

# THT-71-4T-1.5-F-400 IE3

Code: 1139186



## 400 °C/2h and 300 °C/2h tubular axial extract fans with short casings

Tubular axial extract fans with short casing for immersed operation in fire risk zones.



### Fan:

- Tubular casing in sheet steel.
- Variable angle impeller made of cast aluminium.
- Approved in accordance with standard EN 12101-3, with certifications no.: 0370-CPR-0305 (F400) and 0370-CPR-0973 (F300).
- Airflow direction from motor to impeller.

### Motor:

- Class H motors for S1 continuous operation and S2 emergency use. With ball bearings, IP55 protection and 1 or 2 speeds, depending on model.
- Motors with IE3 efficiency for powers equal to or greater than 0.75 kW, except single-phase, 2-speed and 8-pole.
- Three-phase 230/400 V 50 Hz (up to 3 kW) and 400/690 V 50 Hz (powers greater than 3 kW).
- Maximum temperature of air to be carried: S1 -25 °C +40 °C continuous service, also suitable for warm climates with temperatures up to 50 °C. S2 operation, 300 °C/2h, 400 °C/2h.

### Finish:

- Anti-corrosive finish in polyester resin, polymerised at 190 °C, after degreasing with phosphate-free nanotechnology treatment.

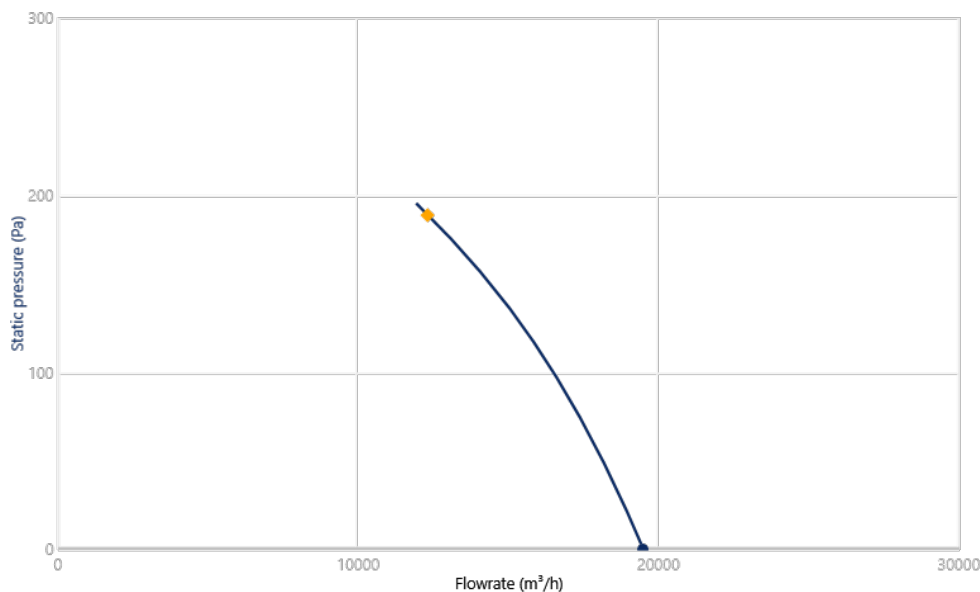
### Available versions:

- THT/CL: Tubular axial fans with long casing equipped with inspection hatch.

### On request:

- Airflow direction from impeller to motor.
- 100% reversible impellers.

## CHARACTERISTIC CURVE AND ACOUSTICS AT 1.2KG/M<sup>3</sup>



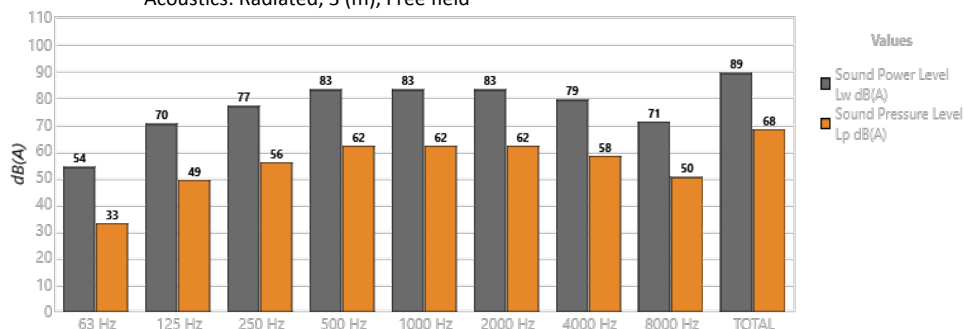
### Design Point

|          |       |
|----------|-------|
| Q (m³/h) | 19480 |
| Ps (Pa)  | 0     |

### Service Point (SP)

|                                |        |
|--------------------------------|--------|
| Q (m³/h)                       | 19480  |
| Ps (Pa)                        | -      |
| Pd (Pa)                        | 112.1  |
| Pt (Pa)                        | 112.1  |
| Impeller (rpm)                 | 1420   |
| Blade Inclination (°)          | 12     |
| Max. Temp. (°C)                | 40     |
| Outlet air speed (m/s)         | 13.67  |
| Mechanical efficiency (Pt) (%) | 67.78  |
| SFP (kW/m³/s)                  | 0.1968 |
| Mechanical power (kW)          | 0.8947 |

Acoustics: Radiated, 3 (m), Free field



| Band    | Lw dB(A) | Lp dB(A) |
|---------|----------|----------|
| 63 Hz   | 54       | 33       |
| 125 Hz  | 70       | 49       |
| 250 Hz  | 77       | 56       |
| 500 Hz  | 83       | 62       |
| 1000 Hz | 83       | 62       |
| 2000 Hz | 83       | 62       |
| 4000 Hz | 79       | 58       |
| 8000 Hz | 71       | 50       |
| TOTAL   | 89       | 68       |

## TECHNICAL CHARACTERISTICS

|                              |       |
|------------------------------|-------|
| Airflow maximum (m³/h)       | 19480 |
| Speed (rpm)                  | 1420  |
| Maximum static pressure (Pa) | 195.2 |
| Maximum total pressure (Pa)  | 237.1 |

## ERP

|                      |        |
|----------------------|--------|
| Efficiency           | 49.4%  |
| Efficiency grade N   | 55.0   |
| Measurement category | C      |
| Efficiency category  | Static |
| Specific ratio       | 1.00   |
| Flowrate (m³/h)      | 12330  |

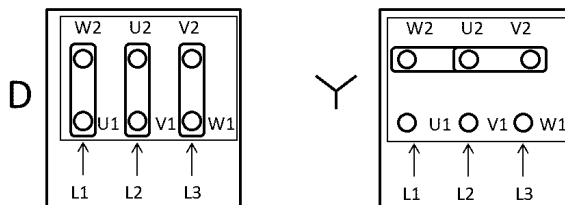
|                      |                   |
|----------------------|-------------------|
| Pressure (Pa)        | 188               |
| Input power (kW)     | 1.305             |
| Speed (rpm)          | 1434              |
| Variable speed drive | VSD not necessary |
| ErP compliance       | 2015              |

♦ Data established at point of optimum efficiency

## MOTOR DATA

|                              |      |
|------------------------------|------|
| Rated Mechanical Power (kW)  | 1.1  |
| Hz/phases                    | 50/3 |
| Motor (rpm)                  | 1430 |
| Poles                        | 4P   |
| Max. current (A) 380-400 V Y | 2.37 |
| Max. current (A) 220-240 V D | 4.1  |
| Motor protection             | IP55 |
| Motor class                  | F400 |
| Motor frame size             | 90S  |

Data can change, please check motor plate



## DIMENSIONS

| ØA  | ØB  | C   | ØD  | E   | ØJ | N         |
|-----|-----|-----|-----|-----|----|-----------|
| 810 | 770 | 429 | 710 | 300 | 12 | 16x22°30' |

Dimensions without explicitly defined units are shown in millimeters (mm). Dimensions depending on the motor are approximate

|                     |    |
|---------------------|----|
| Approx. weight (kg) | 52 |
|---------------------|----|

