

Valid for Emotron FDU 2.0 and Emotron VFX 2.0

Marine supplement

This is a supplement to the instruction manuals with document number:

01-5324-01 Instruction manual for Emotron FDU 2.0

01-5325-01 Instruction manual for Emotron VFX 2.0

01-5329-01 Datasheet/Instruction for Vibration dampers.

1.4 Type code number

Fig. 1 gives an example of the type code numbering used on all Emotron FDU/VFX AC drives. With this code number the exact type of the drive can be determined. This identification will be required for type specific information when mounting and installing. The code number is located on the product label, on the front of the unit

FDU/VFX48-175-54 C E - - - A - N N N N A N - -																		
Position number:																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Fig. 1 Type code numbers position

Position for 003-074	Position for 090-3K0	Configuration	
19	17	Approval/certification	--=CE approved D=Marine DNV Product certificate + CE approved M=Marine version + CE approved U=UL/cUL approved

D = Marine version and individual DNV product certificate, only applicable for units above 100 kW.

If marine options “D” or “M” are included, the AC drive will be equipped with Standby supply option board which includes isolated DC voltage measurement circuits. This will provide the AC drive with infinite impedance to ground.

Note: Optional vibration dampers are not included in the marine versions, must be ordered separately.



Installation

The below mentioned products in its standard configuration are covered by this supplement.

Note: Valid for AC drives with air or liquid cooling.

Table 1 DNV approved models of Emotron VFX and Emotron FDU

Model	Frame size	IP class	Model	Frame size	IP class	Model	Frame size	IP class
VFX/FDU48-003	B	IP54	VFX/FDU48-860	J	IP20*	VFX/FDU69-090	F69	IP54
VFX/FDU48-004			VFX/FDU48-1K0	KA		VFX/FDU69-109		
VFX/FDU48-006			VFX/FDU48-1K15			VFX/FDU69-146		
VFX/FDU48-008			VFX/FDU48-1K25	VFX/FDU69-175				
VFX/FDU48-010			VFX/FDU48-1K35	VFX/FDU69-200				
VFX/FDU48-013			VFX/FDU48-1K5	VFX/FDU69-250				
VFX/FDU48-018			VFX/FDU48-1K75	VFX/FDU69-300				
VFX/FDU48-026			C	VFX/FDU48-2K0		M	VFX/FDU69-375	H69
VFX/FDU48-031	VFX/FDU48-2K25			N	VFX/FDU69-400			
VFX/FDU48-037	VFX/FDU48-2K5			O	VFX/FDU69-430			
VFX/FDU48-046	D			VFX/FDU52-003	IP54	VFX/FDU69-500	I69	
VFX/FDU48-061			VFX/FDU52-004	VFX/FDU69-595				
VFX/FDU48-074			VFX/FDU52-006	VFX/FDU69-650				
VFX/FDU48-090	E		VFX/FDU52-008	B		VFX/FDU69-720	J69	
VFX/FDU48-109			VFX/FDU52-010	VFX/FDU69-800				
VFX/FDU48-146			VFX/FDU52-013	VFX/FDU69-905		KA69		
VFX/FDU48-175	VFX/FDU52-018		VFX/FDU69-995					
VFX/FDU48-210	F		VFX/FDU52-026	C		VFX/FDU69-1K2	K69	
VFX/FDU48-228			VFX/FDU52-031		VFX/FDU69-1K4	L69		
VFX/FDU48-250			VFX/FDU52-037		VFX/FDU69-1K6	M69		
VFX/FDU48-300	G		VFX/FDU52-046	D	VFX/FDU69-1K8	N69		
VFX/FDU48-375			VFX/FDU52-061		VFX/FDU69-2K0	O69		
VFX/FDU48-430	H		VFX/FDU52-074	IP20*	VFX/FDU69-2K2	P69		
VFX/FDU48-500			I		VFX/FDU69-2K4	Q69		
VFX/FDU48-600	VFX/FDU69-2K6	R69						
VFX/FDU48-650	VFX/FDU69-2K8	S69						
VFX/FDU48-750	VFX/FDU69-3K0	T69						

*) The actual installation shall be designed according to CG Instruction manual and according to the applicable DNV rules for the actual application. Drawings for the actual application are to be submitted for approval in each case. A DNV product certificate (optional) is required in accordance with DNV Rule paragraph Pt.4, Ch.8, Sec.1, B303 (sizes $\geq 100\text{kW}$).

If ambient temperature exceeds 40°C , the AC drives nominal current has to be derated. This gives a 12,5% decreased current rating at 45°C for IP54 units and 5% derating for IP20 units. For further information regarding derating, see Instruction manual for the AC drive.

Note: Frame sizes G - O and H69 - T69 shall be installed in an enclosure with an IP degree in accordance with DNV rules with regards to the location

Mounting

Stand alone wall mounting

The installation shall be designed according to CG Drives & Automation Sweden AB instruction manual and according to the applicable DNV Rules for the actual application.

For Emotron FDU/VFX 48-090 to -250 and Emotron FDU/VFX 69-090 to -200, optional damper kit (4 spring dampers) is required if no other vibration measures are taken. See separate mounting instruction 01-5329-01.

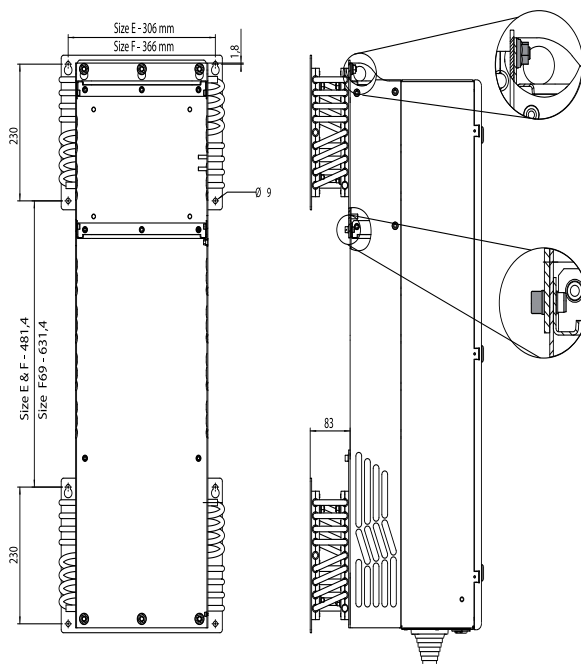


Fig. 2 AC drive size E - F with vibration damper.

Optional vibration dampers for Emotron FDU and VFX 2.0

Part number	Designation
01-5329-01	Damper mounting kit for size E (48-090 to 48-175)
01-5329-10	Damper mounting kit for size F - F69 (48-210 to 48-250 & 69-090 to 69-200)

Cabinet mounting

Emotron FDU/VFX 48-300 to 48-2K5 and 69-250 to 69-3K0, IP20 modules

The installation shall be designed according to CG Drives & Automation Sweden AB instruction manuals for Emotron FDU/VFX 2.0 and according to the applicable DNV Rules for the actual application.

IT net

When connecting to IT net, the AC drive must be ordered for IT net (means that EMC filter is disconnected from ground) and user must make sure that the complete system comply with EMC requirements.

Certificates

DNV certificates can be found in the "File archive" on www.emotron.com or follow the below links.

Emotron FDU

http://www.emotron.com/Documents/Documents/Products_Solutions/Products/AC_drives/Emotron_FDU/Emotron_FDU_E-13480_Certificate.pdf

Emotron VFX

http://www.emotron.com/Documents/Documents/Products_Solutions/Products/AC_drives/Emotron_VFX/Emotron_VFX_DNV_E-13481_Certificate.pdf

