

Frequency Inverters FUS 1500 ... 5500/3CV 15kW up to 55kW 4.11

Features:

- ▣ compact design
- ▣ easy commissioning and programming
- ▣ IGBT power stage
- ▣ detachable operating unit
- ▣ rotating field frequency up to 650Hz
- ▣ integrated PID controller
- ▣ integrated PLC
- ▣ optionally with RS 232/485 interface
- ▣ integrated braking chopper (up to 15kW) *
- ▣ integrated setpoint potentiometer
- ▣ 6 multi-functional inputs
- ▣ 2 multi-functional outputs
- ▣ degree of protection: IP20



Frequency Inverters
FUS 1500 ... 5500/3CV



Function:

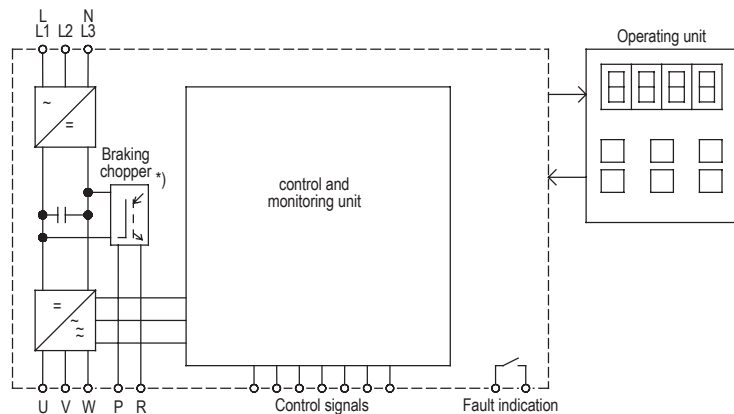
- ▣ control and setpoint entry via terminals and operating unit
- ▣ PWM clock frequency 2-16kHz
- ▣ DC braking (duration, intensity, operating frequency)
- ▣ potential-free control and signaling contacts
- ▣ automatic restart after voltage dip

Typical Applications:

- | | |
|--------------------|-----------------------|
| pumps | centrifuges |
| ventilators | grinding machines |
| conveying systems | printing machines |
| textile machines | wood working machines |
| packaging machines | vibrators |

Upon Request:

- ▣ Customized enclosures

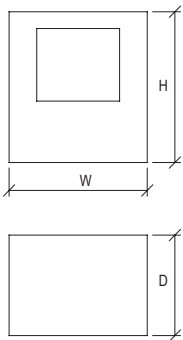


Technical Data	FUS .../3CV						
	1500	1850	2200	3000	3700	4500	5500
Motor shaft power in kW	15	18,5	22	30	37	45	55
Mains voltage according to DIN EN 50160 (IEC 38)	three-phase 380-480V (+10%,-15%) 50/60Hz ±5%						
Output current	32A	40A	48A	64A	80A	96A	128A
Control functions							
Frequency setting range	0,1 - 650Hz						
Control mode	U/f - characteristic; vector control						
Acceleration and deceleration time	0,1 - 3600s						
DC brake	operating frequency 0,1-10Hz, braking time 0-25,5s, intensity 0 - 20% UN						
Frequency setpoint	poti 10kΩ, internal poti, 0-10V, 0-20mA, keypad, fixed frequencies						
Ambient / Storage temperature	-10°C ... +40°C / -20°C ... +60°C						
Weight / kg	15	15	15	33	33	50	50
Order number	2F100. 40015	2F100. 40018	2F100. 40022	2F100. 40030	2F100. 40037	2F100. 40045	2F100. 40055
Recommended mains filters	27110. 53042	27110. 53055		27110. 53075	27110. 53100	27110. 53130	27110. 53180

For line and motor reactors see accessories.

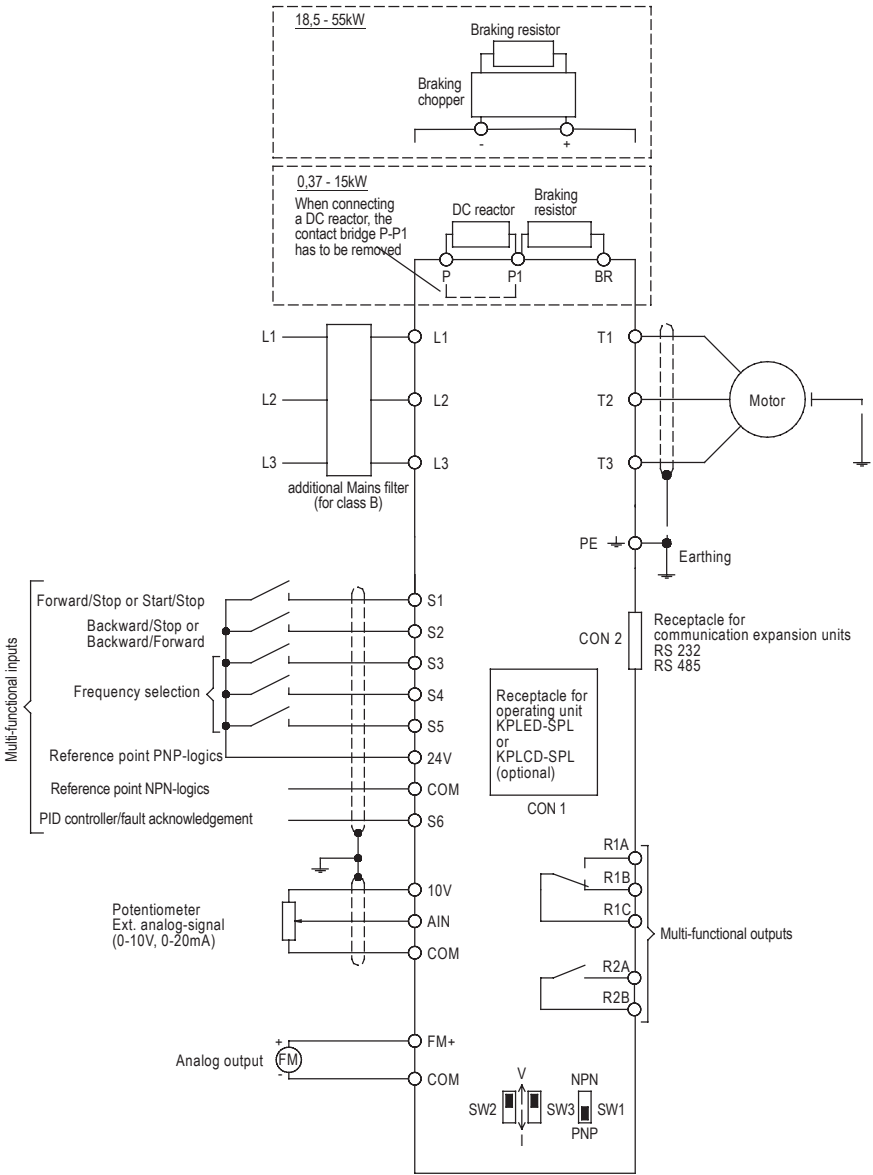
4.12 Frequency Inverters FUS 1500 ... 5500/3CV 15kW up to 55kW

Dimensions:



	W [mm]	H [mm]	D [mm]
FUS 1500/3CV	265	360	247,5
FUS 1850/3CV	265	360	247,5
FUS 2200/3CV	265	360	247,5
FUS 3000/3CV	269	553	303,6
FUS 3700/3CV	269	553	303,6
FUS 4500/3CV	308	653	308,6
FUS 5500/3CV	308	653	308,6

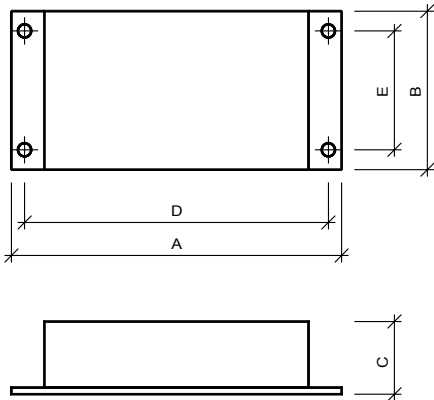
Connection Diagram:



Built-under Mains Filters

Technical Data	NF .../3CV					
	528/42	528/55	528/75	528/100	528/130	528/180
Area required mm x mm	310 x 50	250 x 85	270 x 80	270 x 90	270 x 90	380 x 120
Leakage current	33mA	33mA	33mA	33mA	33mA	33mA
for Motor shaft power	15kW	-22kW	30kW	37kW	45kW	55kW
Order number	27110.53042	27110.53055	27110.53075	27110.53100	27110.53130	27110.53180
Terminals	M6	M6	M6	M10	M10	M10

Dimensions:

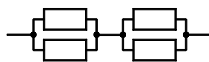


	Dimensions (mm)				
	A	B	C	D	E
NF 528/42/3CV	310	50	85	295	30
NF 528/55/3CV	250	85	90	235	60
NF 528/75/3CV	270	80	135	255	60
NF 528/100/3CV	270	90	150	255	65
NF 528/130/3CV	270	90	150	255	65
NF 528/180/3CV	380	120	170	365	102

Braking Resistors

Technical Data	BW/CV ...				
	1500	2200*)	3000*)	4500**)	5500**)
Dimensions in mm Length L	615	535	615	535	615
Width W	50	50	50	50	50
Height H	55	55	55	55	55
for Motor shaft power / kW	15	-22	30	-45	55
Resistance / Ω	40	30	20	30	20
Power rating / W	1500	1200	1500	1200	1500
Order number	29000.2F108	29000.2F109	29000.2F110	29000.2F111	29000.2F112

*) 1 set resists of 4 stated resistors.



***) 1 set resists of 8 stated resistors.

Options

	Order number
RS 232	29000.2F004
RS 485	29000.2F005
Operator module (LCD)	29000.2F013
Memory module	29000.2F006
Braking module	29000.2F012
Extension cable 0,5m	29000.2F007
Extension cable 1m	29000.2F008
Extension cable 2m	29000.2F009
Extension cable 3m	29000.2F010
Extension cable 5m	29000.2F011
Converter USB-RS 232/422/485	29000.28241

General Accessories

	Order number
Potentiometer 10kΩn (VDE-version)	41750.01103
Rotary button, 20mm	65000.00002
Scale, 50mm x 50mm; 0 - 10	77200.00014

