

Frequency Inverters FUS ... /3G11S 0.37kW up to 22kW 4.23

**Features:**

- ▣ compact design / fully digital control
- ▣ PTC - input
- ▣ simple copying of parameters (optional unit)
- ▣ automatic self-optimization
- ▣ detachable operating unit
- ▣ dynamic torque vector control
- ▣ control range 1:1200
- ▣ high breakaway torque (200% nominal torque at 0.5Hz output frequency)
- ▣ extensive control functions and options (incremental encoder card, digital I/O-card, analog I/O-card, relay card)
- ▣ max. rotating field frequency CT: 400Hz VT: 120Hz
- ▣ flying restart function in both directions
- ▣ integrated PID-controller
- ▣ DC brake
- ▣ integr. braking chopper up to FUS 750/3G11S
- ▣ degree of protection IP40
- ▣ integrated RS 485



Frequency Inverters  
**FUS ... /3G11S**  
**0.37kW bis 22kW**  


**Function:**

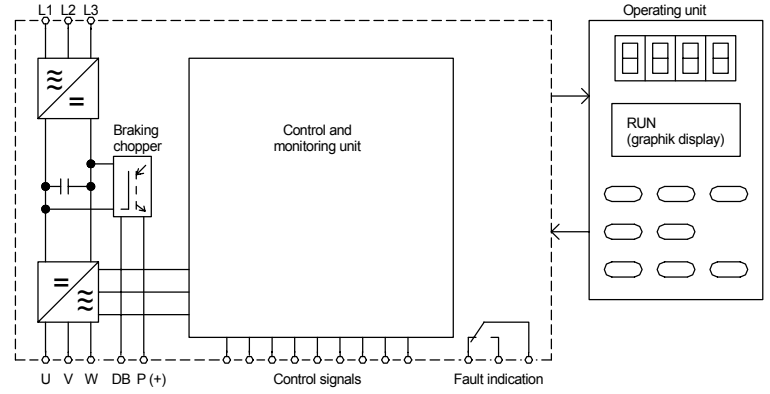
- ▣ control and setpoint entry via terminals and operating unit
- ▣ PWM clock frequency 1-15kHz
- ▣ DC braking (duration, intensity, operating frequency)
- ▣ potential-free control and signalling contacts
- ▣ automatic restart after voltage dip

**Typical Applications:**

- pumps
- ventilators
- conveying machinery
- textile machinery
- packaging machines
- centrifuges
- grinding machines
- printing machinery
- wood working machines
- vibrators
- lifts and hoisting gear
- drives requiring high torques at low speed (torque control)

**Upon Request:**

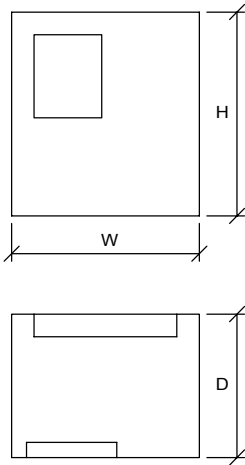
- ▣ Customized Enclosures



Technical Data	FUS ... /3G11S											
	037	075	150	220	400	550	750	1100	1500	1850	2200	
Motor shaft power (CT) /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 (VT) /kW						7.5	11.0	15.0	18.5	22.0		
Mains voltage	three-phase 380-480V, +10%, -15%; 50/60Hz ±5%											
Output current (CT) /A	1.5	2.5	3.7	5.5	9.0	13.0	18.0	24.0	30.0	39.0	45.0	
Output current (VT) /A						16.5	23.0	30.0	37.0	44.0		
Peak current (CT) /A	150% I <sub>N</sub> for 1 min., 200% I <sub>N</sub> for 0.5s											
Peak current (VT) /A	110% I <sub>N</sub> for 1 min.											
Control Functions												
Frequency setting range	CT: 0.2 - 400 Hz VT: 0.2 - 120Hz											
Ramp-up and ramp-down time	0.01 - 3600s											
DC brake	operating frequency 0.1 - 60Hz, braking time 0 - 30s, intensity 0-100%											
Frequency setpoint	keypad, poti 1-5kΩ, 0-10V, 0-5V, 4-20mA, fixed frequencies, RS485											
Ambient/Storage temperature	-10°C ... +50°C / -25°C ... +65°C											
Weight/kg	2.2	2.5	3.8	3.8	3.8	6.5	6.5	10.0	10.0	10.5	10.5	
Order number	28100. 40037	28100. 40075	28100. 40150	28100. 40220	28200. 40004	28200. 40005	28200. 40007	28200. 40011	28200. 40015	28200. 40018	28200. 40022	
Recommended mains filters	005		012			035		050	CT:050 VT:072	072		

CT - constant torque  
 VT - variable torque

**Dimensions:**



	W [mm]	H [mm]	D [mm]
FUS 037/3G11S	110	260	130
FUS 075/3G11S	110	260	145
FUS 150/3G11S	150	260	145
FUS 220/3G11S	150	260	145
FUS 400/3G11S	150	260	145
FUS 550/3G11S	220	260	195
FUS 750/3G11S	220	260 <td 195	
FUS 1100/3G11S	250	400	195
FUS 1500/3G11S	250	400	195
FUS 1850/3G11S	250	400	195
FUS 2200/3G11S	250	400	195

**Connection Diagram:**

