

# CPH

## Belt-driven box fan certified 400°C/2H



### Product

CPH

### Application

Industrial and commercial applications

### Construction

Galvanized sheet metal box with forward curved blade fan and external motor

### FEATURES

The CPH series double-inlet belt-driven fans are forward curved blade Centrifugal box fans designed for industrial and commercial use. They are used in systems for standard ventilation (such as kitchens, bathrooms, hotel rooms...). However, in the event of fire, they are capable of extracting smoke at temperatures up to 200°C in continuous operation or up to 400°C for 2 consecutive hours in case of fire.

The entire product range covers a flow rate field varying from a minimum of 1,500 m<sup>3</sup>/h to a maximum of 35,000 m<sup>3</sup>/h, with static pressures ranging from a minimum of 100 Pa to a maximum of 1,760 Pa.

### STRUCTURE

Fully dismantlable galvanized steel sheet structure with belt drive protection guard. Motor positioned outside the structure, therefore outside the hot fume stream, resulting in increased reliability and lifespan. Height-adjustable motor mounting plate that allows optimal belt tensioning, with the possibility of positioning the transmission and motor either on the right or left side of the unit (facing the discharge outlet) according to system requirements

Configurations:

- motor above fan for all models with motor power equal to or less than 7.5 kW;
- floor-mounted motor for all models with motor power equal to or greater than 11 kW.

### FAN

Double-inlet centrifugal fan with forward curved blade impeller in galvanized steel. Bearings mounted on anti-vibration supports outside the air flow.

### MOTOR

Three-phase asynchronous electric motor up to 30230/400V IP55 UNELMEC class F, in 4 or 6 pole or dual-speed version.

## TECHNICAL CHARACTERISTICS

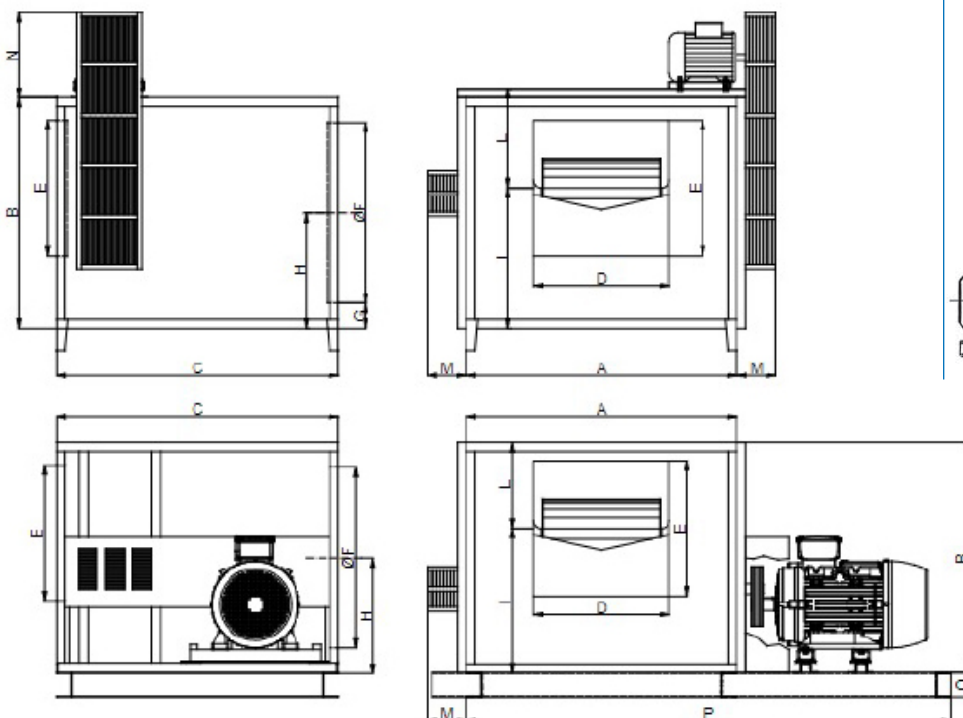
Ducted air	Clean
Flow rates	1500-35000mc/h
Pressure heads	100-1760Pa
Air temperature	-20°C/+200°C - +400°C 2H
Supply voltage	400V-3ph-50Hz



## DIMENSIONS

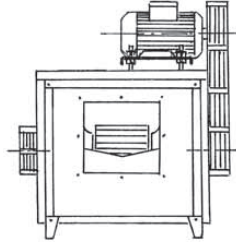
Size	250	300	350	400	450	500	unit of measurement
A	600	700	800	900	1000	1200	[mm]
B	600	680	750	840	960	1020	[mm]
C	650	730	860	1030	1200	1250	[mm]
D	300	350	400	450	500	600	[mm]
E	300	350	400	450	500	600	[mm]
øF	405	500	610	650	750	800	[mm]
G	100	100	100	100	100	100	[mm]
H	300	340	375	420	480	510	[mm]
I	370	425	470	535	630	640	[mm]
L	230	255	280	305	330	380	[mm]
M	158	173	173	173	173	173	[mm]
N <sub>1</sub>	270   350	340   410	340   410	360   420	350   420	380   420	[mm]
O	100	100	100	100	120	120	[mm]
P <sub>2</sub>	1100	1200	1580	1680	1850	2150	[mm]
Wt	60	85	130	180	230	280	[kg]

- <sup>1</sup> Minimum and maximum values depending on the electric motor installed.  
<sup>2</sup> Dimensions referred to the largest motor size for each model (configuration "/A").

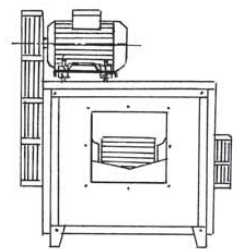


## MOTOR POSITION

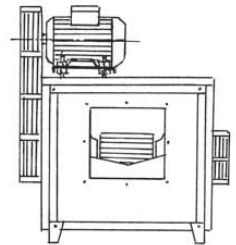
### Right position on roof



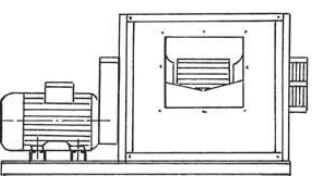
### Left position on roof



### Right position on base

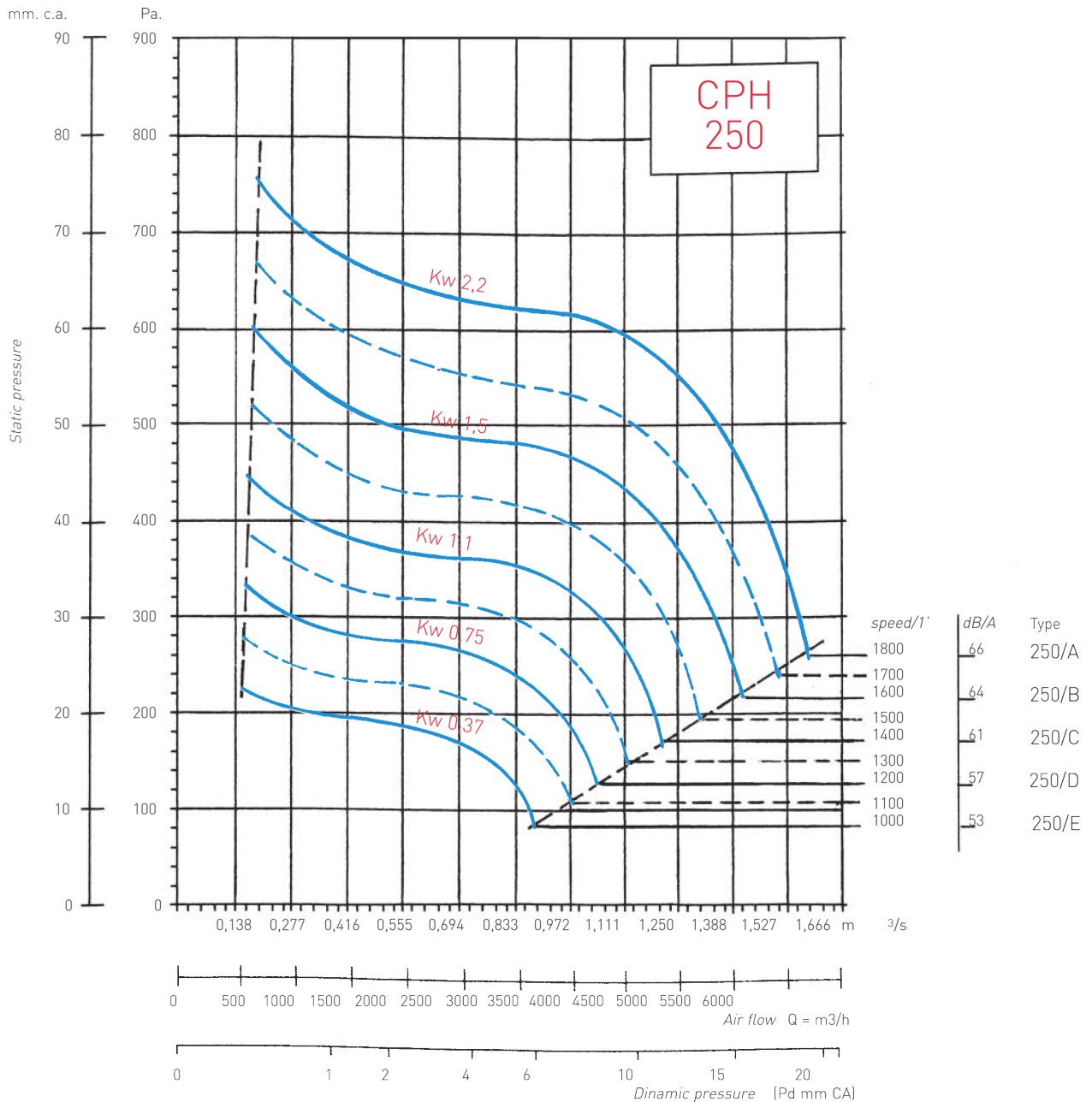


### Left position on base



## CHARACTERISTIC CURVES

### CPH 250



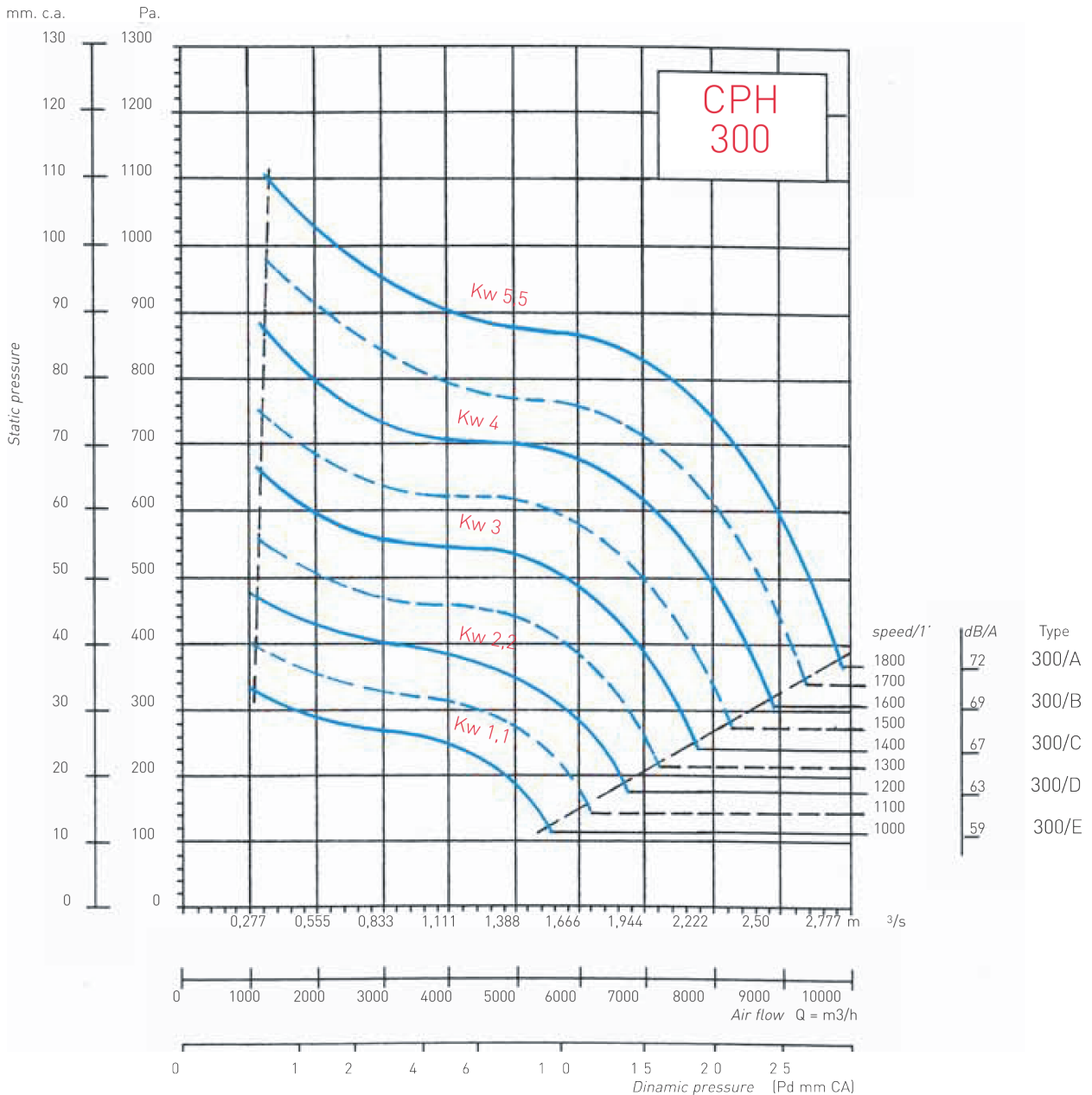
kW referred to installed power

Sound pressure level at 3 m in free field, from the fan center with ducted outlets. Tolerance - 3 dB.

All performances are referred to air at 15°C - Barometric pressure 760 mm Hg - Specific weight 1.22 kg/m³



## CPH 300

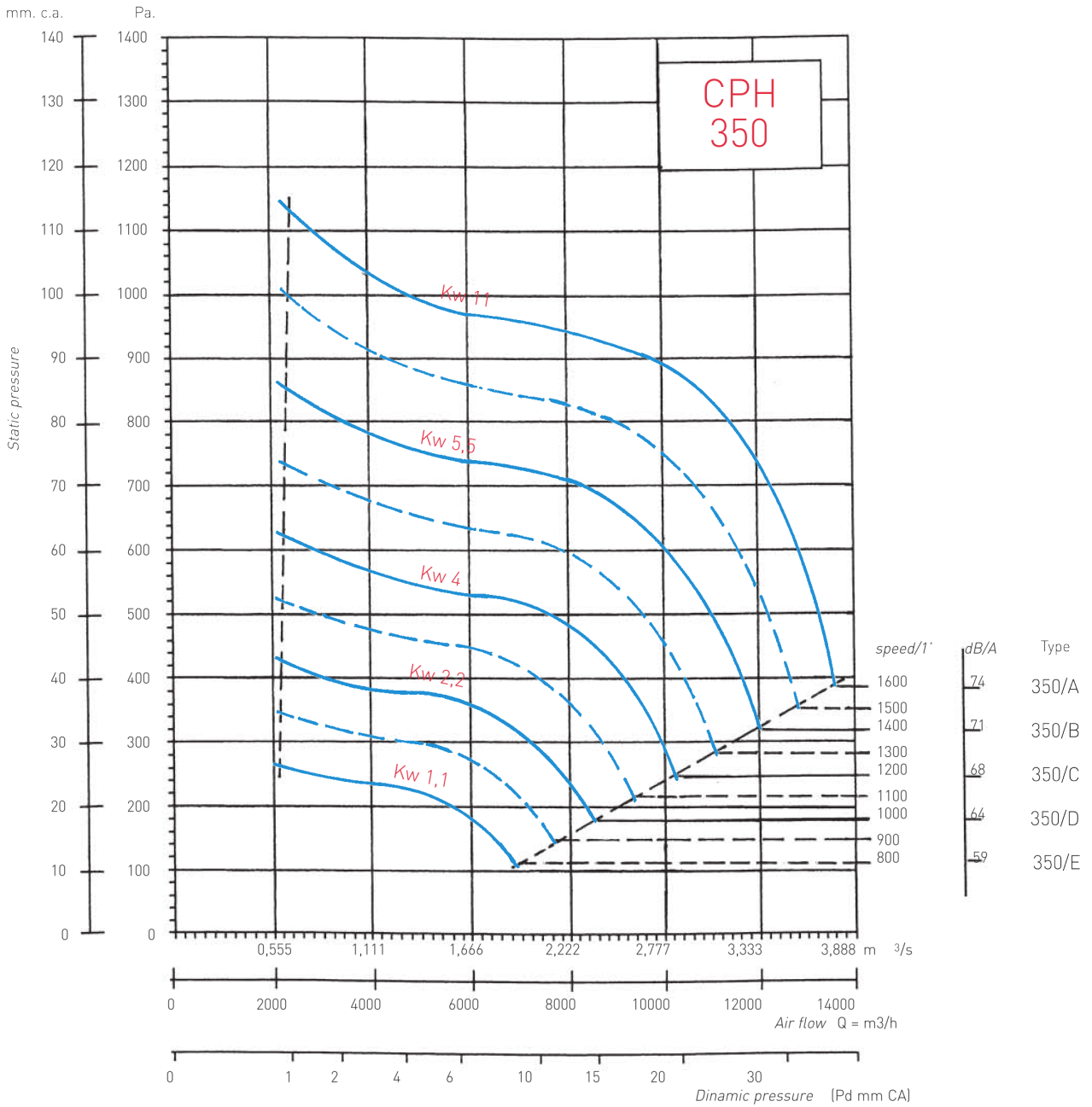


kW referred to installed power

Sound pressure level at 3 m in free field, from the fan center with ducted outlets. Tolerance ~ 3 dB.

All performances are referred to air at 15°C - Barometric pressure 760 mm Hg - Specific weight 1.22 kg/m³

## CPH 350



kW referred to installed power

Sound pressure level at 3 m in free field, from the fan center with ducted outlets. Tolerance ~ 3 dB.

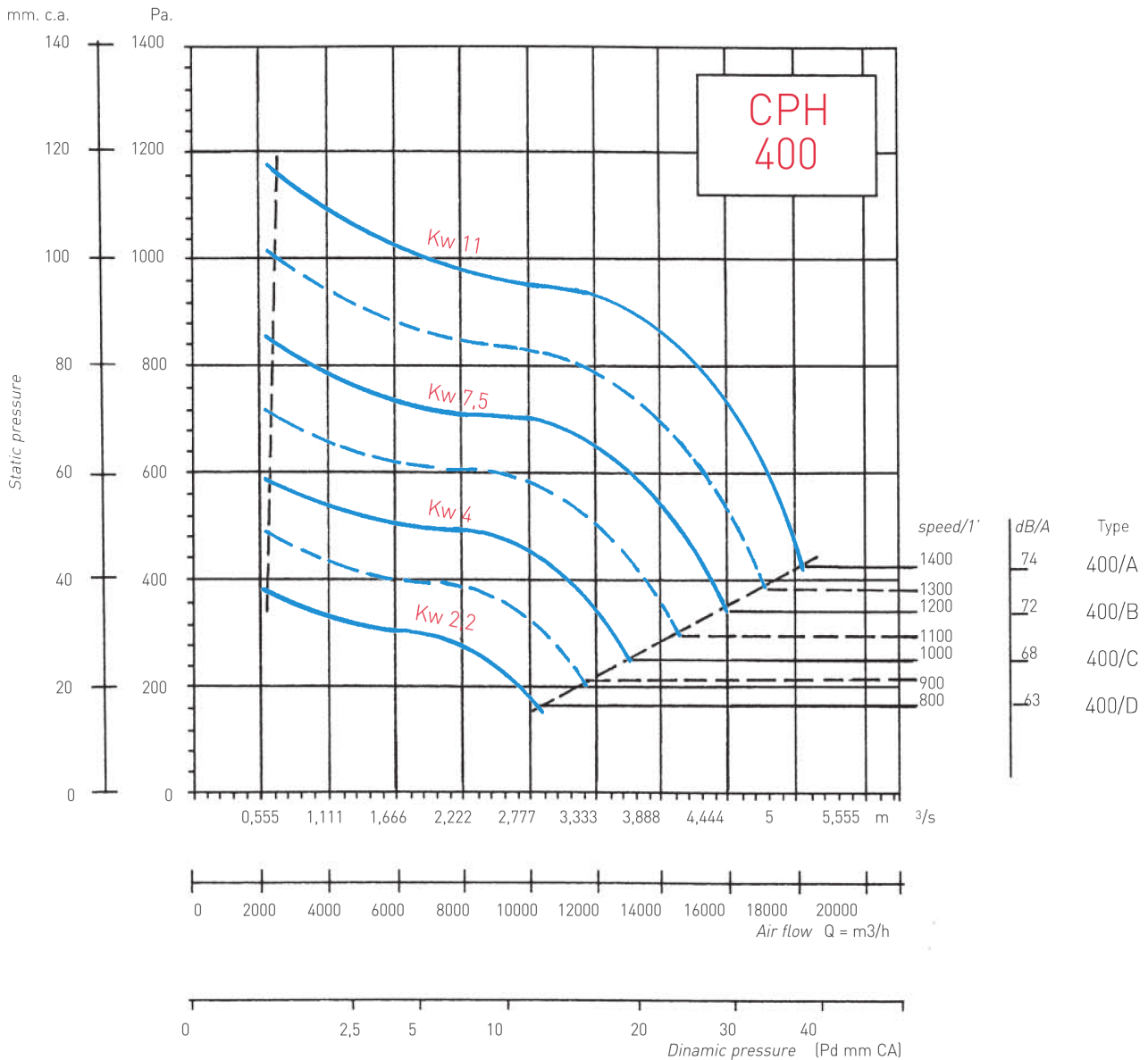
All performances are referred to air at 15°C - Barometric pressure 760 mm Hg - Specific weight 1.22 kg/m³



# Ventilation

Comfort and performance  
at maximum efficiency  
energy

## CPH 400

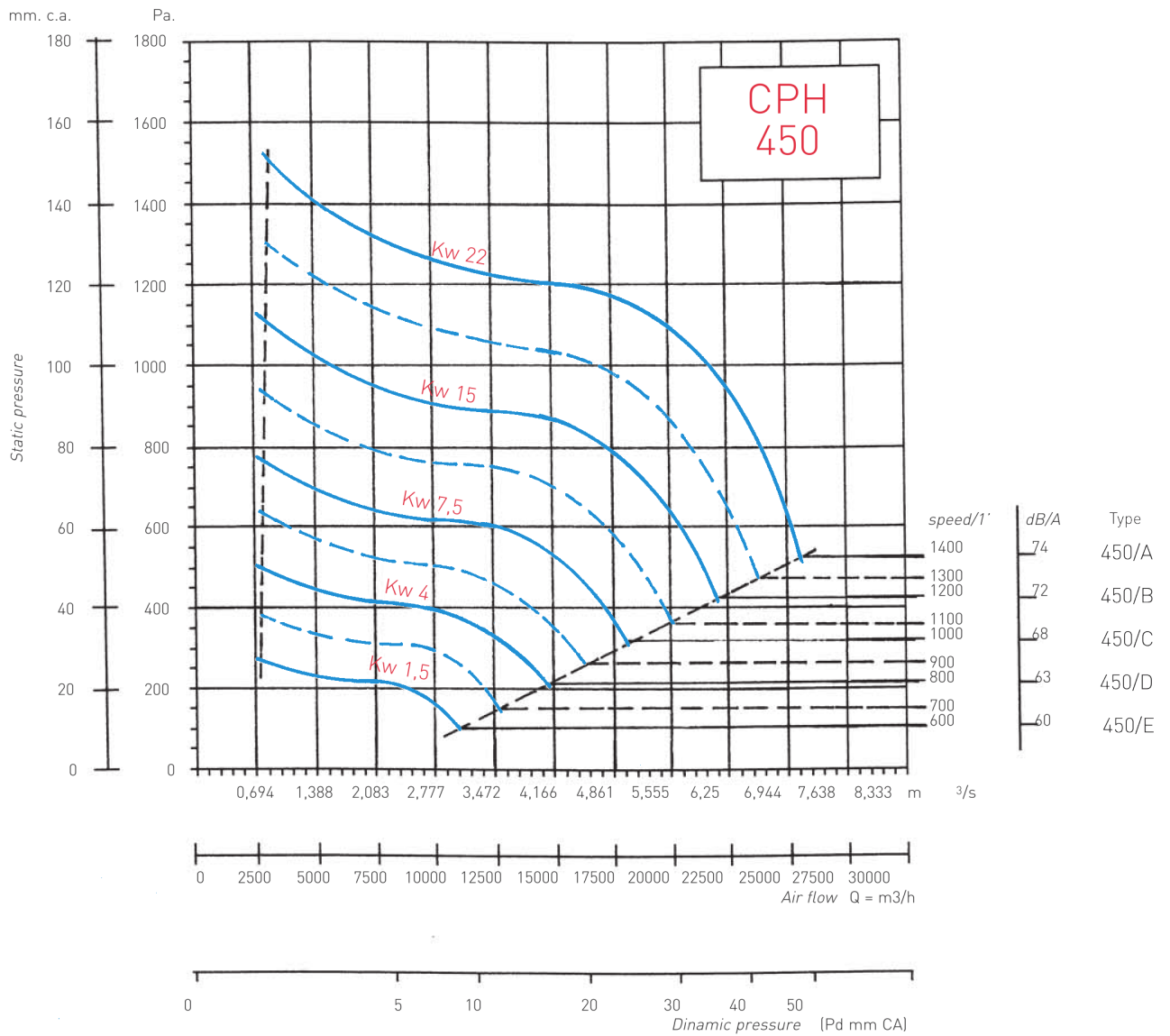


kW referred to installed power

Sound pressure level at 3 m in free field, from the fan center with ducted outlets. Tolerance - 3 dB.

All performances are referred to air at 15°C - Barometric pressure 760 mm Hg - Specific weight 1.22 kg/m³

## CPH 450



kW referred to installed power

Sound pressure level at 3 m in free field, from the fan center with ducted outlets. Tolerance - 3 dB.

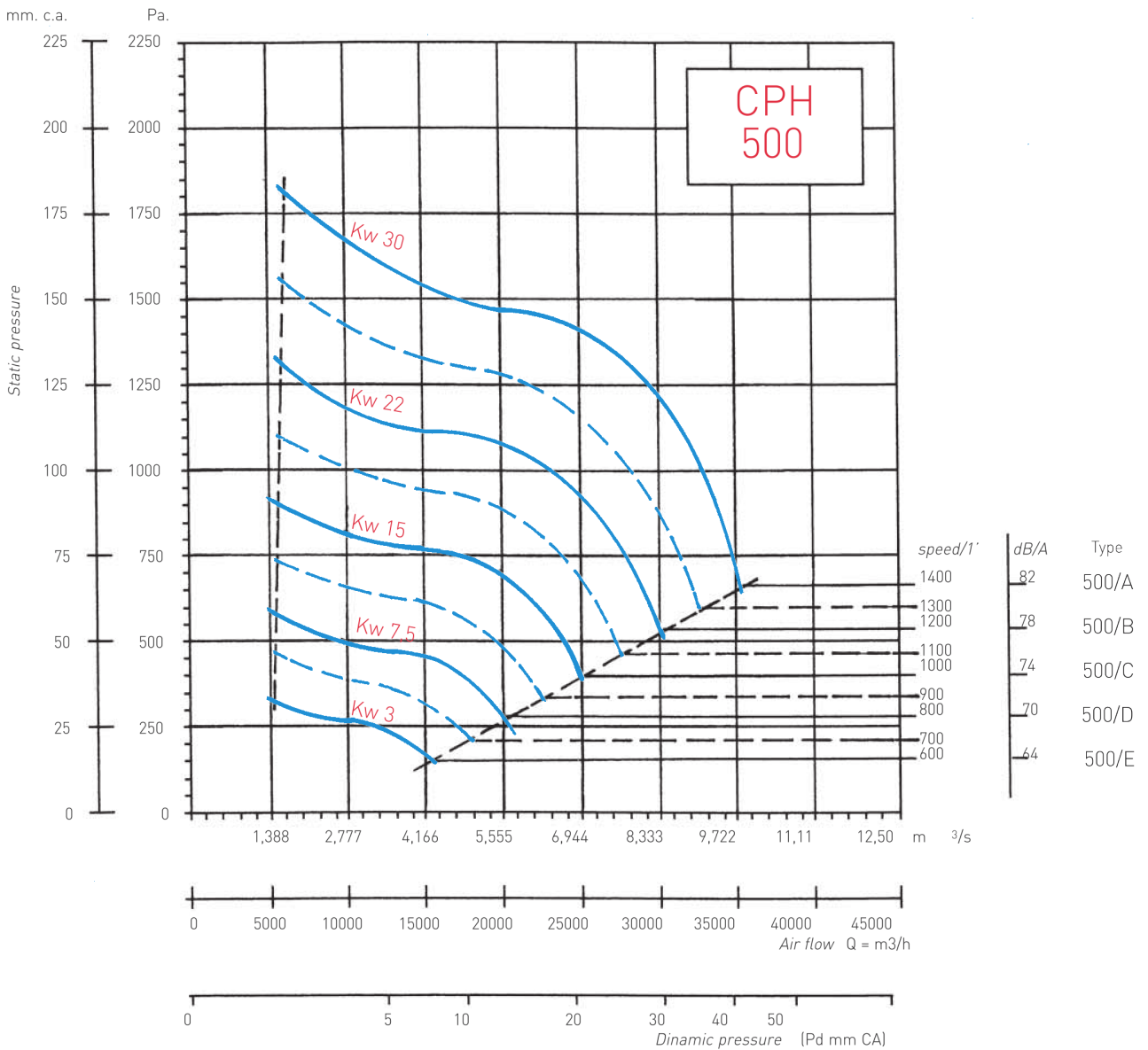
All performances are referred to air at 15°C - Barometric pressure 760 mm Hg - Specific weight 1.22 kg/m³



# Ventilation

Comfort and performance  
at maximum efficiency  
energy

## CPH 500



kW referred to installed power

Sound pressure level at 3 m in free field, from the fan center with ducted outlets. Tolerance - 3 dB.

All performances are referred to air at 15°C - Barometric pressure 760 mm Hg - Specific weight 1.22 kg/m³