MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

CONTROL TECHNIQUES

UNI2402

UNIDRIVE 7.5 KW AC DRIVE

Used with the applicable Unidrive UNI2000 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Control Techniques Unidrive user guide

Declaration of Conformity

Control Techniques Ltd
The Gro
Newtown
Powys
UK
SY16 3BE

UNI1201	UNI1202	UNI1203	UNI1204	UNI1205
UNI2201	UNI2202	UNI2203		
UNI3201	UNI3202	UNI3203	UNI3204	

UNI1401	UNI1402	UNI1403	UNI1404	UNI1405
UNI2401	UNI2402	UNI2403		
UNI3401	UNI3402	UNI3403	UNI3404	UNI3405
UNI4401	UNI4402	UNI4403	UNI4404	UNI4405
UNI5401				

The AC variable speed drive products listed above, including the VTC, LFT (all sizes) and REGEN (UNI3401 to UNI4405 only) variants, have been designed and manufactured in accordance with the following European harmonised, national and international standards:

EN 60249	Base materials for printed circuits
IEC326-1	Printed boards: general information for the specification writer
IEC326-5	Printed boards: specification for single- and double-sided printed boards with plated-through holes
IEC326-6	Printed boards: specification for multilayer printed boards
IEC664-1	Insulation co-ordination for equipment within low-voltage systems: principles, requirements and tests
EN 60529	Degrees of protection provided by enclosures (IP code)
UL94	Flammability rating of plastic materials
UL508C	Standard for power conversion equipment
EN 50081-1[1]	Generic emission standard for the residential, commercial and light industrial environment
EN 50081-2	Generic emission standard for the industrial environment
EN 50082-2	Generic immunity standard for the industrial environment
EN 61800-3	Adjustable speed electrical power drive systems - Part 3: EMC product standard including specific test methods

[1] Conducted emission sizes 1 to 3, not size 4 or 5. See the relevant EMC Data Sheet.

These products comply with the Low Voltage Directive 73/23/EEC, the Electromagnetic Compatibility (EMC) Directive 89/336/EEC and the CE Marking Directive 93/68/EEC.



W. Drury
Executive Vice President, Technology
Newtown

Date: 26 September 2001

These electronic drive products are intended to be used with appropriate motors, controllers, electrical protection components and other equipment to form complete end products or systems. Compliance with safety and EMC regulations depends upon installing and configuring drives correctly, including using the specified input filters. The drives must be installed only by professional assemblers who are familiar with requirements for safety and EMC. The assembler is responsible for ensuring that the end product or system complies with all the relevant laws in the country where it is to be used. A *Unidrive EMC Data Sheet* is also available giving detailed EMC information.

3.11 RFI filters

RFI filters are available for all sizes of Unidrive as follows:

Table 3-3 RFI filters

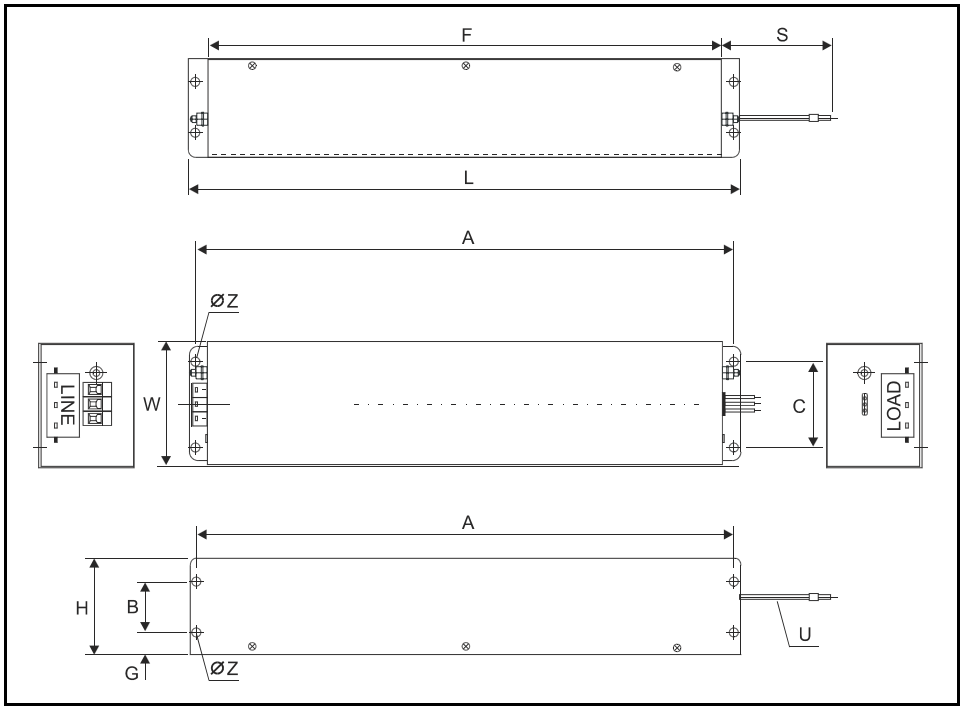
Drive	Filter type	Schaffner part no.	CT part no.	Max cable size	Weight
UNI1201 to 1205	Bookcase	FS5111-10-29	4200-6105	4 mm^2 10 AWG	1.4kg (3lb)
UNI1201 to 1205	Footprint or Bookcase	FS5101-10-07	4200-6104	4 mm^2 10 AWG	2.1kg (5lb)
UNI2201 to 2202	Bookcase	FS5112-16-07	4200-6109	4 mm^2 10 AWG	2.7kg (6lb)
UNI2201 to 2202	Footprint or Bookcase	FS5106-16-07	4200-6108	4 mm^2 10 AWG	2.1kg (5lb)
UNI2203	Bookcase	FS5113-25-29	4200-6114	4 mm^2 10 AWG	2.7kg (6lb)
UNI2203	Footprint or Bookcase	FS5106-25-07	4200-6113	4 mm^2 10 AWG	2.1kg (5lb)
UNI3201 to 3202	Bookcase	FS5113-50-53	4200-6116	10 mm^2 6 AWG	3.8kg (9lb)
UNI3203	Bookcase	FS5113-63-34	4200-6117	10 mm^2 6 AWG	3.8kg (9lb)
UNI3204	Bookcase	FS5113-100-35	4200-6106	50 mm^2 1/0 AWG	7.8kg (17lb)
UNI1401 to 1405	Bookcase	FS5111-10-29	4200-6105	4 mm^2 10 AWG	1.4kg (3lb)
UNI1401 - 1405	Footprint or Bookcase	FS5101-10-07	4200-6104	4 mm^2 10 AWG	2.1kg (5lb)
UNI2401	Bookcase	FS5112-16-07	4200-6109	4 mm^2 10 AWG	2.7kg (6lb)
UNI2401	Footprint or Bookcase	FS5106-16-07	4200-6108	4 mm^2 10 AWG	2.1kg (5lb)
UNI2402 to 2403	Bookcase	FS5113-25-29	4200-6114	4 mm^2 10 AWG	2.7kg (6lb)
UNI2402 to 2403	Footprint or Bookcase	FS5106-25-07	4200-6113	4 mm^2 10 AWG	2.1kg (5lb)
UNI3401 to 3403	Bookcase	FS5113-50-53	4200-6116	10 mm^2 6 AWG	3.8kg (9lb)
UNI3404	Bookcase	FS5113-63-34	4200-6117	10 mm^2 6 AWG	3.8kg (9lb)
UNI3405	Bookcase	FS5113-100-35	4200-6106	50 mm^2 1/0 AWG	7.8kg (17lb)
UNI4401 to 4402	Bookcase	FS5113-150-40	4200-6107	95 mm^2 4/0 AWG	7.8kg (17lb)
UNI4403 to 4404	Bookcase	FS5113-180-40	4200-6111	95 mm^2 4/0 AWG	15kg (33lb)
UNI4405	Bookcase	FS5113-220-37	4200-6112	150 mm^2 6/0 AWG	15kg (33lb)
UNI5401	Bookcase	FS113-300-99	4200-6115	M12 stud	16kg (35lb)

The RFI filters can be surface-mounted only.

Mount the RFI filter following the guidelines in Figure 4-12 *EMC compliance* on page 48.

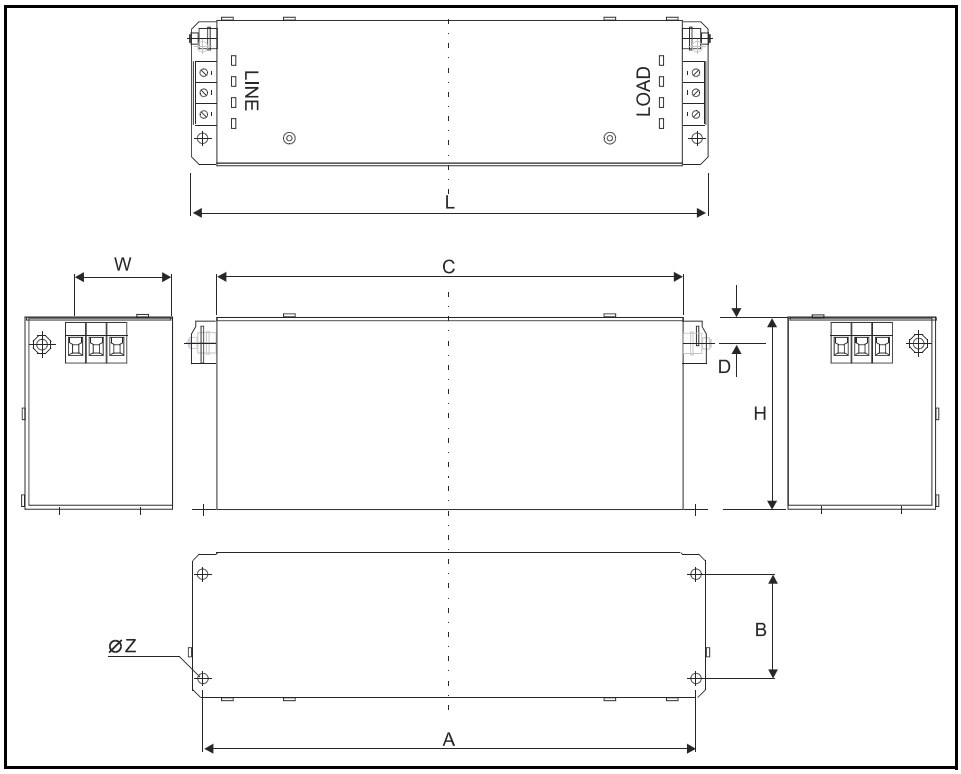
3.11.2 Unidrive size 2 filters

Figure 3-23 Unidrive size 2 (UNI2201 to UNI2202 and UNI2401) bookcase mounted filter



Dimension	RFI Filter
	4200-6109 FS5112-16-07
Model	UNI2201 to UNI2202 UNI2401
A	380mm (14.961in)
B	35mm (1.378in)
C	60mm (2.362in)
F	364mm (14.331in)
G	16.5mm (0.650in)
H	68mm (2.677in)
L	390mm (15.354in)
S	300mm ±5mm (11.811in ±0.197in)
U	3x 2.5mm^2 (AWG14)
W	85mm (3.346in)
Z	5.5mm (0.217in)
Ground Terminal	M5

Figure 3-24 Unidrive size 2 (UNI2203, and UNI2402 to UNI2403) bookcase mounted filter



Dimension	RFI Filter
	4200-6114 FS5113-25-29
Model	UNI2203 UNI2402 to UNI2403
A	245mm (9.646in)
B	45mm (1.772in)
C	230mm (9.055in)
D	13mm (0.512in)
H	95mm (3.740in)
L	255mm (10.039in)
W	73mm (2.874in)
Z	4.5mm (0.177in)
Ground Terminal	M5