



## APPLICATION

Fan designed for transporting non-aggressive and non-explosive gases without contamination. Typical applications:

- pneumatic transport,
- blowing in drying systems (eg graphic machines and plastics processing),
- air blowing systems in combustion / heat treatment systems (eg melting furnaces).

## CONSTRUCTION

- medium-pressure centrifugal fan with direct drive,
- riveted impeller made of aluminum sheet, with backward curved blades, (20 to 400 models), welded aluminum rotor (600 models), dynamically balanced according to ISO 1940-1,
- the housing is cast in aluminium alloy,
- galvanized inlet cover,
- fan painted grey RAL 7042,
- maximum temperature of the transported medium is 80°C,
- ambient temperature range from -20°C to + 40°C,
- figure LG270.

## MOTOR

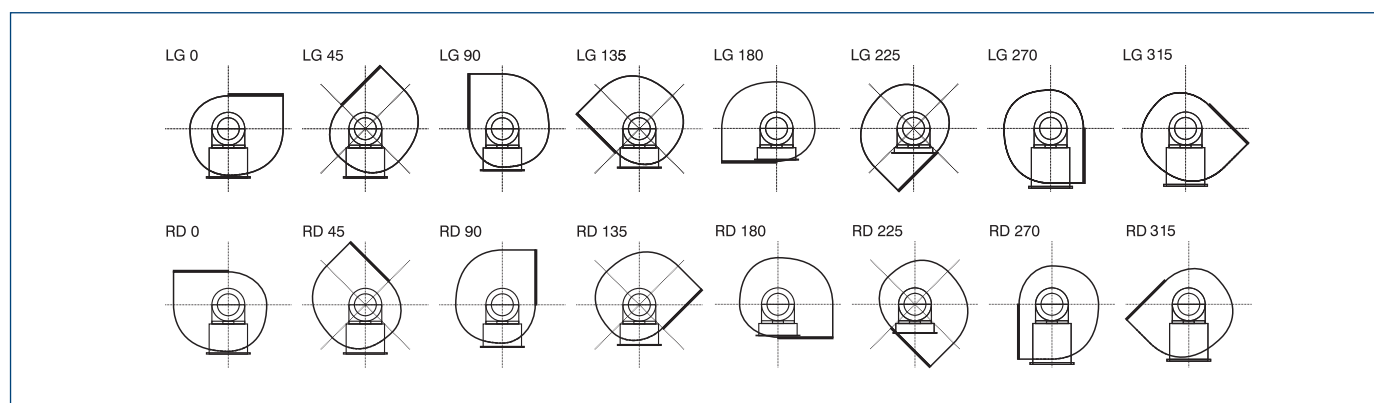
- asynchronous, single-phase, 230V, 50Hz (power to 1.5kW),
- asynchronous, three-phase, 230/400V, 50Hz (power to 3kW),
- asynchronous, three-phase, 400/690V, 50Hz (power 11.0kW),
- efficiency class IE3 (power from 0.25 kW) or IE2 (1.5 kW, 230V),
- degree of protection IP55,
- insulation class F,
- three-phase motors are adapted for frequency converter.

## SPECIAL EXECUTIONS

- different position LG/RD,
- painting in a different color,
- impeller made of galvanized steel sheet,
- impeller made of stainless steel 1.4301,
- impeller made of acid-proof steel 1.4404,
- different motor voltage and frequency,
- single-phase motor driven by voltage,
- different motor degree of protection,
- motor equipped with sensor or additional cooling,
- ambient temperature range below -20°C and above +40°C.



## FIGURES



## TECHNICAL CHARACTERISTICS

| Typ            | airflow max | pressure max | maximum absorbed power | speed    | maximum absorbed current | voltage | capacitor | sound pressure level* | weight | ErP  | article number |
|----------------|-------------|--------------|------------------------|----------|--------------------------|---------|-----------|-----------------------|--------|------|----------------|
|                | [m³/h]      | [Pa]         | [kW]                   | [r.p.m.] | [A]                      | [V]     | [μF]      | [dB(A)]               | [kg]   |      |                |
| MBA 30T        | 750         | 1250         | 0,25                   | 2790     | 1,1/0,55                 | 230/400 | -         | 70                    | 12     | 2015 | 436510202      |
| MBA 40S        | 560         | 1880         | 0,37                   | 2880     | 2,2                      | 230     | 25        | 73                    | 17     | 2015 | 436510208      |
| MBA 40T        | 660         | 1820         | 0,37                   | 2870     | 0,95                     | 230/400 | -         | 73                    | 17     | 2015 | 436510206      |
| MBA 75S        | 720         | 2400         | 0,55                   | 2870     | 3,1                      | 230     | 35        | 75                    | 22     | 2015 | 436510215      |
| MBA 75T        | 795         | 2490         | 0,55                   | 2870     | 2,15/1,25                | 230/400 | -         | 75                    | 22     | 2015 | 436510210      |
| MBA 110S       | 1040        | 2470         | 0,75                   | 2880     | 4,2                      | 230     | 50        | 78                    | 24     | 2015 | 436510225      |
| MBA 110T       | 1140        | 2490         | 0,75                   | 2890     | 2,95/1,7                 | 230/400 | -         | 78                    | 23     | 2015 | 436510220      |
| MBA 220T       | 2315        | 3230         | 1,5                    | 2880     | 5,25/3                   | 230/400 | -         | 79                    | 52     | 2015 | 436510230      |
| MBA 300S       | 2090        | 3320         | 1,5                    | 2740     | 9,1                      | 230     | 40        | 79                    | 42     | 2015 | 436510245      |
| MBA 300T       | 1460        | 3380         | 1,5                    | 2880     | 5,25/3                   | 230/400 | -         | 79                    | 43     | 2015 | 436510240      |
| MBA 400T       | 3490        | 3860         | 3                      | 2880     | 9,3/5,3                  | 230/400 | -         | 84                    | 61     | 2015 | 436510260      |
| MBA 600T 7,5kW | 3840        | 6485         | 7,5                    | 2895     | 14,0                     | 400/690 | -         | 86                    | 133    | 2015 | 436510276      |
| MBA 600T 11kW  | 5700        | 6485         | 11                     | 2900     | 19,1                     | 400/690 | -         | 86                    | 142    | 2015 | 436510278      |

\* sound pressure measured at a distance of 1,5m from the fan at  $q=2/3 \cdot q_{max}$ .

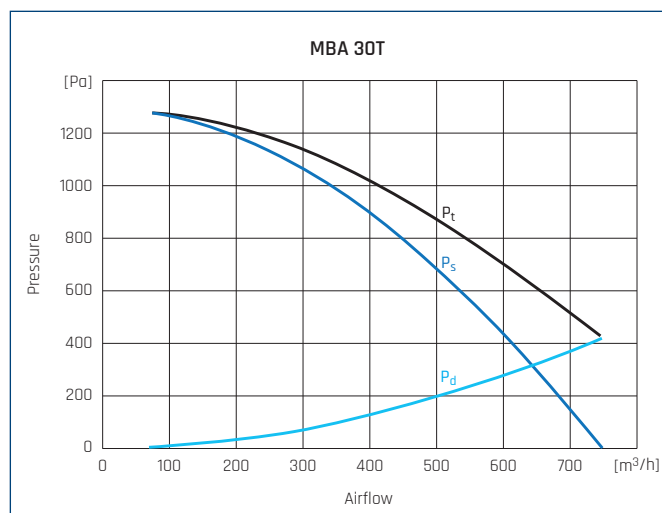
## PERFORMANCE CURVES

- $p_t$  - total pressure
- $p_s$  - static pressure
- $p_d$  - dynamic pressure

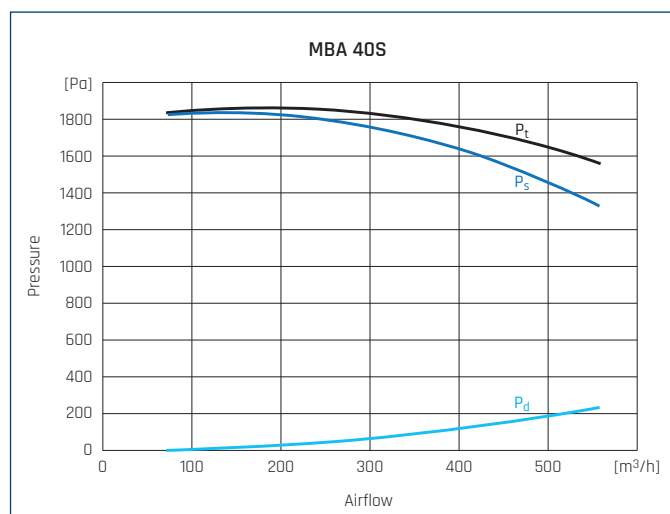
### ErP

|            |                                      |
|------------|--------------------------------------|
| MC         | Measurement category                 |
| EC         | Efficiency category                  |
| VSD        | Speed control: supplied with the fan |
| SR         | Specific ratio                       |
| $\eta$ [%] | Efficiency                           |
| N          | Efficiency grade                     |
| [kW]       | Absorbed power                       |
| [m³/h]     | Airflow                              |
| [Pa]       | Static pressure/total                |
| [RPM]      | Speed                                |

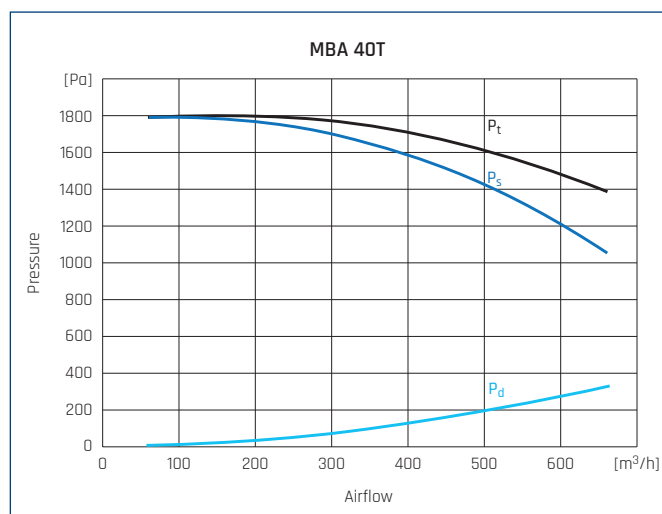
Based on Commission Regulation (UE) No. 327/2011 of March 30, 2011.



| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 44,1       | 61,2 | 0,24 | 365    | 1031 | 2796  |

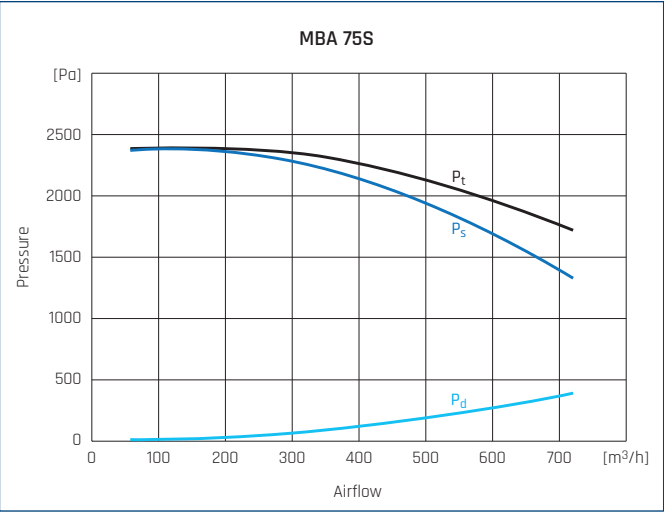


| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 50,5       | 64,7 | 0,4  | 486    | 1668 | 2880  |

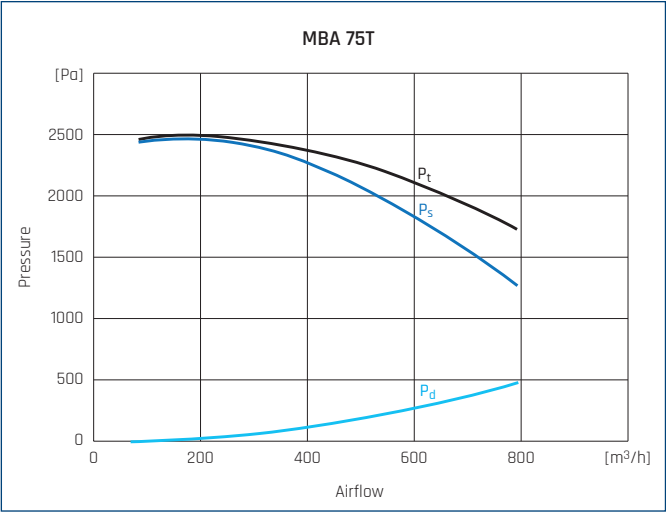


| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 51,2       | 65,4 | 0,4  | 527    | 1570 | 2870  |

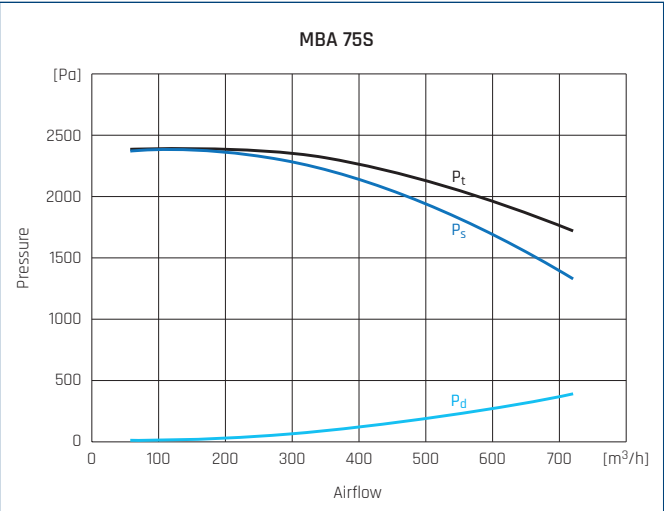
PERFORMANCE CURVES



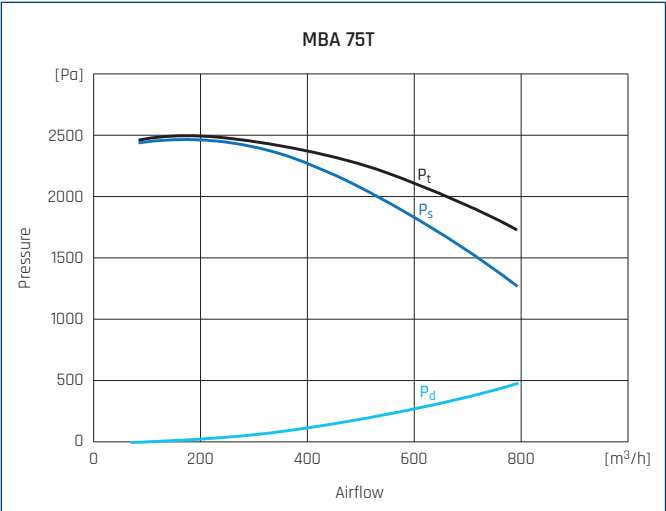
| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 51,8       | 64,7 | 0,60 | 540    | 2069 | 2870  |



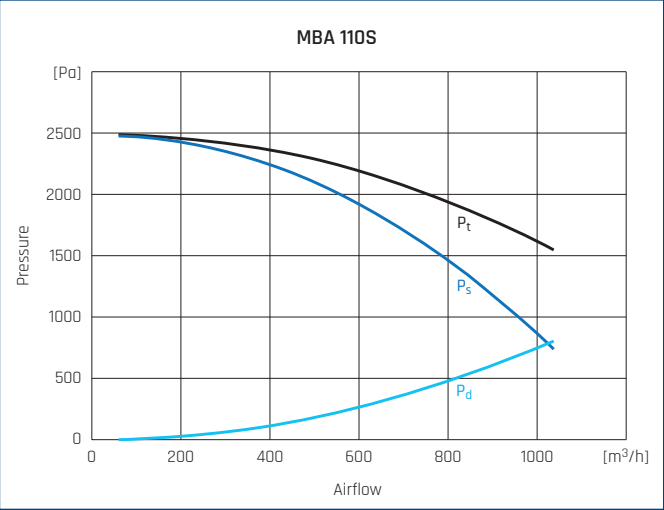
| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 54,5       | 67,2 | 0,6  | 583    | 2126 | 2870  |



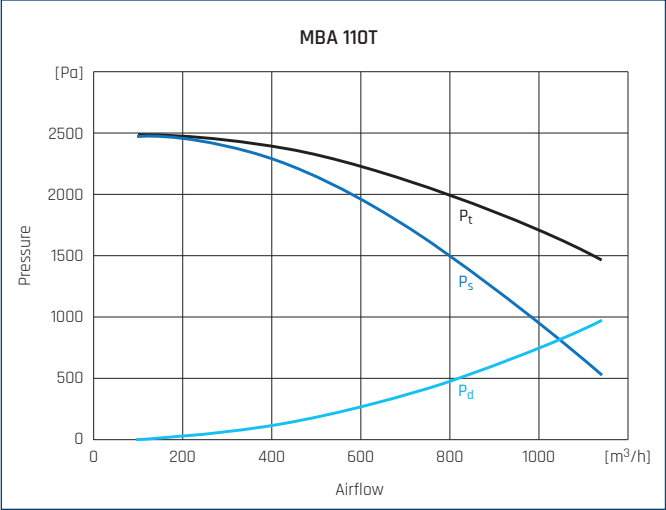
| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 51,8       | 64,7 | 0,60 | 540    | 2069 | 2870  |



| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 54,5       | 67,2 | 0,6  | 583    | 2126 | 2870  |

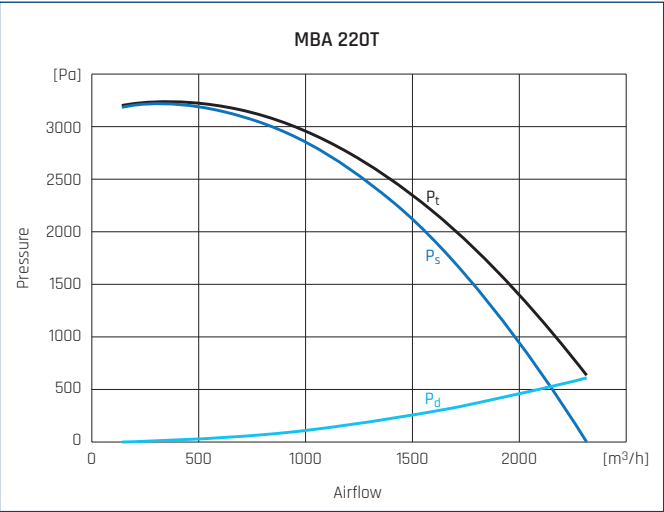


| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 53,7       | 65,7 | 0,73 | 671    | 2116 | 2921  |

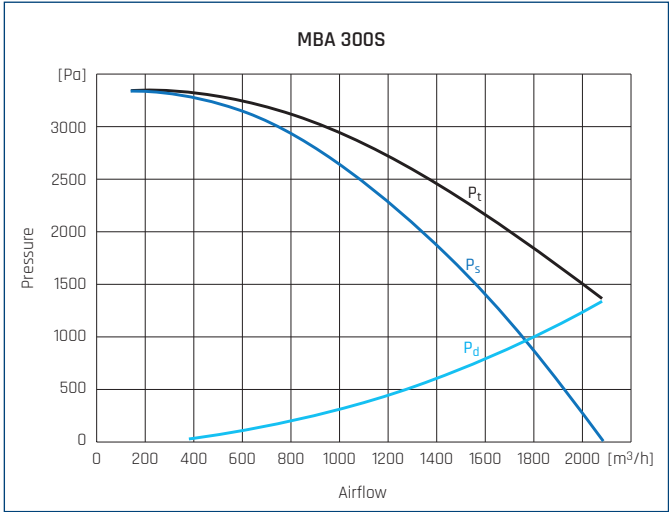


| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 56,7       | 68,5 | 0,75 | 762    | 2035 | 2923  |

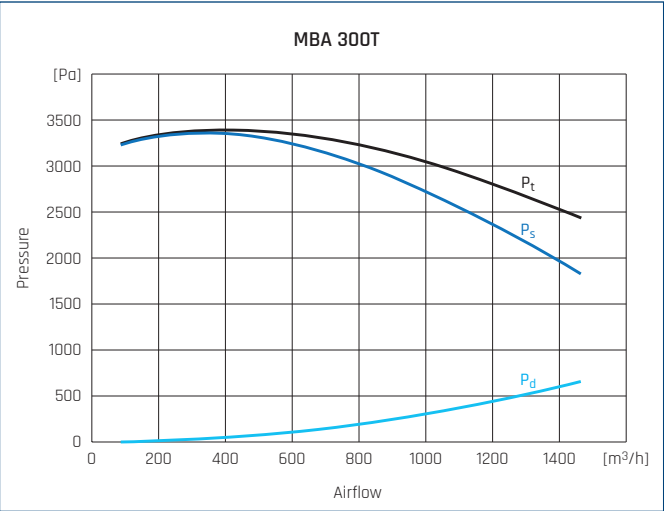
PERFORMANCE CURVES



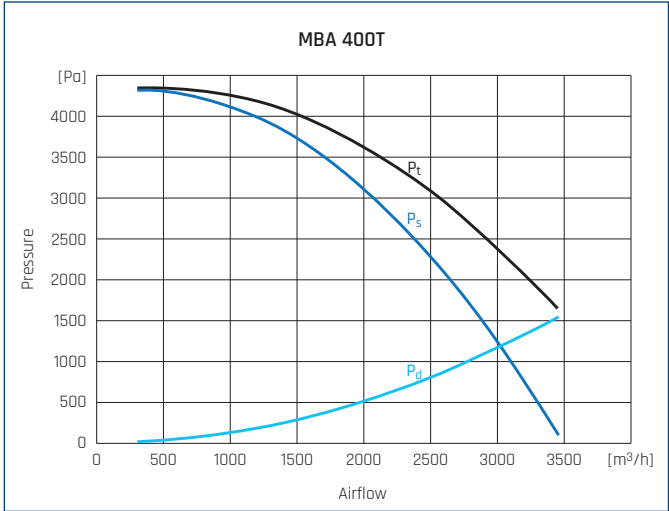
| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 62,0       | 70,7 | 1,50 | 1283   | 2642 | 2903  |



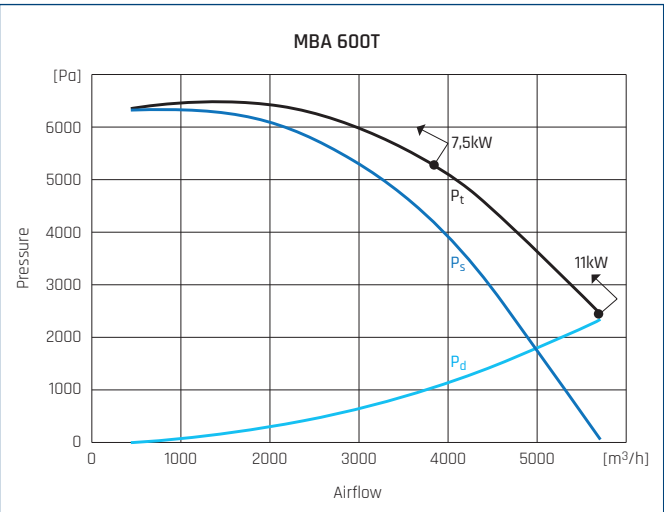
| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 55,1       | 64,6 | 1,23 | 847    | 2878 | 2750  |



| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 58,9       | 67,6 | 1,48 | 1081   | 2937 | 2912  |

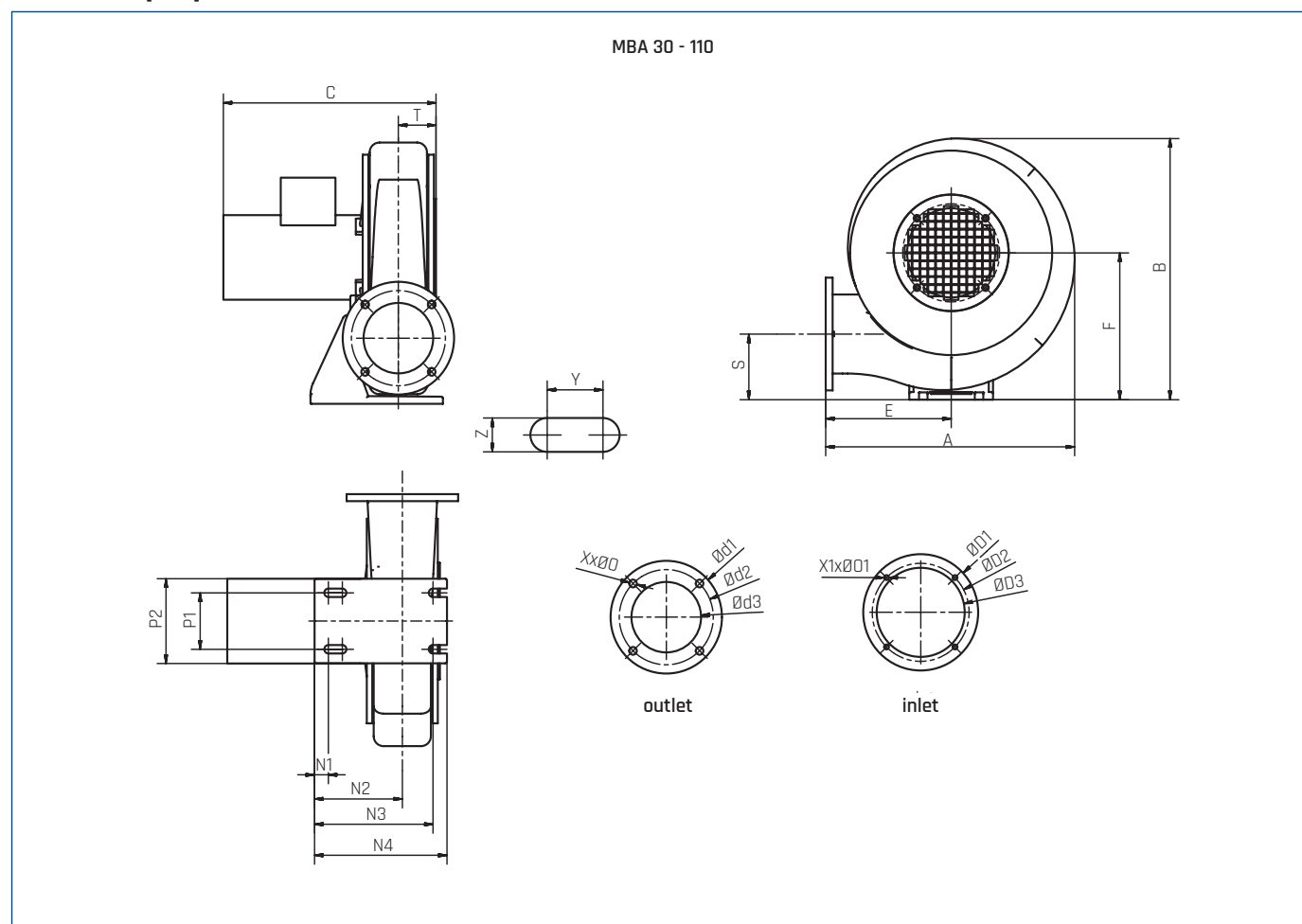


| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 66,6%      | 72,7 | 2,65 | 1976   | 3244 | 2911  |



| MC | EC    | VSD | SR | $\eta$ [%] | N    | [kW] | [m³/h] | [Pa] | [RPM] |
|----|-------|-----|----|------------|------|------|--------|------|-------|
| B  | Total | No  | 1  | 70,0       | 70,4 | 7,33 | 3190   | 5857 | 2900  |

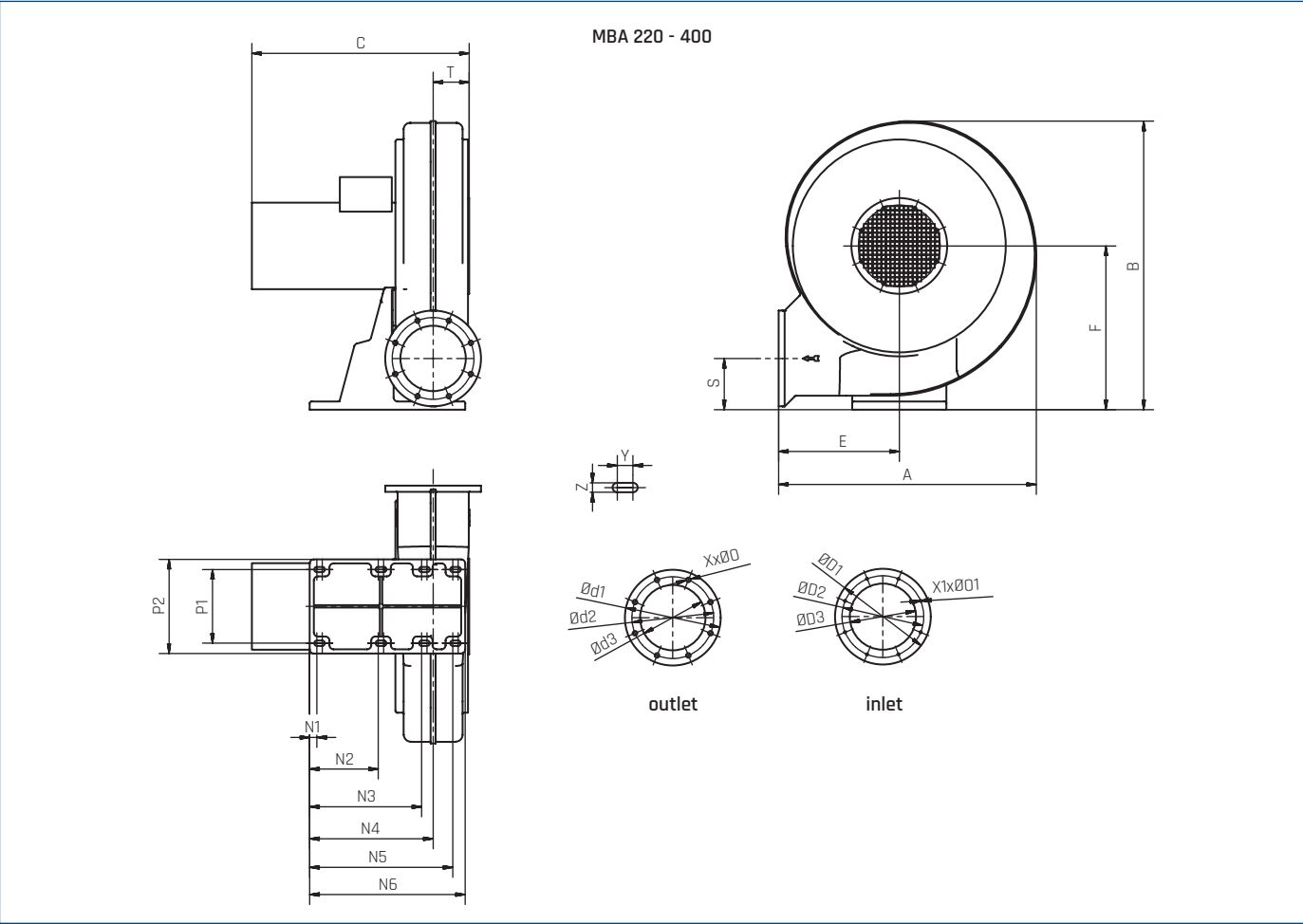
## DIMENSIONS [mm]



| Type           | A   | B   | C*  | Ød1 | Ød2 | Ød3 | ØD1 | ØD2 | ØD3 | E   | F   | N1   | N2  | N3  | N4  | Ø0  | Ø01 | P1  | P2  | S  | T  | Z  | X | X1 | Y  |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|----|----|----|---|----|----|
| <b>MBA 30</b>  | 357 | 370 | 305 | 160 | 135 | 100 | 165 | 139 | 126 | 180 | 208 | 20   | 126 | 170 | 190 | 11  | M8  | 80  | 120 | 93 | 54 | 12 | 4 | 4  | 20 |
| <b>MBA 40</b>  | 405 | 444 | 337 | 165 | 139 | 100 | 200 | 165 | 150 | 200 | 245 | 20   | 127 | 170 | 190 | 9,5 | M8  | 80  | 120 | 85 | 60 | 12 | 4 | 4  | 20 |
| <b>MBA 75</b>  | 451 | 515 | 364 | 165 | 139 | 100 | 165 | 139 | 126 | 210 | 290 | 46,5 | 156 | 215 | 240 | 9,5 | M8  | 140 | 200 | 91 | 58 | 13 | 4 | 4  | 17 |
| <b>MBA 110</b> | 451 | 515 | 364 | 165 | 139 | 100 | 200 | 182 | 162 | 210 | 290 | 46,5 | 156 | 215 | 240 | 9,5 | M8  | 140 | 200 | 91 | 59 | 13 | 4 | 4  | 17 |

\* Dimension C depends on the hydraulic motor selected.

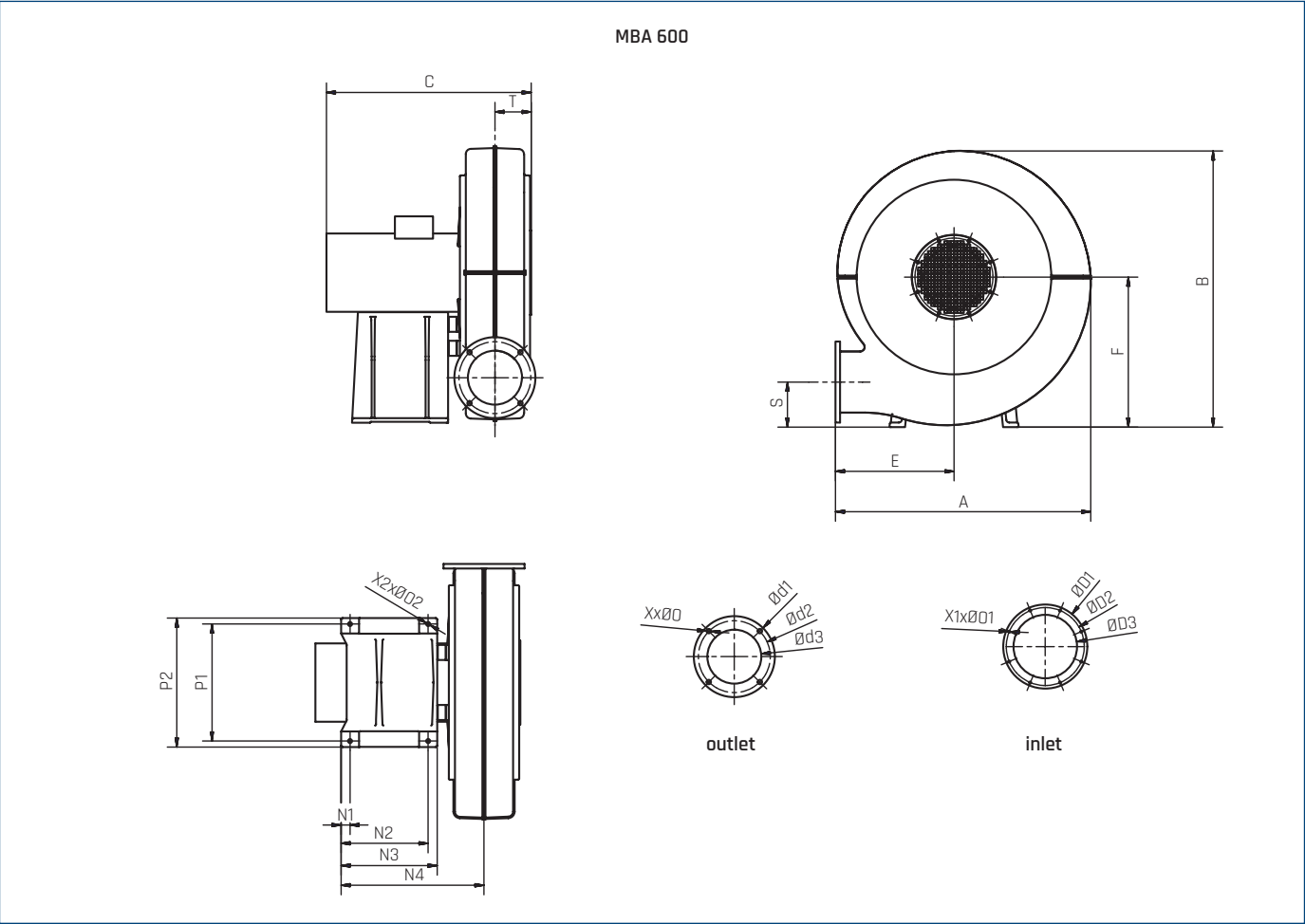
DIMENSIONS [mm]



| Type    | A   | B   | C*  | Ød1 | Ød2 | Ød3 | ØØ1 | ØØ2 | ØØ3 | E   | F   | N1   | N2    | N3    | N4    | N5    | N6  | Ø0   | ØØ1 | P1  | P2  | S   | T  | Z  | X | X1 | Y  |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|-----|------|-----|-----|-----|-----|----|----|---|----|----|
| MBA 220 | 570 | 650 | 455 | 230 | 200 | 160 | 200 | 182 | 162 | 270 | 368 | 17,5 | 167,5 | 273,5 | 297   | 349,5 | 380 | 9,5  | M8  | 180 | 230 | 135 | 87 | 13 | 4 | 4  | 13 |
| MBA 300 | 523 | 577 | 420 | 184 | 165 | 125 | 200 | 182 | 140 | 248 | 320 | 17,5 | 167,5 | 273,5 | 297   | 349,5 | 380 | 9,5  | M6  | 180 | 230 | 98  | 72 | 13 | 4 | 8  | 13 |
| MBA 400 | 630 | 705 | 532 | 234 | 200 | 160 | 234 | 200 | 162 | 295 | 400 | 17,5 | 167,5 | 273,5 | 301,5 | 349,5 | 380 | 11,5 | M6  | 180 | 230 | 125 | 88 | 13 | 8 | 8  | 13 |

\* Dimension C depends on the hydraulic motor selected.

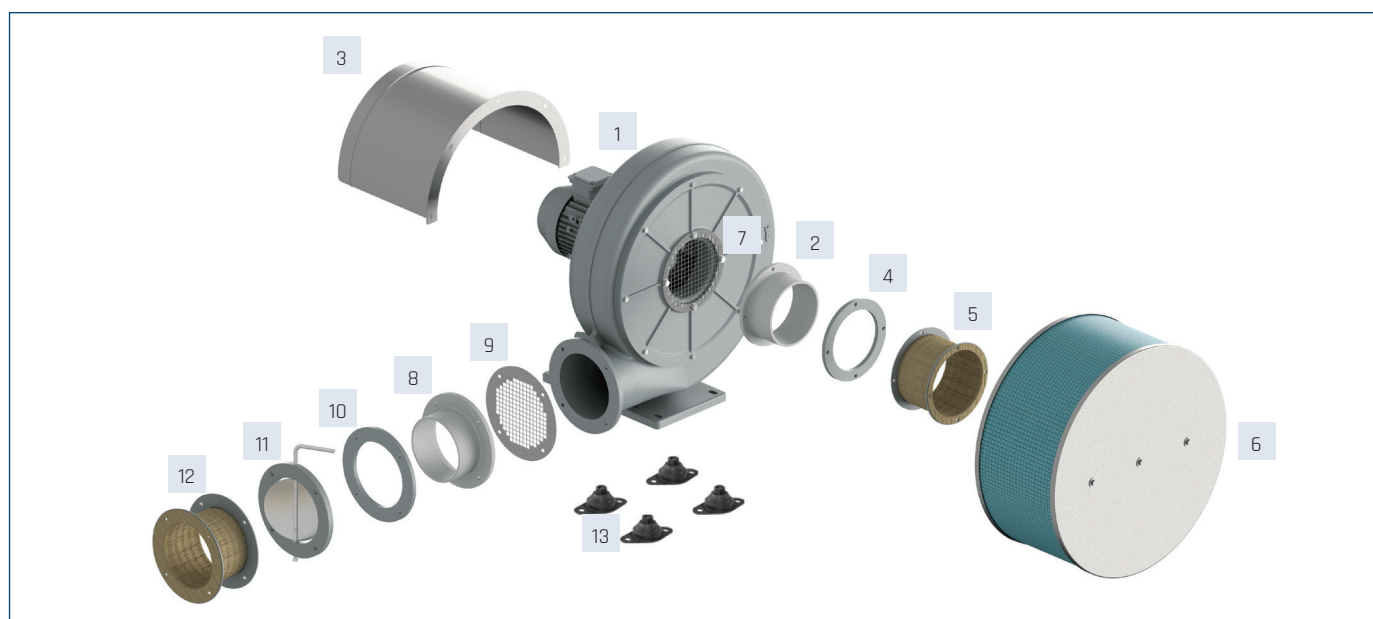
DIMENSIONS [mm]



| Type    | A   | B   | C*  | Ød1 | Ød2 | Ød3 | Ø01 | Ø02 | Ø03 | E   | F   | N1 | N2  | N3  | N4  | O  | Ø01 | Ø02 | P1  | P2  | S   | T   | X | X1 | X2 |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|---|----|----|
| MBA 600 | 850 | 920 | 682 | 270 | 240 | 180 | 280 | 260 | 212 | 395 | 500 | 30 | 290 | 320 | 476 | 14 | M8  | 13  | 390 | 430 | 150 | 120 | 4 | 8  | 4  |

\* Dimension C depends on the hydraulic motor selected.

## ACCESSORY ASSEMBLY



| Inlet   |                    |             |                |                          |             |                 |
|---------|--------------------|-------------|----------------|--------------------------|-------------|-----------------|
| 1       | 2                  | 3           | 4              | 5                        | 6           | 7               |
| Type    | Suction connection | Motor cover | Welding collar | Anti-vibration connector | Filter      | Protective mesh |
| MBA 20  | 45510440-04        | Brak        | 45515460       | 42519930                 | 25511485-22 | 26510223        |
| MBA 30  | 45510440-04        | 25511591    | 45515460       | 42519930                 | 25511485-22 | 26510223        |
| MBA 40  | 46515053           | 25511592    | 25511305       | 42519930-01              | 25511485-24 | 26510223-05     |
| MBA 75  | 46515040           | 25511593    | 45515460       | 42519930                 | 25511485    | 26510223        |
| MBA 110 | 46515050           | 25511593    | 45515510       | 42519931                 | 25511486-10 | 25511384        |
| MBA 220 | 46515050           | 25511594    | 45515510       | 42519931                 | 25511486-12 | 25511693        |
| MBA 300 | 46515050           | 25511595    | 45515510       | 42519932                 | 25511486-14 | 25511508        |
| MBA 350 | 46515050           | 25511595    | 45515510       | 42519932                 | 25511486-14 | 25511508        |
| MBA 400 | 46515052           | 25511596    | 45516588       | 42519933                 | 25511486-16 | 25511528        |
| MBA 600 | 46515051           | 25511597    | 45516586       | 42519934                 | 25511486-18 | 25511547        |

| Outlet  |                   |                 |                |          |                          |                      |
|---------|-------------------|-----------------|----------------|----------|--------------------------|----------------------|
| 1       | 8                 | 9               | 10             | 11       | 12                       | 13                   |
| Type    | Outlet connection | Protective mesh | Welding collar | Throttle | Anti-vibration connector | Anti-vibration mount |
| MBA 20  | 45510450          | 45510550        | 45515450       | 25511302 | 42519935                 | 26040960             |
| MBA 30  | 45510470          | 45510570        | 45516578       | 45510415 | 42519936                 | 26040960             |
| MBA 40  | 46515040-01       | 26510224        | 45515500       | 25511314 | 42519937                 | 26040960             |
| MBA 75  | 46515040-01       | 26510224        | 45515500       | 25511314 | 42519937                 | 26040960             |
| MBA 110 | 46515040-01       | 26510224        | 45515500       | 25511314 | 42519937                 | 26040960             |
| MBA 220 | 46515065-01       | 26510173        | 45516587       | 25511348 | 42519939                 | 26040965             |
| MBA 300 | 46515060-10       | 25511503        | 45516580       | 25511347 | 42519940                 | 26040965             |
| MBA 350 | 46515060-10       | 25511503        | 45516580       | 25511347 | 42519940                 | 26040965             |
| MBA 400 | 46515065-01       | 26510173        | 45516587       | 25511348 | 42519941                 | 26040965             |
| MBA 600 | 46515065-13       | 26510179        | 45516585       | 25511356 | 42519938                 | 26040970             |

|                           |                                        |        |                               |                         |                |                            |                                         |          |                                |                      |
|---------------------------|----------------------------------------|--------|-------------------------------|-------------------------|----------------|----------------------------|-----------------------------------------|----------|--------------------------------|----------------------|
|                           |                                        |        |                               |                         |                |                            |                                         |          |                                |                      |
| welding collar<br>- inlet | anti-vibration<br>connector<br>- inlet | filter | protective<br>mesh<br>- inlet | suction con-<br>nection | motor<br>cover | welding collar<br>- outlet | anti-vibration<br>connector<br>- outlet | throttle | protective<br>mesh<br>- outlet | outlet<br>connection |
|                           |                                        |        |                               |                         |                |                            |                                         |          |                                |                      |
| anti-vibration<br>mount   |                                        |        |                               |                         |                |                            |                                         |          |                                |                      |

## ELECTRICAL ACCESSORIES

| Type           | inverter | service switch    |
|----------------|----------|-------------------|
| MBA 30T        | L 0.4kW  | R-S 3-F + SP, 10A |
| MBA 40S        | -        | R-S 1-F + SP, 16A |
| MBA 40T        | L 0.4kW  | R-S 3-F + SP, 10A |
| MBA 75S        | -        | R-S 1-F + SP, 16A |
| MBA 75T        | L 0.75kW | R-S 3-F + SP, 10A |
| MBA 110S       | -        | R-S 1-F + SP, 16A |
| MBA 110T       | L 0.75kW | R-S 3-F + SP, 10A |
| MBA 220T       | L 1.5kW  | R-S 3-F + SP, 10A |
| MBA 300S       | -        | R-S 1-F + SP, 16A |
| MBA 300T       | L 1.5kW  | R-S 3-F + SP, 10A |
| MBA 400T       | L 4.0kW  | R-S 3-F + SP, 10A |
| MBA 600T 7,5kW | L 7,5kW  | R-S 3-F + SP, 16A |
| MBA 600T 11kW  | L 11.0kW | R-S 3-F + SP, 25A |



## Article number

|          |          |         |          |         |          |                   |             |                   |             |
|----------|----------|---------|----------|---------|----------|-------------------|-------------|-------------------|-------------|
| L 0.4kW  | 40016302 | L 1.5kW | 40016322 | L 4.0kW | 40016352 | R-S 3-F + SP, 10A | 91040908-01 | R-S 1-F + SP, 16A | 91040907-02 |
| L 0.75kW | 40016312 | L 2.2kW | 40016332 | L 7,5kW | 40016372 | R-S 3-F + SP, 16A | 91040908    | R-S 1-F + SP, 25A | 91040910    |
| L 11.0kW | 40016382 |         |          |         |          | R-S 3-F + SP, 25A | 91040910    |                   |             |