

# Main motors

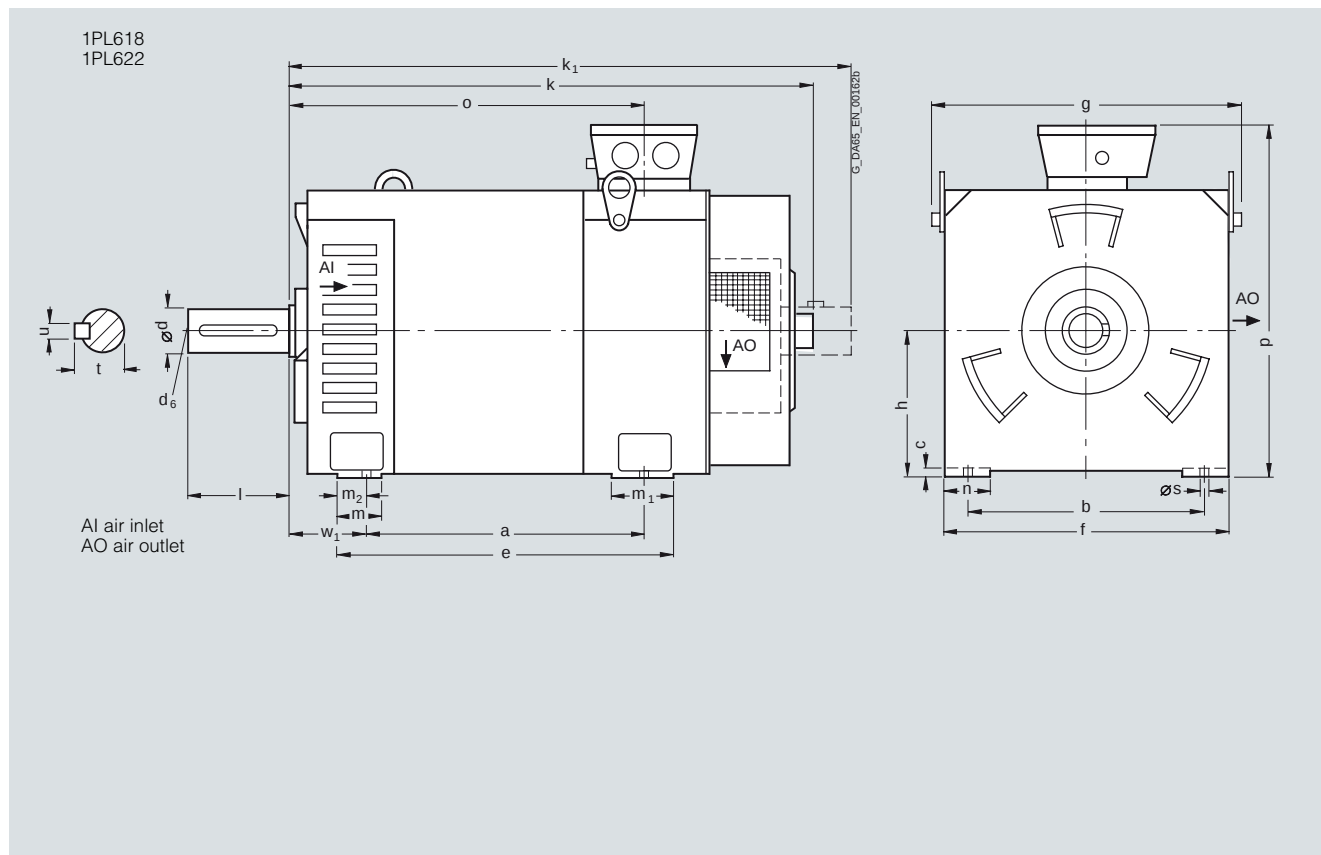
## Dimensional drawings

### 1PL6 asynchronous motors Forced ventilation

#### Dimensional drawings

| For motor                                                                                   |         | Dimensions in mm (inches) |                |                |              |                |                |                |               |                 |                  |              |                  |                  |              |                |
|---------------------------------------------------------------------------------------------|---------|---------------------------|----------------|----------------|--------------|----------------|----------------|----------------|---------------|-----------------|------------------|--------------|------------------|------------------|--------------|----------------|
| Shaft height                                                                                | Type    | DIN IEC                   | a B            | b A            | c LA         | e M            | f AB           | g AC           | h H           | k LB            | k <sub>1</sub> – | m BA         | m <sub>1</sub> – | m <sub>2</sub> – | n AA         | o –            |
| <b>1PL6, type of construction IM B3, forced ventilation, direction of air flow DE → NDE</b> |         |                           |                |                |              |                |                |                |               |                 |                  |              |                  |                  |              |                |
| 180                                                                                         | 1PL6184 |                           | 430<br>(16.93) | 279<br>(10.98) | 14<br>(0.55) | 525<br>(20.67) | 360<br>(14.17) | 405<br>(15.94) | 180<br>(7.09) | 835<br>(32.87)  | –                | 78<br>(3.07) | 120<br>(4.72)    | 50<br>(1.97)     | 65<br>(2.56) | 541<br>(21.30) |
|                                                                                             | 1PL6186 |                           | 520<br>(20.47) |                |              | 615<br>(24.21) |                |                |               | 925<br>(36.42)  |                  |              |                  |                  |              | 631<br>(24.84) |
| 225                                                                                         | 1PL6224 |                           | 445<br>(17.52) | 356<br>(14.02) | 18<br>(0.71) | 545<br>(21.46) | 450<br>(17.72) | 498<br>(19.61) | 225<br>(8.86) | –               | 1100<br>(43.31)  | 80<br>(3.15) | 120<br>(4.72)    | 60<br>(2.36)     | 85<br>(3.35) | 629<br>(24.76) |
|                                                                                             | 1PL6226 |                           | 545<br>(21.46) |                |              | 645<br>(25.39) |                |                |               | 1200<br>(47.24) |                  |              |                  |                  |              | 729<br>(28.70) |
|                                                                                             | 1PL6228 |                           | 635<br>(25.00) |                |              | 735<br>(28.94) |                |                |               | 1290<br>(50.79) |                  |              |                  |                  |              | 819<br>(32.24) |

| Shaft height | Type    | DIN IEC | Terminal box type                |                                  |                                  | Shaft extension DE |                     |              |                     |               |                |              |
|--------------|---------|---------|----------------------------------|----------------------------------|----------------------------------|--------------------|---------------------|--------------|---------------------|---------------|----------------|--------------|
|              |         |         | 1XB7322<br>p <sup>1)</sup><br>HD | 1XB7422<br>p <sup>1)</sup><br>HD | 1XB7700<br>p <sup>1)</sup><br>HD | s<br>K             | w <sub>1</sub><br>C | d<br>D       | d <sub>6</sub><br>– | l<br>E        | t<br>GA        | u<br>F       |
| 180          | 1PL6184 |         | 495<br>(19.49)                   | 560<br>(22.05)                   | –                                | 14.5<br>(0.57)     | 121<br>(4.76)       | 60<br>(2.36) | M20                 | 140<br>(5.51) | 64<br>(2.52)   | 18<br>(0.71) |
|              | 1PL6186 |         |                                  |                                  | 580<br>(22.83)                   |                    |                     | 65<br>(2.56) |                     |               | 69<br>(2.72)   |              |
| 225          | 1PL6224 |         | 595<br>(23.43)                   | 645<br>(25.39)                   | 680<br>(26.77)                   | 18.5<br>(0.73)     | 149<br>(5.87)       | 75<br>(2.95) | M20                 | 140<br>(5.51) | 79.5<br>(3.13) | 20<br>(0.79) |
|              | 1PL6226 |         |                                  | –                                |                                  |                    |                     |              |                     |               |                |              |
|              | 1PL6228 |         |                                  | –                                |                                  |                    |                     |              |                     |               |                |              |

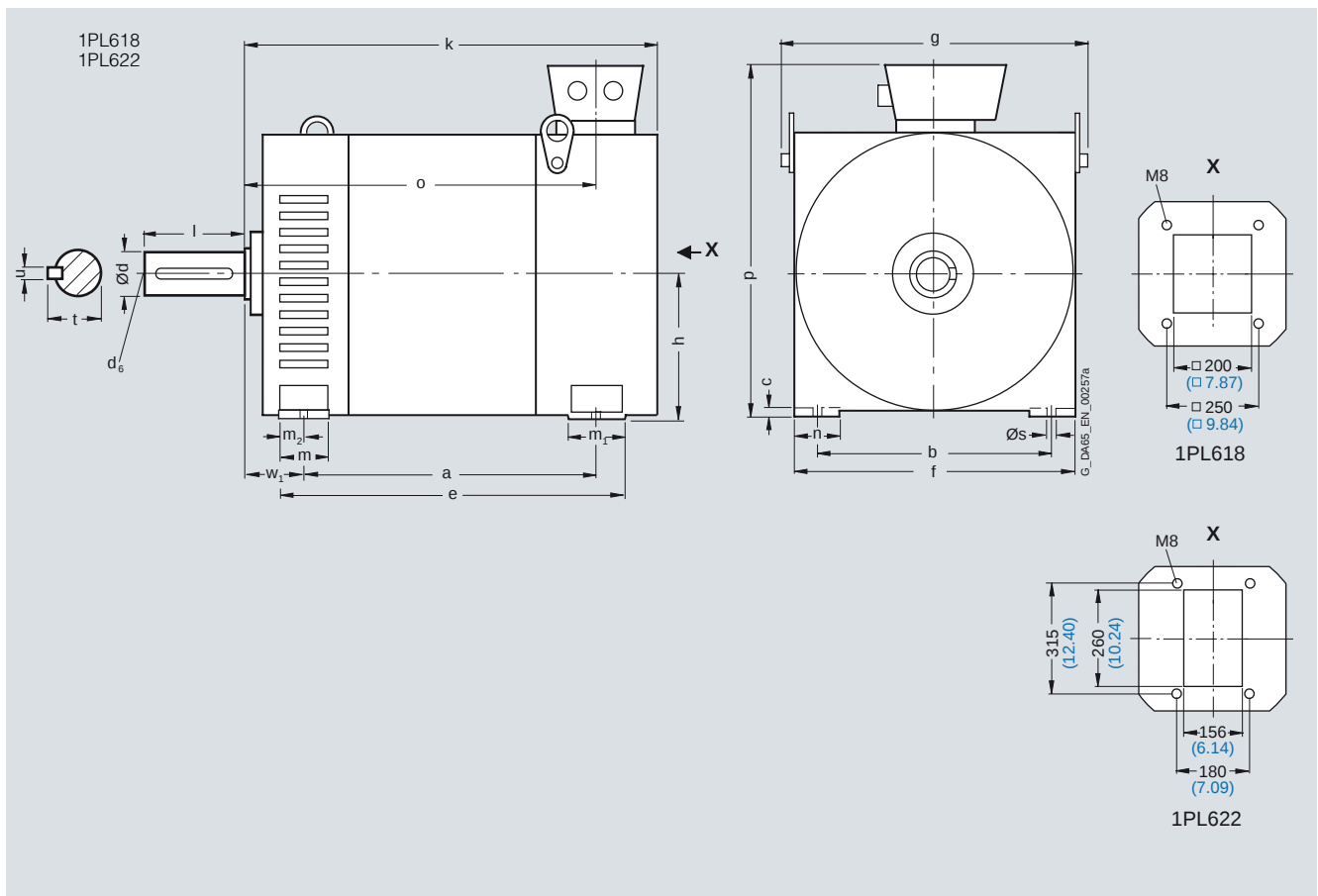


<sup>1)</sup> Maximum dimensions, depending on electrical version (terminal box).

## Dimensional drawings

| For motor                                                                         |         | Dimensions in mm (inches) |                |                |              |                |                |                |               |                |              |                  |                  |              |                | Terminal box type  |                    |
|-----------------------------------------------------------------------------------|---------|---------------------------|----------------|----------------|--------------|----------------|----------------|----------------|---------------|----------------|--------------|------------------|------------------|--------------|----------------|--------------------|--------------------|
|                                                                                   |         |                           |                |                |              |                |                |                |               |                |              |                  |                  |              |                | 1XB7422            | 1XB7700            |
| Shaft height                                                                      | Type    | DIN IEC                   | a B            | b A            | c LA         | e M            | f AB           | g AC           | h H           | k LB           | m BA         | m <sub>1</sub> – | m <sub>2</sub> – | n AA         | o –            | p <sup>1)</sup> HD | p <sup>1)</sup> HD |
| 1PL6, type of construction IM B3, forced ventilation, with pipe connection at NDE |         |                           |                |                |              |                |                |                |               |                |              |                  |                  |              |                |                    |                    |
| 180                                                                               | 1PL6184 |                           | 430<br>(16.93) | 279<br>(10.98) | 14<br>(0.55) | 510<br>(20.08) | 360<br>(14.17) | 408<br>(16.06) | 180<br>(7.09) | 630<br>(24.80) | 60<br>(2.36) | 120<br>(4.72)    | 35<br>(1.38)     | 65<br>(2.56) | 541<br>(21.30) | 560<br>(22.05)     | –                  |
|                                                                                   | 1PL6186 |                           | 520<br>(20.47) |                |              | 600<br>(23.62) |                |                |               | 720<br>(28.35) |              |                  |                  |              | 631<br>(24.84) |                    | 680<br>(26.77)     |
| 225                                                                               | 1PL6224 |                           | 445<br>(17.52) | 356<br>(14.02) | 18<br>(0.71) | 530<br>(20.87) | 450<br>(17.72) | 498<br>(19.61) | 225<br>(8.86) | 750<br>(29.53) | 60<br>(2.36) | 120<br>(4.72)    | 40<br>(1.57)     | 80<br>(3.15) | 629<br>(24.76) | –                  | 680<br>(26.77)     |
|                                                                                   | 1PL6226 |                           | 545<br>(21.46) |                |              | 630<br>(24.80) |                |                |               | 850<br>(33.46) |              |                  |                  |              | 729<br>(28.70) |                    |                    |
|                                                                                   | 1PL6228 |                           | 635<br>(25.00) |                |              | 720<br>(28.35) |                |                |               | 940<br>(37.01) |              |                  |                  |              | 819<br>(32.24) |                    |                    |

| Shaft extension DE |         |         |                |                  |                            |                     |               |                |              |
|--------------------|---------|---------|----------------|------------------|----------------------------|---------------------|---------------|----------------|--------------|
| Shaft height       | Type    | DIN IEC | s K            | w <sub>1</sub> C | <b>d</b><br><b>D</b>       | d <sub>6</sub><br>– | l<br>E        | t<br>GA        | u<br>F       |
| 180                | 1PL6184 |         | 14.5<br>(0.57) | 121<br>(4.76)    | <b>60</b><br><b>(2.36)</b> | M20                 | 140<br>(5.51) | 64<br>(2.52)   | 18<br>(0.71) |
|                    | 1PL6186 |         |                |                  | <b>65</b><br><b>(2.56)</b> |                     |               | 69<br>(2.72)   |              |
| 225                | 1PL6224 |         | 18.5<br>(0.73) | 149<br>(5.87)    | <b>75</b><br><b>(2.95)</b> | M20                 | 140<br>(5.51) | 79.5<br>(3.13) | 20<br>(0.79) |
|                    | 1PL6226 |         |                |                  |                            |                     |               |                |              |
|                    | 1PL6228 |         |                |                  |                            |                     |               |                |              |



<sup>1)</sup> Maximum dimensions, depending on electrical version (terminal box).

# Main motors

## Dimensional drawings

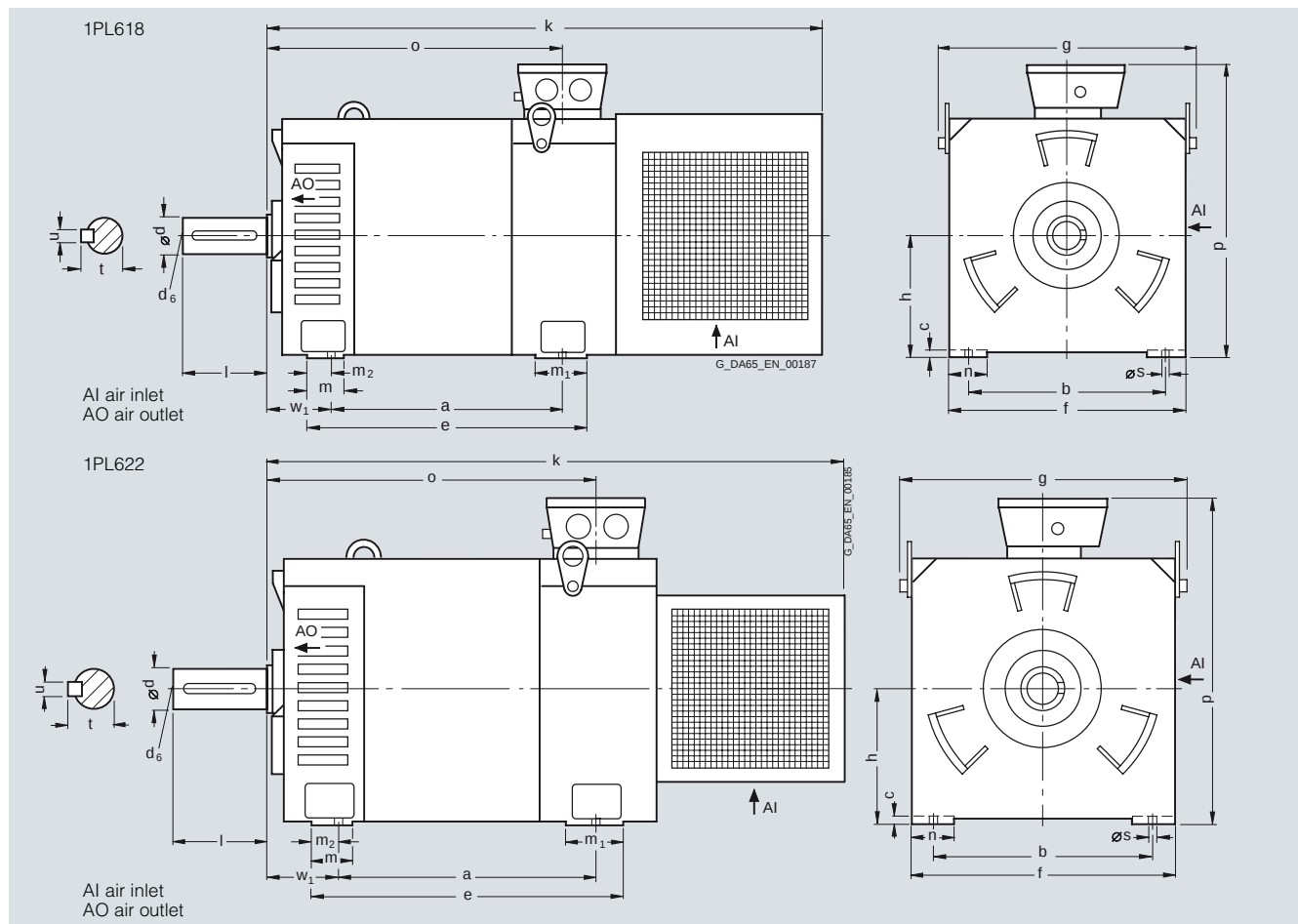
### 1PL6 asynchronous motors Forced ventilation

#### Dimensional drawings

| For motor                                                                                   |         | Dimensions in mm (inches) |                |                |              |                |                |                |               |                 |              |                  |                  |              |                |                | Terminal box type<br>1XB7... |                    |                    |
|---------------------------------------------------------------------------------------------|---------|---------------------------|----------------|----------------|--------------|----------------|----------------|----------------|---------------|-----------------|--------------|------------------|------------------|--------------|----------------|----------------|------------------------------|--------------------|--------------------|
| Shaft height                                                                                | Type    | DIN IEC                   | a B            | b A            | c LA         | e M            | f AB           | g AC           | h H           | k LB            | m BA         | m <sub>1</sub> – | m <sub>2</sub> – | n AA         | o –            |                | p <sup>1)</sup> HD           | p <sup>1)</sup> HD | p <sup>1)</sup> HD |
| <b>1PL6, type of construction IM B3, forced ventilation, direction of air flow NDE → DE</b> |         |                           |                |                |              |                |                |                |               |                 |              |                  |                  |              |                |                |                              |                    |                    |
| 180                                                                                         | 1PL6184 |                           | 430<br>(16.93) | 279<br>(10.98) | 14<br>(0.55) | 525<br>(20.67) | 360<br>(14.17) | 405<br>(15.94) | 180<br>(7.09) | 1010<br>(39.76) | 78<br>(3.07) | 120<br>(4.72)    | 50<br>(1.97)     | 65<br>(2.56) | 541<br>(21.30) | 495<br>(19.49) | 560<br>(22.05)               | –                  |                    |
|                                                                                             | 1PL6186 |                           | 520<br>(20.47) |                |              | 615<br>(24.21) |                |                |               | 1100<br>(43.31) |              |                  |                  |              | 631<br>(24.84) |                |                              | 580<br>(22.83)     |                    |
| 225                                                                                         | 1PL6224 |                           | 445<br>(17.52) | 356<br>(14.02) | 18<br>(0.71) | 545<br>(21.46) | 450<br>(17.72) | 498<br>(19.61) | 225<br>(8.86) | 1090<br>(42.91) | 80<br>(3.15) | 120<br>(4.72)    | 60<br>(2.36)     | 85<br>(3.35) | 629<br>(24.76) | 595<br>(23.43) | 645<br>(25.39)               | 680<br>(26.77)     |                    |
|                                                                                             | 1PL6226 |                           | 545<br>(21.46) |                |              | 645<br>(25.39) |                |                |               | 1190<br>(46.85) |              |                  |                  |              | 729<br>(28.70) |                | –                            |                    |                    |
|                                                                                             | 1PL6228 |                           | 635<br>(25.00) |                |              | 735<br>(28.94) |                |                |               | 1280<br>(50.39) |              |                  |                  |              | 819<br>(32.24) |                | –                            |                    |                    |

#### Shaft extension DE

| Shaft height | Type    | DIN IEC | s K            | w <sub>1</sub> C | d D          | d <sub>6</sub> – | l E           | t GA           | u F          |
|--------------|---------|---------|----------------|------------------|--------------|------------------|---------------|----------------|--------------|
| 180          | 1PL6184 |         | 14.5<br>(0.57) | 121<br>(4.76)    | 60<br>(2.36) | M20              | 140<br>(5.51) | 64<br>(2.52)   | 18<br>(0.71) |
|              | 1PL6186 |         |                |                  | 65<br>(2.56) |                  |               | 69<br>(2.72)   |              |
| 225          | 1PL6224 |         | 18.5<br>(0.73) | 149<br>(5.87)    | 75<br>(2.95) | M20              | 140<br>(5.51) | 79.5<br>(3.13) | 20<br>(0.79) |
|              | 1PL6226 |         |                |                  |              |                  |               |                |              |
|              | 1PL6228 |         |                |                  |              |                  |               |                |              |



<sup>1)</sup> Maximum dimensions, depending on electrical version (terminal box).

# Main motors

## Dimensional drawings

### 1PL6 asynchronous motors Forced ventilation

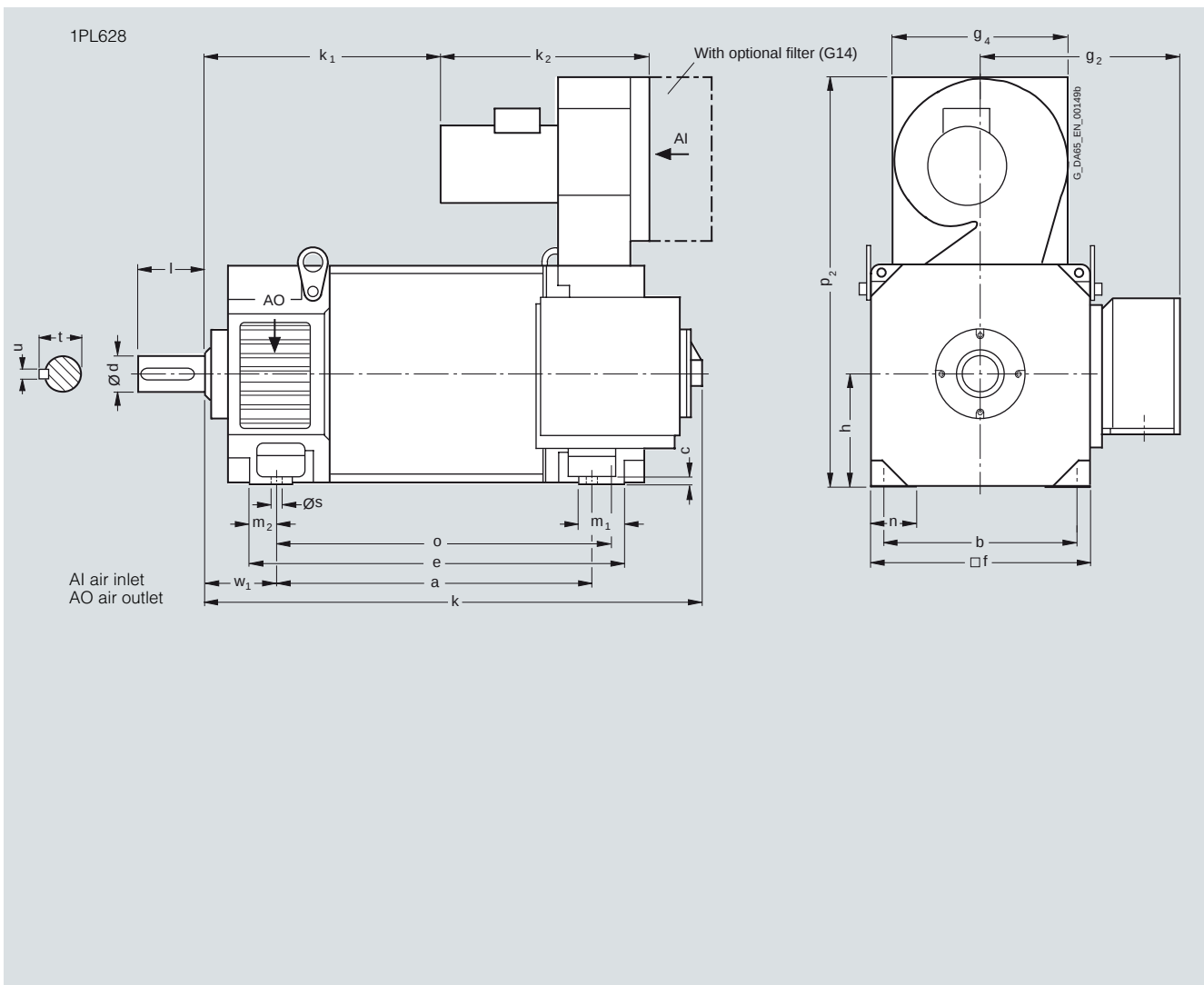
#### Dimensional drawings

For motor Dimensions in mm (inches)

| Shaft height                                                                                | Type    | DIN IEC | a B            | b A            | c LA         | e M             | f AB           | g <sub>2</sub> AD | g <sub>4</sub> – | h H            | k LB            | k <sub>1</sub> – | k <sub>2</sub> – | m <sub>1</sub> – | m <sub>2</sub> – | n AA          |
|---------------------------------------------------------------------------------------------|---------|---------|----------------|----------------|--------------|-----------------|----------------|-------------------|------------------|----------------|-----------------|------------------|------------------|------------------|------------------|---------------|
| <b>1PL6, type of construction IM B3, forced ventilation, direction of air flow NDE → DE</b> |         |         |                |                |              |                 |                |                   |                  |                |                 |                  |                  |                  |                  |               |
| 280                                                                                         | 1PL6284 |         | 684<br>(26.93) | 457<br>(17.99) | 22<br>(0.87) | 840<br>(33.07)  | 560<br>(22.05) | 518<br>(20.39)    | 449<br>(17.68)   | 280<br>(11.02) | 1146<br>(45.12) | 489<br>(19.25)   | 546<br>(21.50)   | 108<br>(4.25)    | 78<br>(3.07)     | 100<br>(3.94) |
|                                                                                             | 1PL6286 |         | 794<br>(31.26) |                |              | 950<br>(37.40)  |                |                   |                  |                | 1256<br>(49.45) | 599<br>(23.58)   |                  |                  |                  |               |
|                                                                                             | 1PL6288 |         | 924<br>(36.38) |                |              | 1080<br>(42.52) |                |                   |                  |                | 1386<br>(54.57) | 729<br>(28.70)   |                  |                  |                  |               |

Shaft extension DE

| Shaft height | Type    | DIN IEC | o –            | p <sub>2</sub> – | s K          | w <sub>1</sub> C | d D                 | d <sub>6</sub> – | l E           | t GA         | u F |
|--------------|---------|---------|----------------|------------------|--------------|------------------|---------------------|------------------|---------------|--------------|-----|
| 280          | 1PL6284 |         | 731<br>(28.78) | 1042<br>(41.02)  | 24<br>(0.94) | 190<br>(7.48)    | <b>95</b><br>(3.74) | 170<br>(6.69)    | 100<br>(3.94) | 25<br>(0.98) |     |
|              | 1PL6286 |         | 841<br>(33.11) |                  |              |                  |                     |                  |               |              |     |
|              | 1PL6288 |         | 971<br>(38.23) |                  |              |                  |                     |                  |               |              |     |



# Main motors

## Dimensional drawings

### 1PL6 asynchronous motors Forced ventilation

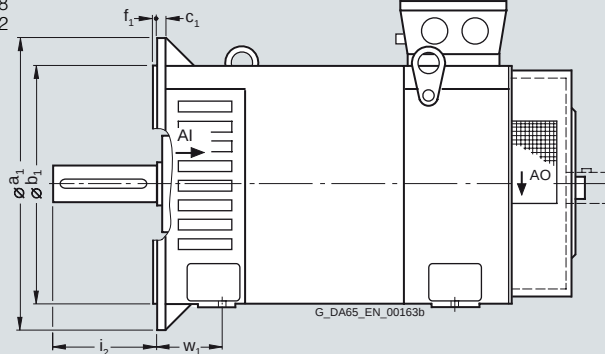
#### Dimensional drawings

For motor      Dimensions in mm (inches)

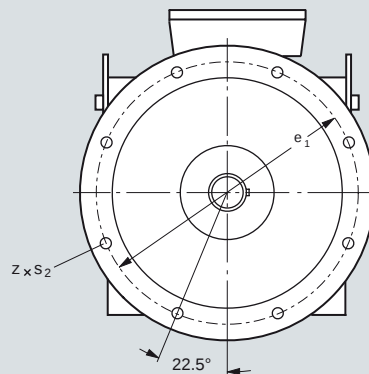
For dimensions for foot mounting, shaft and terminal box, see dimensional drawing of 1PL618/1PL622 motors, type of construction IM B3.

| Shaft height                                                                                 | Type    | DIN IEC | a <sub>1</sub><br>P | b <sub>1</sub><br>N | c <sub>1</sub><br>LA | e <sub>1</sub><br>M | f <sub>1</sub><br>T | i <sub>2</sub><br>— | s <sub>2</sub><br>S | Z<br>— | w <sub>1</sub><br>— |
|----------------------------------------------------------------------------------------------|---------|---------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|--------|---------------------|
| <b>1PL6, type of construction IM B35, forced ventilation, direction of air flow DE → NDE</b> |         |         |                     |                     |                      |                     |                     |                     |                     |        |                     |
| 180                                                                                          | 1PL6184 |         | 450<br>(17.72)      | 350<br>(13.78)      | 16<br>(0.63)         | 400<br>(15.75)      | 5<br>(0.20)         | 140<br>(5.51)       | 19<br>(0.75)        | 8      | 121<br>(4.76)       |
|                                                                                              | 1PL6186 |         |                     |                     |                      |                     |                     |                     |                     |        |                     |
| 225                                                                                          | 1PL6224 |         | 550<br>(21.65)      | 450<br>(17.72)      | 18<br>(0.71)         | 500<br>(19.69)      | 5<br>(0.20)         | 140<br>(5.51)       | 19<br>(0.75)        | 8      | 149<br>(5.87)       |
|                                                                                              | 1PL6226 |         |                     |                     |                      |                     |                     |                     |                     |        |                     |
|                                                                                              | 1PL6228 |         |                     |                     |                      |                     |                     |                     |                     |        |                     |

1PL618  
1PL622



AI air inlet  
AO air outlet



# Main motors

## Dimensional drawings

### 1PL6 asynchronous motors Forced ventilation

#### Dimensional drawings

For motor Dimensions in mm (inches)

For dimensions for foot mounting, shaft and terminal box see dimensional drawing of 1PL618/1PL622 motors, type of construction IM B3.

Terminal box type

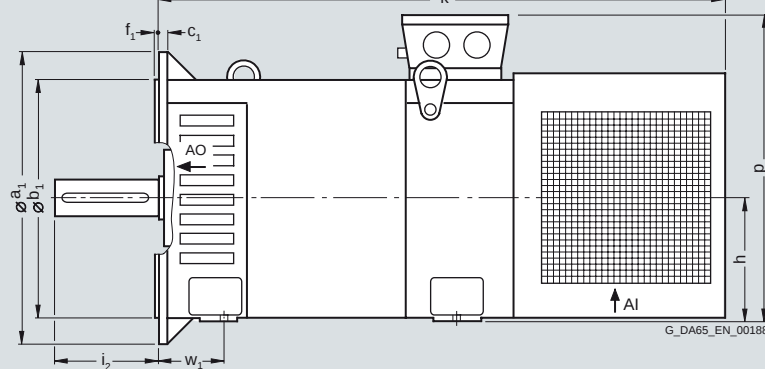
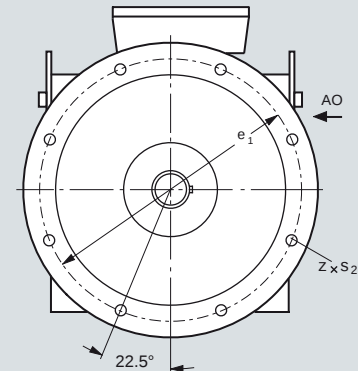
1XB7322 1XB7422 1XB7700

| Shaft height | Type | DIN IEC | a <sub>1</sub> P | b <sub>1</sub> N | c <sub>1</sub> LA | e <sub>1</sub> M | f <sub>1</sub> T | h H | k LB | p <sup>1)</sup> HD | p <sup>1)</sup> HD | p <sup>1)</sup> HD | s <sub>2</sub> S | z |
|--------------|------|---------|------------------|------------------|-------------------|------------------|------------------|-----|------|--------------------|--------------------|--------------------|------------------|---|
|--------------|------|---------|------------------|------------------|-------------------|------------------|------------------|-----|------|--------------------|--------------------|--------------------|------------------|---|

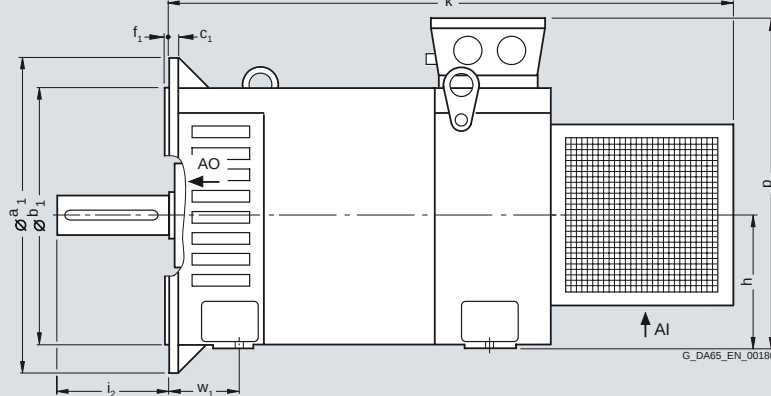
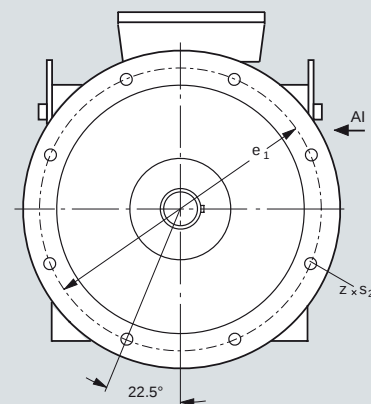
**1PL6, type of construction IM B35, forced ventilation, direction of air flow NDE → DE**

|     |         |  |                |                |              |                |             |               |                 |                |                |                |              |   |
|-----|---------|--|----------------|----------------|--------------|----------------|-------------|---------------|-----------------|----------------|----------------|----------------|--------------|---|
| 180 | 1PL6184 |  | 450<br>(17.72) | 350<br>(13.78) | 16<br>(0.63) | 400<br>(15.75) | 5<br>(0.20) | 180<br>(7.09) | 1010<br>(39.76) | 495<br>(19.49) | 560<br>(22.05) | —              | 19<br>(0.75) | 8 |
|     | 1PL6186 |  |                |                |              |                |             |               | 1100<br>(43.31) |                |                | 580<br>(22.83) |              |   |
| 225 | 1PL6224 |  | 550<br>(21.65) | 450<br>(17.72) | 18<br>(0.71) | 500<br>(19.69) | 5<br>(0.20) | 225<br>(8.86) | 1090<br>(42.91) | 595<br>(23.43) | 645<br>(25.39) | 680<br>(26.77) | 19<br>(0.75) | 8 |
|     | 1PL6226 |  |                |                |              |                |             |               | 1190<br>(46.85) |                | —              |                |              |   |
|     | 1PL6228 |  |                |                |              |                |             |               | 1280<br>(50.39) |                | —              |                |              |   |

1PL618

AI air inlet  
AO air outlet

1PL622

AI air inlet  
AO air outlet<sup>1)</sup> Maximum dimensions, depending on electrical version (terminal box).

# Main motors

## Dimensional drawings

### 1PL6 asynchronous motors Forced ventilation

#### Dimensional drawings

For motor Dimensions in mm (inches)

For dimensions for foot mounting, shaft and terminal box, see the dimensional drawing of 1PL628 motors, type of construction IM B3.

| Shaft height                                                                                 | Type    | DIN IEC | a <sub>1</sub> P | b <sub>1</sub> N | c <sub>1</sub> LA | e <sub>1</sub> M | f <sub>1</sub> T | h H            | i <sub>2</sub> | k LB            | k <sub>1</sub> | k <sub>2</sub> | p <sub>2</sub>  |
|----------------------------------------------------------------------------------------------|---------|---------|------------------|------------------|-------------------|------------------|------------------|----------------|----------------|-----------------|----------------|----------------|-----------------|
| <b>1PL6, type of construction IM B35, forced ventilation, direction of air flow NDE → DE</b> |         |         |                  |                  |                   |                  |                  |                |                |                 |                |                |                 |
| 280                                                                                          | 1PL6284 |         | 660<br>(25.98)   | 550<br>(21.65)   | 24<br>(0.94)      | 600<br>(23.62)   | 6<br>(0.24)      | 280<br>(11.02) | 170<br>(6.69)  | 1146<br>(45.12) | 489<br>(19.25) | 546<br>(21.50) | 1042<br>(41.02) |
|                                                                                              | 1PL6286 |         |                  |                  |                   |                  |                  |                |                | 1256<br>(49.45) | 599<br>(23.58) |                |                 |
|                                                                                              | 1PL6288 |         |                  |                  |                   |                  |                  |                |                | 1386<br>(54.57) | 729<br>(28.70) |                |                 |

