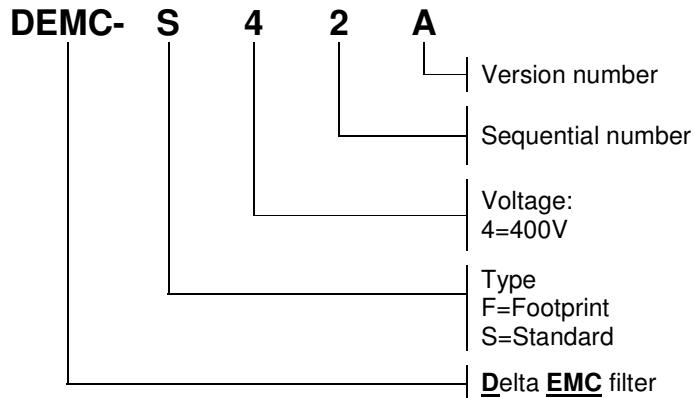


Type number key



Footprint filters 400V 3-phase

Filter type	Current * (A RMS)	Leakage current mA **	Suitable for:		Max motor cable length	
			VFD series	Type	2 nd Env. (Ind.)	1 st Env. (Dom.)
DEMC-F40A	6	3.4 (18)	VFD-S	VFD004S43E	50m	5m
				VFD007S43E		
			VFD-M	VFD007M43B		
				VFD015M43B		
DEMC-F41A	6.9	3.4 (18)	VFD-S	VFD015S43E	50m	5m
				VFD022S43E		
			VFD-B	VFD007B43A		
				VFD015B43A		
				VFD022B43B		
DEMC-F42A	23	2.5 (14)	VFD-M	VFD037M43A	50m	5m
				VFD055M43A		
				VFD075M43A		
DEMC-F43A	11.2	3.4 (18)	VFD-F	VFD007F43A	50m	5m
				VFD015F43A		
				VFD022F43A		
				VFD037F43A		
			VFD-B	VFD037B43A		
				VFD007V43A-2		
			VFD-VE	VFD015V43A-2		
				VFD022V43A-2		
DEMC-F44A	33	2.5 (14)	VFD-F	VFD055F43B	50m	5m
				VFD075F43B		
				VFD110F43A		
				VFD150F43A		
				VFD055B43A		
			VFD-B	VFD075B43A		
				VFD110B43A		
				VFD055V43A-2		
			VFD-VE	VFD075V43A-2		

* Current specified at 50°C

** Measured at 500V/50Hz: running condition and (fault condition)

Standard filters 400V 3-phase

Filter type	Current * (A RMS)	Leakage current mA **	Suitable for:		Max motor cable length		
			VFD series	Type	2 nd Env. (Ind.)	1 st Env. (Dom.)	
DEMC-S40A	25	<2.8 (67)	VFD-VE	VFD110V43A-2	100m	10m	
				VFD110V43B-2	100m	10m	
DEMC-S41A	36	<3.7 (81)	VFD-B	VFD150B43A	100m	10m	
				VFD-VE	VFD150V43A-2	100m	10m
DEMC-S42A	50	<4.8 (114)	VFD-F	VFD185F43A	100m	10m	
				VFD220F43A	100m	10m	
			VFD-B	VFD185B43A	100m	10m	
				VFD220B43A	100m	10m	
			VFD-VE	VFD185V43A-2	100m	10m	
				VFD220V43A-2	100m	10m	
DEMC-S43A	70	<4.4 (107)	VFD-F	VFD300F43A	100m	10m	
				VFD-B	VFD300B43A	100m	10m
				VFD-VE	VFD300V43A-2	100m	10m
DEMC-S44A	100	<6.4 (154)	VFD-F	VFD370F43A	100m	10m	
				VFD450F43A	100m	10m	
			VFD-B	VFD370B43A	100m	10m	
				VFD450B43A	100m	5m	
			VFD-VE	VFD370V43A-2	100m	10m	
				VFD450V43A-2	100m	5m	
DEMC-S45A	150	<9.8 (154)	VFD-F	VFD550F43A	100m	5m	
				VFD-B	VFD550B43A	100m	5m
			VFD-VE	VFD550B43C	100m	5m	
				VFD550V43A-2	100m	5m	
DEMC-S46A	180	<12.5 (396)	VFD-F	VFD750F43A	100m	5m	
				VFD900F43A	100m	5m	
				VFD900F43C	100m	5m	
			VFD-B	VFD750B43A	100m	5m	
				VFD750B43C	100m	5m	
			VFD-VE	VFD750V43A-2	100m	5m	
DEMC-S47A	290	<2.6 (125)	VFD-F	VFD1100F43A	100m	-	
				VFD1100F43C	100m	-	

* Current specified at 40°C

** Measured at 500V/50Hz: running condition and (fault condition)

Common data Footprint filters

Mains voltage range	VAC	480VAC +10% max
Mains frequency	Hz	50 ~ 60Hz ±1%
Operating temperature	°C	-25 ~ +100°C
Storage temperature	°C	-25 ~ +100°C
Atmospheric pressure	kPa	86 ~ 106kPa
Relative humidity	%	≤90% (non condensing)
Vibration		5~500Hz: 1.5G
Degree of protection		IP20
Pollution degree		2
Altitude	m	≤1000m
Dielectric strength *	VAC	2121VAC/1s
Insulation resistance	MΩ	>2MΩ at 500VDC
Residual voltage	VDC	3.3VDC after 10s
Approvals		CE, RoHS

* Acc. to EN50178.

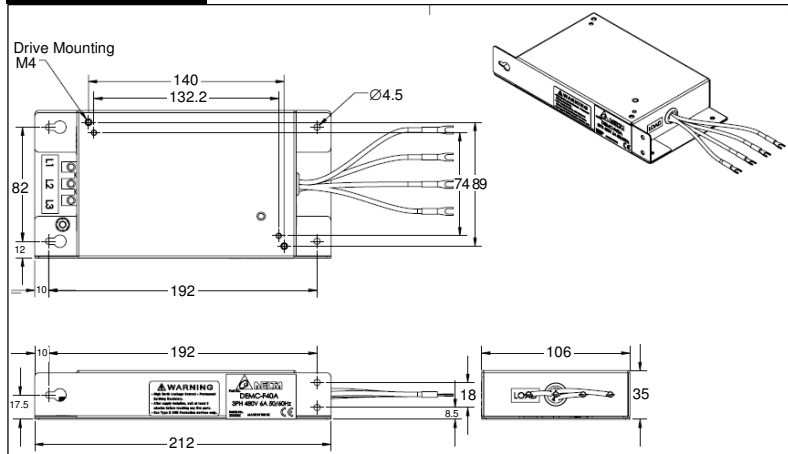
Common data Standard filters

Mains voltage	VAC	500VAC +10% max
Mains frequency	Hz	50 ~ 60Hz ±1%
Operating temperature	°C	-25 ~ +100°C (-25 ~ +90°C for DEMC-S47A)
Storage temperature	°C	-25 ~ +100°C
Atmospheric pressure	kPa	86 ~ 106kPa
Relative humidity	%	≤90% (non condensing)
Vibration		10~200Hz: 1.8G
Degree of protection		IP20
Altitude	m	≤1000m
Surge voltage *	Vpeak	4000Vpeak 1.2/50μs
Dielectric strength *	VAC	2250VAC/1min
Approvals		CE, UL, RoHS

* Acc. to EN50178.

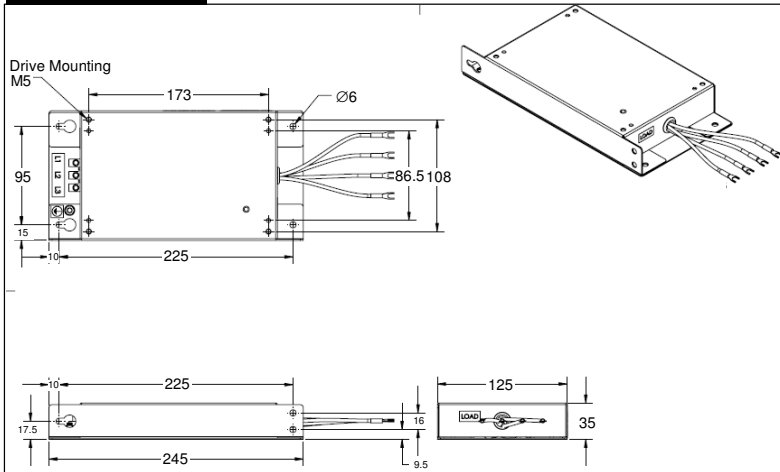
Sizes and dimensions in mm

DEMC-F40A



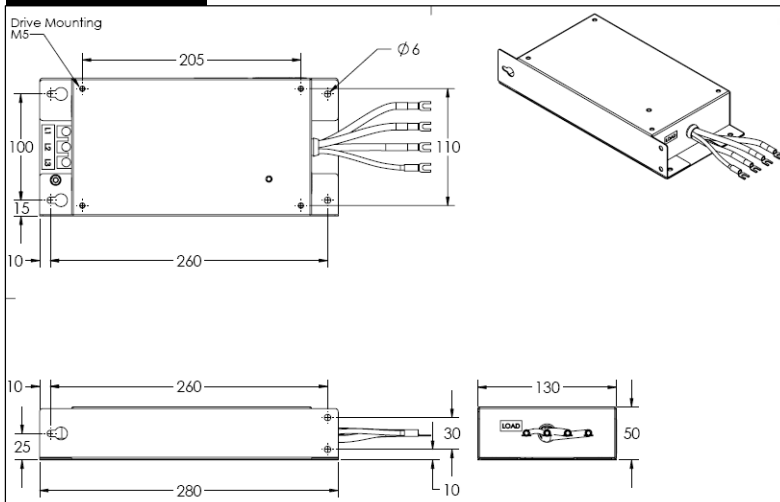
Weight	0.6kg
Power dissipation	3W
Terminal wire section	0.5~6mm ²
Flying leads	1.5mm ² , 200mm M3.5 fork
Mounting	4x M4
Drive Mounting	2x M4 (2x)
Earth stud	M5x13mm

DEMC-F41A



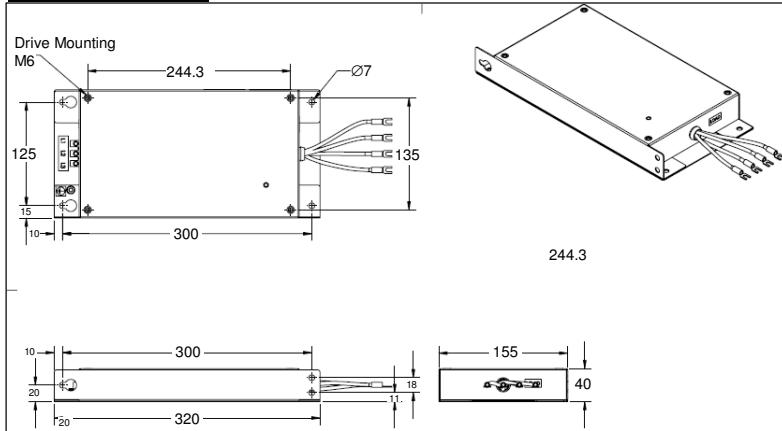
Weight	0.7kg
Power dissipation	4W
Terminal wire section	0.5~6mm ²
Flying leads	1.5mm ² , 250mm M4 fork
Mounting	4x M5
Drive Mounting	4x M5 (2x)
Earth stud	M5x13mm

DEMC-F42A



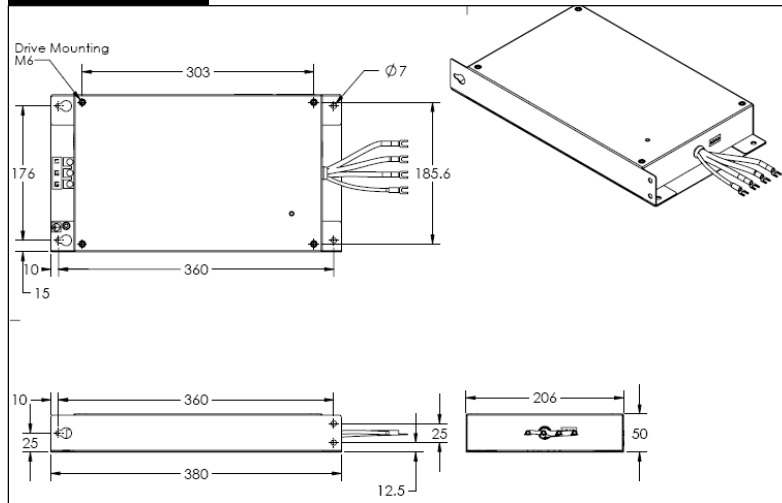
Weight	1.3kg
Power dissipation	7.5W
Terminal wire section	2~10mm ²
Flying leads	6mm ² , 300mm M4 fork
Mounting	4x M5
Drive Mounting	4x M5
Earth stud	M5x13mm

DEMC-F43A



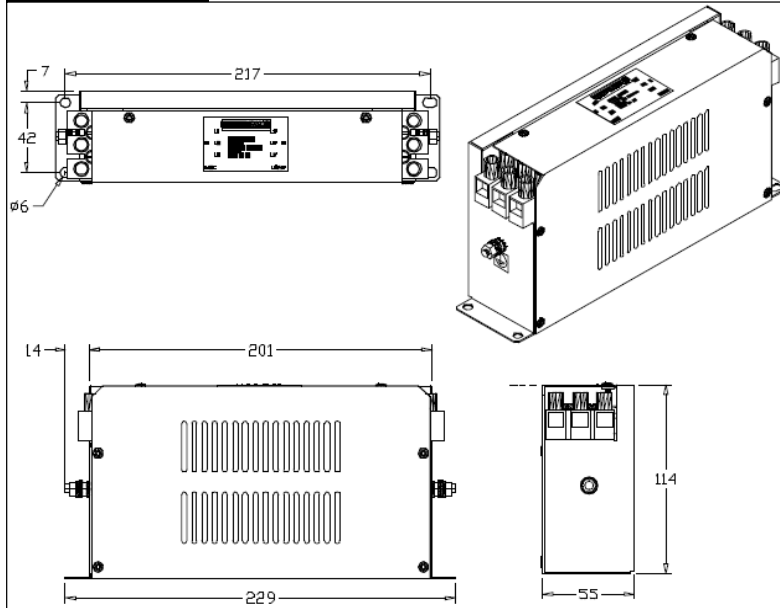
Weight	1kg
Power dissipation	4W
Terminal wire section	0.5~6mm ²
Flying leads	4mm ² , 300mm M4 fork
Mounting	4x M6
Drive Mounting	4x M6
Earth stud	M5x13mm

DEMC-F44A



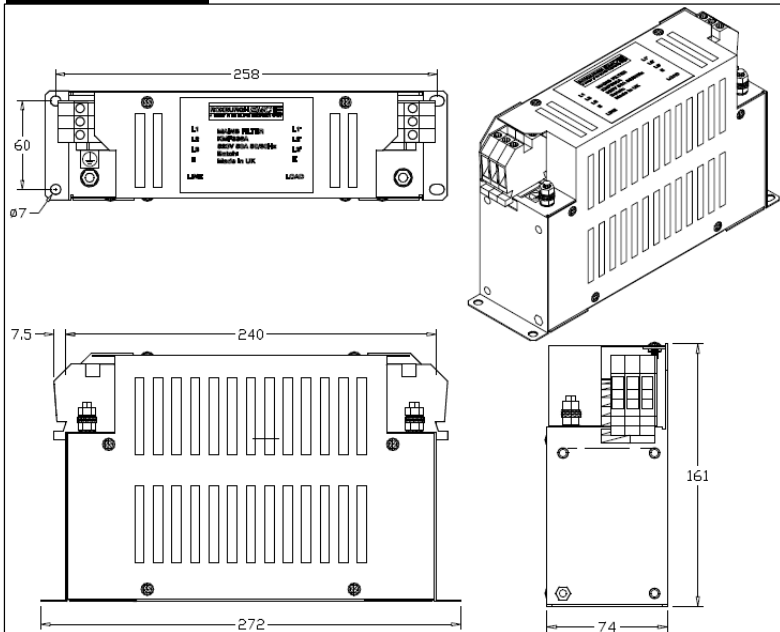
Weight	1.9kg
Power dissipation	16W
Terminal wire section	2~10mm ²
Flying leads	6mm ² , 350mm M5 fork
Mounting	4x M6
Drive Mounting	4x M6
Earth stud	M5x13mm

DEMC-S40A



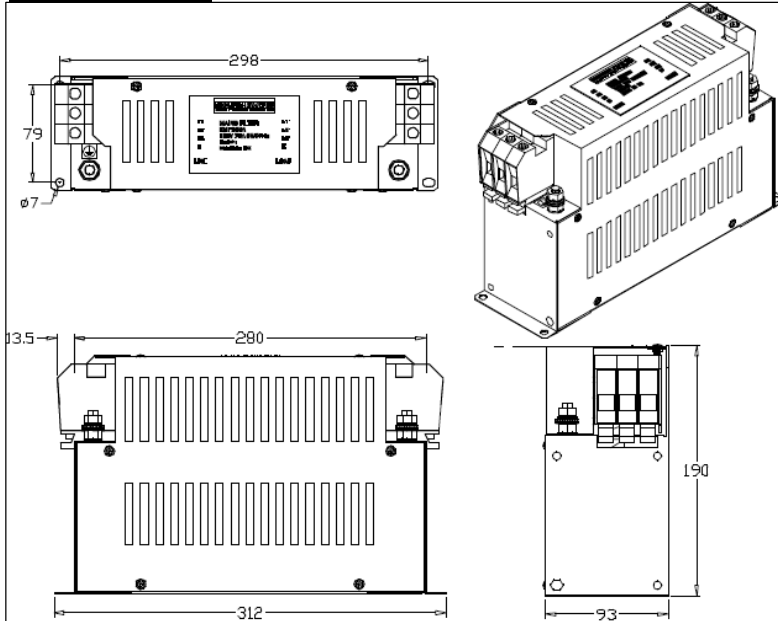
Weight	1.3kg
Power dissipation	11W
Terminal block wire section	10mm ²
Mounting	4x M5
Earth stud	M5x14mm

DEMC-S41A



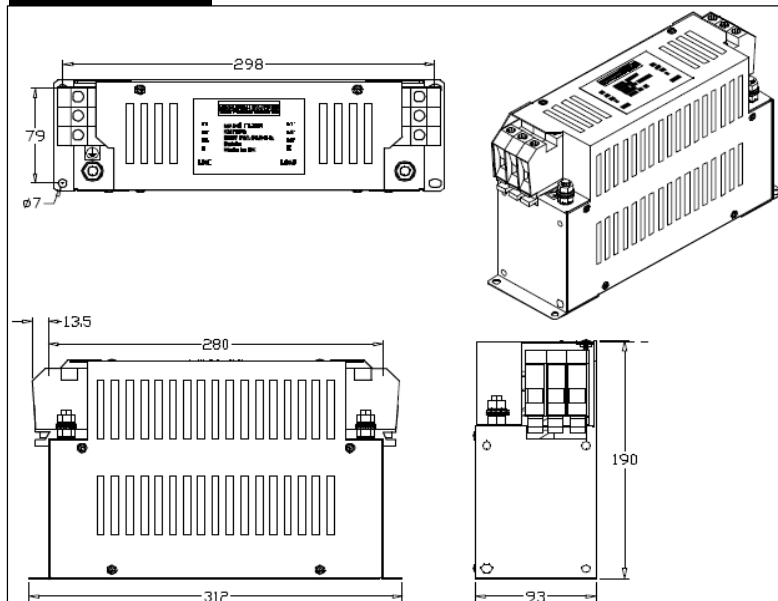
Weight	2.7kg
Power dissipation	16W
Terminal block wire section	10mm ²
Mounting	4x M6
Earth stud	M6x18mm

DEMC-S42A



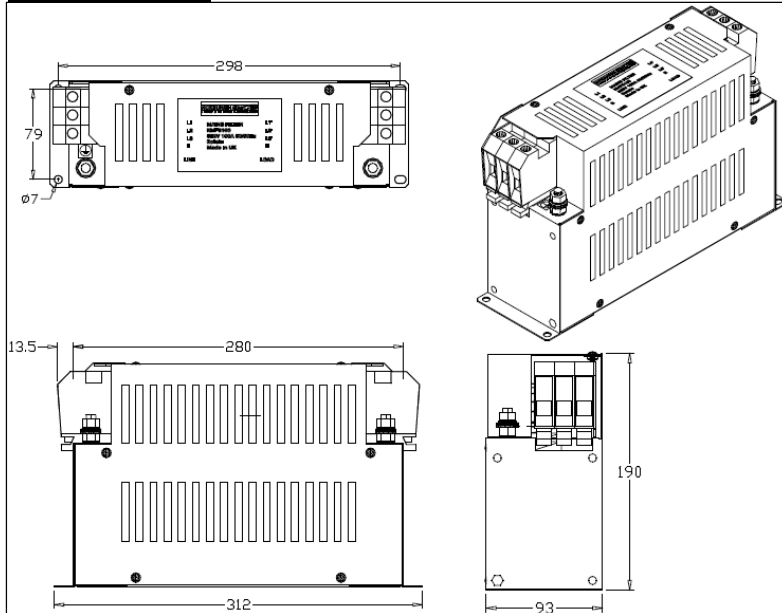
Weight	3.7kg
Power dissipation	16W
Terminal block wire section	50mm ²
Mounting	4x M6
Earth stud	M8x23mm

DEMC-S43A



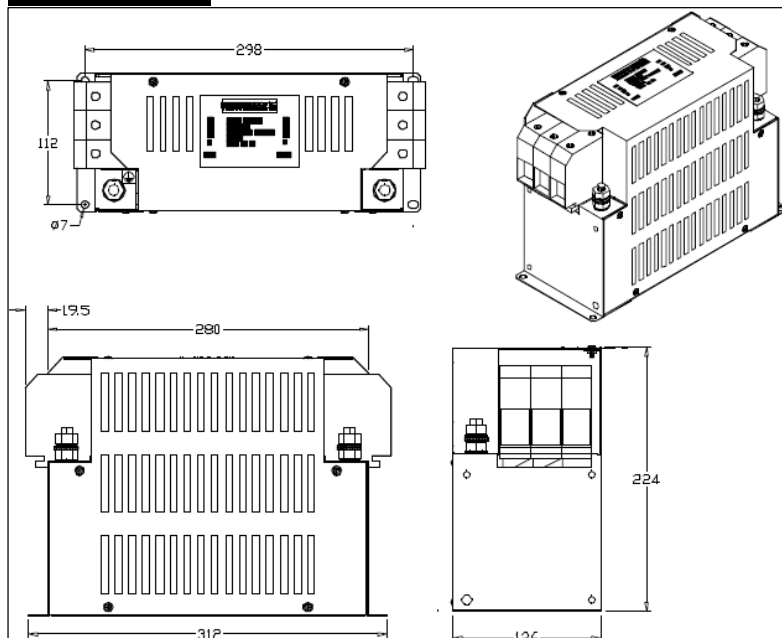
Weight	4.2kg
Power dissipation	19W
Terminal block wire section	50mm ²
Mounting	4x M6
Earth stud	M8x23mm

DEMC-S44A



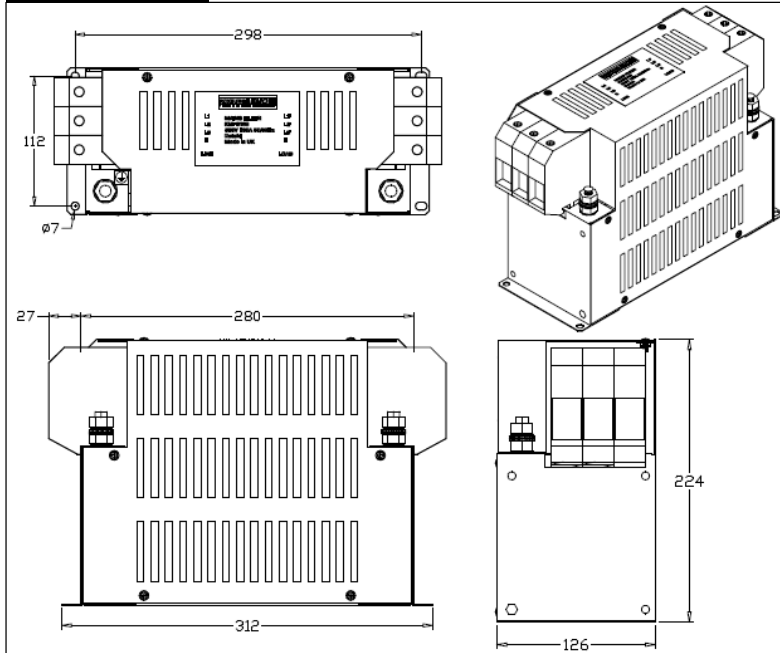
Weight	4.5kg
Power dissipation	18W
Terminal block wire section	50mm ²
Mounting	4x M6
Earth stud	M8x23mm

DEMC-S45A



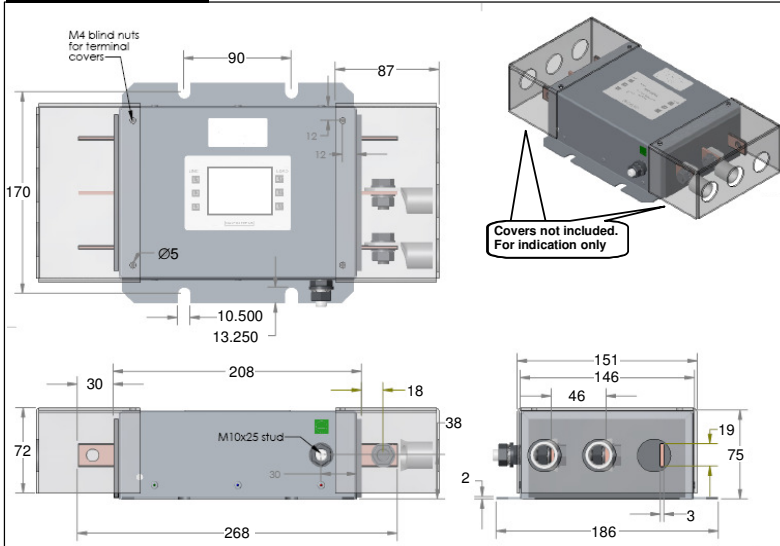
Weight	6.1kg
Power dissipation	25W
Terminal block wire section	70mm ²
Mounting	4x M6
Earth stud	M10x28mm

DEMC-S46A



Weight	8.9kg
Power dissipation	28W
Terminal block wire section	95mm ²
Mounting	4x M6
Earth stud	M10x28

DEMC-S47A



Weight	4.4kg
Power dissipation	9W
Terminals	30x19x3mm
Fastening	M10x20mm
Mounting	4x M10
Mounting Covers (covers not included)	4x M4
Earth stud	M10x25mm

Standards

To comply with the European EMC Directive 89/336/EEC, Power Drive Systems (PDS) have to fulfil the requirements of the product standard EN61800-3 2004 Adjustable speed electrical power drive systems, Part 3: EMC Products Standard Including Specific Test Methods. These requirements are necessary and sufficient; no additional EMC tests are required.

Environments

In standard EN61800-3 two environments are defined:

1st Environment: Household or Domestic. It includes domestic premises and establishments directly connected without intermediate transformers to a low-voltage power supply network, which supplies buildings used for domestic purposes.

In the 1st Environment difference is made between restricted and unrestricted distribution.

Restricted distribution means that products are sold to EMC competent users. Unrestricted distribution means that products are sold to non-EMC competent users (e.g. consumers). **AC Motor Drives never fall in the unrestricted distribution class!**

2nd Environment:

Industrial. All other establishments.

(Between 1st and 2nd Environment there is always at least one mains power transformer)

In the 2nd Environment difference is made for conducted emission for AC Motor Drives with mains current >100A and ≤100A.

Classes

With the latest version of the standard EN61800-3 2004, classes for PDS are defined.

1st Environment restricted: Class **C2**

2nd Environment ≤100A: Class **C3**

>100A: Class **C3**

The following classes are defined but outside the scope of the filters and this datasheet.

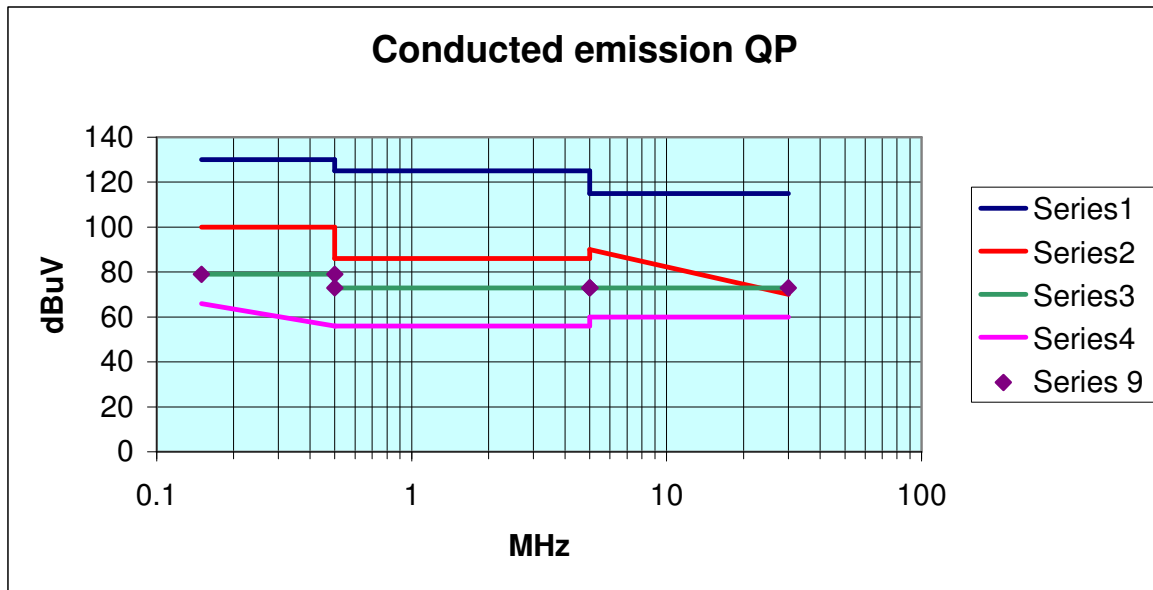
1st Environment unrestricted: Class **C1** (not used for AC Motor Drives)

2nd Environment: Class **C4** (special for PDS with rated voltage ≥1000V, rated current ≥400A or special circumstances).

Below you'll find a table and a plot of the conducted emission levels for the defined classes. Although the levels in EN61800-3 2004 are equal to those in EN55011 and EN55022, these latter are only used for reference for measuring methods, etc.

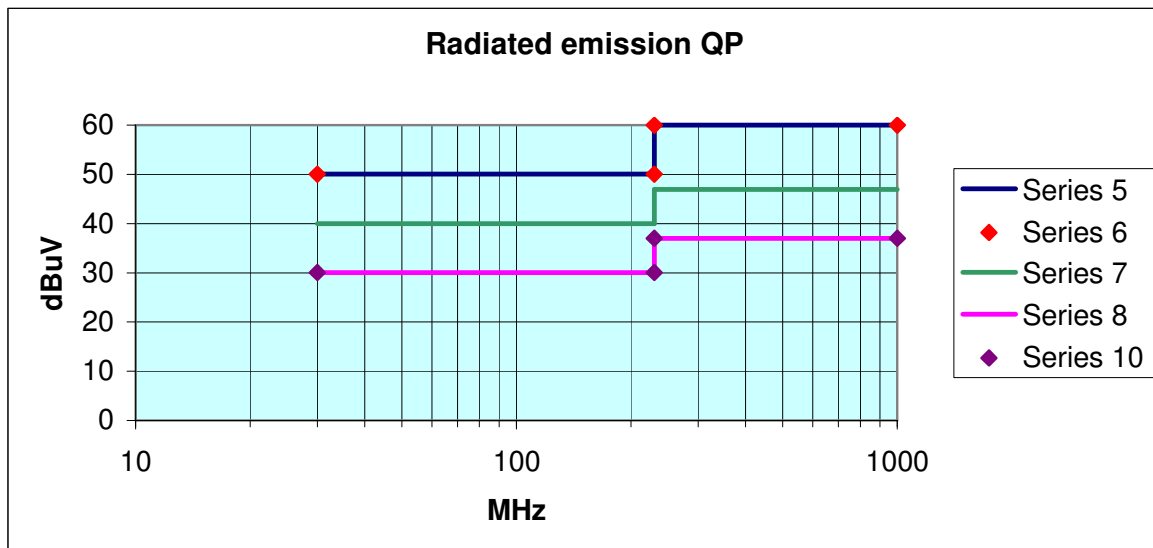
Conducted Emission (QP)					
	Industrial			Domestic	
EN61800-3 2004	C4 Special >400A	C3 2nd Env. >100A	C3 2nd Env. <100A	C2 1st Env. Restr.	C1 1st Env. Unrestr.
EN61800-3/A11	-	2nd Env. >100A	2nd Env. <100A	1st Env. Restricted	1st Env. Unrestricted
EN55011	-	Class A Gr.2 >100A	Class A Gr.2 <100A	Class A Gr.1	Class B
EN55022	-	-	-	Class A	Class B

MHz	dB μ V (QP)				
Series	9	1	2	3	4
0.15	79	130	100	79	66
0.5	79	130	100	79	56
0.5	73	125	86	73	56
5	73	125	86	73	56
5	73	115	90	73	60
30	73	115	70	73	60
	(AV: -13dB μ V)	(AV: -10dB μ V)	(AV: -10dB μ V)	(AV: -13dB μ V)	(AV: -10dB μ V)



Radiated Emission (QP)					
	Industrial			Domestic	
EN61800-3 2004	C4 Special >400A	C3 2nd Env. >100A	C3 2nd Env. <100A	C2 1st Env. Restr.	C1 1st Env. Unrestr.
EN61800-3/A11	-	2nd Env. >100A	2nd Env. <100A	1st Env. Restricted	1st Env. Unrestricted
EN55011	-	Class A Gr.2 >100A	Class A Gr.2 <100A	Class A Gr.1	Class B
EN55022	-	-	-	Class A	Class B

MHz	dB μ V (QP)				
Series	10	5	6	7	8
30	30	50	50	40	30
230	30	50	50	40	30
230	37	60	60	47	37
1000	37	60	60	47	37
	@30m	@10m	@10m	@10m	@10m or +10dB μ V @3m



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