

# Single stage Lateral Channel Blowers Compressor - 50Hz X1.85 SM



Air Control Industries  
Global Air Movement Specialists since 1969



## Main Features

- Compliance with the ATEX Directive 94/9/EC
- Compliance with the Machinery Directive 2006/42/CE
  - Maximum flow: 850 m³/h
  - Maximum Pressure: 450 mbar
  - Aluminium alloy parts non sparking
  - Motors ATEX Ex nA IIB T4 Gc with PTC sensor
  - Suitable for horizontal and vertical installation (for Biogas application, only vertical)
  - Inlet / Outlet ports: G 4"

## For Biogas application (to be listed at order)

- Anodizing
- Impregnation
- Provision for pressure and temperature control sensors
- Drain holes
- Only vertical installation with No. 3 vibration dampers included (Refer to the doc: "Overall dimensions for Biogas application")

## MARKING

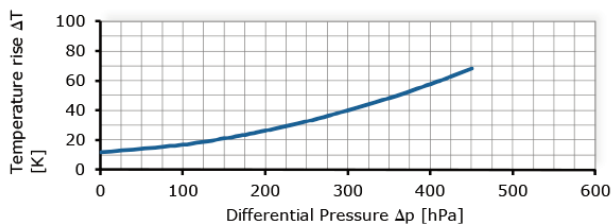
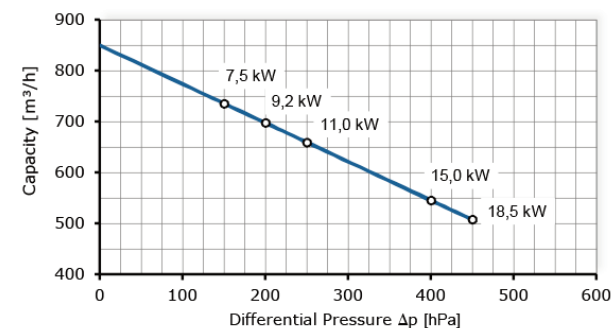
- Zone 2, Cat 3G (GAS)
  - II 3G c IIB T4
- Zone 22, Cat 3D (DUST)
  - II 3D c T135°C
- For Biogas application
  - Zone 2, Cat 3G (GAS)
    - II 3G cb IIB T3



## Technical Data for 50Hz - 2 poles - Three-Phase Motors [5]

Order Code	Maximum flow [m³/h]	Maximum Differential Pressure Δp [hPa]	Electric Motor data			Noise level Lp [3] [dB (A)]	Weight [kg]
			Installed Power [kW]	Voltage [2] Δ/Y [V]	Rated Amps Δ/Y [A]		
X1.85-7.5	850	150	7,5	400/690	14,9 / 8,6	80,5	94
X1.85-9.2	850	200	9,2	400/690	18,0 / 10,4	81,0	99
X1.85-11.0	850	250	11,0	400/690	21,5 / 12,4	81,5	101
X1.85-15.0	850	400	15,0	400/690	29,2 / 16,9	82,0	104
X1.85-18.5	850	450	18,5	400/690	34,8 / 20,1	82,5	125

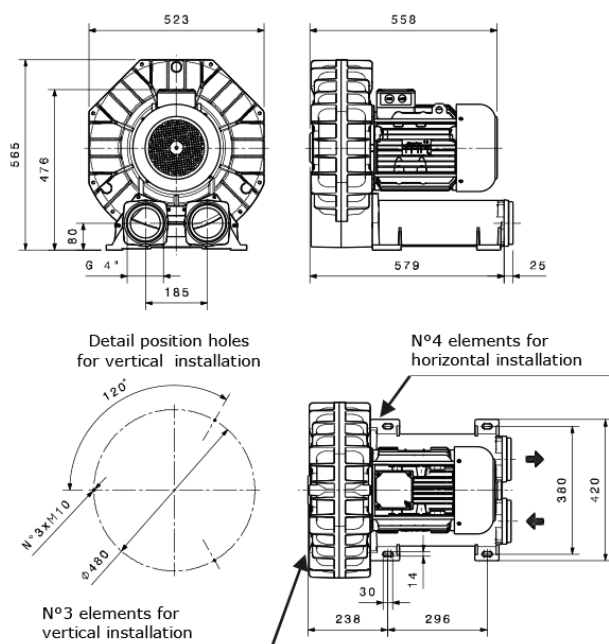
## Performance Diagrams [50Hz] [1]



### Notes:

- (1) Performance curves refer to operative conditions to air at 15°C temperature and 1013 hPa (abs) pressure measured at inlet port. Tolerance on capacity and temperature values: +/-10%. 1 hPa = 1 mbar
- (2) Allowed tolerance for supplied voltage: +/-10%.
- (3) Noise measured at 1 meter distance in accordance to EN ISO 3744, tolerance: +/-3 dB (A).
- (4) Tolerance about dimensions according to: ISO 2768-c.
- (5) For use with frequencies different from 50Hz, refer to variable frequency table.

## Overall Dimensions [mm] [4]



For proper installation and safe use of the blower it must be equipped with relief valve and air filter in accordance with 94/9/EC ATEX Directive.  
For further details ask for the Compressor connection diagram.