

# Centro-MZ

## Inline centrifugal fans

### Use

- Supply and extract ventilation systems installed in various premises.
- Direct mounting inside air ductworks.
- Compatible with Ø 100 up to 315 mm round air ducts.



**Air flow:**  
up to 1540 m<sup>3</sup>/h  
428 l/s



**Power:**  
from 60 W



**Noise level:**  
from 35 dBA



### Design

- Galvanized steel casing.
- Aerodynamically shaped casing.
- External terminal block for power supply.

### Motor

- Single-phase external rotor motor with a centrifugal impeller with backward curved blades.
- Equipped with ball bearings for longer service life.
- Integrated thermal protection with automatic restart.
- Dynamically balanced impeller.
- For ventilation of premises with high requirements to noise level low-noise modifications are available (**Centro-MZ L**).

### Speed control

- Smooth speed control with an external thyristor controller or step speed control with an external auto transformer (both available upon separate order).

### Mounting

- Any mounting position.
- Wall or ceiling mounting with fixing brackets supplied as a standard.
- Flexible air ducts are fixed on the fan spigots with clamps.

### Modifications and options

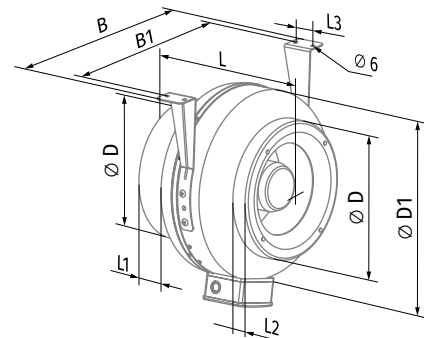
- max:** high-powered motor.
- L:** low-powered and low-noise motor.
- W1:** power cable with mains plug.

#### Designation key

| Series    | Duct diameter [mm]                | Motor modifications                             | Options                         |
|-----------|-----------------------------------|---|---------------------------------|
| Centro-MZ | 100; 125; 150; 160; 200; 250; 315 | max: high-powered motor<br>L: low-powered motor | W1: power cable with mains plug |

### Overall dimensions [mm]

| Type              | Ø D | Ø D1 | B   | B1  | L   | L1 | L2 | L3 | Weight [kg] |
|-------------------|-----|------|-----|-----|-----|----|----|----|-------------|
| Centro-MZ 100 (L) | 98  | 245  | 300 | 260 | 195 | 20 | 20 | 30 | 2.8 (2.5)   |
| Centro-MZ 125 (L) | 123 | 237  | 253 | 293 | 202 | 23 | 22 | 30 | 3.16        |
| Centro-MZ 150     | 149 | 274  | 290 | 330 | 170 | 20 | 20 | 30 | 3.5         |
| Centro-MZ 150 max | 149 | 345  | 355 | 395 | 230 | 20 | 20 | 40 | 5.6         |
| Centro-MZ 160     | 158 | 278  | 294 | 334 | 200 | 25 | 23 | 30 | 3.44        |
| Centro-MZ 200 (L) | 198 | 332  | 340 | 380 | 245 | 25 | 29 | 40 | 5.43        |
| Centro-MZ 250 (L) | 249 | 332  | 340 | 380 | 213 | 25 | 29 | 40 | 5.25        |
| Centro-MZ 315 (L) | 313 | 402  | 410 | 450 | 308 | 33 | 55 | 40 | 6.57        |



#### Accessories

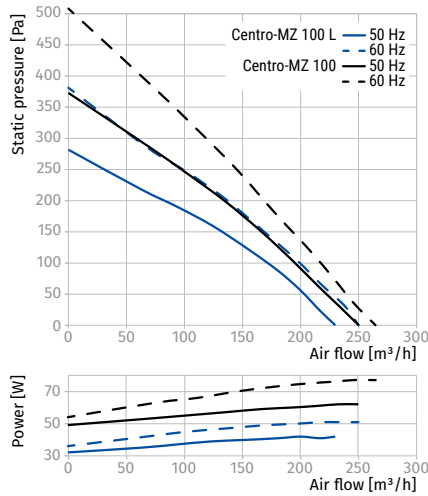
| Silencers   | Filter boxes   | Electric heaters   | Water heaters  | Backdraft air dampers   | Air dampers   | Clamps  | Speed controllers   |
|---|--|--|--|---|---|---|---|
| <br>SD | <br>KFBK / KFBT | <br>EKH | <br>WKH | <br>VRV | <br>VK / VKA | <br>KZ | <br>CDT E1.8 |

## Technical data

| Parameters                       | Centro-MZ 100 L |           | Centro-MZ 100 |           | Centro-MZ 125 L |           | Centro-MZ 125 |           |
|----------------------------------|-----------------|-----------|---------------|-----------|-----------------|-----------|---------------|-----------|
| Voltage [V]                      | 1 ~ 230         |           | 1 ~ 230       |           | 1 ~ 230         |           | 1 ~ 230       |           |
| Frequency [Hz]                   | 50              | 60        | 50            | 60        | 50              | 60        | 50            | 60        |
| Power [W]                        | 42              | 51        | 62            | 77        | 60              | 61        | 78            | 79        |
| Current [A]                      | 0.19            | 0.23      | 0.28          | 0.34      | 0.37            | 0.37      | 0.34          | 0.34      |
| Maximum air flow [m³/h (l/s)]    | 230 (64)        | 250 (69)  | 250 (69)      | 265 (74)  | 230 (64)        | 240 (67)  | 330 (92)      | 340 (94)  |
| RPM [min⁻¹]                      | 2732            | 3258      | 2812          | 3294      | 2605            | 2720      | 2820          | 2880      |
| Sound pressure at 3 m [dBA]      | 35              | 36        | 46            | 47        | 35              | 36        | 46            | 46        |
| Transported air temperature [°C] | -25...+55       | -25...+50 | -25...+55     | -25...+50 | -25...+55       | -25...+50 | -25...+55     | -25...+50 |
| SEC class                        | C               |           | C             |           | C               |           | C             |           |
| IP rating                        | IPX4            |           | IPX4          |           | IPX4            |           | IPX4          |           |
| Motor IP rating                  | IP44            |           | IP44          |           | IP44            |           | IP44          |           |
| ErP                              | 2018            |           | 2018          |           | 2018            |           | 2018          |           |

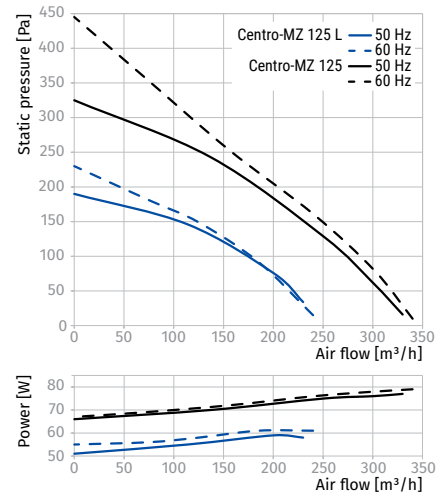
### CENTRO-MZ 100 L, CENTRO-MZ 100

| Sound power level, A-weighted | Total | Octave frequency bands [Hz] |     |     |     |      |      |      |      |
|-------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|------|
|                               |       | 63                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| <b>Centro-MZ 100 L</b>        |       |                             |     |     |     |      |      |      |      |
| LWA to inlet [dBA]            | 63    | 51                          | 57  | 56  | 57  | 51   | 46   | 40   | 29   |
| LWA to outlet [dBA]           | 65    | 54                          | 62  | 58  | 61  | 57   | 50   | 45   | 33   |
| LWA to environment [dBA]      | 55    | 19                          | 14  | 21  | 34  | 42   | 41   | 29   | 17   |
| <b>Centro-MZ 100</b>          |       |                             |     |     |     |      |      |      |      |
| LWA to inlet [dBA]            | 72    | 47                          | 67  | 68  | 67  | 60   | 54   | 53   | 42   |
| LWA to outlet [dBA]           | 73    | 56                          | 67  | 72  | 66  | 63   | 58   | 57   | 42   |
| LWA to environment [dBA]      | 64    | 43                          | 60  | 57  | 41  | 24   | 6    | 17   | 24   |



### CENTRO-MZ 125 L, CENTRO-MZ 125

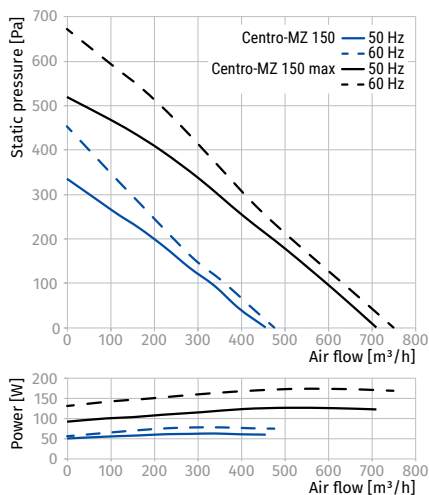
| Sound power level, A-weighted | Total | Octave frequency bands [Hz] |     |     |     |      |      |      |      |
|-------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|------|
|                               |       | 63                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| <b>Centro-MZ 125 L</b>        |       |                             |     |     |     |      |      |      |      |
| LWA to inlet [dBA]            | 59    | 31                          | 52  | 54  | 53  | 49   | 46   | 35   | 30   |
| LWA to outlet [dBA]           | 61    | 35                          | 53  | 56  | 60  | 51   | 49   | 35   | 34   |
| LWA to environment [dBA]      | 64    | 46                          | 60  | 59  | 43  | 33   | 15   | 30   | 28   |
| <b>Centro-MZ 125</b>          |       |                             |     |     |     |      |      |      |      |
| LWA to inlet [dBA]            | 75    | 56                          | 63  | 68  | 69  | 64   | 61   | 52   | 41   |
| LWA to outlet [dBA]           | 75    | 58                          | 71  | 74  | 72  | 65   | 65   | 56   | 47   |
| LWA to environment [dBA]      | 64    | 52                          | 64  | 59  | 48  | 36   | 23   | 30   | 27   |



| Parameters                                 | Centro-MZ 150 |           | Centro-MZ 150 max |           | Centro-MZ 160 |           | Centro-MZ 200 L |           | Centro-MZ 200 |            |
|--|---------------|-----------|-------------------|-----------|---------------|-----------|-----------------|-----------|---------------|------------|
| Voltage [V]                                | 1 ~ 230       |           | 1 ~ 230           |           | 1 ~ 230       |           | 1 ~ 230         |           | 1 ~ 230       |            |
| Frequency [Hz]                             | 50            | 60        | 50                | 60        | 50            | 60        | 50              | 60        | 50            | 60         |
| Power [W]                                  | 64            | 78        | 127               | 174       | 78            | 81        | 139             | 177       | 157           | 202        |
| Current [A]                                | 0.29          | 0.34      | 0.56              | 0.77      | 0.34          | 0.35      | 0.61            | 0.78      | 0.69          | 0.88       |
| Maximum air flow [m <sup>3</sup> /h (l/s)] | 455 (125)     | 475 (132) | 710 (197)         | 750 (208) | 455 (126)     | 460 (128) | 840 (233)       | 940 (261) | 1000 (278)    | 1045 (290) |
| RPM [min <sup>-1</sup> ]                   | 2780          | 3216      | 2760              | 3144      | 2760          | 2820      | 2790            | 2850      | 2740          | 2840       |
| Sound pressure at 3 m [dBA]                | 44            | 45        | 48                | 49        | 46            | 46        | 48              | 49        | 50            | 50         |
| Transported air temperature [°C]           | -25...+50     |           | -25...+60         |           | -25...+55     |           | -25...+50       |           | -25...+45     |            |
| SEC class                                  | B             |           | B                 |           | B             |           | B               |           | B             |            |
| IP rating                                  | IPX4          |           | IPX4              |           | IPX4          |           | IPX4            |           | IPX4          |            |
| Motor IP rating                            | IP44          |           | IP44              |           | IP44          |           | IP44            |           | IP44          |            |
| ErP  | 2018          |           | 2018              |           | 2018          |           | 2018            |           | 2018          |            |

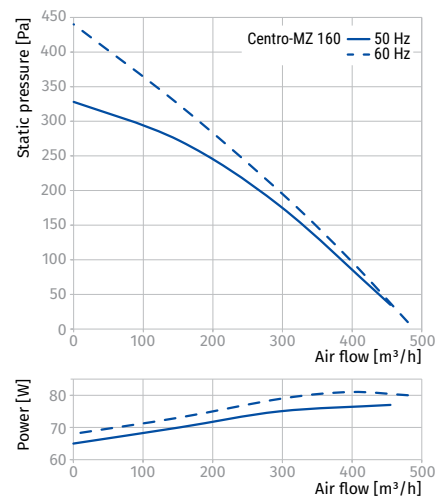
### CENTRO-MZ 150, CENTRO-MZ 150 MAX

| Sound power level, A-weighted        | Total | Octave frequency bands [Hz] |     |     |     |      |      |      |      |
|--------------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|------|
|                                      |       | 63                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| <b>Centro-MZ 150</b>                 |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 90    | 53                          | 87  | 86  | 75  | 74   | 71   | 68   | 54   |
| L <sub>WA</sub> to outlet [dBA]      | 90    | 53                          | 88  | 85  | 72  | 71   | 66   | 65   | 52   |
| L <sub>WA</sub> to environment [dBA] | 66    | 28                          | 49  | 58  | 60  | 60   | 60   | 50   | 37   |
| <b>Centro-MZ 150 max</b>             |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 94    | 56                          | 91  | 90  | 79  | 78   | 75   | 71   | 57   |
| L <sub>WA</sub> to outlet [dBA]      | 94    | 56                          | 92  | 89  | 76  | 75   | 69   | 68   | 55   |
| L <sub>WA</sub> to environment [dBA] | 68    | 29                          | 51  | 61  | 63  | 63   | 63   | 52   | 39   |



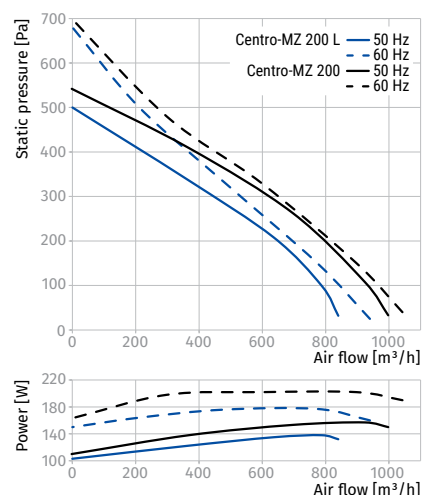
### CENTRO-MZ 160

| Sound power level, A-weighted        | Total | Octave frequency bands [Hz] |     |     |     |      |      |      |      |
|--------------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|------|
|                                      |       | 63                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| L <sub>WA</sub> to inlet [dBA]       | 69    | 42                          | 67  | 66  | 63  | 61   | 58   | 48   | 35   |
| L <sub>WA</sub> to outlet [dBA]      | 72    | 46                          | 69  | 65  | 68  | 64   | 63   | 50   | 40   |
| L <sub>WA</sub> to environment [dBA] | 60    | 41                          | 60  | 53  | 36  | 20   | 18   | 30   | 24   |



### CENTRO-MZ 200 L, CENTRO-MZ 200

| Sound power level, A-weighted        | Total | Octave frequency bands [Hz] |     |     |     |      |      |      |      |
|--------------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|------|
|                                      |       | 63                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| <b>Centro-MZ 200 L</b>               |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 76    | 47                          | 68  | 65  | 70  | 67   | 59   | 58   | 50   |
| L <sub>WA</sub> to outlet [dBA]      | 76    | 49                          | 71  | 69  | 72  | 63   | 63   | 60   | 53   |
| L <sub>WA</sub> to environment [dBA] | 64    | 46                          | 61  | 57  | 48  | 32   | 27   | 48   | 42   |
| <b>Centro-MZ 200</b>                 |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 73    | 51                          | 66  | 68  | 71  | 67   | 64   | 58   | 52   |
| L <sub>WA</sub> to outlet [dBA]      | 79    | 51                          | 73  | 69  | 74  | 67   | 65   | 60   | 50   |
| L <sub>WA</sub> to environment [dBA] | 68    | 47                          | 64  | 64  | 46  | 32   | 30   | 44   | 42   |



| Parameters                       | Centro-MZ 250 L |            | Centro-MZ 250 |            | Centro-MZ 315 L |            | Centro-MZ 315 |            |
|----------------------------------|-----------------|------------|---------------|------------|-----------------|------------|---------------|------------|
| Voltage [V]                      | 1 ~ 230         |            | 1 ~ 230       |            | 1 ~ 230         |            | 1 ~ 230       |            |
| Frequency [Hz]                   | 50              | 60         | 50            | 60         | 50              | 60         | 50            | 60         |
| Power [W]                        | 134             | 175        | 152           | 202        | 151             | 205        | 185           | 238        |
| Current [A]                      | 0.59            | 0.77       | 0.66          | 0.88       | 0.66            | 0.89       | 0.81          | 1.04       |
| Maximum air flow [m³/h (l/s)]    | 980 (272)       | 1030 (286) | 1070 (297)    | 1100 (306) | 1330 (369)      | 1370 (381) | 1540 (428)    | 1580 (439) |
| RPM [min⁻¹]                      | 2785            | 2880       | 2765          | 2560       | 2680            | 2750       | 2730          | 2870       |
| Sound pressure at 3 m [dBA]      | 51              | 51         | 52            | 52         | 52              | 52         | 53            | 54         |
| Transported air temperature [°C] | -25...+50       | -25...+50  | -25...+50     | -25...+50  | -25...+50       | -25...+50  | -25...+45     | -25...+45  |
| SEC class                        | B               |            | B             |            | -               |            | -             |            |
| IP rating                        | IPX4            |            | IPX4          |            | IPX4            |            | IPX4          |            |
| Motor IP rating                  | IP44            |            | IP44          |            | IP44            |            | IP44          |            |
| ErP                              | 2018            |            | 2018          |            | 2018            |            | 2018          |            |

**CENTRO-MZ 250 L, CENTRO-MZ 250**

| Sound power level, A-weighted        | Total | Octave frequency bands [Hz] |     |     |     |      |      |      |      |
|--------------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|------|
|                                      |       | 63                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| <b>Centro-MZ 250 L</b>               |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 69    | 46                          | 59  | 61  | 65  | 62   | 58   | 60   | 54   |
| L <sub>WA</sub> to outlet [dBA]      | 74    | 49                          | 59  | 63  | 66  | 67   | 62   | 64   | 56   |
| L <sub>WA</sub> to environment [dBA] | 60    | 42                          | 54  | 54  | 44  | 37   | 37   | 52   | 45   |
| <b>Centro-MZ 250</b>                 |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 75    | 60                          | 66  | 67  | 67  | 67   | 63   | 56   | 45   |
| L <sub>WA</sub> to outlet [dBA]      | 76    | 60                          | 73  | 71  | 69  | 65   | 66   | 59   | 46   |
| L <sub>WA</sub> to environment [dBA] | 65    | 58                          | 62  | 60  | 47  | 43   | 40   | 47   | 36   |

**CENTRO-MZ 315 L, CENTRO-MZ 315**

| Sound power level, A-weighted        | Total | Octave frequency bands [Hz] |     |     |     |      |      |      |      |
|--------------------------------------|-------|-----------------------------|-----|-----|-----|------|------|------|------|
|                                      |       | 63                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| <b>Centro-MZ 315 L</b>               |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 70    | 35                          | 53  | 61  | 65  | 67   | 61   | 58   | 56   |
| L <sub>WA</sub> to outlet [dBA]      | 74    | 41                          | 54  | 64  | 73  | 70   | 65   | 62   | 60   |
| L <sub>WA</sub> to environment [dBA] | 59    | 35                          | 49  | 53  | 50  | 46   | 51   | 50   | 50   |
| <b>Centro-MZ 315</b>                 |       |                             |     |     |     |      |      |      |      |
| L <sub>WA</sub> to inlet [dBA]       | 77    | 53                          | 66  | 71  | 69  | 68   | 66   | 63   | 60   |
| L <sub>WA</sub> to outlet [dBA]      | 78    | 58                          | 71  | 74  | 72  | 71   | 71   | 63   | 63   |
| L <sub>WA</sub> to environment [dBA] | 70    | 55                          | 66  | 61  | 57  | 48   | 54   | 56   | 51   |

