



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8137-1FB12-0BA1

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         | 8.6                    | 165.0                  | 18.0                  | 391                   | 17.8                   | 500                     | 264                      | 28.0                    | 6,000                     | 171.0                  | 19                    | 0.820 | 0.880 | 6.7                   |
|   | BLM/SLM 400V     | 6.9                    | 165.0                  | 18.0                  | 323                   | 14.7                   | 400                     | 264                      | 28.0                    | 6,000                     | 171.0                  | 19                    | 0.790 | 0.880 | 6.7                   |
|   | ALM/BLM/SLM 480V | 10.3                   | 165.0                  | 18.0                  | 458                   | 21.4                   | 600                     | 264                      | 28.0                    | 6,000                     | 171.0                  | 19                    | 0.850 | 0.880 | 6.8                   |

Mechanical data

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                     |
| Shaft height              | 132                                                                                  |
| Cooling                   | Forced ventilation NDE -> DE                                                         |
| Vibration severity grade  | R/A                                                                                  |
| Shaft and flange accuracy | R                                                                                    |
| 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       | Standard with fixed bearing                                                          |
| Shaft end                 | Plain shaft                                                                          |
| Encoder system            | Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm |

Physical constants

|                       |                         |
|-----------------------|-------------------------|
| Thermal time constant | 30 min                  |
| Moment of inertia     | 1,090 kgcm <sup>2</sup> |
| Weight (approx.)      | 141 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 m <sup>3</sup> /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                 |

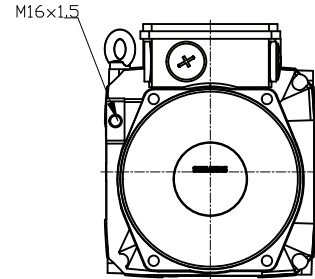
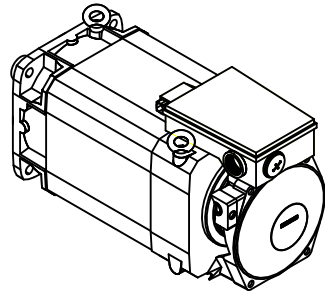
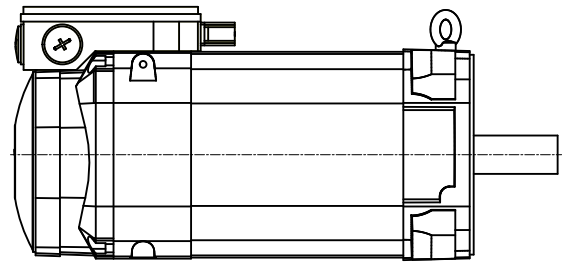
External fan

Max. power consumption

|                           |        |
|---------------------------|--------|
| 3 AC 400 V / 50 Hz (±10%) | 0.13 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.16 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.17 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                                                                                                                                    |  |
|  |         | <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> |  |
| Terminal box                                                                          | gk833   | 1PH8137-1FB12-0BA1                                                                                                                                            |  |
| Weight                                                                                | 141 kg  |                                                                                                                                                               |  |
| Unit                                                                                  | mm (in) |                                                                                                                                                               |  |
| Date                                                                                  | 4/24/23 |                                                                                                                                                               |  |
| SIEMENS AG                                                                            |         |                                                                                                                                                               |  |
| not tolerated dimensions: ± 1                                                         |         |                                                                                                                                                               |  |
|                                                                                       |         | DT                                                                                                                                                            |  |