Data sheet for SINAMICS V20

Article No. :
6SL3210-5BE27-5UV0


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

| Rated data |  |  |
| :---: | :---: | :---: |
| Input |  |  |
| Number of phases | 3 AC |  |
| Line voltage | 380 ... 480 V -15 \% +10 \% |  |
| Line frequency | $47 . . .63 \mathrm{~Hz}$ |  |
| Output |  |  |
| Number of phases | 3 AC |  |
| Rated voltage | 400 V IEC | 480 V NEC ${ }^{1)}$ |
| Rated power (LO) | 7.50 kW | 10.00 hp |
| Rated power (HO) | 7.50 kW | 10.00 hp |
| Rated current (LO) | 16.50 A | 16.50 A |
| Rated current (HO) | 16.50 A | 16.50 A |
| Rated current (IN) | 16.50 A |  |
| Pulse frequency | 4.00 kHz |  |
| Output frequency | $0 . . .550 \mathrm{~Hz}$ |  |

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 | 4 |  |
| Number |  |  |
| 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

Item no. :
Consignment no. :
Project :

|  | Ambient conditions |
| :--- | :--- |
| Cooling | External fan |
| Installation altitude | $1,000 \mathrm{~m}(3,280.84 \mathrm{ft})$ |
| Ambient temperature |  |
| Operation ${ }^{2)}$ | $-10 \ldots 60^{\circ} \mathrm{C}\left(14 \ldots 140^{\circ} \mathrm{F}\right)$ |
| Storage | $-40 \ldots 70^{\circ} \mathrm{C}\left(-40 \ldots 158^{\circ} \mathrm{F}\right)$ |

Relative humidity
Max. operation $95 \%$

| Connections |
| :--- | :--- |

Max. motor cable length

| Shielded | $25 \mathrm{~m}(82.02 \mathrm{ft})$ |
| :--- | :--- |
| Unshielded | $50 \mathrm{~m}(164.04 \mathrm{ft})$ |


|  | Mechanical data |
| :--- | :--- |
| Mounting position | Through-hole mounting / wall <br> mounting / side-by-side mounting |
| Degree of protection | IP20 / UL open type |
| Frame size | FSD |
| Net weight | $3.70 \mathrm{~kg}(8.16 \mathrm{lb})$ |

Dimensions

| Width | $240.0 \mathrm{~mm}(9.45 \mathrm{in})$ |
| :--- | :--- |
| Height | $206.5 \mathrm{~mm}(8.13 \mathrm{in})$ |
| Depth | $172.5 \mathrm{~mm}(6.79 \mathrm{in})$ |


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

## Data sheet for SINAMICS V20

## Article No.: 6SL3210-5BE27-5UV0

| Converter losses to IEC61800-9-2* |  |
| :---: | :---: |
| Efficiency class | IE2 |
| Comparison with the reference converter (90\% / 100\%) | 36.1 \% |



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
${ }^{1)}$ The output current and HP ratings are valid for the voltage range 440 V - 480 V
${ }^{2)}$ Please observe derating at temperatures of $40^{\circ} \mathrm{C}$ or above

