

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8137-1FG12-0GA1



Figure similar

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         | 29.0                   | 120.0                  | 56.0                  | 400                   | 77.9                   | 2,300                   | 340                      | 152.0                   | 8,000                     | 176.0                  | 73                    | 0.929 | 0.86  | 21.9                  |
|   | BLM/SLM 400V     | 28.0                   | 134.0                  | 60.0                  | 350                   | 68.1                   | 2,000                   | 340                      | 152.0                   | 8,000                     | 176.0                  | 73                    | 0.924 | 0.87  | 21.5                  |
|   | ALM/BLM/SLM 480V | 30.0                   | 108.0                  | 52.0                  | 460                   | 89.4                   | 2,650                   | 340                      | 152.0                   | 8,000                     | 176.0                  | 73                    | 0.941 | 0.83  | 22.4                  |

### 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                                                                             |
| Shaft extension           | 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                 |

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