PLYMOVENT®
clean air at work

# FUA (60Hz)

## FUA-1800/2100/2700/3000/4700

The FUA is an extraction fan that is specially designed to remove exhaust gases, as well as welding and other fumes, dust and oil mist.

The fan is intended and designed for mounting to extraction arms, filter units and vehicle exhaust extraction systems or can be used as a central fan. The fan is rated for outdoor use.

### APPLICATIONS

The FUA fans are intended to be used for the following applications:
- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- stick/MMAW welding
- vehicle exhaust extraction systems

Do **not** use the FUA fans for the following applications or in the following circumstances:
- aluminium laser cutting
- extraction of aggressive fumes and gases (e.g. from acids, alkaline or soldering paste containing lithium)
- extraction of hot gases exceeding 176°F (80°C) continuously
- grinding aluminium and magnesium
- flame spraying
- extraction of cement, saw dust, wood dust, etc.
- explosive environments or explosive substances/gases

### SPECIFICATIONS

| | |
|---|---|
| **Physical dimensions and properties** | |
| Material:<br>• impeller (non-ferrous)<br>• housing | <br>• aluminium<br>• powder coated galvanized sheet metal |
| Color of housing | basalt grey (RAL 7011) |
| Motor design | NEMA |
| Fan type | centrifugal |
| Impeller | backward inclined |
| Design conditions | 68°F (20°C) at sea level |
| Max. airflow temperature | 176°F (80°C) continuously |
| **Performance** | |
| Max. starts/stops per hour | 20 (1ph); 30 (3ph) |
| **Ambient conditions** | |
| Operating temperature:<br>• min.<br>• nom.<br>• max. | <br>• -4°F (-20°C)<br>• 68°F (20°C)<br>• 176°F (80°C) |
| Max. relative humidity | 80% |
| Storage conditions | • -4 to 176°F (-20 to 80°C)<br>• relative humidity max. 80% |

| **Options and accessories** | |
|---|---|
| *Universal mounting bracket for freestanding, wall, or ceiling mounting* | |
| • MB-FUA/S1<br>• MB-FUA/S2 | • FUA-1800/2100/2700<br>• FUA-3000/4700 |
| *Mounting bracket to mount the fan on a FlexMax extension crane, UK extractor crane or FEB boom arm* | |
| • MB-FUA/C1<br>• MB-FUA/C2 | • FUA-1800/2100/2700<br>• FUA-3000/4700 |
| *Outlet transition from rectangular to round* | |
| • OL-250/FUA-3000<br>• OL-250/FUA-4700<br>• OL-315/FUA-4700 | • FUA-3000<br>• FUA-4700<br>• FUA-4700 |
| *Soft connection* | |
| • SC-160<br>• SC-250 | • FUA-1800/2100/2700<br>• FUA-3000/4700 (+OL-250) |
| **Scope of supply** | |
| Extraction fan | |
| **Shipping data** | |
| Harmonized Tariff Code | 8414.5940.90 |
| Number/package | 1 |

### APPROVALS/CERTIFICATES

| | |
|---|---|
| CE | *FUA-1800/2100/2700:*<br>compliance with CE directives<br>*FUA-3000/4700:*<br>compliance with CE directives as part of an installation |
| RoHS | Directive 2011/65/EC (RoHS) valid as of 8 June 2011 |
| | Plymovent certifies that the products shown herein are licensed to bear the AMCA Seal. The ratings shown comply with the requirements of the AMCA Certified Ratings Program.<br>FUA fans are rated AMCA Type B |
| CSA | Certified motor |
| UL® | Certified motor |

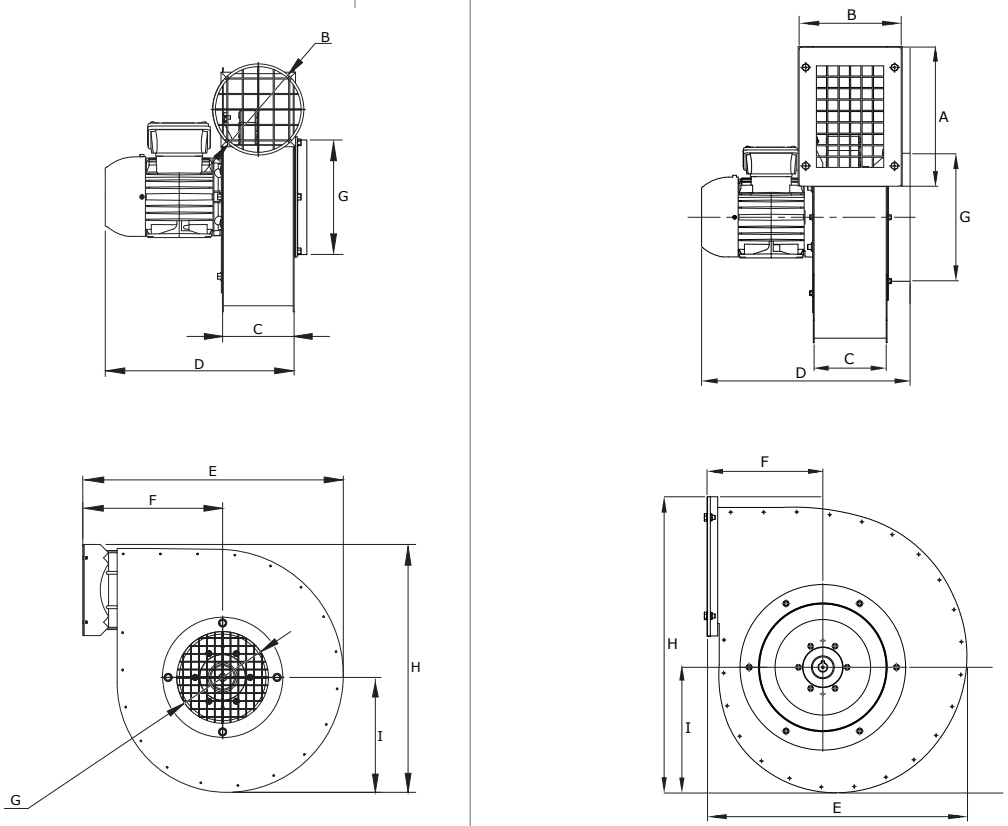
## ARTICLE NUMBERS, WEIGHTS AND PACKING DIMENSIONS

| Fan type | Connection voltage | Article number | Weight | | Packing dimensions |
|---|---|---|---|---|---|
| | | | Net | Gross* | |
| **FUA-1800** | 115/208-230V/1ph/60Hz | 0000102912 | 66.1 lbs | 72.8 lbs | 22.4 x 22.0 x 16.5 in.<br>(56,9 x 55,9 x 40,6 cm) |
| | 208-230/460V/3ph/60Hz | 0000102913 | 51.8 lbs | 56.2 lbs | 18.5 x 18.5 x 20.9 in.<br>(47 x 47 x 53 cm) |
| | 575V/3ph/60Hz | 0000102914 | 51.8 lbs | 56.2 lbs | 18.5 x 18.5 x 20.9 in.<br>(47 x 47 x 53 cm) |
| **FUA-2100** | 115/208-230V/1ph/60Hz | 0000102916 | 67.7 lbs | 68.3 lbs | 22.4 x 22.0 x 16.5 in.<br>(56,9 x 55,9 x 42 cm) |
| | 208-230/460V/3ph/60Hz | 0000102917 | 54.0 lbs | 58.4 lbs | 18.5 x 18.5 x 20.9 in.<br>(47 x 47 x 53 cm) |
| | 575V/3ph/60Hz | 0000102918 | 54.0 lbs | 58.4 lbs | 18.5 x 18.5 x 20.9 in.<br>(47 x 47 x 53 cm) |
| **FUA-2700** | 115/208-230V/1ph/60Hz | 0000102919 | 68.3 lbs | 76.1 lbs | 22.4 x 22.0 x 16.5 in.<br>(56,9 x 55,9 x 42 cm) |
| | 208-230/460V/3ph/60Hz | 0000102920 | 60.6 lbs | 65.0 lbs | 18.5 x 18.5 x 20.9 in.<br>(47 x 47 x 53 cm) |
| | 575V/3ph/60Hz | 0000102921 | 60.6 lbs | 65.0 lbs | 18.5 x 18.5 x 20.9 in.<br>(47 x 47 x 53 cm) |
| **FUA-3000** | 115/208-230V/1ph/60Hz | 0000102922 | 87.1 lbs | 93.7 lbs | 23.2 x 23.6 x 23.6 in.<br>(59 x 60 x 60 cm) |
| | 208-230/460V/3ph/60Hz | 0000102923 | 72.8 lbs | 80.5 lbs | 23.6 x 23.6 x 19.3 in.<br>(60 x 60 x 49 cm) |
| | 575V/3ph/60Hz | 0000103156 | 72.8 lbs | 80.5 lbs | 23.6 x 23.6 x 19.3 in.<br>(80 x 55,9 x 49 cm) |
| **FUA-4700** | 208-230V/1ph/60Hz | 0000102924 | 90.4 lbs | 99.2 lbs | 31.1 x 23.2 x 25.6 in.<br>(79 x 59 x 65 cm) |
| | 208-230/460V/3ph/60Hz | 0000102925 | 90.4 lbs | 99.2 lbs | 31.1 x 23.2 x 25.6 in.<br>(79 x 59 x 65 cm) |
| | 575V/3ph/60Hz | 0000102926 | 90.4 lbs | 99.2 lbs | 31.1 x 23.2 x 25.6 in.<br>(79 x 59 x 65 cm) |

*Gross weight = including packaging

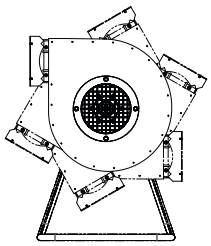
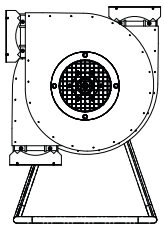
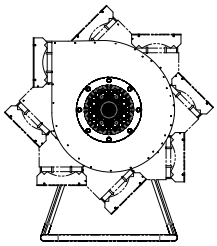
## DIMENSIONS

FUA-1800/2100/2700

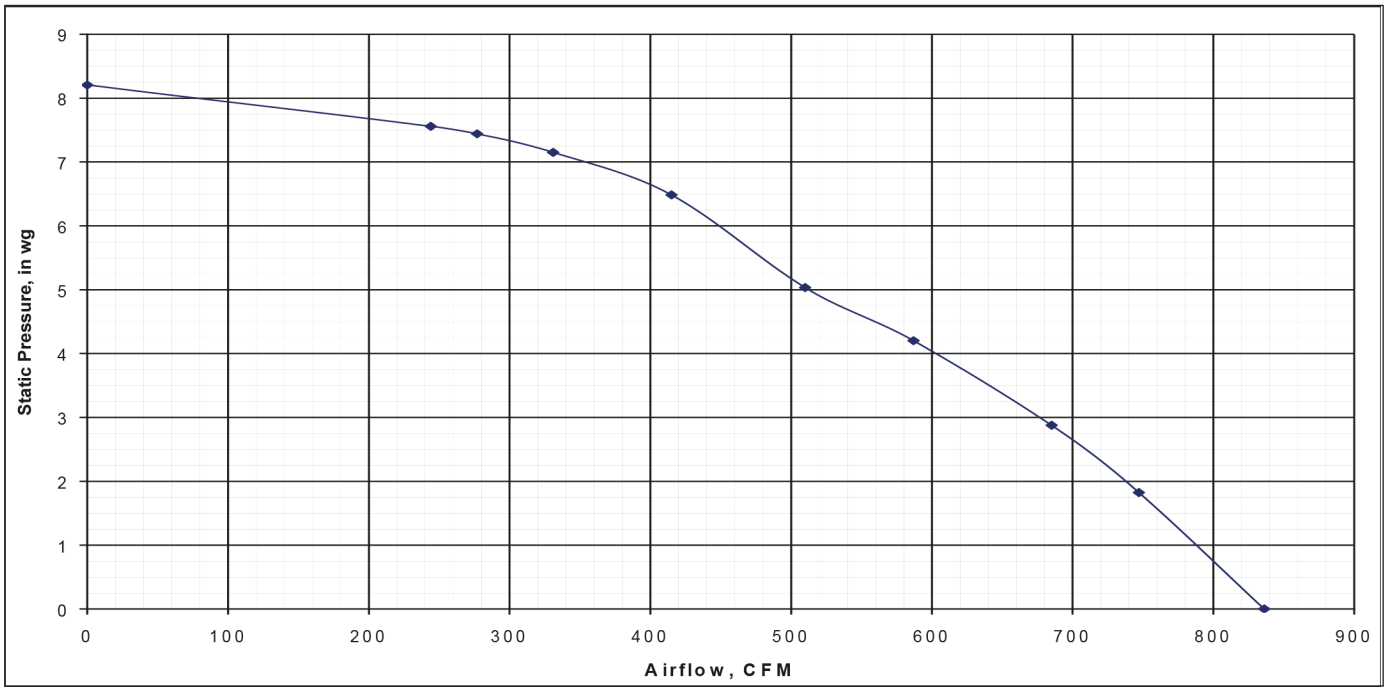



| | | FUA-1800 | | FUA-2100 | | FUA-2700 | | FUA-3000 | | FUA-4700 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| A | | - | - | - | - | - | - | 10.8 | 275 | 13.7 | 348 |
| B | | Ø 6.3 | Ø 159 | Ø 6.3 | Ø 159 | Ø 6.3 | Ø 159 | 5.5 | 140 | 5.5 | 140 |
| C | | 4.9 | 125 | 4.9 | 125 | 4.9 | 125 | 5.7 | 145 | 5.7 | 145 |
| D | 1~ motor | 15.9 | 403 | 16.9 | 430 | 16.9 | 430 | 19.3 | 489 | 20.0 | 508 |
| | 3~ motor | 14.8 | 375 | 14.8 | 375 | 15.8 | 400 | 18.1 | 459 | 18.8 | 478 |
| E | | 17.9 | 455 | 17.9 | 455 | 17.9 | 455 | 20.2 | 512 | 23.3 | 591 |
| F | | 9.6 | 244 | 9.6 | 244 | 9.6 | 244 | 9.0 | 228 | 10.2 | 258 |
| G | | Ø 6.3 | Ø 160 | Ø 6.3 | Ø 160 | Ø 6.3 | Ø 160 | Ø 9.8 | Ø 250 | Ø 9.6 | Ø 245 |
| H | | 17.1 | 433 | 17.1 | 433 | 17.1 | 433 | 23.0 | 583 | 28.9 | 733 |
| I | | 7.9 | 201 | 7.9 | 201 | 7.9 | 201 | 9.7 | 247 | 11.7 | 297 |

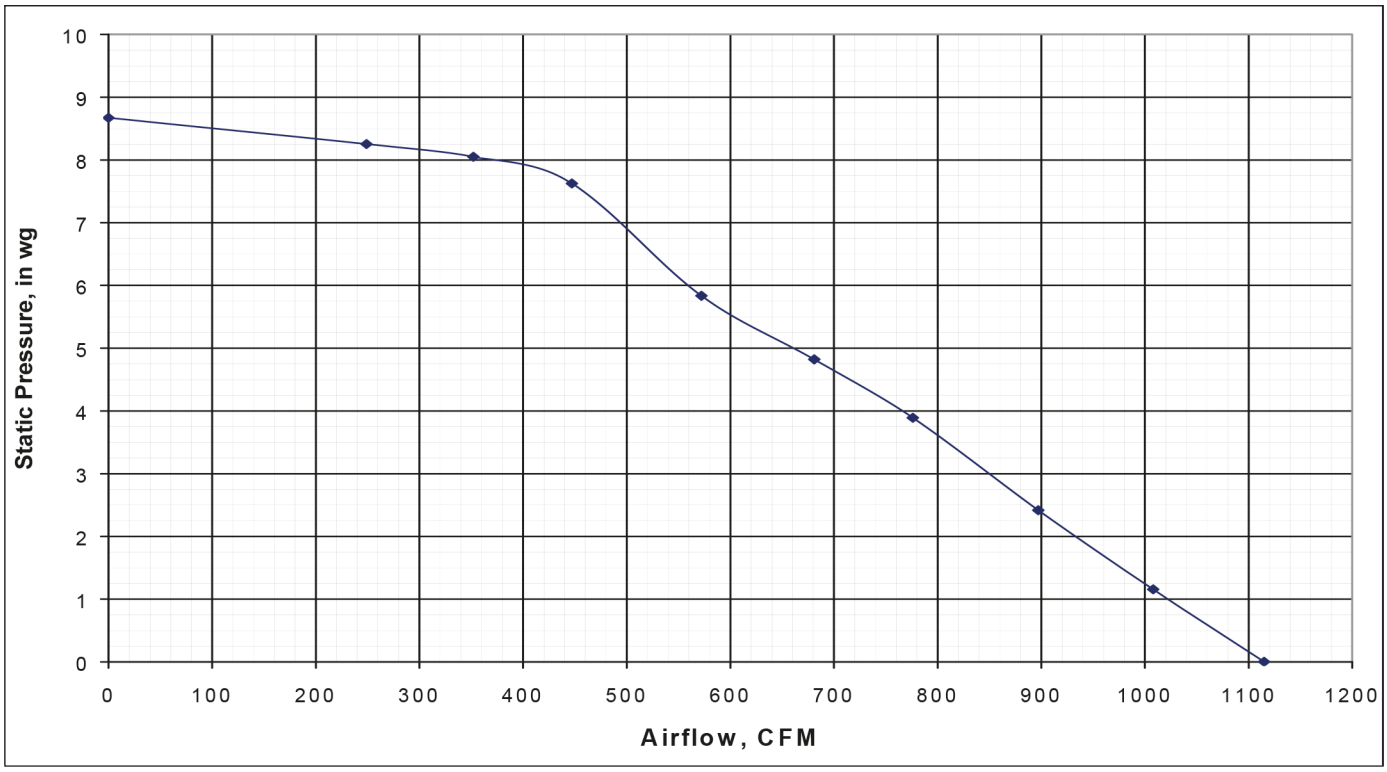
## POSSIBLE OUTLET POSITIONS

| FUA-1300/1800/ 2100/2700/3000 | | FUA-4700 |
|---|---|---|
|  |  |  |
| 60° or multiple | 90° | 45° or multiple |

**PRESSURE DROP FUA-1800 | FUA-2100**

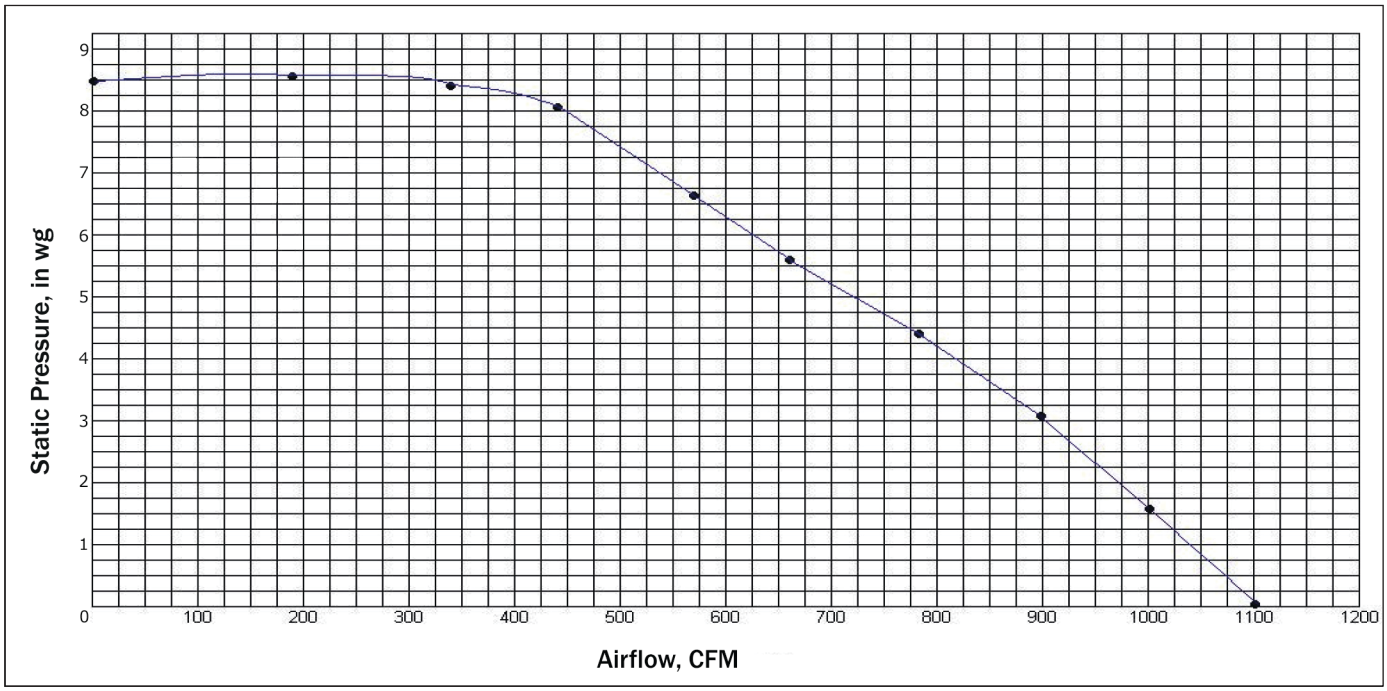



FUA-1800

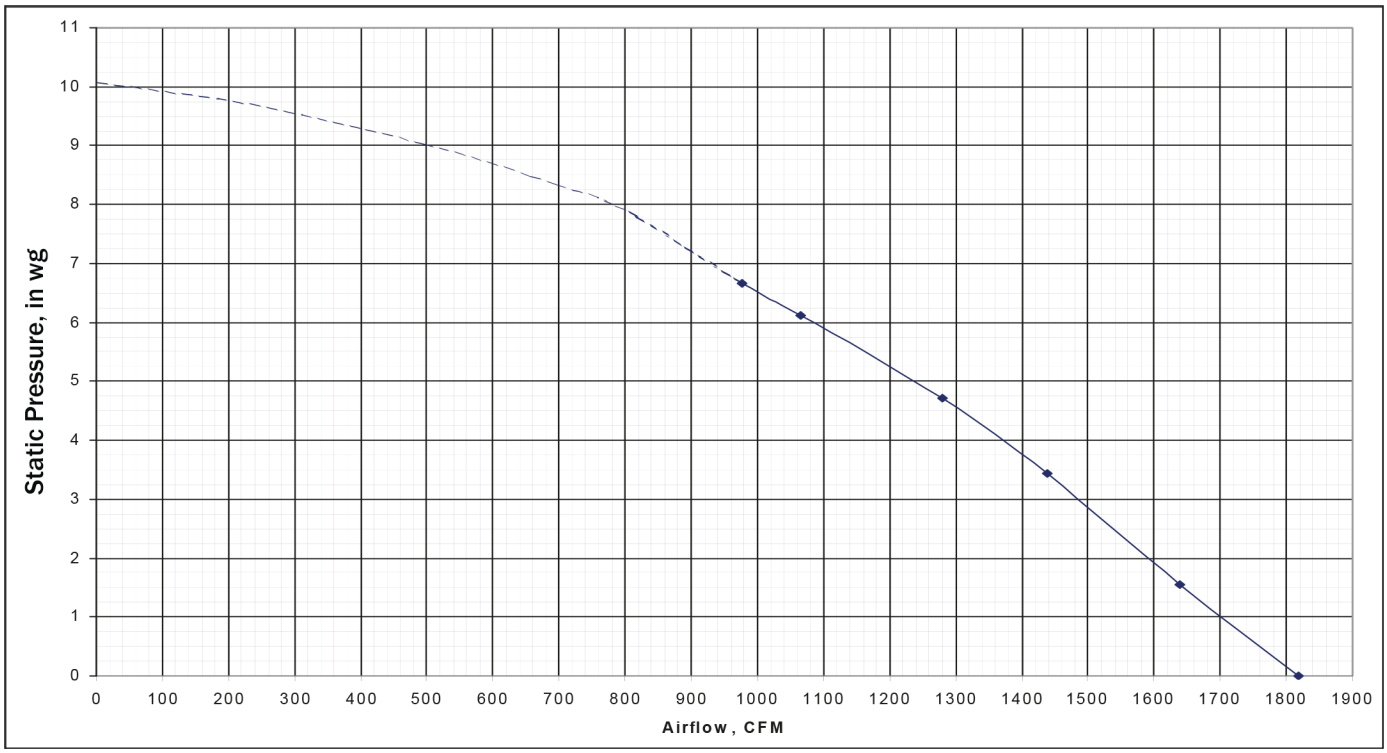



FUA-2100

**PRESSURE DROP FUA-2700 | FUA-3000**

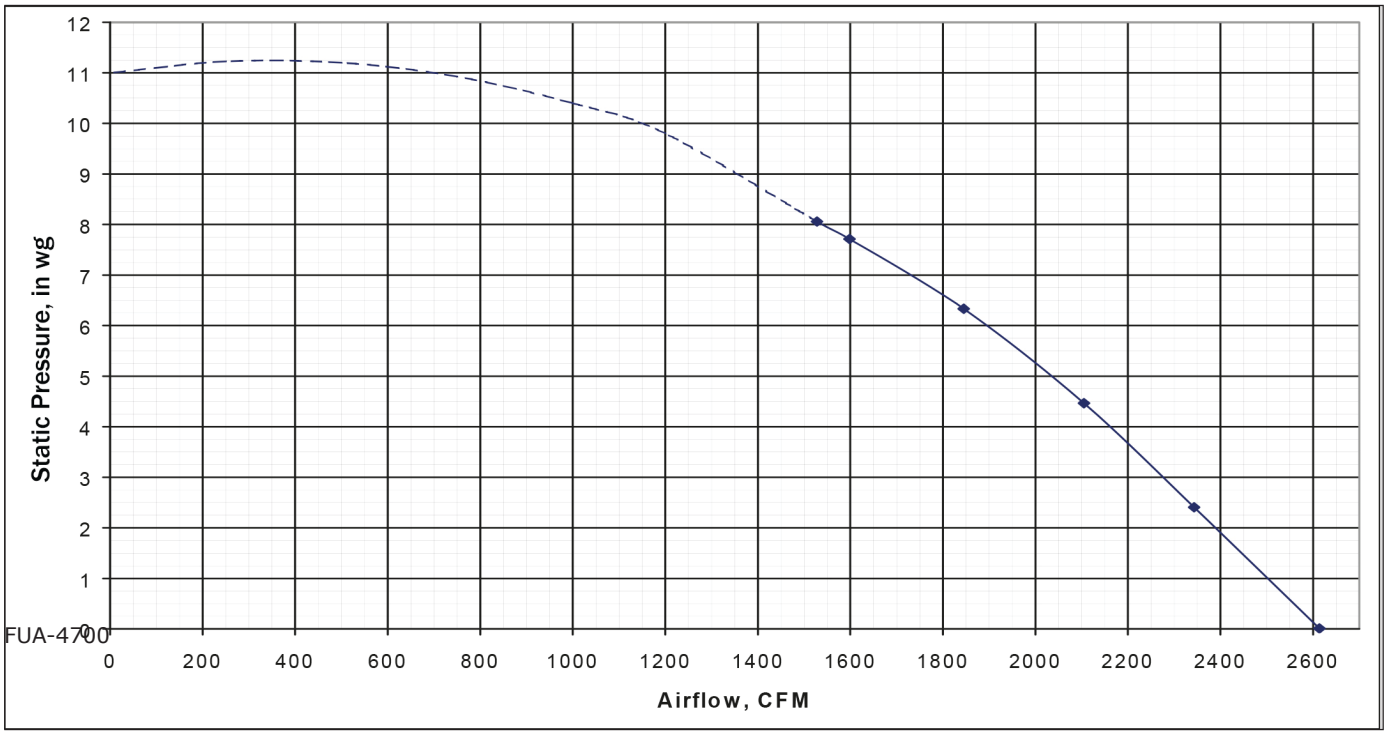



FUA-2700




FUA-3000

**PRESSURE DROP FUA-4700**




FUA-4700

**Sub table A: Sound power levels ($L_w$) in dB**

*Sound power is a measure of sound energy per time unit. For a sound source, unlike sound pressure, sound power is neither room dependent nor distance dependent. Sound power is a theoretical value that is not measurable. It is calculated and expressed in watts and as sound power level $L_w$ in decibels.*

The table below shows the sound power levels in dB calculated according to AMCA Standard 301.

| | Static pressure (in. WG) | Airflow (CFM) | Octave band number & center frequency number (Hz) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| FUA-1800 | 0 | 836 | 109 | 100 | 91 | 91 | 87 | 86 | 82 | 76 |
| | 2.4 | 715 | 105 | 98 | 89 | 88 | 83 | 83 | 78 | 71 |
| | 4.8 | 530 | 100 | 99 | 87 | 86 | 81 | 80 | 74 | 68 |
| | 7.15 | 331 | 104 | 97 | 81 | 82 | 79 | 76 | 70 | 65 |
| FUA-2100 | 0 | 1115 | 97 | 98 | 91 | 93 | 88 | 88 | 83 | 80 |
| | 2.5 | 890 | 90 | 95 | 91 | 93 | 86 | 84 | 79 | 75 |
| | 5 | 660 | 95 | 96 | 89 | 90 | 84 | 81 | 75 | 71 |
| | 7.62 | 447 | 88 | 94 | 89 | 89 | 83 | 79 | 72 | 70 |
| FUA-2700 | 0 | 1107 | 78 | 88 | 90 | 89 | 86 | 84 | 83 | 80 |
| | 2.95 | 900 | 79 | 87 | 89 | 87 | 85 | 81 | 79 | 74 |
| | 5.35 | 700 | 83 | 84 | 88 | 84 | 83 | 79 | 76 | 71 |
| | 7.75 | 500 | 80 | 82 | 88 | 87 | 85 | 79 | 74 | 70 |
| FUA-3000 | 0 | 1818 | 89 | 91 | 97 | 99 | 94 | 90 | 84 | 81 |
| | 2.2 | 1570 | 95 | 91 | 98 | 100 | 91 | 87 | 81 | 78 |
| | 4.4 | 1320 | 88 | 90 | 98 | 96 | 88 | 84 | 78 | 75 |
| | 6.66 | 977 | 89 | 91 | 95 | 94 | 86 | 82 | 75 | 72 |
| FUA-4700 | 0 | 2614 | 107 | 100 | 97 | 97 | 94 | 93 | 87 | 86 |
| | 2.4 | 2343 | 106 | 99 | 97 | 97 | 93 | 92 | 85 | 83 |
| | 5 | 2040 | 104 | 99 | 96 | 94 | 91 | 89 | 82 | 80 |
| | 8.05 | 1528 | 100 | 98 | 96 | 93 | 89 | 86 | 80 | 77 |

**Sub table B: Conversion of sound power level ($L_w$) to sound pressure level ($L_p$)**

*A sound source produces sound power, which generates a sound pressure fluctuation in the air. Sound power is the distance-independent cause of this, whereas sound pressure is the distance-dependent effect.*

The table below shows the dB value to be deduced from the values of sub table A to the achieve the sound pressure level at a certain distance.

| | Sound pressure level | | | |
|---|---|---|---|---|
| At a distance of: | 1 m (3.3 ft) | 2 m (6.5 ft) | 3 m (9.8 ft) | 4 m (13.1 ft) |
| Ref.: sound power levels ($L_w$) in sub table A | –11 dB | –17 dB | –21 dB | –23 dB |

**Sub table C: A-weighting of sound pressure level**

*The most common weighting that is used in noise measurement is A-weighting. Like the human ear, this effectively cuts off the lower and higher frequencies that the average person cannot hear.*

The table below shows the A-weighting related to the different frequencies.

| Octave band number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Frequency (Hz) | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| **A-weighing** | –0.8 | –0.2 | 0 | 0 | 0 | –0.2 | –0.8 | –3.0 |

Note: dB(A) levels are not licensed by AMCA International.

## MOTOR SPECIFICATIONS FUA-1800 | FUA-2100 | FUA-2700

| | FUA-1800 | | | FUA-2100 | | | FUA-2700 | | |
|---|---|---|---|---|---|---|---|---|---|
| Power | **0.75 HP (0,55 kW)** | | | **1 HP (0,75 kW)** | **1 HP (0,75 kW)** | | **1.5 HP (1,1 kW)** | | |
| Energy efficiency (NEMA) | **standard** | | | **standard** | **premium** | | **premium** | | |
| Rated voltage | **115/208-230V** | **208-230/460V** | **575V** | **115/208-230V** | **208-230/460V** | **575V** | **115/208-230V** | **208-230/460V** | **575V** |
| No. of phases | **1ph** | **3ph** | **3ph** | **1ph** | **3ph** | **3ph** | **1ph** | **3ph** | **3ph** |
| Frequency | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** |
| Frame | 56C | 56C | 56C | 56C | 56C | 56C | 56C | 56C | 56C |
| Poles | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Rated speed | 3450 rpm | 3450 rpm | 3475 rpm | 3450 rpm | 3480 rpm | 3480 rpm | 3450 rpm | 3490 rpm | 3460 rpm |
| Slip | Unlisted | Unlisted | 3.47% | Not Listed | Not Listed | 3.47% | Unlisted | Unlisted | 3.89% |
| Rated current | 10/5.2-5 A | 2.5-2.4/1.2 A | 0.904 A | 11.8/6.1-5.9 A | 3.0-2.8/1.4 A | 1.2 A | 17/8.7-8.5 A | 4.4-4.2/2 A | 1.62 A |
| L. R. Amperes | 30 A | 7.3 A @460V | 6.33 A | 64.40 A | 26.00 A @460V | 13.1 A | 133/66.8 A | 34.0/17.0 A | 13.6 A |
| Il/In | Unlisted | Unlisted | Unlisted | Not Listed | Not Listed | Not Listed | Unlisted | Unlisted | Unlisted |
| No load current | 2.93 @230V | .75A @460V | 0.440 A | 4.5 A @ 230 V | 0.95 A @460V | 0.829 A | 4.67 A @230V | 1.00 A @460V | 0.652 A |
| Rated torque | 18.00 ft-lbs (24..40 Nm) | 18.00 ft-lbs (24..40 Nm) | 1.12 ft-lbs (1.51 Nm) | 3.00 ft-lbs (4.07 Nm) | 3.02 ft-lbs (4.09 Nm) | 1.49 ft-lbs (2.02 Nm) | 2.25 ft-lbs (3.05 Nm) | 2.25 ft-lb (3.05 Nm) | 2.25 ft-lb (3.05 Nm) |
| Locked rotor torque | 356% | 256% | 250% | 250% | 360% | 229% | 240% | 378% | 240% |
| Breakdown torque | 267% | 361% | 290% | 260% | 433% | 380% | 270% | 498% | 270% |
| Design | | N | B | L | L | A | | B | B |
| Insulation class | N | B | F | F | F | F | L | F | F |
| Temperature rise | | 57 @100% load | 80 K | 90 @100% load | 46 @100% load | 80 @100% Load | | 46.0 @100% | 80 K |
| Locked rotor time | Unlisted | 22 s (hot) | 23 s (hot) | 90.0 F @FL | 17 s (hot) | 11 s (hot) | Unlisted | Unlisted | 21 s (hot) |
| Service factor | 1.15 / 1 | 1 / 1.15 | 1.15 | 1.15 / 1 | 1 / 1.15 | 1.15 | 1.15 / 1 | 1 / 1.15 | 1.15 |
| Duty cycle | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous |
| Ambient temperature | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) | -4°F to 76°F (-20°C to +80°C) |
| Altitude | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level | 3280 ft (1000 m) above sea level |
| Enclosure | IP43 (TEFC) | IP54 (TEFC) | IP55 (TEFC) | IP43 (TEFC) | IP43 (TEFC) | IP55 (TEFC) | IP43 (TEFC) | IP43 (TEFC) | IP55 (TEFC) |
| Mounting | Rigid/R1 | Rigid/R1 | Rigid/R1 | Rigid/F1 | Rigid/F1 | Rigid/F1 | Rigid/R1 | Rigid/R1 | B34T |
| Rotation | both | both | both | both | both | both | both | both | both |
| Preferred preset rotation direction | CCW, seen from drive end side | | | CCW, seen from drive end side | | | CCW, seen from drive end side | | |
| Approx. weight | 29 lbs (13.15 kg) | 22.00 lbs (9.98 kg) | 20.90 lbs (9.48 kg) | 45 lb (20,41 kg) | 35 lb (15,88 kg) | 32.3 lb (14,65 kg) | 37 lbs (16.78 kg) | 32 lbs (14.52 kg) | 27.10 lbs (12.29 kg) |
| Moment of inertia | 0.0020 kgm² | 0.0014 kgm² | 0.0014 kgm² | Not Listed | Not Listed | 0.0963 sq.ft. lb (0,0133 kgm²) | 0.0023 kgm² | 0.0020 kgm² | 0.0020 kgm² |
| Sound pressure level (global) | Unlisted | Unlisted | 68.0 dB(A) | Not Listed | Not Listed | 68.0 dB(A) | Unlisted | Unlisted | 68.0 dB(A) |
| Foundation loads:<br>• max. traction<br>• max. compression | Unlisted | Unlisted | Unlisted | Unlisted | Unlisted | Unlisted | Unlisted | Unlisted | <br>250 N<br>431 N |
| Load: 100%<br>• Power factor<br>• Efficiency | <br>76.3%<br>64% | <br>75.6%<br>78.4 % | <br>85%<br>72% | <br>87.0%<br>73% | <br>87.1%<br>88.4% | <br>90.0%<br>80.0% | <br>80%<br>72% | <br>82.2%<br>84.6% | <br>90%<br>77% |
| Load: 75%<br>• Power factor<br>• Efficiency | <br>73%<br>58.6% | <br>70.6%<br>73.5% | <br>79%<br>68% | <br>81.7%<br>72.9% | <br>86.7 %<br>82.1% | <br>86%<br>78.5% | <br>73.5%<br>70.5% | <br>76.3%<br>82.2% | <br>0.82<br>84.0% |
| Load: 50%<br>• Power factor<br>• Efficiency | <br>65.4%<br>50.3% | <br>58.9%<br>68.3% | <br>70%<br>62% | <br>71.8%<br>71% | <br>85.5%<br>72.2% | <br>76%<br>75.5% | <br>66.1%<br>62.7% | <br>64.7%<br>79.1% | <br>76%<br>72% |

## MOTOR SPECIFICATIONS FUA-3000 | FUA-4700

| | FUA-3000 | | | FUA-4700 | | |
|---|---|---|---|---|---|---|
| Power | **2 HP (1,5 kW)** | | | **3 HP (2,2 kW)** | | |
| Energy efficiency (NEMA) | **standard** | | | **premium** | | |
| Rated voltage | **115/208-230V** | **208-230/ 460V** | **575V** | **208-230V** | **208-230/ 460V** | **575V** |
| No. of phases | **1ph** | **3ph** | **3ph** | **1ph** | **3ph** | **3ph** |
| Frequency | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** |
| Frame | 56C | 56C | 56C | 145T | 56C | 56C |
| Poles | 2 | 2 | 2 | 2 | 2 | 2 |
| Rated speed | 3450 rpm | 3490 rpm | 3600 rpm | 3450 rpm | 3490 rpm | 3480 rpm |
| Slip | Unlisted | Unlisted | 3.06% | 2.78% | 3.89% | 3.33% |
| Rated current | 20/11.4-10 A | 5.2-4.8/2.4 A | 3.10 A | 14.38-13 A | 8.8-8/4 A | 3.01 A |
| L. R. Amperes | 64.40 A | 34.0/17.0 A | 16.1 A | 100 A @230V | 41 A @460V | 25.6 A |
| Il/In | 9.4<br>Code M | 8.9<br>Code L | 8.9<br>Code L | 7.0<br>Code J | 8.1<br>Code J | 8.1<br>Code J |
| No load current | 8.00/4.00 A | 1.50/0.750 A | 0.600 A | 5.30/2.65 A | 3.08/1.54 A | 1.12 A |
| Rated torque | 3.02 Nm | 3.06 Nm | 3.06 Nm | 6.10 Nm | 6.17 Nm | 6.17 Nm |
| Locked rotor torque | 250% | 350% | 350% | 210% | 330% | 330% |
| Breakdown torque | 310% | 380% | 380% | 230% | 360% | 360% |
| Design | | B | B | | B | B |
| Insulation class | F | F | F | F | F | F |
| Temperature rise | | 80 K | 80 K | | 80 K | 80 K |
| Locked rotor time | 8 s (hot) | 21 s (hot) | 21 s (hot) | 8 s (hot) | 14 s (hot) | 14 s (hot) |
| Service factor | 1.15 | 1.25 | 1.25 | 1.15 | 1.25 | 1.25 |
| Duty cycle | S1 | S1 | S1 | S1 | S1 | S1 |
| Ambient temperature | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) |
| Altitude | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level |
| Enclosure | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) |
| Mounting | B34T | B34T | B34T | B34T | B34T | B34T |
| Rotation | both | both | both | both | both | both |
| Preferred preset rotation direction | CCW, seen from drive end side | | | CCW, seen from drive end side | | |
| Approx. weight | 26.0 kg<br>(57.3 lbs) | 18.5 kg<br>(40.8 lbs) | 18.5 kg<br>(40.8 lbs) | 27.9 kg<br>(61.5 lbs) | 23.5 kg<br>(51.8 lbs) | 23.5 kg<br>(51.8 lbs) |
| Moment of inertia | 0.0023 kgm² | 0.0020 kgm² | 0.0020 kgm² | 0.0028 kgm² | 0.0026 kgm² | 0.0026 kgm² |
| Sound pressure level (global) | | 68.0 dB(A) | 68.0 dB(A) | | 68.0 dB(A) | 68.0 dB(A) |
| Foundation loads:<br>• max. traction<br>• max. compression | | 250 N<br>431 N | 250 N<br>431 N | 274 N<br>548 N | 55 kgf<br>78 kgf | 536 N<br>766 N |
| Load: 100%<br>• Power factor<br>• Efficiency | 0.88<br>76.4% | 0.86<br>84.0% | 0.86<br>84.0% | 0.90<br>79.0% | 0.86<br>86.5% | 0.86<br>86.5% |
| Load: 75%<br>• Power factor<br>• Efficiency | 0.86<br>75.5% | 0.82<br>84.0% | 0.82<br>84.0% | 0.87<br>78.5% | 0.81<br>86.5% | 0.81<br>86.5% |
| Load: 50%<br>• Power factor<br>• Efficiency | 0.83<br>74.3% | 0.72<br>81.5% | 0.72<br>81.5% | 0.79<br>75.0% | 0.70<br>85.5% | 0.70<br>85.5% |

**MOTOR SPECIFICATIONS FUA-3000 | FUA-4700**

| | FUA-3000 | | | FUA-4700 | | |
|---|---|---|---|---|---|---|
| Power | **2 HP (1,5 kW)** | | | **3 HP (2,2 kW)** | | |
| Energy efficiency (NEMA) | **standard** | | | **premium** | | |
| Rated voltage | **115/208-230V** | **208-230/ 460V** | **575V** | **208-230V** | **208-230/ 460V** | **575V** |
| No. of phases | **1ph** | **3ph** | **3ph** | **1ph** | **3ph** | **3ph** |
| Frequency | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** | **60Hz** |
| Frame | 56C | 56C | 56C | 145T | 56C | 56C |
| Poles | 2 | 2 | 2 | 2 | 2 | 2 |
| Rated speed | 3450 rpm | 3490 rpm | 3600 rpm | 3450 rpm | 3490 rpm | 3480 rpm |
| Slip | Unlisted | Unlisted | 3.06% | 2.78% | 3.89% | 3.33% |
| Rated current | 20/11.4-10 A | 5.2-4.8/2.4 A | 3.10 A | 14.38-13 A | 8.8-8/4 A | 3.01 A |
| L. R. Amperes | 64.40 A | 34.0/17.0 A | 16.1 A | 100 A @230V | 41 A @460V | 25.6 A |
| Il/In | 9.4<br>Code M | 8.9<br>Code L | 8.9<br>Code L | 7.0<br>Code J | 8.1<br>Code J | 8.1<br>Code J |
| No load current | 8.00/4.00 A | 1.50/0.750 A | 0.600 A | 5.30/2.65 A | 3.08/1.54 A | 1.12 A |
| Rated torque | 3.02 Nm | 3.06 Nm | 3.06 Nm | 6.10 Nm | 6.17 Nm | 6.17 Nm |
| Locked rotor torque | 250% | 350% | 350% | 210% | 330% | 330% |
| Breakdown torque | 310% | 380% | 380% | 230% | 360% | 360% |
| Design | | B | B | | B | B |
| Insulation class | F | F | F | F | F | F |
| Temperature rise | | 80 K | 80 K | | 80 K | 80 K |
| Locked rotor time | 8 s (hot) | 21 s (hot) | 21 s (hot) | 8 s (hot) | 14 s (hot) | 14 s (hot) |
| Service factor | 1.15 | 1.25 | 1.25 | 1.15 | 1.25 | 1.25 |
| Duty cycle | S1 | S1 | S1 | S1 | S1 | S1 |
| Ambient temperature | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) | -4°F to 176°F<br>(-20°C to +80°C) |
| Altitude | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level | 1000 m (3280 ft)<br>above sea level |
| Enclosure | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) | IP55 (TEFC) |
| Mounting | B34T | B34T | B34T | B34T | B34T | B34T |
| Rotation | both | both | both | both | both | both |
| Preferred preset rotation direction | CCW, seen from drive end side | | | CCW, seen from drive end side | | |
| Approx. weight | 26.0 kg (57.3 lbs) | 18.5 kg (40.8 lbs) | 18.5 kg (40.8 lbs) | 27.9 kg (61.5 lbs) | 23.5 kg (51.8 lbs) | 23.5 kg (51.8 lbs) |
| Moment of inertia | 0.0023 kgm² | 0.0020 kgm² | 0.0020 kgm² | 0.0028 kgm² | 0.0026 kgm² | 0.0026 kgm² |
| Sound pressure level (global) | | 68.0 dB(A) | 68.0 dB(A) | | 68.0 dB(A) | 68.0 dB(A) |
| Foundation loads:<br>• max. traction<br>• max. compression | | 250 N<br>431 N | 250 N<br>431 N | 274 N<br>548 N | 55 kgf<br>78 kgf | 536 N<br>766 N |
| Load: 100%<br>• Power factor<br>• Efficiency | 0.88<br>76.4% | 0.86<br>84.0% | 0.86<br>84.0% | 0.90<br>79.0% | 0.86<br>86.5% | 0.86<br>86.5% |
| Load: 75%<br>• Power factor<br>• Efficiency | 0.86<br>75.5% | 0.82<br>84.0% | 0.82<br>84.0% | 0.87<br>78.5% | 0.81<br>86.5% | 0.81<br>86.5% |
| Load: 50%<br>• Power factor<br>• Efficiency | 0.83<br>74.3% | 0.72<br>81.5% | 0.72<br>81.5% | 0.79<br>75.0% | 0.70<br>85.5% | 0.70<br>85.5% |

**Authorized Plymovent Distributor:**

| | |
|---|---|
| Product type | **FUA (60Hz)** |
| Article no. | refer to tables |
| Product category | extraction fans |
| Version | 03MAR2023/I |

Always check the latest version on **www.plymovent.com**