

Thyristor Speed Controller SGP [2,5 – 16A] 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 IP 00



Thyristor Speed Controller
SGP [2,5 – 16A]
CE

Function:

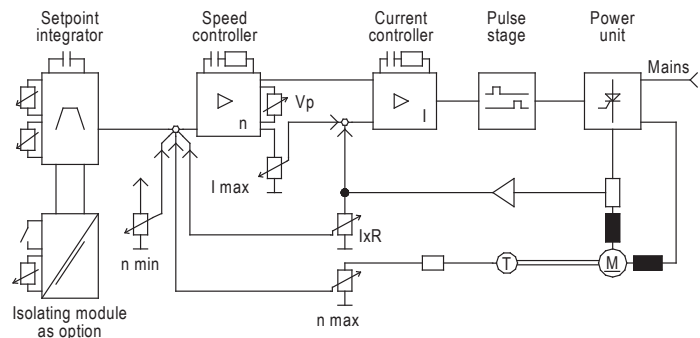
- ❑ half-controlled symmetrical bridge circuit with excitation voltage source
- ❑ adjustable current controller and thus very suitable for permanently excited motors

Typical Applications:

- conveyors
- printing machines
- pumps
- rotary table drives
- welding wire feed mechanisms
- packaging machines
- others

Options:

- ❑ with isolating module (P)
- ❑ pluggable with pin connector DIN 41617 (ST)
- ❑ pluggable with isolating module (ST/P)

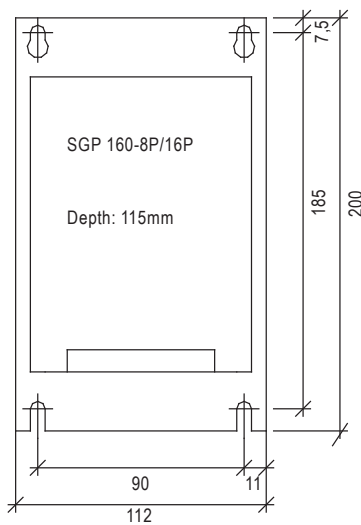
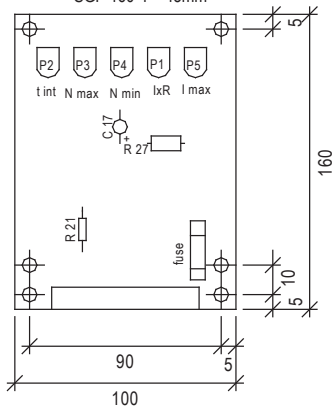


Typical designation	SGP 160-2,5	SGP 160-4	SGP 160-8P	SGP 160-16P
eff. armature current	2,5A	4A	8A	16A
max. motor shaft power	0,25kW	0,37kW	0,9kW	1,8kW
operating voltage acc. to DIN EN 50160 (IEC 38)	230V + 15% 50/60Hz			
order number	22300.22002	22300.22004	22311.22008	22311.22016
recommended mains filter	27000.25003	27000.25006	27000.25010	27000.25020

Technical data	SGP 160-2,5	SGP 160-4	SGP 160-8P	SGP 160-16P
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eff. armature current	2,5A	4A	8A	16A
max. motor shaft power	0,25kW	0,37kW	0,9kW	1,8kW
armature voltage	0 ... 180VDC			
excitation voltage / current	200VDC / 0,5A		200VDC / 1A	
control characteristics				
with I x R compensation	1 : 30 / ±3%			
with tachometer control	1 : 100 / ±1%			
setpoint input	0 - 10VDC 5 - 10kΩ potentiometer			
actual value input	12 - 300VDC depending on adaptation Factory-adapted to 160V armature voltage			
connection	16-pole terminal strip, 1,5mm ²		Control unit: 6-pole terminal strip, 1,5mm ² Power unit: 6-pole terminal strip, 1,5mm ²	
ambient / storage temperature	0 ... 45°C not subject to moisture condensation / -25°C ... 75°C			
cooling	convection			
temperature-dependent power reduction	2% / °C above 45°C...max. 55°C			
weight / kg	0,25	0,3	1,1	1,3

Dimensions:

SGP 160-2,5/4
Depth: SGP 160-2,5 = 35mm
SGP 160-4 = 45mm

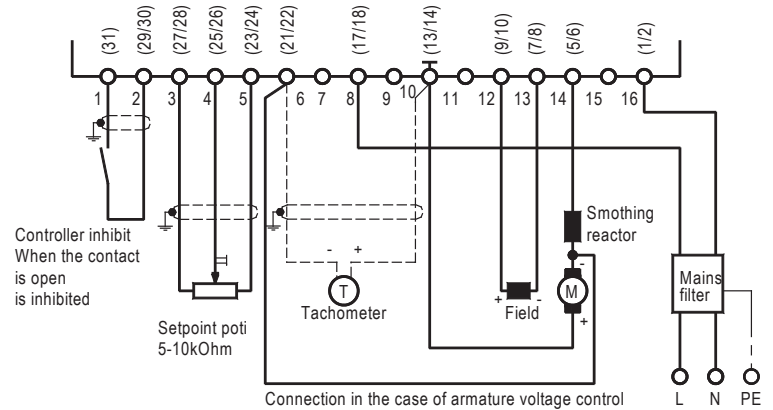


All dimensions indicated in mm

Connection Diagrams:

SGP 160-2,5/4

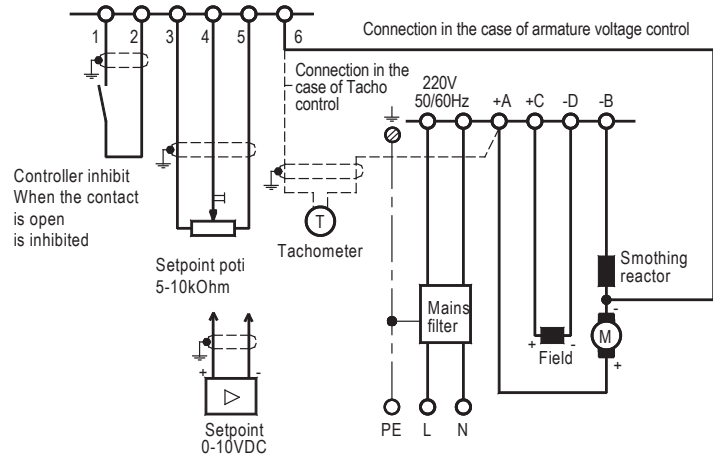
Plug-connector version indicated in brackets



SGP 160-8/16P

Connection Control unit
(6-pole terminal strip)

Control Power unit
(6-pole terminal strip)



To ensure a good commutation and a long service life of the carbon brushes, we recommend to use a smoothing reactor in the case of thyristor controllers.