

## Data sheet for SINAMICS V20

Article No. : 6SL3210-5BE31-8UV0



Figure similar

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

### Rated data

#### Input

Number of phases	3 AC
Line voltage	380 ... 480 V -15 % +10 %
Line frequency	47 ... 63 Hz

#### Output

Number of phases	3 AC	
<b>Rated voltage</b>	<b>400V IEC</b>	<b>480V NEC <sup>1)</sup></b>
Rated power (LO)	22.00 kW	30.00 hp
Rated power (HO)	18.50 kW	25.00 hp
Rated current (LO)	45.00 A	40.00 A
Rated current (HO)	38.00 A	34.00 A
Rated current (IN)	45.00 A	
Pulse frequency	4.00 kHz	
Output frequency	0 ... 550 Hz	

#### Overload capability

Low Overload (LO)
110 % rated output current for 60 s, cycle time 300 s
High Overload (HO)
150 % rated output current for 60 s, cycle time 300 s

### General tech. specifications

Power factor $\lambda$	0.72
Offset factor $\cos \varphi$	0.95
Efficiency $\eta$	0.98
Filter class (integrated)	Unfiltered

### Communication

Communication	USS, Modbus RTU
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### Inputs / outputs

#### Standard digital inputs

Number	4
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#### Digital outputs

Number as relay changeover contact	1
Number as transistor	1

#### Analog inputs

Number	2 (Can be used as additional digital input)
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#### Analog outputs

Number	1
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### Ambient conditions

Cooling	External fan
Installation altitude	1,000 m (3,280.84 ft)

#### Ambient temperature

Operation <sup>2)</sup>	-10 ... 60 °C (14 ... 140 °F)
Storage	-40 ... 70 °C (-40 ... 158 °F)

#### Relative humidity

Max. operation	95 %
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### Connections

#### Max. motor cable length

Shielded	50 m (164.04 ft)
Unshielded	100 m (328.08 ft)

### Mechanical data

Mounting position	Through-hole mounting / wall mounting / side-by-side mounting
Degree of protection	IP20 / UL open type
Frame size	F5E
Net weight	6.24 kg (13.76 lb)

#### Dimensions

Width	245.0 mm (9.65 in)
Height	264.5 mm (10.41 in)
Depth	209.0 mm (8.23 in)

### Standards

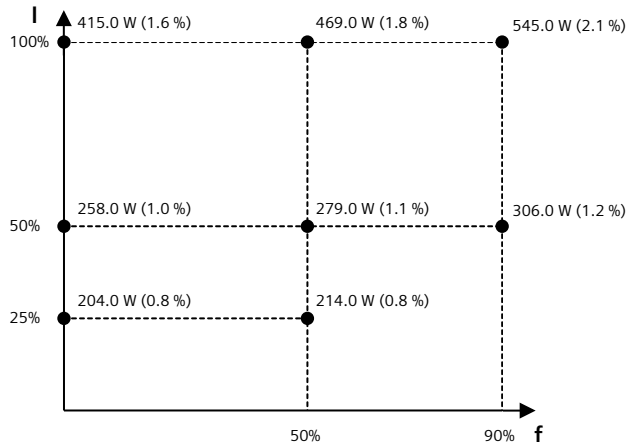
Compliance with standards	CE, cULus, C-Tick (RCM), KC
CE marking	EN 61800-5-1 / EN 60204-1 and EN 61800-3

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### Converter losses to IEC61800-9-2\*

Efficiency class	IE2
Comparison with the reference converter (90% / 100%)	41.0 %



The percentage values show the losses in relation to the rated apparent power of the converter.

The diagram shows the losses for the points (as per standard IEC61800-9-2) of the relative torque generating current (I) over the relative motor stator frequency (f). The values are valid for the basic version of the converter without options/components.

\*converted values

<sup>1)</sup>The output current and HP ratings are valid for the voltage range 440V-480V

<sup>2)</sup>Please observe derating at temperatures of 40 °C or above