

## Data sheet for SINAMICS V20

Article No. : 6SL3210-5BE23-0UV0



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)     | 3.00 kW         | 4.00 hp                       |
| Rated power (HO)     | 3.00 kW         | 4.00 hp                       |
| Rated current (LO)   | 7.30 A          | 7.30 A                        |
| Rated current (HO)   | 7.30 A          | 7.30 A                        |
| Rated current (IN)   | 7.30 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 |
|---------------|-----------------|

### Inputs / outputs

#### Standard digital inputs

|        |   |
|--------|---|
| Number | 4 |
|--------|---|

#### Digital outputs

|                                    |   |
|------------------------------------|---|
| Number as relay changeover contact | 1 |
| Number as transistor               | 1 |

#### Analog inputs

|        |   |
|--------|---|
| Number | 2 (Can be used as additional digital input) |
|--------|---|

#### Analog outputs

|        |   |
|--------|---|
| Number | 1 |
|--------|---|

### Ambient conditions

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

#### Ambient temperature

|           |                                |
|-----------|--------------------------------|
| Operation | -10 ... 60 °C (14 ... 140 °F)  |
| Storage   | -40 ... 70 °C (-40 ... 158 °F) |

#### Relative humidity

|                |      |
|----------------|------|
| Max. operation | 95 % |
|----------------|------|

### Connections

#### Max. motor cable length

|            |                  |
|------------|------------------|
| Shielded   | 25 m (82.02 ft)  |
| Unshielded | 50 m (164.04 ft) |

### Mechanical data

|                      |   |
|----------------------|---|
| Mounting position    | Through-hole mounting / wall mounting / side-by-side mounting |
| Degree of protection | IP20 / UL open type   |
| Frame size           | FSB   |
| Net weight           | 1.60 kg (3.53 lb)   |

#### Dimensions

|        |                    |
|--------|--------------------|
| Width  | 140.0 mm (5.51 in) |
| Height | 160.0 mm (6.30 in) |
| Depth  | 164.5 mm (6.48 in) |

### Standards

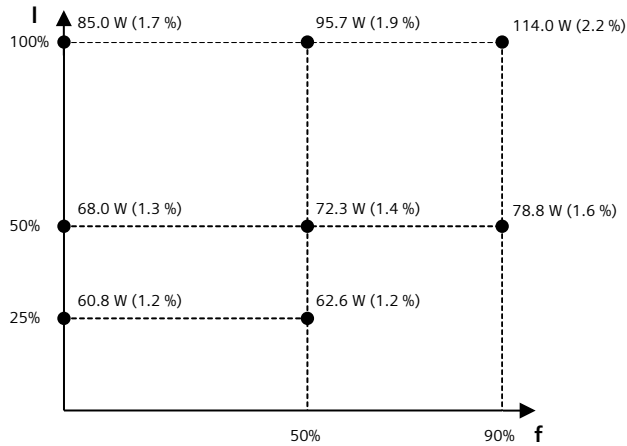
|                           |  |
|---------------------------|--|
| Compliance with standards | CE, cULus, C-Tick (RCM), KC              |
| CE marking                | EN 61800-5-1 / EN 60204-1 and EN 61800-3 |

## Data sheet for SINAMICS V20

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

|  |        |
|--|--------|
| Efficiency class                                     | IE2    |
| Comparison with the reference converter (90% / 100%) | 33.4 % |



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