

Thyristor Controllers SGP 160 – 1,4/1,5 5.01

Features:

- for motors with external and permanent excitation
- one-quadrant operation
- control range with armature voltage control 1:30
- control range with tachometer control 1:100
- degree of protection IP00 (built-in device)
- degree of protection IP44 (with housing)



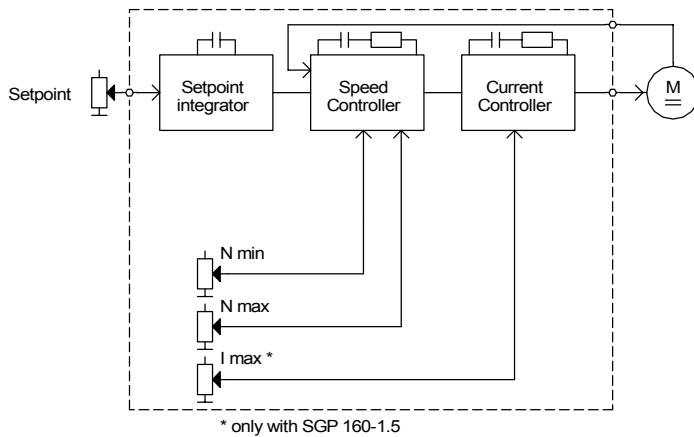
Thyristor Controllers
SGP 160 – 1,4/1,5
CE

Function:

- half-controlled symmetrical bridge circuit with excitation voltage source
- only with SGP 1,5
- adjustable current controller and thus very suitable for permanently excited motors

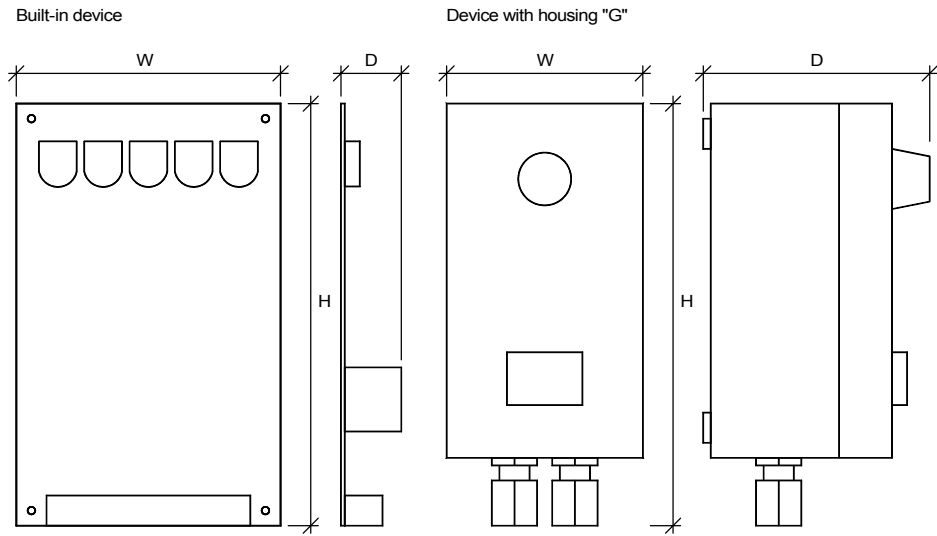
Typical Applications:

- conveying systems
- printing machines
- pumps
- rotary table drives
- welding wire feed mechanisms
- packaging machinery



| Technical Data | SGP 160-1,4 (G) | SGP 160-1,5 (G) |
|---|-------------------------------|-------------------|
| Operating voltage | 230V +15% 50/60Hz | |
| max. Output power | 240W | |
| max. Motor shaft power | 150W | |
| Armature voltage | 0 ... 180VDC | |
| max. Armature current | 1,5A eff. | |
| Excitation voltage/current | 200VDC / 0,5A | |
| Control range | 1:10 | 1:20 |
| Setpoint potentiometer 2,5kV test voltage | 1MΩ linear | 10kΩ linear |
| Adjustable minimum speed | 0 ... 50% | 0 ... 50% |
| Adjustable current control range | - | 0,7 ... 1,5A eff. |
| Ambient / Storage temperature | 0°C ... 45°C / -25°C ... 75°C | |
| Weight / kg | 0,175 | 0,25 |
| G | 0,45 | 0,51 |
| Order number | 22000.22001 | 22010.22001 |
| G ¹ | 22001.22001 | 22011.22001 |
| Recommended Mains filter | 27000.25003 | |

Dimensions:

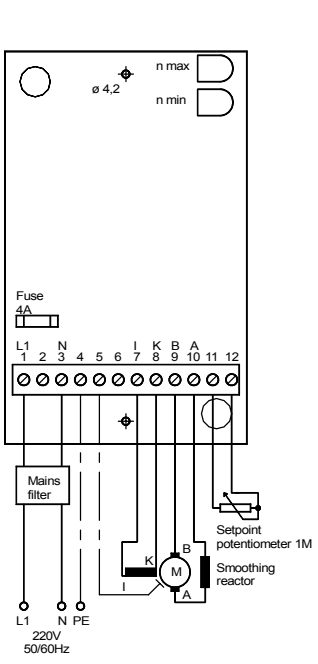


| | W | H | D |
|---------------------------------|------|-------|------|
| SGP 160 – 1,4/1,5 | 67mm | 110mm | 30mm |
| SGP 160 – 1,4/1,5G ¹ | 80mm | 194mm | 84mm |

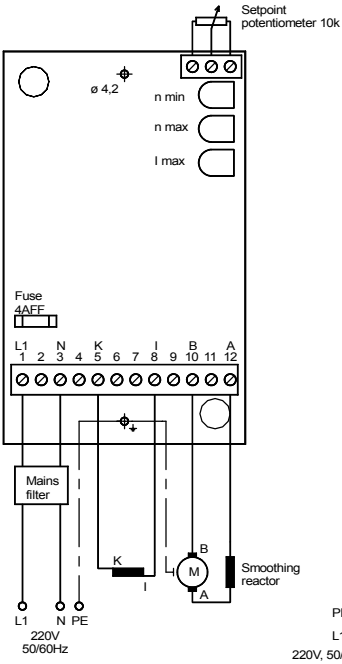
¹ in housing with potentiometer and power switch (external mains filter required!)

Connection Diagrams:

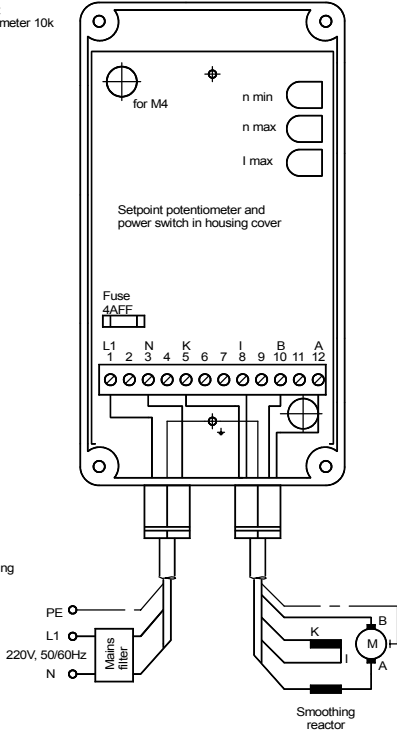
SGP 160 - 1.4



SGP 160 - 1.5



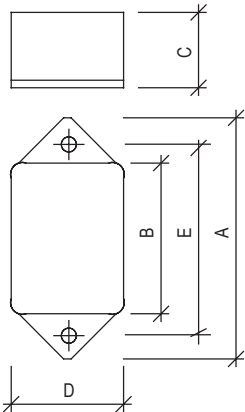
SGP 160 - 1.5G



Mains filter

| | |
|-----------------------|--------------|
| Technical Data | NF 250/3 |
| Area required | 85x54mm |
| Leakage current | 0,4mA |
| Type of connection | flat pin 6,3 |
| For Motor shaft power | -0,25kW |
| Nominal current | 3A |
| Order number | 27000.25003 |

Dimensions:



| | Dimensions (mm) | | | | | | Weight (kg) |
|----------|-----------------|------|------|----|----|---|-------------|
| | A | B | C | D | E | F | |
| NF 250/3 | 85 | 64,8 | 40,3 | 54 | 75 | - | 0,25 |

Smoothing Reactors

| Type | Nominal current in A | Inductance in mH | Dimensions in mm (WxHxD) | Order number |
|----------|----------------------|------------------|--------------------------|--------------|
| SGP 5-78 | 1 - 2 | 70 - 100 | 60 x 66 x 100 | 23000.07802 |

General Accessories

| | Order number |
|--------------------------------------|--------------|
| Potentiometer in VDE-design 10kΩ | 41750.01103 |
| Potentiometer in VDE-design 1MΩ | 41751.01105 |
| Socket connector DIN 41617 / 31-pole | 53231.00003 |

