



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8133-1UG02-0LA1

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

Item no. :  
Consignment no. :  
Project :

Engineering data

|   |                  | P <sub>N</sub><br>[kW] | M <sub>N</sub><br>[Nm] | I <sub>N</sub><br>[A] | U <sub>N</sub><br>[V] | f <sub>N</sub><br>[Hz] | n <sub>N</sub><br>[rpm] | M <sub>max</sub><br>[Nm] | I <sub>max</sub><br>[A] | n <sub>max</sub><br>[rpm] | M <sub>0</sub><br>[Nm] | I <sub>0</sub><br>[A] | η     | cos φ | I <sub>μ</sub><br>[A] |
|---|------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|--------------------------|-------------------------|---------------------------|------------------------|-----------------------|-------|-------|-----------------------|
| Y | ALM 400V         | 22.5                   | 93.0                   | 44.0                  | 400                   | 78.1                   | 2,300                   | 250                      | 117.0                   | 10,000                    | 126.0                  | 54                    | 0.933 | 0.840 | 18.1                  |
|   | BLM/SLM 400V     | 20.0                   | 96.0                   | 45.0                  | 350                   | 68.1                   | 2,000                   | 250                      | 117.0                   | 10,000                    | 126.0                  | 54                    | 0.919 | 0.850 | 18.1                  |
|   | ALM/BLM/SLM 480V | 24.0                   | 86.0                   | 41.0                  | 456                   | 89.6                   | 2,650                   | 250                      | 117.0                   | 10,000                    | 126.0                  | 54                    | 0.949 | 0.830 | 18.1                  |

Mechanical data

|                           |                                                                          |
|---------------------------|--------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                         |
| Shaft height              | 132                                                                      |
| Cooling                   | Forced ventilation DE -> NDE                                             |
| Vibration severity grade  | SPECIAL/B                                                                |
| Shaft and flange accuracy | SPECIAL                                                                  |
| Degree of protection      | IP55                                                                     |
| Design acc. to Code I     | IM B5 (IM V1, IM V3)                                                     |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                          |
| Color                     | Standard (Anthracite RAL 7016)                                           |
| Type of the bearing       | Performance                                                              |
| Shaft end                 | Plain shaft                                                              |
| Encoder system            | Incremental encoder 20 bit without commutation position (encoder IN20DQ) |

Physical constants

|                       |           |
|-----------------------|-----------|
| Thermal time constant | 30 min    |
| Moment of inertia     | 760 kgcm² |
| Weight (approx.)      | 106 kg    |

Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | gk833        |

Cooling data and sound pressure level

|                                                                                               |                     |
|-----------------------------------------------------------------------------------------------|---------------------|
| Airflow, min.                                                                                 | 0.09 m³/s           |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 70 dB <sup>1)</sup> |
| Air discharge                                                                                 | axial               |
| Pressure drop                                                                                 | 140 Pa              |

External fan

Max. power consumption

|                           |        |
|---------------------------|--------|
| 3 AC 400 V / 50 Hz (±10%) | 0.21 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.19 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.23 A |

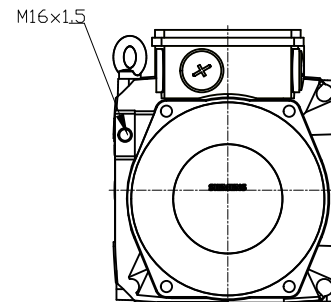
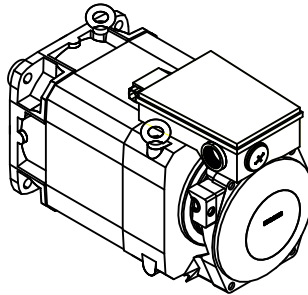
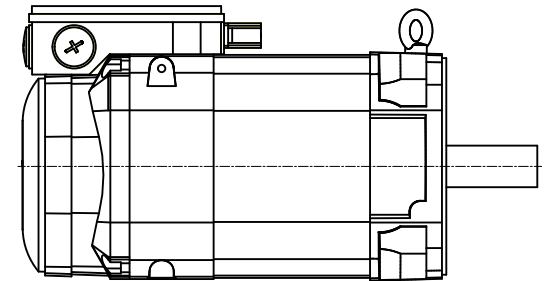
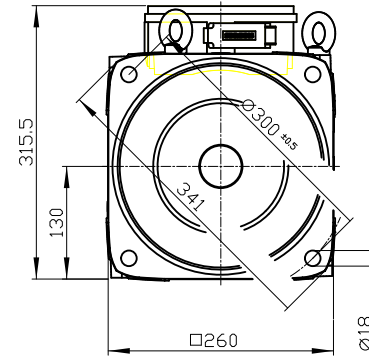
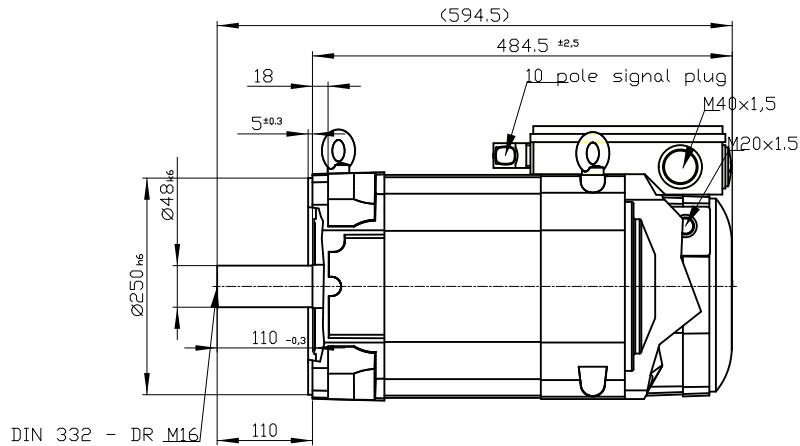
<sup>1)</sup> at a rated frequency of 4 kHz and a speed range of up to 5000 rpm

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Type of construction: IM B5 (IM V1, IM V3) / Type of protection: IP55

|                                                                                       |  |         |                    |
|---------------------------------------------------------------------------------------|--|---------|--------------------|
|  |  |         |                    |
| Terminal box                                                                          |  | gk833   | 1PH8133-1UG02-0LA1 |
| Weight                                                                                |  | 106 kg  |                    |
| Unit                                                                                  |  | mm [in] |                    |
| Date                                                                                  |  | 4/17/23 |                    |
| SIEMENS AG                                                                            |  |         |                    |
| not toleranced dimensions: ± 1                                                        |  |         |                    |
|                                                                                       |  | DT      |                    |