



Figure similar

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8184-1FF30-2AA1

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         | 89.0                   | 486.0                  | 162.0                 | 390                   | 59.3                   | 1,750                   | 925                      | 300.0                   | 5,000                     | 486.0                  | 162                   | 0.937 | 0.87  | 61.0                  |
|   | BLM/SLM 400V     | 76.0                   | 484.0                  | 162.0                 | 335                   | 50.9                   | 1,500                   | 925                      | 300.0                   | 5,000                     | 484.0                  | 162                   | 0.931 | 0.87  | 61.0                  |
|   | ALM/BLM/SLM 480V | 98.0                   | 468.0                  | 156.0                 | 450                   | 67.5                   | 2,000                   | 925                      | 300.0                   | 5,000                     | 468.0                  | 156                   | 0.943 | 0.85  | 63.0                  |

### Mechanical data

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                     |
| Shaft height              | 180                                                                                  |
| Cooling                   | Open circuit cooling DE-> NDE                                                        |
| Vibration severity grade  | A                                                                                    |
| Shaft and flange accuracy | N                                                                                    |
| Degree of protection      | IP23                                                                                 |
| Design acc. to Code I     | IM B3 (IM B6, IM B7, IM B8, IM V6)                                                   |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                                      |
| Color                     | Standard (Anthracite RAL 7016)                                                       |
| Type of the bearing       | Standard                                                                             |
| Shaft extension           | Feather key with half key balancing                                                  |
| Encoder system            | Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm |

### Physical constants

|                       |                         |
|-----------------------|-------------------------|
| Thermal time constant | 26 min                  |
| Moment of inertia     | 4,890 kgcm <sup>2</sup> |
| Weight (approx.)      | 350 kg                  |

### Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | 1XB7322-P05  |

### Cooling data and sound pressure level

|                                                                                               |                        |
|-----------------------------------------------------------------------------------------------|------------------------|
| Airflow, min.                                                                                 | 0.21 m <sup>3</sup> /s |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 73 dB <sup>1)</sup>    |
| Air discharge                                                                                 | axial                  |
| Pressure drop                                                                                 | 450 Pa                 |

<sup>1)</sup> at a rated frequency of 2 kHz and a speed range of up to 3000 rpm