

# SIEMENS

## Data sheet for SINAMICS V20

Article No. : 6SL3210-5BE31-1CV0

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

Item no. :  
Consignment no. :  
Project :



Figure similar

| 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         |                        |
| Rated voltage      | 400V IEC     | 480V NEC <sup>1)</sup> |
| Rated power (LO)   | 11.00 kW     | 15.00 hp               |
| Rated power (HO)   | 11.00 kW     | 15.00 hp               |
| Rated current (LO) | 25.00 A      | 21.00 A                |
| Rated current (HO) | 25.00 A      | 21.00 A                |
| Rated current (IN) | 25.00 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 λ                  | 0.72    |
| Offset factor cos φ             | 0.95    |
| Efficiency η                    | 0.98    |
| Filter class (integrated)       | Class A |
| With integrated braking chopper | Yes     |

| 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    | Through-hole mounting / wall mounting / side-by-side mounting |
| Degree of protection | IP20 / UL open type                                           |
| Frame size           | FSD                                                           |
| Net weight           | 4.10 kg (9.04 lb)                                             |

|            |                    |
|------------|--------------------|
| Dimensions |                    |
| Width      | 240.0 mm (9.45 in) |
| Height     | 206.5 mm (8.13 in) |
| Depth      | 172.5 mm (6.79 in) |

| Standards |  |
|-----------|--|
|-----------|--|

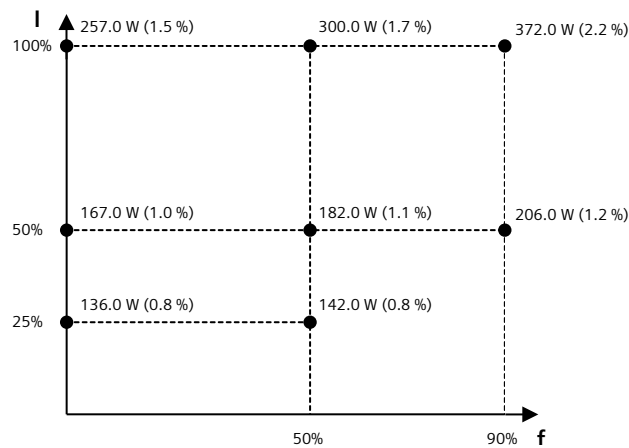
|                           |                                         |
|---------------------------|-----------------------------------------|
| Compliance with standards | CE, cULus, C-Tick (RCM), KC             |
| CE marking                | EN 61800-5-1 /EN 60204-1 and EN 61800-3 |

# SIEMENS

## Data sheet for SINAMICS V20

Article No. : 6SL3210-5BE31-1CV0

| Converter losses to IEC61800-9-2*                    |        |
|------------------------------------------------------|--------|
| Efficiency class                                     | IE2    |
| Comparison with the reference converter (90% / 100%) | 39.6 % |



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.

\*calculated 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