

VFB40 Frequency inverters 004 to 016 (B1)

Type number	VFB40	-004	-006	-008	-010	-012	-016
Rated power	kW	1.5	2.2	3	4	5.5	7.5
Rated output current	A,RMS	4	6	7.5	9.5	12	16
Current limit I_{CL} , 120s	A,RMS	6	9	11.3	14.3	18	24
Peak motor current	A,peak	10.7	16.1	20.2	25.5	32.2	42.9
Input current	A,RMS	4.5	6.8	8.5	10.5	13.3	17.8
Mains fuse gL/gG acc. to IEC269	A	6	10		16		20
Ambient temperature for rated power	°C	0 - 40					
Switching frequency f_s	kHz	3.0 kHz					
Efficiency (P_{nom})	%	97					
Losses (P_{nom})	W	45	66	90	120	165	225
Derating	%/°C	No derating required					
Degree of protection		IP20					
Dimensions HxWxD	mm	360x126x260					
Weight	kg	7					
Glands mains/motor cable		None (clamps used)					
Max section motor/mains cable solid (stranded)	mm ²	4 (2.5)			10 (6)		

VFX40 Frequency inverters 018 to 037 (S2)

Type number	VFX40	-018	-026	-031	-037
Rated power	kW	7.5	11	15	18.5
Rated output current	A,RMS	18	26	31	37
Current limit I_{CL} , 60s	A,RMS	27	39	46	55
Input current	A,RMS	16	23	28	35
Min. brake resistor (for option brake chopper)	Ω	22	22	22	22
Mains fuse gL/gG acc. to IEC269	A	20	25	35	50
Ambient temperature for rated power	IP54 °C	0 - 40			
Switching frequency f_s	kHz	3.0 kHz			
Efficiency (P_{nom})	%	98			
Losses (P_{nom})	W	235	325	385	460
Derating	%/°C	-2.5 to +10°C max			
Degree of protection		IP54			
Dimensions size X2 HxWxD	mm	470(530) x 176 x 272			
Weight	kg	19			
Mains/motor cable entry	mm	Ø32			
Max section motor/mains cable solid (stranded)	mm ²	16(10)			

VFX40 Frequency inverters 046 to 073 (X2)

Type number	VFX40	-046	-060	-073
Rated power	kW	22	30	37
Rated output current	A,RMS	46	61	74
Current limit I_{CL} , 60s	A,RMS	69	92	111
Peak motor current	A,peak	133	177	215
Input current	A,RMS	42	57	70
Mains fuse gL/gG acc. to IEC269	A	50	63	80
Ambient temperature for rated power	°C	IP20: 0 - 40 IP54: 0 - 35		
Switching frequency f_s	kHz	3.0 kHz		
Efficiency (P_{nom})	%	97.5		
Losses (P_{nom})	W	550	750	925
Derating	%/°C	-2.5 to +10 °C max		
Degree of protection		IP20 IP54		
Dimensions HxWxD	mm	530(590)x220x270		
Weight	kg	30		
Glands mains/motor cable		M40		
Max. section motor/mains cable solid (stranded)	mm ²	16 (10)	25 (16)	50 (35)

VFX40 Frequency inverters 074 to 090 IP20 (X3)

Type number	VFX40	-074	-090
Rated power	kW	37	45
Rated output current	A,RMS	74	90
Current limit I_{CL} , 60s	A,RMS	111	135
Peak motor current	A,peak	215	261
Input current	A,RMS	69	85
Mains fuse gL/gG acc. to IEC269	A	80	100
Switching frequency f_s	kHz	3.0 kHz	
Ambient temperature for rated power	°C	IP20: 0 - 40 IP54: 0 - 35	
Efficiency (P_{nom})	%	97.5	
Losses (P_{nom})	W	925	1125
Derating	%/°C	-2.5 to +10 °C max	
Degree of protection		IP20 IP54	
Dimensions HxWxD	mm	650(750)x340x295	
Weight	kg	55	
Glands mains/motor cable		M50	
Max. section motor/mains cable solid (stranded)	mm ²	50 (35)	

VFX40 Frequency inverters 109 to 175 (X4)

Type number	VFX40	-109	-146	-175
Rated power	kW	55	75	90
Rated output current	A,RMS	109	146	175
Current limit I_{CL} , 60s	A,RMS	164	219	263
Peak motor current	A,peak	316	423	508
Input current	A,RMS	104	139	166
Mains fuse gL/gG acc. to IEC269	A	125	160	200
Ambient temperature for rated power	°C	IP20: 0 - 50 IP54: 0 - 45	IP20: 0 - 40 IP54: 0 - 35	
Switching frequency f_s	kHz	3.0 kHz		
Efficiency (P_{nom})	%	97.5		
Losses (P_{nom})	kW	1.4	1.9	2.3
Derating	%/°C	No derating required	-2.5 to +10°C max	
Degree of protection		IP20 IP54		
Dimensions HxWxD	mm	800(900)x450x330		
Weight	kg	85		
Glands mains/motor cable		M63		
Max. section motor/mains cable solid (stranded)	mm ²	50 (50)		95 (95)

VFX40 Frequency inverters 210 to 374 (X5)

Standard without output coils and with Control Panel.

Type number	VFX40	-210	-250	-300	-374
Rated power	kW	110	132	160	250
Rated output current	A,RMS	210	250	300	375
Current limit I_{CL} , 60s	A,RMS	315	375	450	560
Peak motor current	A,peak	609	725	870	1080
Input current	A,RMS	200	238	285	356
Mains fuse gL/gG acc. to IEC269	A	200	250	315	500
Switching frequency f_s	kHz	1.5kHz			
Ambient temperature for rated power	°C	IP20: 0 - 50 IP54: 0 - 45	IP20: 0 - 40 IP54: 0 - 35		
Efficiency (P_{nom})	%	97.5			
Losses (P_{nom})	kW	2.8	3.3	4	6.2
Derating	%/°C	No derating required	-2.5 to +10°C max		
Degree of protection		IP20 IP54			
Dimensions HxWxD	IP20 mm IP54	1100(1145)x500x420 2150x600x500			
Weight IP20 (IP54)	kg	160 (275)			
Terminals mains/motor connections	mm ²	150		240	

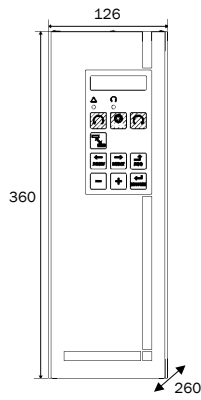
VFX40 Frequency inverters 500 to 749 (X10)

Type number	VFX40	-500	-600	-749
Rated power	kW	250	315	400
Rated output current	A,RMS	500	600	750
Current limit I_{CL} , 60s	A,RMS	750	900	1125
Peak motor current	A,peak	1450	1740	2175
Input current	A,RMS	475	570	721
Mains fuse gL/gG acc. to IEC269	A	2x250	2x315	2x400
Switching frequency f_s	kHz	1.5kHz		
Ambient temperature for rated power	°C	IP20: 0 - 40 IP54: 0 - 35		
Relative humidity	%	0 - 90 (non condensing)		
Efficiency (P_{nom})	%	97.5		
Losses (P_{nom})	kW	6.3	7.9	10
Derating	%/°C	-2.5 to +10°C max		
Degree of protection		IP20 IP54		
Dimensions HxWxD	IP20 mm IP54 mm	2x 1100(1145)x500x420 2150x1200x500		
Weight IP20 (IP23/IP54)	kg	320 (525)		
Terminals mains/motor connections	mm ²	2x150	2x240	2x240

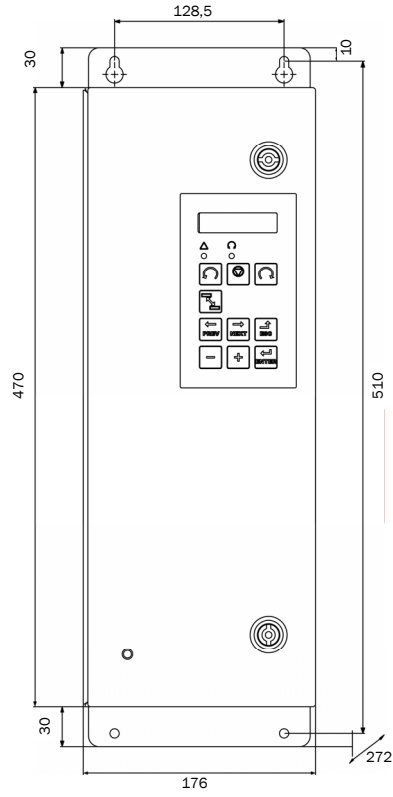
Standards

The VFB/VFX complies with the standards EN61800-3, EN50178, EN60204-1 and EN60529. It is adapted to the Machine Directive and complies with the **EMC-Directive** and the **Low Voltage Directive**, which is indicated by the **CE**-mark and accompanying declarations.

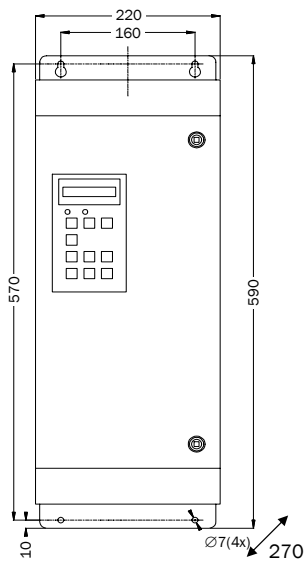
Dimensions VFB40-004 to -016 (B1)



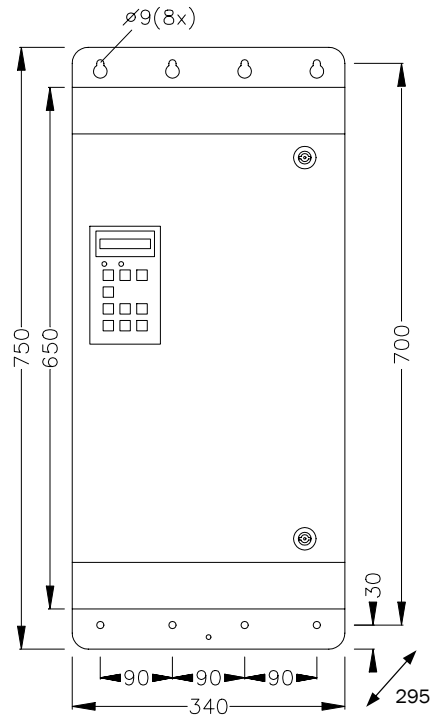
Dimensions VFX40-018 to -037 (S2)



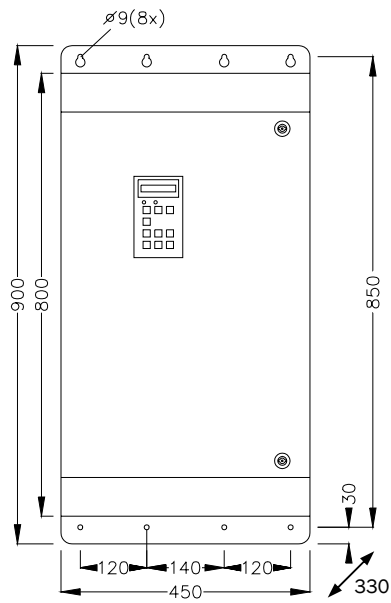
Dimensions VFX40-046 to -073 (X2)



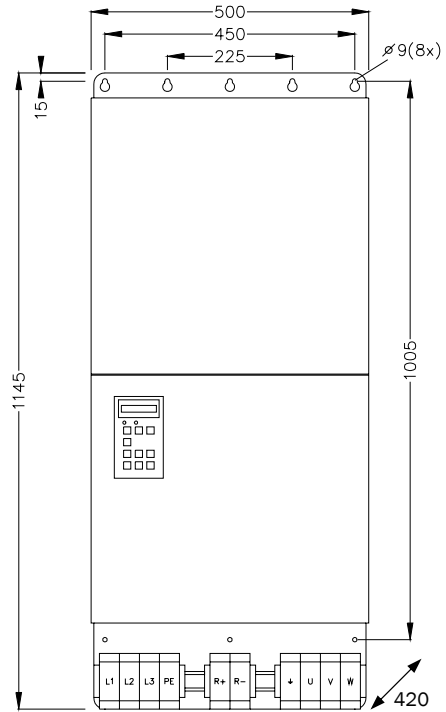
Dimensions VFX40-074 to -090 (X3)



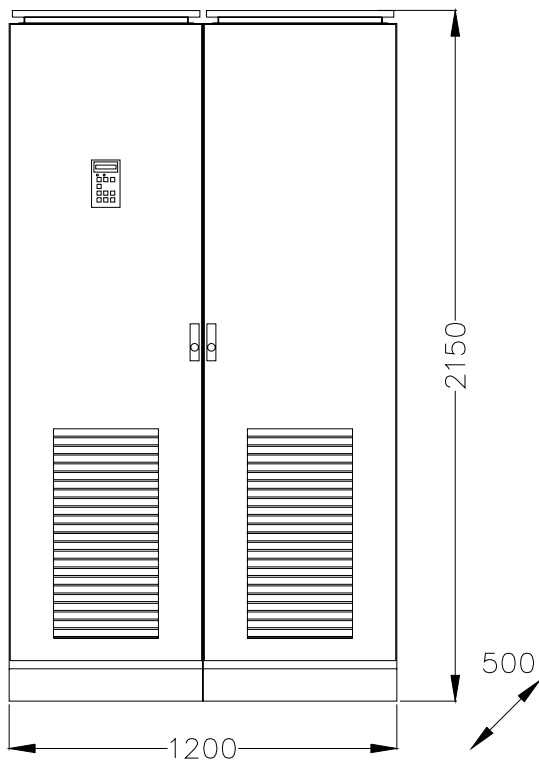
Dimensions VFX40-109 to -175 (X4)



**Dimensions VFX40-210 to -374 (X5)
IP20**



**Dimensions VFX40-500 to -749 (X10)
IP54**

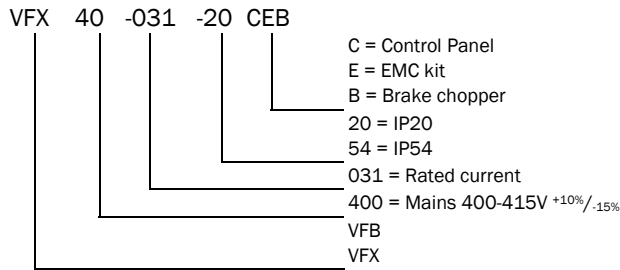


Cabinet options

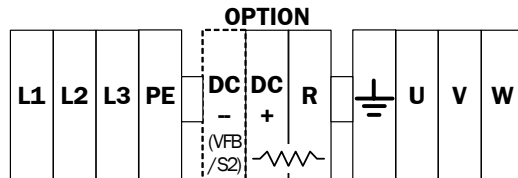
Output coils (with single motor terminals).

- Mains switch.
- Mains contactor.
- Emergency switch.

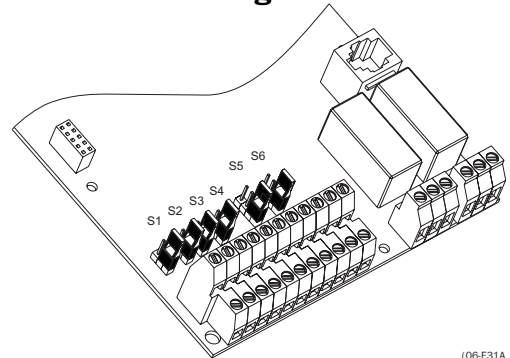
Type number code



Power connections



Signal connections



Connections terminal strip 1-22

(06-F21A_2)

Nr	Name	Type	Function	Signal
1	+10V	Ref	+10VDC Reference voltage, 10mA max.	
2	AnIn1+	Ana.Input	Programmable	Differential input ±10VDC or 0/4-20mA Resolution 10bits
3	AnIn1-	Ana.Input		
4	AnIn2+	Ana.Input	Programmable	Differential input ±10VDC or 0/4-20mA Resolution 10bits
5	AnIn2-	Ana.Input		
6	-10V	Ref	-10VDC Reference voltage, 10mA max.	
7	Common	Signal ground		
8	Run L	Binary Input	Run Left	Level high 0-8/24VDC or 0-20mA
9	Run R	Binary Input	Run Right	Level high 0-8/24VDC or 0-20mA
10	Enable	Binary Input	Enable	Level high 0-8/24VDC or 0-20mA
11	+24V	Ref	24VDC Regulated, 100mA max (together with DigOut 1&2).	
12	Common	Signal ground		
13	AnOut1	Ana.Output	Programmable	±10VDC or 0/4-20mA Resolution 10bits
14	AnOut2	Ana.Output	Programmable	±10VDC or 0/4-20mA Resolution 8bits
15	Common	Signal ground		
16	DigIn1	Binary Input	Programmable	Active high 0-8/24VDC or 0-20mA
17	DigIn2	Binary Input	Programmable	Active high 0-8/24VDC or 0-20mA
18	DigIn3	Binary Input	Programmable	Active high 0-8/24VDC or 0-20mA
19	DigIn4	Binary Input	Programmable	Active high 0-8/24VDC or 0-20mA
20	DigOut1	Binary Output	Programmable	24VDC (See pin 11: +24VDC)
21	DigOut2	Binary Output	Programmable	24VDC (See pin 11: +24VDC)
22	Reset	Binary Input	Reset	Level high 0-8/24VDC or 0-20mA

Connections terminal strip 31-33

31	Rel.1 NC	Relay output	Relay 1: Programmable	Change-over contact Isolated 2A/250V~/AC1
32	Rel.1 P			
33	Rel.1 NO			

Connections terminal strip 41-43

41	Rel.2 NC	Relay output	Relay 2: Programmable	Change-over contact Isolated 2A/250V~/AC1
42	Rel.2 P			
43	Rel.2 NO			

