

Frequency Inverters FUS 037 ... 2200/3G1E 0,37 up to 22kW 4.27

**Features:**

- ❑ dual rating (HD, LD\*)
- ❑ keypad with USB connector (optional)
- ❑ integrated EMC-filter (conform with EN61800-3, categorie C3)
- ❑ "safety enable"-input (conform with EN 954-1)
- ❑ internal mini-PLC
- ❑ integrated braking chopper (up to 22kW)
- ❑ integrated braking resistor (up to 7,5kW)
- ❑ 3 expansion slots for different options (Encoder, fieldbus, ...)
- ❑ spring cage connection
- ❑ advanced PID-function (e.g. dancer control)
- ❑ degree of protection IP20
- ❑ overload durability (HD: 200% for 3s and 150% for 1min.)



Frequency Inverters MEGA  
FUS 037 ... 2200/3G1E



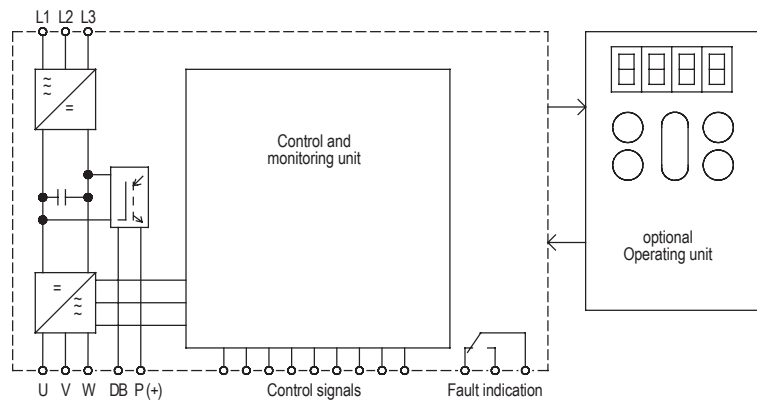
**Function:**

- ❑ accurate control
- ❑ "sensorless vector control"-mode (100% torque at 0Hz)
- ❑ suitable for permanent magnet and induction synchronous motors
- ❑ positioning (with Encoder)

**Typical Applications:**

- pumps
- ventilators
- conveying machinery
- textile machinery
- packing machines
- lifts and hoisting gear

- centrifuges
- grinding machines
- printing machinery
- wood working machines
- vibrators
- drives requiring high torque at low speed



Technical Data	FUS .../3G1E										
	037	075	150	220	400	550	750	1100	1500	1850	2200
Motor shaft power HD / kW	0,37	0,75	1,5	2,2	4,0	5,5	7,5	11,0	15,0	18,5	22,0
Motor shaft power LD / kW						7,5	11,0	15,0	18,5	22,0	30,0
Mains voltage acc. to DIN EN 50160 (IEC 38)	three-phase 380-480V, +-10%, -15%, 50/60Hz, +-5%										
Rated output current HD / A	1,5	2,5	4,0	5,5	9,0	13,5	18,5	24,5	32,0	39,0	45,0
Rated output current LD / A						16,5	23,0	30,5	37,0	45,0	60,0
Overload durability (output)	150% for 1min., 200% for 3s										
<b>Control functions</b>											
Frequency setting range	HD: 0 - 500Hz; LD: 0 - 120Hz										
Ramp-up and ramp-down time	0 ... 6000s										
DC brake	operating frequency 0 - 60Hz, braking time 0 - 30s, intensity 0 - 100%										
EMC-filter	observed EMC-rule: class C3 (spurious radiation)										
Frequency setpoint	poti 1-5kΩ, 0-±10V, 4-20mA, keypad, fixed frequencies, motor poti										
Ambient / Storage temperature	-10°C ... +50°C / -20°C ... +65°C										
Weight / kg	1,8	2,1	2,7	2,9	3,2	6,8	6,9	6,2	10,5	10,5	11,2
Order number	2F210. 40037	2F210. 40075	2F210. 40150	2F210. 40220	2F200. 40004	2F200. 40005	2F200. 40007	2F200. 40011	2F200. 40015	2F200. 40018	2F200. 40022
Recommended mains filter (class C2), order no. 27107.480...	05		12		18		35		35 (HD) 44 (LD)	50 (HD) 72 (LD)	72 78 (LD)

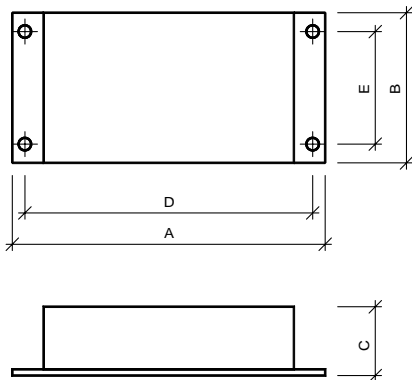
\* HD – high duty, LD – low duty



Built-under mains filter

Technical Data	NF .../F1/G1							
	480/5	480/12	480/18	480/35	480/44	480/50	480/72	480/78
Leakage current / mA	3,0	3,0	3,2	3,0	3,32	6,0	3,0	3,25
for Motor shaft power / kW	-0,75	-2,2	4,0	-11,0	11,0 (LD)	15,0 (HD)	-22,0 (HD)	22,0 (LD)
Order number 27107.48...	005	012	018	035	044	050	072	078

Dimensions:



	Dimensions (mm)				
	A	B	C	D	E
NF 480/5/F1/G1	320	116	42	293	90
NF 480/12/F1/G1	320	155	45	293	105
NF 480/18/F1/G1	320	155	45	293	105
NF 480/35/F1/G1	341	225	48	311	167
NF 480/44/F1/G1	341	225	55	311	167
NF 480/50/F1/G1	500	250	70	449	185
NF 480/72/F1/G1	500	250	70	449	185
NF 480/78/F1/Ga	500	250	90	449	185

Braking resistors

Technical Data	Braking resistor BW ...							
	075/3FU	220/3FU	370/3FU	550/3FU	750/3FU	1100/3FU	1500/3FU	2200/3FU
Area required / mm x mm	221x43	188x67	328x67	378x80	418x80	460x80	580x80	400x180
for Motor shaft power / kW	-0,75	-2,2	3,7	5,5	7,5	11,0	-18,5	22,0
Resistor / :	200	160	130	80	60	40	34	22
Power rating / kW*	0,2	0,4	0,4	0,8	0,9	1,4	1,4	1,8
Order number	29000. 20614	29000. 20615	29000. 20616	29000. 20617	29000. 20618	29000. 20619	29000. 20620	29000. 20632

\*The power output refers to a cycle time of 120s with a cyclic duration factor of 10%.

For shorter cycle times or a higher c.d.f. the resistance values are to be suited to the drive. For this purpose please contact us..

Options

	Order number
Multifunctional keypad	29000.20621
Standard keypad	29000.2F201
Encoder-card PG (5V)	29000.2F204
Profibus DP	29000.2F200
CAN Open adaptor	29000.2F205
DeviceNet-card	29000.2F206
Encoder-card PG (12V)	29000.2F207
Converter USB-RS 232/422/485	29000.28241

General Accessories

	Order number
potentiometer in VDE-design 10k :	41750.01103
rotary button, 20mm, complete	65000.00002
scale, 50mm x 50mm; 0 - 10	77200.00014

