

# SIMOTICS SD 1LA/1LG Standard Motors

## Motors with Standard Efficiency IE1

Self-ventilated motors  
Cast-iron series 1LA6 and 1LG4

IE1



### Selection and ordering data

| Operating values at rated output                                                                                                                                                                                                                                                             |                              |                     |                                                                                                 |                        |                 |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                     | Cast-iron series<br>1LA6/1LG4 –<br>IE1 version in<br>accordance with<br>IEC 60034-30<br>Order No. |                | $m_{IM\ B3}$ J          |                  | Torque<br>class               |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------|-------------------------------------------------------------------------------------------------|------------------------|-----------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------------|----------------------------------|--------------------------|--------------------------|-----------------------|---------------------|---------------------------------------------------------------------------------------------------|----------------|-------------------------|------------------|-------------------------------|--|--|
| $P_{rated}$ ,<br>50 Hz                                                                                                                                                                                                                                                                       | $P_{rated}$ ,<br>60 Hz<br>1) | Frame<br>size       | $\eta_{rated}$ ,<br>50 Hz                                                                       | $T_{rated}$ ,<br>50 Hz | IE<br>class     | $\eta_{rated}$ ,<br>50 Hz,<br>4/4 | $\eta_{rated}$ ,<br>50 Hz,<br>3/4 | $\eta_{rated}$ ,<br>50 Hz,<br>2/4 | $\cos\varphi$<br>rated,<br>50 Hz,<br>4/4 | $I_{rated}$ ,<br>50 Hz,<br>400 V | $T_{LR}/$<br>$I_{rated}$ | $I_{LR}/$<br>$I_{rated}$ | $T_B/$<br>$I_{rated}$ | $L_{pA}$ ,<br>50 Hz | $L_{WA}$ ,<br>50 Hz                                                                               |                |                         |                  |                               |  |  |
| kW                                                                                                                                                                                                                                                                                           | kW                           | FS                  | rpm                                                                                             | Nm                     |                 | %                                 | %                                 | %                                 |                                          | A                                |                          |                          |                       | dB(A)               | dB(A)                                                                                             |                | kg                      | kgm <sup>2</sup> | CL                            |  |  |
| <div>• Cooling: Self-ventilated (IC 411)</div> <div>• Efficiency: Standard Efficiency IE1, service factor (SF) 1.1</div> <div>• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)</div> |                              |                     |                                                                                                 |                        |                 |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                     |                                                                                                   |                |                         |                  |                               |  |  |
| 2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz <sup>1)</sup>                                                                                                                                                                                                                                   |                              |                     |                                                                                                 |                        |                 |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                     |                                                                                                   |                |                         |                  |                               |  |  |
| 3                                                                                                                                                                                                                                                                                            | 3.45                         | 100 L               | 2890                                                                                            | 9.9                    | IE1             | 81.5                              | 81.5                              | 80.5                              | 0.85                                     | 6.3                              | 2.8                      | 6.8                      | 3.0                   | 62                  | 74                                                                                                | 1LA6106-2AA ■■ | 34                      | 0.0035           | 16                            |  |  |
| 4                                                                                                                                                                                                                                                                                            | 4.55                         | 112 M               | 2905                                                                                            | 13                     | IE1             | 83.1                              | 83.1                              | 82.1                              | 0.86                                     | 8.1                              | 2.6                      | 7.2                      | 2.9                   | 63                  | 75                                                                                                | 1LA6113-2AA ■■ | 43                      | 0.0059           | 16                            |  |  |
| 5.5                                                                                                                                                                                                                                                                                          | 6.3                          | 132 S               | 2925                                                                                            | 18                     | IE1             | 84.7                              | 84.7                              | 83.7                              | 0.89                                     | 10.5                             | 2.0                      | 5.9                      | 2.8                   | 68                  | 80                                                                                                | 1LA6130-2AA ■■ | 53                      | 0.015            | 16                            |  |  |
| 7.5                                                                                                                                                                                                                                                                                          | 8.6                          | 132 S               | 2930                                                                                            | 24                     | IE1             | 86.0                              | 86.0                              | 85.0                              | 0.89                                     | 14.1                             | 2.3                      | 6.9                      | 3.0                   | 68                  | 80                                                                                                | 1LA6131-2AA ■■ | 58                      | 0.019            | 16                            |  |  |
| 11                                                                                                                                                                                                                                                                                           | 12.6                         | 160 M               | 2940                                                                                            | 36                     | IE1             | 87.6                              | 87.6                              | 86.6                              | 0.88                                     | 20.5                             | 2.1                      | 6.5                      | 2.9                   | 70                  | 82                                                                                                | 1LA6163-2AA ■■ | 96                      | 0.034            | 16                            |  |  |
| 15                                                                                                                                                                                                                                                                                           | 17.3                         | 160 M               | 2940                                                                                            | 49                     | IE1             | 88.7                              | 88.7                              | 87.7                              | 0.90                                     | 27                               | 2.2                      | 6.6                      | 3.0                   | 70                  | 82                                                                                                | 1LA6164-2AA ■■ | 105                     | 0.043            | 16                            |  |  |
| 18.5                                                                                                                                                                                                                                                                                         | 21.3                         | 160 L               | 2940                                                                                            | 60                     | IE1             | 89.3                              | 89.3                              | 88.3                              | 0.91                                     | 33                               | 2.4                      | 7.0                      | 3.1                   | 70                  | 82                                                                                                | 1LA6166-2AA ■■ | 115                     | 0.051            | 16                            |  |  |
| 22                                                                                                                                                                                                                                                                                           | 24.5                         | 180 M               | 2945                                                                                            | 71                     | IE1             | 89.9                              | 90.0                              | 89.6                              | 0.86                                     | 41 <sup>2)</sup>                 | 2.5                      | 6.4                      | 3.4                   | 69                  | 82                                                                                                | 1LG4183-2AA ■■ | 145                     | 0.068            | 16                            |  |  |
| 30                                                                                                                                                                                                                                                                                           | 33.5                         | 200 L               | 2950                                                                                            | 97                     | IE1             | 90.7                              | 90.8                              | 90.1                              | 0.88                                     | 54 <sup>2)</sup>                 | 2.3                      | 6.5                      | 3.0                   | 73                  | 86                                                                                                | 1LG4206-2AA ■■ | 205                     | 0.13             | 16                            |  |  |
| 37                                                                                                                                                                                                                                                                                           | 41.5                         | 200 L               | 2955                                                                                            | 120                    | IE1             | 91.2                              | 91.5                              | 90.8                              | 0.89                                     | 66 <sup>2)</sup>                 | 2.5                      | 7.2                      | 3.3                   | 73                  | 86                                                                                                | 1LG4207-2AA ■■ | 225                     | 0.15             | 16                            |  |  |
| 45                                                                                                                                                                                                                                                                                           | 51                           | 225 M               | 2960                                                                                            | 145                    | IE1             | 91.7                              | 92.0                              | 91.6                              | 0.88                                     | 80 <sup>2)</sup>                 | 2.4                      | 6.7                      | 3.1                   | 73                  | 86                                                                                                | 1LG4223-2AA ■■ | 285                     | 0.22             | 16                            |  |  |
| 55                                                                                                                                                                                                                                                                                           | 62                           | 250 M               | 2970                                                                                            | 177                    | IE1             | 92.1                              | 92.2                              | 91.4                              | 0.88                                     | 98                               | 2.1                      | 6.7                      | 3.1                   | 75                  | 88                                                                                                | 1LG4253-2AB ■■ | 375                     | 0.40             | 13                            |  |  |
| 75                                                                                                                                                                                                                                                                                           | 84                           | 280 S               | 2975                                                                                            | 241                    | IE1             | 92.7                              | 92.5                              | 91.5                              | 0.87                                     | 134 <sup>2)</sup>                | 2.5                      | 7.5                      | 3.1                   | 74                  | 87                                                                                                | 1LG4280-2AB ■■ | 500                     | 0.72             | 13                            |  |  |
| 90                                                                                                                                                                                                                                                                                           | 101                          | 280 M               | 2975                                                                                            | 289                    | IE1             | 93.0                              | 93.1                              | 92.5                              | 0.89                                     | 157 <sup>2)</sup>                | 2.6                      | 7.2                      | 3.1                   | 74                  | 87                                                                                                | 1LG4283-2AB ■■ | 540                     | 0.83             | 13                            |  |  |
| 110                                                                                                                                                                                                                                                                                          | 123                          | 315 S               | 2982                                                                                            | 352                    | IE1             | 93.3                              | 92.9                              | 91.5                              | 0.87                                     | 196 <sup>2)</sup>                | 2.4                      | 7.2                      | 3.1                   | 79                  | 92                                                                                                | 1LG4310-2AB ■■ | 720                     | 1.2              | 13                            |  |  |
| 132                                                                                                                                                                                                                                                                                          | 148                          | 315 M               | 2982                                                                                            | 423                    | IE1             | 93.5                              | 93.2                              | 92.5                              | 0.90                                     | 225 <sup>2)</sup>                | 2.4                      | 6.9                      | 3.0                   | 79                  | 92                                                                                                | 1LG4313-2AB ■■ | 775                     | 1.4              | 13                            |  |  |
| 160                                                                                                                                                                                                                                                                                          | 180                          | 315 L               | 2982                                                                                            | 512                    | IE1             | 93.8                              | 93.6                              | 93.1                              | 0.91                                     | 270 <sup>3)</sup>                | 2.4                      | 7.0                      | 3.0                   | 79                  | 92                                                                                                | 1LG4316-2AB ■■ | 900                     | 1.6              | 13                            |  |  |
| 200                                                                                                                                                                                                                                                                                          | 224                          | 315 L               | 2982                                                                                            | 641                    | IE1             | 94.0                              | 93.9                              | 93.5                              | 0.92                                     | 335 <sup>3)</sup>                | 2.3                      | 6.7                      | 2.9                   | 79                  | 92                                                                                                | 1LG4317-2AB ■■ | 1015                    | 2.1              | 13                            |  |  |
| Voltages                                                                                                                                                                                                                                                                                     |                              |                     |                                                                                                 |                        |                 |                                   |                                   |                                   | No. of<br>poles                          | Motor type 1LA6                  |                          | Motor type 1LG4          |                       | Version             |                                                                                                   | 1              | Order code(s)           |                  |                               |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 230 VΔ/400 VY                | 60 Hz <sup>1)</sup> | 460 VY                                                                                          | 2                      | 1LA6106 ... 166 |                                   | 1LG4183 ... 313                   |                                   | Standard                                 |                                  | 6                        |                          |                       | –                   |                                                                                                   |                |                         |                  |                               |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 400 VΔ/690 VY                | 60 Hz <sup>1)</sup> | 460 VΔ                                                                                          | 2                      | 1LA6106 ... 166 |                                   | 1LG4183 ... 317                   |                                   | Standard                                 |                                  | 3                        |                          |                       | –                   |                                                                                                   |                |                         |                  |                               |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 500 VY                       |                     |                                                                                                 | 2                      | 1LA6106 ... 166 |                                   | 1LG4183 ... 313                   |                                   | Without add.<br>charge                   |                                  | 5                        |                          |                       | –                   |                                                                                                   |                |                         |                  |                               |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 500 VΔ                       |                     |                                                                                                 | 2                      | 1LA6106 ... 166 |                                   | 1LG4183 ... 317                   |                                   | Without add.<br>charge                   |                                  | 9                        |                          |                       | ...                 |                                                                                                   |                |                         |                  |                               |  |  |
| Further voltages <sup>1)</sup>                                                                                                                                                                                                                                                               |                              |                     | For additional charges, code numbers and descriptions, see supplements and special versions.    |                        |                 |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                     |                                                                                                   |                | 1                       | ...              |                               |  |  |
| Types of construction                                                                                                                                                                                                                                                                        |                              |                     |                                                                                                 | No. of<br>poles        | Motor type 1LA6 |                                   | Motor type 1LG4                   |                                   | Version                                  |                                  | Order code(s)            |                          |                       |                     |                                                                                                   |                |                         |                  |                               |  |  |
| Without flange                                                                                                                                                                                                                                                                               |                              |                     | IM B3/6/7/8 <sup>4)</sup>                                                                       |                        | 2               | 1LA6106 ... 166                   |                                   | 1LG4183 ... 317                   |                                          | Standard                         |                          | 0                        | –                     |                     |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM V6 <sup>4)</sup>                                                                             |                        | 2               | 1LA6106 ... 166                   |                                   | 1LG4183 ... 313                   |                                          | Standard                         |                          |                          | 0                     | –                   |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                                 |                        | 2               | –                                 |                                   | 1LG4316 ... 317                   |                                          | With add. charge                 |                          |                          |                       | 9                   | M1E                                                                                               |                |                         |                  |                               |  |  |
| With flange                                                                                                                                                                                                                                                                                  |                              |                     | IM V5 without protective cover <sup>4)</sup>                                                    |                        | 2               | 1LA6106 ... 166                   |                                   | 1LG4183 ... 313                   |                                          | Standard                         |                          | 0                        | –                     |                     |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                                 |                        | 2               | –                                 |                                   | 1LG4316 ... 317                   |                                          | With add. charge                 |                          |                          | 9                     | M1D                 |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM B5 <sup>5)</sup>                                                                             |                        | 2               | 1LA6106 ... 166                   |                                   | 1LG4183 ... 317                   |                                          | With add. charge                 |                          | 1                        |                       | –                   |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM V1 without protective cover <sup>5) 6)</sup>                                                 |                        | 2               | 1LA6106 ... 166                   |                                   | 1LG4183 ... 313                   |                                          | With add. charge                 |                          |                          | 1                     | –                   |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                                 |                        | 2               | –                                 |                                   | 1LG4316 ... 317                   |                                          | With add. charge                 |                          | 8                        |                       | –                   |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM V3 <sup>5)</sup>                                                                             |                        | 2               | 1LA6106 ... 166                   |                                   | –                                 |                                          | With add. charge                 |                          |                          | 1                     | –                   |                                                                                                   |                |                         |                  |                               |  |  |
| With standard flange                                                                                                                                                                                                                                                                         |                              |                     |                                                                                                 |                        | 2               | –                                 |                                   | 1LG4183 ... 313                   |                                          | With add. charge                 |                          | 9                        |                       | M1G                 |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM V1 with protective cover <sup>5) 6) 7)</sup>                                                 |                        | 2               | 1LA6106 ... 166                   |                                   | 1LG4183 ... 317                   |                                          | With add. charge                 |                          |                          | 4                     | –                   |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM B35                                                                                          |                        | 2               | 1LA6106 ... 166                   |                                   | 1LG4183 ... 317                   |                                          | With add. charge                 |                          | 6                        |                       | –                   |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM B14, IM V19, IM V18<br>without protective cover                                              |                        | 2               | 1LA6106 ... 166                   |                                   | –                                 |                                          | With add. charge                 |                          |                          | 2                     | –                   |                                                                                                   |                |                         |                  |                               |  |  |
| With special flange                                                                                                                                                                                                                                                                          |                              |                     | IM B34                                                                                          |                        | 2               | 1LA6106 ... 166                   |                                   | –                                 |                                          | With add. charge                 |                          | 7                        |                       | –                   |                                                                                                   |                |                         |                  |                               |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM B14, IM V19, IM V18<br>without protective cover                                              |                        | 2               | 1LA6106 ... 166                   |                                   | –                                 |                                          | With add. charge                 |                          |                          | 3                     | –                   |                                                                                                   |                |                         |                  |                               |  |  |
| Further types of<br>construction                                                                                                                                                                                                                                                             |                              |                     | For additional charges, code numbers and descriptions, see supplements and special versions.    |                        |                 |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                     |                                                                                                   |                | 9                       | ...              |                               |  |  |
| Special versions                                                                                                                                                                                                                                                                             |                              |                     |                                                                                                 |                        |                 |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                     |                                                                                                   |                |                         | Order code(s)    |                               |  |  |
| Options                                                                                                                                                                                                                                                                                      |                              |                     | For additional charges, code numbers and descriptions, see supplements<br>and special versions. |                        |                 |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                     |                                                                                                   |                | 1L . . . . . - . . . -Z |                  | . . . + . . . + . . . + . . . |  |  |

1) Operating values at rated output for 60 Hz are available on request.  
2) For connection to 230 V, parallel feeders are necessary.  
3) For connection to 400 V, parallel feeders are necessary.  
4) If 1LG4 motors in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.  
5) 1LG4220 to 1LG4318 motors are supplied with two screw-in eyebolts conforming to IM B5, whereby one can be repositioned to conform to IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.  
6) 2-pole motors 1LG4316-... and 1LG4317-... (motor series 1LG4 frame size 315 L) in 60 Hz version available on request.  
7) The "Second shaft extension" option, order code K16 is not possible.



IE1

# SIMOTICS SD 1LA/1LG Standard Motors

## Motors with Standard Efficiency IE1

Self-ventilated motors  
Cast-iron series 1LA6 and 1LG4

### Selection and ordering data (continued)

| Operating values at rated output                                                                                                                                                                                                                                                       |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        |                                       |                             |                            | Cast-iron series<br><b>1LA6/1LG4 –</b><br>IE1 version in<br>accordance with<br>IEC 60034-30<br>Order No. | $m_{\text{MB3}}$ J | Torque<br>class |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------|----------------------------------------------------------------------------------------------|-------------------------------|-------------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------|-----------------------------|----------------------------|----------------------------------------------------------------------------------------------------------|--------------------|-----------------|----|
| $P_{\text{rated}}$ ,<br>50 Hz                                                                                                                                                                                                                                                          | $P_{\text{rated}}$ ,<br>60 Hz<br>1) | Frame<br>size       | $\eta_{\text{rated}}$ ,<br>50 Hz                                                             | $T_{\text{rated}}$ ,<br>50 Hz | IE<br>class | $\eta_{\text{rated}}$ ,<br>50 Hz,<br>4/4 | $\eta_{\text{rated}}$ ,<br>50 Hz,<br>3/4 | $\eta_{\text{rated}}$ ,<br>50 Hz,<br>2/4 | $\cos\varphi$<br>rated,<br>50 Hz,<br>4/4 | $I_{\text{rated}}$ ,<br>50 Hz,<br>400 V | $T_{\text{LR}}/$<br>$I_{\text{rated}}$ | $I_{\text{LR}}/$<br>$I_{\text{rated}}$ | $T_{\text{B}}/$<br>$I_{\text{rated}}$ | $L_{\text{pFA}}$ ,<br>50 Hz | $L_{\text{WA}}$ ,<br>50 Hz |                                                                                                          |                    |                 |    |
| kW                                                                                                                                                                                                                                                                                     | kW                                  | FS                  | rpm                                                                                          | Nm                            |             | %                                        | %                                        | %                                        |                                          | A                                       |                                        |                                        |                                       | dB(A)                       | dB(A)                      |                                                                                                          |                    |                 |    |
| <b>• Cooling: Self-ventilated (IC 411)</b><br><b>• Efficiency: Standard Efficiency IE1, service factor (SF) 1.1</b><br><b>• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)</b> |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        |                                       |                             |                            |                                                                                                          |                    |                 |    |
| 4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz <sup>1)</sup>                                                                                                                                                                                                                             |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        |                                       |                             |                            |                                                                                                          |                    |                 |    |
| 2.2                                                                                                                                                                                                                                                                                    | 2.55                                | 100 L               | 1420                                                                                         | 15                            | IE1         | 79.7                                     | 79.7                                     | 78.7                                     | 0.82                                     | 4.85                                    | 2.5                                    | 5.6                                    | 2.8                                   | 53                          | 68                         | 1LA6106-4AA ■■                                                                                           | 33                 | 0.0047          | 16 |
| 3                                                                                                                                                                                                                                                                                      | 3.45                                | 100 L               | 1420                                                                                         | 20                            | IE1         | 81.5                                     | 81.5                                     | 80.5                                     | 0.82                                     | 6.5                                     | 2.7                                    | 5.6                                    | 3.0                                   | 53                          | 68                         | 1LA6107-4AA ■■                                                                                           | 36                 | 0.0055          | 16 |
| 4                                                                                                                                                                                                                                                                                      | 4.6                                 | 112 M               | 1440                                                                                         | 27                            | IE1         | 83.1                                     | 83.1                                     | 82.1                                     | 0.83                                     | 8.4                                     | 2.7                                    | 6.0                                    | 3.0                                   | 53                          | 65                         | 1LA6113-4AA ■■                                                                                           | 45                 | 0.012           | 16 |
| 5.5                                                                                                                                                                                                                                                                                    | 6.3                                 | 132 S               | 1455                                                                                         | 36                            | IE1         | 84.7                                     | 84.7                                     | 83.7                                     | 0.81                                     | 11.6                                    | 2.5                                    | 6.3                                    | 3.1                                   | 62                          | 74                         | 1LA6130-4AA ■■                                                                                           | 55                 | 0.018           | 16 |
| 7.5                                                                                                                                                                                                                                                                                    | 8.6                                 | 132 M               | 1455                                                                                         | 49                            | IE1         | 86.0                                     | 86.0                                     | 85.0                                     | 0.82                                     | 15.4                                    | 2.7                                    | 6.7                                    | 3.2                                   | 62                          | 74                         | 1LA6133-4AA ■■                                                                                           | 62                 | 0.023           | 16 |
| 11                                                                                                                                                                                                                                                                                     | 12.6                                | 160 M               | 1460                                                                                         | 72                            | IE1         | 87.6                                     | 87.6                                     | 86.6                                     | 0.84                                     | 21.5                                    | 2.2                                    | 6.2                                    | 2.7                                   | 66                          | 78                         | 1LA6163-4AA ■■                                                                                           | 100                | 0.043           | 16 |
| 15                                                                                                                                                                                                                                                                                     | 17.3                                | 160 L               | 1460                                                                                         | 98                            | IE1         | 88.7                                     | 88.7                                     | 87.7                                     | 0.84                                     | 29                                      | 2.6                                    | 6.5                                    | 3.8                                   | 66                          | 78                         | 1LA6166-4AA ■■                                                                                           | 114                | 0.055           | 16 |
| 18.5                                                                                                                                                                                                                                                                                   | 21.3                                | 180 M               | 1465                                                                                         | 121                           | IE1         | 89.3                                     | 89.7                                     | 89.2                                     | 0.84                                     | 35.5 <sup>2)</sup>                      | 2.4                                    | 6.7                                    | 3.1                                   | 65                          | 78                         | 1LG4183-4AA ■■                                                                                           | 140                | 0.10            | 16 |
| 22                                                                                                                                                                                                                                                                                     | 25.3                                | 180 L               | 1465                                                                                         | 143                           | IE1         | 89.9                                     | 90.4                                     | 90.0                                     | 0.84                                     | 42 <sup>2)</sup>                        | 2.5                                    | 6.9                                    | 3.2                                   | 65                          | 78                         | 1LG4186-4AA ■■                                                                                           | 155                | 0.12            | 16 |
| 30                                                                                                                                                                                                                                                                                     | 34.5                                | 200 L               | 1465                                                                                         | 196                           | IE1         | 90.7                                     | 91.1                                     | 90.6                                     | 0.85                                     | 56 <sup>2)</sup>                        | 2.5                                    | 6.7                                    | 3.4                                   | 66                          | 79                         | 1LG4207-4AA ■■                                                                                           | 205                | 0.19            | 16 |
| 37                                                                                                                                                                                                                                                                                     | 42.5                                | 225 S               | 1475                                                                                         | 240                           | IE1         | 91.2                                     | 91.6                                     | 91.0                                     | 0.85                                     | 69 <sup>2)</sup>                        | 2.3                                    | 6.7                                    | 3.1                                   | 66                          | 79                         | 1LG4220-4AA ■■                                                                                           | 265                | 0.37            | 16 |
| 45                                                                                                                                                                                                                                                                                     | 52                                  | 225 M               | 1475                                                                                         | 291                           | IE1         | 91.7                                     | 92.2                                     | 91.8                                     | 0.86                                     | 82 <sup>2)</sup>                        | 2.6                                    | 7.2                                    | 3.2                                   | 66                          | 79                         | 1LG4223-4AA ■■                                                                                           | 300                | 0.45            | 16 |
| 55                                                                                                                                                                                                                                                                                     | 63                                  | 250 M               | 1480                                                                                         | 355                           | IE1         | 92.1                                     | 92.4                                     | 92.0                                     | 0.85                                     | 101                                     | 2.4                                    | 6.1                                    | 2.8                                   | 67                          | 80                         | 1LG4253-4AA ■■                                                                                           | 390                | 0.69            | 16 |
| 75                                                                                                                                                                                                                                                                                     | 86                                  | 280 S               | 1485                                                                                         | 482                           | IE1         | 92.7                                     | 92.6                                     | 91.6                                     | 0.85                                     | 137 <sup>2)</sup>                       | 2.5                                    | 7.1                                    | 3.0                                   | 70                          | 83                         | 1LG4280-4AA ■■                                                                                           | 535                | 1.2             | 16 |
| 90                                                                                                                                                                                                                                                                                     | 104                                 | 280 M               | 1485                                                                                         | 579                           | IE1         | 93.0                                     | 92.9                                     | 92.0                                     | 0.86                                     | 162 <sup>2)</sup>                       | 2.5                                    | 7.4                                    | 3.0                                   | 70                          | 83                         | 1LG4283-4AA ■■                                                                                           | 580                | 1.4             | 16 |
| 110                                                                                                                                                                                                                                                                                    | 127                                 | 315 S               | 1488                                                                                         | 706                           | IE1         | 93.3                                     | 93.3                                     | 92.7                                     | 0.85                                     | 200 <sup>2)</sup>                       | 2.5                                    | 6.4                                    | 2.8                                   | 70                          | 83                         | 1LG4310-4AA ■■                                                                                           | 730                | 1.9             | 16 |
| 132                                                                                                                                                                                                                                                                                    | 152                                 | 315 M               | 1488                                                                                         | 847                           | IE1         | 93.5                                     | 93.5                                     | 92.9                                     | 0.85                                     | 240 <sup>2)</sup>                       | 2.7                                    | 6.8                                    | 2.9                                   | 70                          | 83                         | 1LG4313-4AA ■■                                                                                           | 810                | 2.3             | 16 |
| 160                                                                                                                                                                                                                                                                                    | 184                                 | 315 L               | 1486                                                                                         | 1028                          | IE1         | 93.8                                     | 93.9                                     | 93.5                                     | 0.86                                     | 285 <sup>3)</sup>                       | 2.7                                    | 6.8                                    | 2.8                                   | 70                          | 83                         | 1LG4316-4AA ■■                                                                                           | 955                | 2.9             | 16 |
| 200                                                                                                                                                                                                                                                                                    | 230                                 | 315 L               | 1486                                                                                         | 1285                          | IE1         | 94.0                                     | 94.2                                     | 94.0                                     | 0.88                                     | 350 <sup>3)</sup>                       | 2.6                                    | 6.5                                    | 2.8                                   | 70                          | 83                         | 1LG4317-4AA ■■                                                                                           | 1060               | 3.5             | 16 |
| Voltages                                                                                                                                                                                                                                                                               |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | No. poles                                | Motor type 1LA6                         | Motor type 1LG4                        | Version                                |                                       | Order code(s)               |                            |                                                                                                          |                    |                 |    |
| 50 Hz                                                                                                                                                                                                                                                                                  | 230 VΔ/400 VY                       | 60 Hz <sup>1)</sup> | 460 VY                                                                                       |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 313                        | Standard                               | 1                                     | –                           |                            |                                                                                                          |                    |                 |    |
| 50 Hz                                                                                                                                                                                                                                                                                  | 400 VΔ/690 VY                       | 60 Hz <sup>1)</sup> | 460 VΔ                                                                                       |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 317                        | Standard                               | 6                                     | –                           |                            |                                                                                                          |                    |                 |    |
| 50 Hz                                                                                                                                                                                                                                                                                  | 500 VY                              |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 313                        | Without add. charge                    | 3                                     | –                           |                            |                                                                                                          |                    |                 |    |
| 50 Hz                                                                                                                                                                                                                                                                                  | 500 VΔ                              |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 317                        | Without add. charge                    | 5                                     | –                           |                            |                                                                                                          |                    |                 |    |
| Further voltages <sup>1)</sup>                                                                                                                                                                                                                                                         |                                     |                     | For additional charges, code numbers and descriptions, see supplements and special versions. |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        | 9                                     | ...                         |                            |                                                                                                          |                    |                 |    |
| Types of construction                                                                                                                                                                                                                                                                  |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | No. poles                                | Motor type 1LA6                         | Motor type 1LG4                        | Version                                |                                       | Order code(s)               |                            |                                                                                                          |                    |                 |    |
| Without flange                                                                                                                                                                                                                                                                         |                                     |                     | IM B3/6/7/8 <sup>4)</sup>                                                                    |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 317                        | Standard                               | 0                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 313                        | Standard                               | 0                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | –                                       | 1LG4316 ... 317                        | Without add. charge                    | 9                                     | M1E                         |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     | IM V5 without protective cover <sup>4)</sup>                                                 |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 313                        | Standard                               | 0                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | –                                       | 1LG4316 ... 317                        | Without add. charge                    | 9                                     | M1D                         |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        |                                       |                             |                            |                                                                                                          |                    |                 |    |
| With flange                                                                                                                                                                                                                                                                            |                                     |                     | IM B5 <sup>5)</sup>                                                                          |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 317                        | With add. charge                       | 1                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 313                        | With add. charge                       | 1                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | –                                       | 1LG4316 ... 317                        | With add. charge                       | 8                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     | IM V3 <sup>5)</sup>                                                                          |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | –                                      | With add. charge                       | 1                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | –                                       | 1LG4183 ... 313                        | With add. charge                       | 9                                     | M1G                         |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 317                        | With add. charge                       | 4                                     | –                           |                            |                                                                                                          |                    |                 |    |
| With standard flange                                                                                                                                                                                                                                                                   |                                     |                     | IM B35                                                                                       |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | 1LG4183 ... 317                        | With add. charge                       | 6                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | –                                      | With add. charge                       | 2                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        |                                       |                             |                            |                                                                                                          |                    |                 |    |
| With special flange                                                                                                                                                                                                                                                                    |                                     |                     | IM B34                                                                                       |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | –                                      | With add. charge                       | 7                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | 4                                        | 1LA6106 ... 166                         | –                                      | With add. charge                       | 3                                     | –                           |                            |                                                                                                          |                    |                 |    |
|                                                                                                                                                                                                                                                                                        |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        |                                       |                             |                            |                                                                                                          |                    |                 |    |
| Further types of construction                                                                                                                                                                                                                                                          |                                     |                     | For additional charges, code numbers and descriptions, see supplements and special versions. |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        | 9                                     | ...                         |                            |                                                                                                          |                    |                 |    |
| Special versions                                                                                                                                                                                                                                                                       |                                     |                     |                                                                                              |                               |             |                                          |                                          |                                          | Order code(s)                            |                                         |                                        |                                        |                                       |                             |                            |                                                                                                          |                    |                 |    |
| Options                                                                                                                                                                                                                                                                                |                                     |                     | For additional charges, code numbers and descriptions, see supplements and special versions. |                               |             |                                          |                                          |                                          |                                          |                                         |                                        |                                        | 1L ..... ■■ -Z                        | ...+...+...+...             |                            |                                                                                                          |                    |                 |    |

1) Operating values at rated output for 60 Hz are available on request.

2) For connection to 230 V, parallel feeders are necessary.

3) For connection to 230 V, parallel feeders are necessary.

4) If 1LG4 motors in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

5) 1LG4220 to 1LG4318 motors are supplied with two screw-in eyebolts conforming to IM B5, whereby one can be repositioned to conform to IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

6) 2-pole motors 1LG4316-... and 1LG4317-... (motor series 1LG4 frame size 315 L) in 60 Hz version available on request.

7) The "Second shaft extension" option, order code K16 is not possible.

# SIMOTICS SD 1LA/1LG Standard Motors

## Motors with Standard Efficiency IE1

Self-ventilated motors  
Cast-iron series 1LA6 and 1LG4

IE1



### Selection and ordering data (continued)

| Operating values at rated output                                                                                                                                                                                                                                                             |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      | Cast-iron series<br>1LA6/1LG4 –<br>IE1 version in<br>accordance with<br>IEC 60034-30<br>Order No. |               | $m_{IM}$ B3 J                                                                                | Torque<br>class  |    |             |                 |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------|----------------------------------------------------------------------------------------------|------------------------|-------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------------|----------------------------------|--------------------------|--------------------------|-----------------------|----------------------|---------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------|------------------|----|-------------|-----------------|--|--|
| $P_{rated}$ ,<br>50 Hz                                                                                                                                                                                                                                                                       | $P_{rated}$ ,<br>60 Hz<br>1) | Frame<br>size       | $n_{rated}$ ,<br>50 Hz                                                                       | $T_{rated}$ ,<br>50 Hz | IE<br>class | $\eta_{rated}$ ,<br>50 Hz,<br>4/4 | $\eta_{rated}$ ,<br>50 Hz,<br>3/4 | $\eta_{rated}$ ,<br>50 Hz,<br>2/4 | $\cos\varphi$<br>rated,<br>50 Hz,<br>4/4 | $I_{rated}$ ,<br>50 Hz,<br>400 V | $T_{LR}/$<br>$I_{rated}$ | $I_{LR}/$<br>$I_{rated}$ | $T_B/$<br>$I_{rated}$ | $L_{pFA}$ ,<br>50 Hz | $L_{WA}$ ,<br>50 Hz                                                                               |               |                                                                                              |                  |    |             |                 |  |  |
| kW                                                                                                                                                                                                                                                                                           | kW                           | FS                  | rpm                                                                                          | Nm                     |             | %                                 | %                                 | %                                 |                                          | A                                |                          |                          |                       |                      |                                                                                                   |               | kg                                                                                           | kgm <sup>2</sup> | CL |             |                 |  |  |
| <div>• Cooling: Self-ventilated (IC 411)</div> <div>• Efficiency: Standard Efficiency IE1, service factor (SF) 1.1</div> <div>• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)</div> |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
| 6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz <sup>1)</sup>                                                                                                                                                                                                                                   |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
| 1.5                                                                                                                                                                                                                                                                                          | 1.75                         | 100 L               | 925                                                                                          | 15                     | IE1         | 75.2                              | 75.2                              | 72.2                              | 0.75                                     | 3.85                             | 2.3                      | 4.0                      | 2.3                   | 47                   | 59                                                                                                | 1LA6106-6AA   | 33                                                                                           | 0.0047           | 16 |             |                 |  |  |
| 2.2                                                                                                                                                                                                                                                                                          | 2.55                         | 112 M               | 940                                                                                          | 22                     | IE1         | 77.7                              | 78.2                              | 75.2                              | 0.78                                     | 5.2                              | 2.2                      | 4.6                      | 2.5                   | 52                   | 64                                                                                                | 1LA6113-6AA   | 40                                                                                           | 0.0091           | 16 |             |                 |  |  |
| 3                                                                                                                                                                                                                                                                                            | 3.45                         | 132 S               | 950                                                                                          | 30                     | IE1         | 79.7                              | 79.7                              | 78.7                              | 0.76                                     | 7.1                              | 1.9                      | 4.2                      | 2.2                   | 63                   | 75                                                                                                | 1LA6130-6AA   | 50                                                                                           | 0.015            | 16 |             |                 |  |  |
| 4                                                                                                                                                                                                                                                                                            | 4.55                         | 132 M               | 950                                                                                          | 40                     | IE1         | 81.4                              | 81.4                              | 80.4                              | 0.76                                     | 9.3                              | 2.1                      | 4.5                      | 2.4                   | 63                   | 75                                                                                                | 1LA6133-6AA   | 57                                                                                           | 0.019            | 16 |             |                 |  |  |
| 5.5                                                                                                                                                                                                                                                                                          | 6.3                          | 132 M               | 950                                                                                          | 55                     | IE1         | 83.1                              | 83.1                              | 82.1                              | 0.76                                     | 12.6                             | 2.3                      | 5.0                      | 2.6                   | 63                   | 75                                                                                                | 1LA6134-6AA   | 66                                                                                           | 0.025            | 16 |             |                 |  |  |
| 7.5                                                                                                                                                                                                                                                                                          | 8.6                          | 160 M               | 960                                                                                          | 75                     | IE1         | 84.7                              | 84.7                              | 83.7                              | 0.74                                     | 17.3                             | 2.1                      | 4.6                      | 2.5                   | 66                   | 78                                                                                                | 1LA6163-6AA   | 103                                                                                          | 0.044            | 16 |             |                 |  |  |
| 11                                                                                                                                                                                                                                                                                           | 12.6                         | 160 L               | 960                                                                                          | 109                    | IE1         | 86.4                              | 86.4                              | 85.4                              | 0.74                                     | 25                               | 2.3                      | 4.8                      | 2.6                   | 66                   | 78                                                                                                | 1LA6166-6AA   | 122                                                                                          | 0.063            | 16 |             |                 |  |  |
| 15                                                                                                                                                                                                                                                                                           | 18                           | 180 L               | 965                                                                                          | 148                    | IE1         | 87.7                              | 88.1                              | 88.3                              | 0.83                                     | 29.5                             | 2.3                      | 5.3                      | 2.5                   | 59                   | 72                                                                                                | 1LG4186-6AA   | 150                                                                                          | 0.18             | 16 |             |                 |  |  |
| 18.5                                                                                                                                                                                                                                                                                         | 22                           | 200 L               | 975                                                                                          | 181                    | IE1         | 88.6                              | 89.0                              | 88.6                              | 0.81                                     | 37                               | 2.5                      | 5.6                      | 2.5                   | 59                   | 72                                                                                                | 1LG4206-6AA   | 195                                                                                          | 0.24             | 16 |             |                 |  |  |
| 22                                                                                                                                                                                                                                                                                           | 26.5                         | 200 L               | 975                                                                                          | 215                    | IE1         | 89.2                              | 89.9                              | 88.8                              | 0.81                                     | 44                               | 2.6                      | 5.7                      | 2.5                   | 59                   | 72                                                                                                | 1LG4207-6AA   | 205                                                                                          | 0.29             | 16 |             |                 |  |  |
| 30                                                                                                                                                                                                                                                                                           | 36                           | 225 M               | 978                                                                                          | 293                    | IE1         | 90.2                              | 91.2                              | 91.3                              | 0.83                                     | 58 <sup>2)</sup>                 | 2.7                      | 5.6                      | 2.5                   | 60                   | 73                                                                                                | 1LG4223-6AA   | 280                                                                                          | 0.49             | 16 |             |                 |  |  |
| 37                                                                                                                                                                                                                                                                                           | 44.5                         | 250 M               | 980                                                                                          | 361                    | IE1         | 90.8                              | 91.5                              | 91.3                              | 0.83                                     | 71                               | 2.7                      | 6.0                      | 2.3                   | 61                   | 74                                                                                                | 1LG4253-6AA   | 370                                                                                          | 0.76             | 16 |             |                 |  |  |
| 45                                                                                                                                                                                                                                                                                           | 54                           | 280 S               | 985                                                                                          | 436                    | IE1         | 91.4                              | 92.1                              | 92.0                              | 0.85                                     | 84                               | 2.4                      | 6.1                      | 2.4                   | 61                   | 74                                                                                                | 1LG4280-6AA   | 475                                                                                          | 1.1              | 16 |             |                 |  |  |
| 55                                                                                                                                                                                                                                                                                           | 66                           | 280 M               | 985                                                                                          | 533                    | IE1         | 91.9                              | 92.5                              | 92.6                              | 0.86                                     | 100                              | 2.5                      | 6.3                      | 2.5                   | 61                   | 74                                                                                                | 1LG4283-6AA   | 510                                                                                          | 1.4              | 16 |             |                 |  |  |
| 75                                                                                                                                                                                                                                                                                           | 90                           | 315 S               | 988                                                                                          | 725                    | IE1         | 92.6                              | 92.8                              | 92.1                              | 0.84                                     | 139                              | 2.5                      | 6.5                      | 2.8                   | 65                   | 78                                                                                                | 1LG4310-6AA   | 685                                                                                          | 2.1              | 16 |             |                 |  |  |
| 90                                                                                                                                                                                                                                                                                           | 108                          | 315 M               | 988                                                                                          | 870                    | IE1         | 92.9                              | 93.2                              | 92.8                              | 0.84                                     | 166 <sup>2)</sup>                | 2.6                      | 6.8                      | 2.9                   | 65                   | 78                                                                                                | 1LG4313-6AA   | 750                                                                                          | 2.5              | 16 |             |                 |  |  |
| 110                                                                                                                                                                                                                                                                                          | 132                          | 315 L               | 988                                                                                          | 1063                   | IE1         | 93.3                              | 93.6                              | 93.4                              | 0.86                                     | 198                              | 2.5                      | 6.8                      | 2.9                   | 65                   | 78                                                                                                | 1LG4316-6AA   | 890                                                                                          | 3.2              | 16 |             |                 |  |  |
| 132                                                                                                                                                                                                                                                                                          | 158                          | 315 L               | 988                                                                                          | 1276                   | IE1         | 93.5                              | 93.7                              | 93.4                              | 0.86                                     | 235                              | 3.1                      | 7.3                      | 3.0                   | 65                   | 78                                                                                                | 1LG4317-6AA   | 980                                                                                          | 4.0              | 16 |             |                 |  |  |
| 160                                                                                                                                                                                                                                                                                          | 192                          | 315 L               | 988                                                                                          | 1547                   | IE1         | 93.8                              | 93.9                              | 93.6                              | 0.86                                     | 285 <sup>3)</sup>                | 3.0                      | 7.5                      | 3.0                   | 65                   | 78                                                                                                | 1LG4318-6AA   | 1180                                                                                         | 4.7              | 16 |             |                 |  |  |
| Voltages                                                                                                                                                                                                                                                                                     |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   | No. poles                                | Motor type 1LA6                  | Motor type 1LG4          | Version                  |                       |                      |                                                                                                   | Order code(s) |                                                                                              |                  |    |             |                 |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 230 VΔ/400 VY                | 60 Hz <sup>1)</sup> | 460 VY                                                                                       |                        |             |                                   |                                   |                                   | 6                                        | 1LA6106 ... 166                  | 1LG4183 ... 313          | Standard                 | 1                     |                      |                                                                                                   |               | –                                                                                            |                  |    |             |                 |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 400 VΔ/690 VY                | 60 Hz <sup>1)</sup> | 460 VΔ                                                                                       |                        |             |                                   |                                   |                                   | 6                                        | 1LA6106 ... 166                  | 1LG4183 ... 318          | Standard                 | 6                     |                      |                                                                                                   |               | –                                                                                            |                  |    |             |                 |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 500 VY                       |                     |                                                                                              |                        |             |                                   |                                   |                                   | 6                                        | 1LA6106 ... 166                  | 1LG4183 ... 313          | Without add. charge      | 3                     |                      |                                                                                                   |               | –                                                                                            |                  |    |             |                 |  |  |
| 50 Hz                                                                                                                                                                                                                                                                                        | 500 VΔ                       |                     |                                                                                              |                        |             |                                   |                                   |                                   | 6                                        | 1LA6106 ... 166                  | 1LG4183 ... 318          | Without add. charge      | 5                     |                      |                                                                                                   |               | –                                                                                            |                  |    |             |                 |  |  |
| Further voltages <sup>1)</sup>                                                                                                                                                                                                                                                               |                              |                     | For additional charges, code numbers and descriptions, see supplements and special versions. |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       | 9                    |                                                                                                   |               | ...                                                                                          |                  |    |             |                 |  |  |
| Types of construction                                                                                                                                                                                                                                                                        |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   | No. poles                                | Motor type 1LA6                  | Motor type 1LG4          | Version                  |                       |                      |                                                                                                   | Order code(s) |                                                                                              |                  |    |             |                 |  |  |
| Without flange                                                                                                                                                                                                                                                                               |                              |                     | IM B3/6/7/8 <sup>4)</sup><br>IM V6 <sup>4)</sup>                                             |                        |             | 6                                 | 1LA6106 ... 166                   | 1LG4183 ... 318                   | Standard                                 | 0                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | 1LA6106 ... 166                   | 1LG4183 ... 313                   | Standard                                 | 0                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | –                                 | 1LG4316 ... 318                   | Without add. charge                      | 9                                |                          |                          |                       | M1E                  |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM V5 without protective cover <sup>4)</sup>                                                 |                        |             | 6                                 | 1LA6106 ... 166                   | 1LG4183 ... 313                   | Standard                                 | 0                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | –                                 | 1LG4316 ... 318                   | Without add. charge                      | 9                                |                          |                          |                       | M1D                  |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
| With flange                                                                                                                                                                                                                                                                                  |                              |                     | IM B5 <sup>5)</sup><br>IM V1 without protective cover <sup>5)</sup>                          |                        |             | 6                                 | 1LA6106 ... 166                   | 1LG4183 ... 318                   | With add. charge                         | 1                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | 1LA6106 ... 166                   | 1LG4183 ... 313                   | With add. charge                         | 1                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | –                                 | 1LG4316 ... 318                   | With add. charge                         | 8                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     | IM V3 <sup>5)</sup>                                                                          |                        |             | 6                                 | 1LA6106 ... 166                   | –                                 | With add. charge                         | 1                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | –                                 | 1LG4183 ... 313                   | With add. charge                         | 9                                |                          |                          |                       | M1G                  |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | 1LA6106 ... 166                   | 1LG4183 ... 318                   | With add. charge                         | 4                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
| With standard flange                                                                                                                                                                                                                                                                         |                              |                     | IM B35<br>IM B14, IM V19, IM V18<br>without protective cover                                 |                        |             | 6                                 | 1LA6106 ... 166                   | 1LG4183 ... 318                   | With add. charge                         | 6                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | 1LA6106 ... 166                   | –                                 | With add. charge                         | 2                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
| With special flange                                                                                                                                                                                                                                                                          |                              |                     | IM B34<br>IM B14, IM V19, IM V18<br>without protective cover                                 |                        |             | 6                                 | 1LA6106 ... 166                   | –                                 | With add. charge                         | 7                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             | 6                                 | 1LA6106 ... 166                   | –                                 | With add. charge                         | 3                                |                          |                          |                       | –                    |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
|                                                                                                                                                                                                                                                                                              |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      |                                                                                                   |               |                                                                                              |                  |    |             |                 |  |  |
| Further types of construction                                                                                                                                                                                                                                                                |                              |                     | For additional charges, code numbers and descriptions, see supplements and special versions. |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       | 9                    |                                                                                                   |               | ...                                                                                          |                  |    |             |                 |  |  |
| Special versions                                                                                                                                                                                                                                                                             |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      |                                                                                                   |               | Order code(s)                                                                                |                  |    |             |                 |  |  |
| Options                                                                                                                                                                                                                                                                                      |                              |                     |                                                                                              |                        |             |                                   |                                   |                                   |                                          |                                  |                          |                          |                       |                      |                                                                                                   |               | For additional charges, code numbers and descriptions, see supplements and special versions. |                  |    | 1L ..... -Z | ...+...+...+... |  |  |

1) Operating values at rated output for 60 Hz are available on request.

2) For connection to 230 V, parallel feeders are necessary.

3) For connection to 400 V, parallel feeders are necessary.

4) If 1LG4 motors in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

5) 1LG4220 to 1LG4318 motors are supplied with two screw-in eyebolts conforming to IM B5, whereby one can be repositioned to conform to IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

6) The "Second shaft extension" option, order code K16 is not possible.



IE1

# SIMOTICS SD 1LA/1LG Standard Motors

## Motors with Standard Efficiency IE1

Self-ventilated motors  
Cast-iron series 1LA6 and 1LG4

### Selection and ordering data (continued)

| Operating values at rated output                                                                                                                                                                                                                                                             |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          |                                                                                              |                          |                          |                       |                      |                     | Cast-iron series                                                              |      | $m_{IM\ B3}$ J |                  | Torque class   |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------|-------------------------------------------------|------------------------|-------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------|--------------------------|-----------------------|----------------------|---------------------|-------------------------------------------------------------------------------|------|----------------|------------------|----------------|-----------------|
| $P_{rated}$ ,<br>50 Hz                                                                                                                                                                                                                                                                       | $P_{rated}$ ,<br>60 Hz<br>1) | Frame<br>size | $n_{rated}$ ,<br>50 Hz                          | $T_{rated}$ ,<br>50 Hz | IE<br>class | $\eta_{rated}$ ,<br>50 Hz,<br>4/4 | $\eta_{rated}$ ,<br>50 Hz,<br>3/4 | $\eta_{rated}$ ,<br>50 Hz,<br>2/4 | $\cos\varphi$<br>rated,<br>50 Hz,<br>4/4 | $I_{rated}$ ,<br>50 Hz,<br>400 V                                                             | $T_{LR}/$<br>$T_{rated}$ | $I_{LR}/$<br>$I_{rated}$ | $T_B/$<br>$T_{rated}$ | $L_{pFA}$ ,<br>50 Hz | $L_{WA}$ ,<br>50 Hz | 1LA6/1LG4 –<br>IE1 version in<br>accordance with<br>IEC 60034-30<br>Order No. |      |                |                  |                |                 |
| kW                                                                                                                                                                                                                                                                                           | kW                           | FS            | rpm                                             | Nm                     |             | %                                 | %                                 | %                                 |                                          | A                                                                                            |                          |                          |                       |                      |                     |                                                                               |      | kg             | kgm <sup>2</sup> | CL             |                 |
| <div>• Cooling: Self-ventilated (IC 411)</div> <div>• Efficiency: Standard Efficiency IE1, service factor (SF) 1.1</div> <div>• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)</div> |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          |                                                                                              |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
| 8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz <sup>1)</sup>                                                                                                                                                                                                                                     |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          |                                                                                              |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
| 0.75                                                                                                                                                                                                                                                                                         | 0.86                         | 100 L         | 680                                             | 11                     | –           | 64.0                              | 63.0                              | 59.0                              | 0.76                                     | 2.25                                                                                         | 1.6                      | 3.0                      | 1.9                   | 45                   | 57                  | 1LA6106-8AB ■■                                                                | 29   | 0.0051         | 13               |                |                 |
| 1.1                                                                                                                                                                                                                                                                                          | 1.3                          | 100 L         | 680                                             | 15                     | –           | 70.0                              | 70.0                              | 66.0                              | 0.76                                     | 3.0                                                                                          | 1.8                      | 3.3                      | 2.1                   | 45                   | 57                  | 1LA6107-8AB ■■                                                                | 32   | 0.0063         | 13               |                |                 |
| 1.5                                                                                                                                                                                                                                                                                          | 1.75                         | 112 M         | 705                                             | 20                     | –           | 72.1                              | 72.1                              | 68.1                              | 0.76                                     | 3.95                                                                                         | 1.8                      | 3.7                      | 2.1                   | 49                   | 61                  | 1LA6113-8AB ■■                                                                | 39   | 0.013          | 13               |                |                 |
| 2.2                                                                                                                                                                                                                                                                                          | 2.55                         | 132 S         | 700                                             | 30                     | –           | 73.2                              | 73.2                              | 70.2                              | 0.74                                     | 5.9                                                                                          | 1.9                      | 3.9                      | 2.3                   | 53                   | 65                  | 1LA6130-8AB ■■                                                                | 50   | 0.014          | 13               |                |                 |
| 3                                                                                                                                                                                                                                                                                            | 3.45                         | 132 M         | 700                                             | 41                     | –           | 75.2                              | 75.2                              | 72.2                              | 0.74                                     | 7.8                                                                                          | 2.1                      | 4.1                      | 2.4                   | 53                   | 65                  | 1LA6133-8AB ■■                                                                | 57   | 0.019          | 13               |                |                 |
| 4                                                                                                                                                                                                                                                                                            | 4.55                         | 160 M         | 715                                             | 53                     | –           | 78.3                              | 78.8                              | 75.8                              | 0.72                                     | 10.2                                                                                         | 2.2                      | 4.5                      | 2.6                   | 63                   | 75                  | 1LA6163-8AB ■■                                                                | 91   | 0.036          | 13               |                |                 |
| 5.5                                                                                                                                                                                                                                                                                          | 6.3                          | 160 M         | 710                                             | 74                     | –           | 81.9                              | 81.9                              | 80.9                              | 0.73                                     | 13.3                                                                                         | 2.3                      | 4.7                      | 2.7                   | 63                   | 75                  | 1LA6164-8AB ■■                                                                | 102  | 0.046          | 13               |                |                 |
| 7.5                                                                                                                                                                                                                                                                                          | 8.6                          | 160 L         | 715                                             | 100                    | –           | 83.9                              | 83.9                              | 82.9                              | 0.72                                     | 17.9                                                                                         | 2.7                      | 5.3                      | 3.0                   | 63                   | 75                  | 1LA6166-8AB ■■                                                                | 122  | 0.064          | 13               |                |                 |
| 11                                                                                                                                                                                                                                                                                           | 13.2                         | 180 L         | 725                                             | 145                    | –           | 85.6                              | 86.4                              | 86.1                              | 0.73                                     | 25.5                                                                                         | 1.7                      | 4.2                      | 2.1                   | 67                   | 80                  | 1LG4186-8AB ■■                                                                | 150  | 0.17           | 13               |                |                 |
| 15                                                                                                                                                                                                                                                                                           | 18                           | 200 L         | 725                                             | 198                    | –           | 87.0                              | 87.7                              | 87.3                              | 0.76                                     | 32.5                                                                                         | 2.2                      | 4.9                      | 2.6                   | 57                   | 70                  | 1LG4207-8AB ■■                                                                | 205  | 0.29           | 13               |                |                 |
| 18.5                                                                                                                                                                                                                                                                                         | 22                           | 225 S         | 730                                             | 242                    | –           | 88.0                              | 88.9                              | 88.7                              | 0.78                                     | 39                                                                                           | 2.3                      | 5.5                      | 2.7                   | 57                   | 70                  | 1LG4220-8AB ■■                                                                | 270  | 0.48           | 13               |                |                 |
| 22                                                                                                                                                                                                                                                                                           | 26.5                         | 225 M         | 730                                             | 288                    | –           | 88.6                              | 89.4                              | 89.3                              | 0.79                                     | 45.5                                                                                         | 2.3                      | 5.6                      | 2.8                   | 61                   | 74                  | 1LG4223-8AB ■■                                                                | 290  | 0.55           | 13               |                |                 |
| 30                                                                                                                                                                                                                                                                                           | 36                           | 250 M         | 730                                             | 392                    | –           | 89.7                              | 90.3                              | 90.3                              | 0.81                                     | 60                                                                                           | 2.3                      | 5.5                      | 2.6                   | 55                   | 68                  | 1LG4253-8AB ■■                                                                | 385  | 0.84           | 13               |                |                 |
| 37                                                                                                                                                                                                                                                                                           | 44.5                         | 280 S         | 735                                             | 481                    | –           | 90.4                              | 91.3                              | 91.3                              | 0.81                                     | 73                                                                                           | 2.2                      | 5.0                      | 2.1                   | 58                   | 71                  | 1LG4280-8AB ■■                                                                | 475  | 1.1            | 13               |                |                 |
| 45                                                                                                                                                                                                                                                                                           | 54                           | 280 M         | 735                                             | 585                    | –           | 91.0                              | 91.8                              | 91.8                              | 0.81                                     | 88                                                                                           | 2.2                      | 5.1                      | 2.1                   | 58                   | 71                  | 1LG4283-8AB ■■                                                                | 515  | 1.4            | 13               |                |                 |
| 55                                                                                                                                                                                                                                                                                           | 66                           | 315 S         | 740                                             | 710                    | –           | 91.6                              | 92.0                              | 91.6                              | 0.81                                     | 107                                                                                          | 2.2                      | 5.8                      | 2.6                   | 64                   | 77                  | 1LG4310-8AB ■■                                                                | 680  | 2.1            | 13               |                |                 |
| 75                                                                                                                                                                                                                                                                                           | 90                           | 315 M         | 738                                             | 971                    | –           | 92.3                              | 93.0                              | 92.8                              | 0.83                                     | 141                                                                                          | 2.2                      | 5.7                      | 2.6                   | 64                   | 77                  | 1LG4313-8AB ■■                                                                | 745  | 2.5            | 13               |                |                 |
| 90                                                                                                                                                                                                                                                                                           | 108                          | 315 L         | 738                                             | 1165                   | –           | 92.6                              | 93.2                              | 93.2                              | 0.83                                     | 169                                                                                          | 2.2                      | 5.8                      | 2.7                   | 64                   | 77                  | 1LG4316-8AB ■■                                                                | 865  | 3.1            | 13               |                |                 |
| 110                                                                                                                                                                                                                                                                                          | 132                          | 315 L         | 738                                             | 1423                   | –           | 93.1                              | 93.5                              | 93.2                              | 0.83                                     | 205                                                                                          | 2.4                      | 6.1                      | 2.8                   | 64                   | 77                  | 1LG4317-8AB ■■                                                                | 1020 | 3.9            | 13               |                |                 |
| 132                                                                                                                                                                                                                                                                                          | 158                          | 315 L         | 738                                             | 1708                   | –           | 93.3                              | 93.7                              | 93.5                              | 0.83                                     | 245                                                                                          | 2.5                      | 6.5                      | 2.9                   | 64                   | 77                  | 1LG4318-8AB ■■                                                                | 1100 | 4.5            | 13               |                |                 |
| Voltages                                                                                                                                                                                                                                                                                     |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          | No. poles                                                                                    | Motor type 1LA6          | Motor type 1LG4          | Version               |                      |                     |                                                                               |      | Order code(s)  |                  |                |                 |
| 50 Hz                                                                                                                                                                                                                                                                                        | 230 VΔ/400 VY                | 60 Hz         | 460 VY                                          |                        |             |                                   |                                   |                                   |                                          | 8                                                                                            | 1LA6106 ... 166          | 1LG4183 ... 313          | Standard              | 1                    |                     |                                                                               |      | –              |                  |                |                 |
| 50 Hz                                                                                                                                                                                                                                                                                        | 400 VΔ/690 VY                | 60 Hz         | 460 VΔ                                          |                        |             |                                   |                                   |                                   |                                          | 8                                                                                            | 1LA6106 ... 166          | 1LG4183 ... 318          | Standard              | 6                    |                     |                                                                               |      | –              |                  |                |                 |
| 50 Hz                                                                                                                                                                                                                                                                                        | 500 VY                       |               |                                                 |                        |             |                                   |                                   |                                   |                                          | 8                                                                                            | 1LA6106 ... 166          | 1LG4183 ... 313          | Without add. charge   | 3                    |                     |                                                                               |      | –              |                  |                |                 |
| 50 Hz                                                                                                                                                                                                                                                                                        | 500 VΔ                       |               |                                                 |                        |             |                                   |                                   |                                   |                                          | 8                                                                                            | 1LA6106 ... 166          | 1LG4183 ... 318          | Without add. charge   | 5                    |                     |                                                                               |      | –              |                  |                |                 |
| Further voltages <sup>1)</sup>                                                                                                                                                                                                                                                               |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          | For additional charges, code numbers and descriptions, see supplements and special versions. |                          |                          |                       |                      |                     |                                                                               | 9    | ...            |                  |                |                 |
| Types of construction                                                                                                                                                                                                                                                                        |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          | No. poles                                                                                    | Motor type 1LA6          | Motor type 1LG4          | Version               |                      |                     |                                                                               |      | Order code(s)  |                  |                |                 |
| Without flange                                                                                                                                                                                                                                                                               |                              |               | IM B3/6/7/8 <sup>2)</sup>                       |                        | 8           | 1LA6106 ... 166                   | 1LG4183 ... 318                   | Standard                          | 0                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               | IM V6 <sup>2)</sup>                             |                        | 8           | 1LA6106 ... 166                   | 1LG4183 ... 313                   | Standard                          | 0                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               |                                                 |                        | 8           | –                                 | 1LG4316 ... 318                   | Without add. charge               | 9                                        | M1E                                                                                          |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               | IM V5 without protective cover <sup>2)</sup>    |                        | 8           | 1LA6106 ... 166                   | 1LG4183 ... 313                   | Standard                          | 0                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               |                                                 |                        | 8           | –                                 | 1LG4316 ... 318                   | Without add. charge               | 9                                        | M1D                                                                                          |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          |                                                                                              |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
| With flange                                                                                                                                                                                                                                                                                  |                              |               | IM B5 <sup>3)</sup>                             |                        | 8           | 1LA6106 ... 166                   | 1LG4183 ... 318                   | With add. charge                  | 1                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               | IM V1 without protective cover <sup>3)</sup>    |                        | 8           | 1LA6106 ... 166                   | 1LG4183 ... 313                   | With add. charge                  | 1                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               |                                                 |                        | 8           | –                                 | 1LG4316 ... 318                   | With add. charge                  | 8                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               | IM V3 <sup>3)</sup>                             |                        | 8           | 1LA6106 ... 166                   | –                                 | With add. charge                  | 1                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               |                                                 |                        | 8           | –                                 | 1LG4183 ... 313                   | With add. charge                  | 9                                        | M1G                                                                                          |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               | IM V1 with protective cover <sup>3) 4)</sup>    |                        | 8           | 1LA6106 ... 166                   | 1LG4183 ... 318                   | With add. charge                  | 4                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
| With standard flange                                                                                                                                                                                                                                                                         |                              |               | IM B35                                          |                        | 8           | 1LA6106 ... 166                   | 1LG4183 ... 318                   | With add. charge                  | 6                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               | IM B14, IM V19, IM V18 without protective cover |                        | 8           | 1LA6106 ... 166                   | –                                 | With add. charge                  | 2                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
|                                                                                                                                                                                                                                                                                              |                              |               | IM B34                                          |                        | 8           | 1LA6106 ... 166                   | –                                 | With add. charge                  | 7                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
| With special flange                                                                                                                                                                                                                                                                          |                              |               | IM B14, IM V19, IM V18 without protective cover |                        | 8           | 1LA6106 ... 166                   | –                                 | With add. charge                  | 3                                        | –                                                                                            |                          |                          |                       |                      |                     |                                                                               |      |                |                  |                |                 |
| Further types of construction                                                                                                                                                                                                                                                                |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          | For additional charges, code numbers and descriptions, see supplements and special versions. |                          |                          |                       |                      |                     |                                                                               | 9    | ...            |                  |                |                 |
| Special versions                                                                                                                                                                                                                                                                             |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          |                                                                                              |                          |                          |                       |                      |                     |                                                                               |      |                |                  | Order code(s)  |                 |
| Options                                                                                                                                                                                                                                                                                      |                              |               |                                                 |                        |             |                                   |                                   |                                   |                                          | For add. charges, code numbers and descriptions, see suppl. and special versions.            |                          |                          |                       |                      |                     |                                                                               |      |                |                  | 1L ..... ■■ -Z | ...+...+...+... |

<sup>1)</sup> Operating values at rated output for 60 Hz are available on request.

<sup>2)</sup> If 1LG4 motors in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

<sup>3)</sup> 1LG4220 to 1LG4318 motors are supplied with two screw-in eyebolts conforming to IM B5, whereby one can be repositioned to conform to IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

<sup>4)</sup> The "Second shaft extension" option, order code K16 is not possible.