



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8131-2FL12-1CA1

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         | 27.7                   | 95.0                   | 44.0                  | 415                   | 93.3                   | 2,800                   | 220                      | 117.0                   | 4,500                     | 105.0                  | 48                    | 0.949 | 0.00  | 0.0                   |
|   | BLM/SLM 400V     | 25.0                   | 96.0                   | 44.0                  | 371                   | 83.3                   | 2,500                   | 220                      | 117.0                   | 4,500                     | 105.0                  | 48                    | 0.948 | 0.00  | 0.0                   |
|   | ALM/BLM/SLM 480V | 29.5                   | 94.0                   | 43.0                  | 449                   | 100.0                  | 3,000                   | 220                      | 117.0                   | 4,500                     | 105.0                  | 48                    | 0.951 | 0.00  | 0.0                   |

| Mechanical data           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| Motor type                | Permanent-magnet synchronous motor                                                   |
| Shaft height              | 132                                                                                  |
| Cooling                   | Forced ventilation NDE -> DE                                                         |
| Vibration severity grade  | S/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 extension           | Feather key with full key balancing                                                  |
| Encoder system            | Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm |

| Physical constants    |                       |
|-----------------------|-----------------------|
| Thermal time constant | 10 min                |
| Moment of inertia     | 446 kgcm <sup>2</sup> |
| Weight (approx.)      | 85 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              |

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