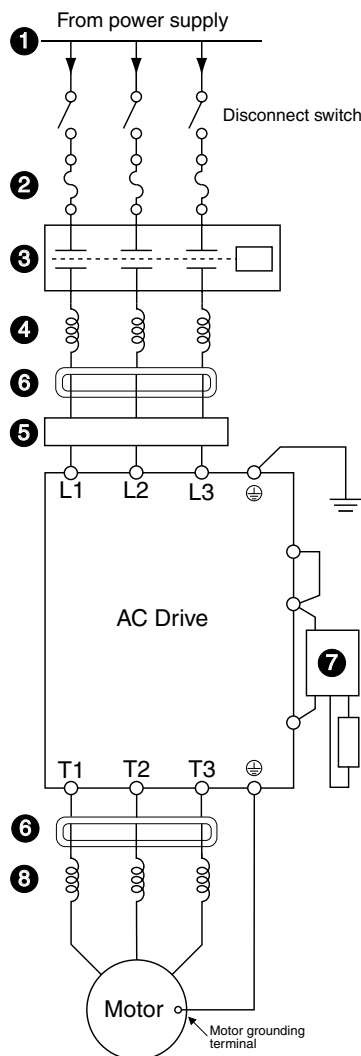


MIF3800



AC Drives Optional Accessories – Overview

Drive Accessories
(not all accessories are applicable for every drive model)



1 Power Supply

Please follow the specific power supply requirements as detailed in the specific drive manual.

2 Fuses

Input fuses protect the AC drive from excessive input current due to line surges, short circuits, and ground faults. They are recommended for all installations and may be required for UL-listed installations.

3 Contactor (Optional)

Do not use a contactor or disconnect switch for run/stop control of the AC drive and motor. This will reduce the operating life cycle of the AC drive. Cycling a power circuit switching device while the AC drive is in run mode should be done only in emergency situations.

4 Input Line Reactor (Optional)

See the Line Reactors section at www.automationdirect.com for more information.

Input line reactors protect the AC drive from transient overvoltage conditions, typically caused by utility capacitor switching. The input line reactor also reduces the harmonics associated with AC drives. Input line reactors are recommended for all installations.

5 EMI filter (Optional)

See the EMI Filters section at www.automationdirect.com for more information.

Input EMI filters reduce electromagnetic interference or noise on the input side of the AC drive. They are required for CE compliance and recommended for installations prone to or sensitive to electromagnetic interference.

6 RF filter (Optional)

RF filters reduce the radio frequency interference or noise on the input or output side of the inverter.

7 Braking Unit and/or Braking Resistor (Optional)

Dynamic braking allows the AC drive to produce additional braking (stopping) torque. AC drives can typically produce between 15% & 20% braking torque without the addition of any external components. The addition of optional braking may be required for applications that require rapid deceleration or high inertia loads.

8 Output Load Reactor or Voltage Time (dV/dT) Filter (Optional)

Output line reactors protect the motor insulation against AC drive short circuits and IGBT reflective wave damage, and also “smooth” the motor current waveform, allowing the motor to run cooler. They are **recommended for operating “non-inverter-duty” motors and when the length of wiring between the AC drive and motor is less than 100 feet.**

Voltage Time filters provide enhanced protection for motors with distances up to 1,000 feet.

Voltage Time filters provide even more protection against wave reflection and reduce common mode noise. They are recommended when the length of wiring between the AC drive and motor is from 100 feet up to 1,000 feet.

See www.automationdirect.com for specific product offerings.