



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8135-2FG23-1QH1

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         | 44.3                   | 184.0                  | 80.0                  | 395                   | 76.7                   | 2,300                   | 390                      | 196.0                   | 4,500                     | 196.0                  | 85                    | 0.953 | 0.000 | 0.0                   |
|   | BLM/SLM 400V     | 39.0                   | 186.0                  | 81.0                  | 346                   | 66.7                   | 2,000                   | 390                      | 196.0                   | 4,500                     | 196.0                  | 85                    | 0.952 | 0.000 | 0.0                   |
|   | ALM/BLM/SLM 480V | 50.5                   | 182.0                  | 79.0                  | 452                   | 88.3                   | 2,650                   | 390                      | 196.0                   | 4,500                     | 196.0                  | 85                    | 0.954 | 0.000 | 0.0                   |

Mechanical data

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Motor type                | Permanent-magnet synchronous motor                                                   |
| Shaft height              | 132                                                                                  |
| Cooling                   | Water cooling                                                                        |
| Vibration severity grade  | S/A                                                                                  |
| Shaft and flange accuracy | R                                                                                    |
| Degree of protection      | IP65                                                                                 |
| Design acc. to Code I     | IM B35 (IM V15, IM V35)                                                              |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                                      |
| Color                     | Standard (Anthracite RAL 7016)                                                       |
| Type of the bearing       | Advanced Lifetime                                                                    |
| Shaft end                 | Feather key with full key balancing                                                  |
| Encoder system            | Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm |

Cooling water specification

|                                 |             |
|---------------------------------|-------------|
| pH value                        | 6 ... 9     |
| Total hardness                  | 1.7 mmol/l  |
| Electrical conductivity         | 500 μS/cm   |
| Chloride ions                   | 40 mg/l     |
| Sulfate ions                    | 50 mg/l     |
| Nitrate ions                    | 50 mg/l     |
| Dissolved substances            | 340 mg/l    |
| Maximum particle size           | 100 μm      |
| Antifreeze/corrosion protection | 20 ... 30 % |

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

Physical constants

|                       |                       |
|-----------------------|-----------------------|
| Thermal time constant | 5 min                 |
| Moment of inertia     | 750 kgcm <sup>2</sup> |
| Weight (approx.)      | 138 kg                |

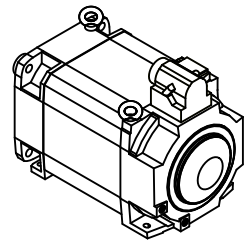
Connection

|                               |                      |
|-------------------------------|----------------------|
| Type of electrical connection | Power connector      |
| Position of the connection    | Power connector, top |
| Power connection              | DE                   |
| Signal connection             | left                 |

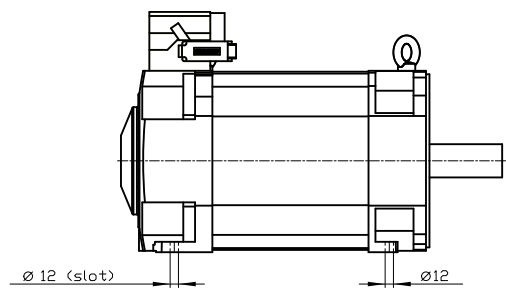
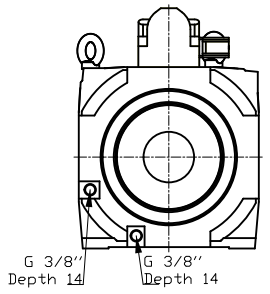
Cooling data and sound pressure level

|                                                                |                     |
|----------------------------------------------------------------|---------------------|
| Flow rate, min.                                                | 12 l/min            |
| Sound pressure level LpA(1m) motor rated load, tolerance + 3dB | 68 dB <sup>1)</sup> |
| Pressure drop                                                  | 0.9 bar             |
| NDE thread connection                                          | 0.375 Inches        |

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deviation acc. to  
DIN 6885 sheet 1



|                                                                                       |         |                                                                                       |  |
|---------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------|--|
| Type of construction IM B35 (IM V15, IM V35)                                          |         | / Type of protection IP65                                                             |  |
|  |         |  |  |
| Terminal box                                                                          | -       | 1PH8135-2FG23-1QH1                                                                    |  |
| Weight                                                                                | 138 kg  |                                                                                       |  |
| Unit                                                                                  | mm [in] |                                                                                       |  |
| Date                                                                                  | 4/28/23 |                                                                                       |  |
| SIEMENS AG                                                                            |         |                                                                                       |  |
| not toleranced dimensions: ± 1                                                        |         | DT                                                                                    |  |