

# SIEMENS

## Data sheet for SINAMICS V20

Article No. : 6SL3210-5BB21-5BV1

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

Item no. :  
Consignment no. :  
Project :



Figure similar

### Rated data

| Input              |                           |                        |
|--------------------|---------------------------|------------------------|
| Number of phases   | 1 AC                      |                        |
| Line voltage       | 200 ... 240 V -15 % +10 % |                        |
| Line frequency     | 47 ... 63 Hz              |                        |
| Output             |                           |                        |
| Number of phases   | 3 AC                      |                        |
| Rated voltage      | 230V IEC                  | 240V NEC <sup>1)</sup> |
| Rated power (LO)   | 1.50 kW                   | 2.00 hp                |
| Rated power (HO)   | 1.50 kW                   | 2.00 hp                |
| Rated current (LO) | 7.80 A                    | 7.80 A                 |
| Rated current (HO) | 7.80 A                    | 7.80 A                 |
| Rated current (IN) | 7.80 A                    |                        |
| Pulse frequency    | 8.00 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 λ                  | 0.72    |
| Offset factor cos φ             | 0.95    |
| Efficiency η                    | 0.98    |
| Filter class (integrated)       | Class B |
| With integrated braking chopper | No      |

### 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 <sup>2)</sup> | -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    | Wall mounting / side-by-side mounting |
| Degree of protection | IP20 / UL open type                   |
| Frame size           | FSAC                                  |
| Net weight           | 1.40 kg (3.09 lb)                     |

|            |                    |
|------------|--------------------|
| Dimensions |                    |
| Width      | 91.0 mm (3.57 in)  |
| Height     | 160.9 mm (6.33 in) |
| Depth      | 147.0 mm (5.79 in) |

### Standards

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

<sup>1)</sup>The output current and HP ratings are valid for the voltage range 220V-240V

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