

TYPHOON OPEN 13ES-15ES





TYPHOON OPEN 13ES

1. High-pressure piston compressor for breathing air, air cooled, 3 staged, oil lubricated, manufactured by PARAMINA, model Typhoon Open 13ES 4kW-5,5Hp, open framed, suitable for all shipping, diving and fire-fighting applications with CE certificate.

Model	: Typhoon Open 13ES
Air Delivery FAD	: 210 lit/min
Max Working Pressure	: 350 bar
Stages	: 3
Cylinders	: 3
Cylinder Arrangement	: W
1 st stage cylinder diameter	: 80mm
2 nd stage cylinder diameter	: 36mm
3 rd stage cylinder diameter	: 14mm
Piston Stroke	: 60mm
Speed Rotation	: 930 rpm
1 st Stage Pressure	: 5,2 – 5,5 bar
2 nd Stage Pressure	: 38 - 43 bar
Transmission	: V Belt
Motor power	: 4 kW/ 400V/50Hz or 440V/60Hz (Class F, IP 55)
Oil Capacity	: 2.2 lit synthetic compressor oil
Air outlet temperature	: 5 - 8 °C above ambient temperature
Max. permissible ambient temperature	: +5 ⁰ to +45 ⁰ C
Cooling air flow min required approximately	: 1440m³/ hr
Max. inclination of compressor	: 15 ⁰
Dimensions (L-W-H)	: 107 X 54 X 70 cm
Weight	: 143 Kg
Filling Time of 1 Cyl.10ltr @ 225bar	: 9,8 min ± 5%
Filling Time of 1 Cyl.10ltr @ 300bar	:12,0 min ± 5%



Standard Equipment:

- Micronic Air Inlet Filter.
- Condensate Separator after 2nd Stage.
- Large Stainless Steel Intercoolers & aftercooler at all stages.
- Large fan (500mm diam.) for optimum cooling of cylinders, intercoolers & aftercoolers, making the compressor capable for continuous operation.
- Combined BA Filter Ø80X535 including Coalescing Pre-filter (0,5mg/m³ oil residual) and 2x (Active Carbon / Molecular Sieve cartridge) Ø42X180 cartridges, with the supply of absolutely clean air exceeding by far the requirements of EN 12021:2014.
- Pressure maintaining valve & non-return valve allowing for safe, efficient & extended filtration.
- Direct on line starting system.
- Start/Stop switch.
- Motor thermal overload protection.
- Emergency Stop button.
- Manual Condensate Drains.
- One (1) Kevlar* Filling Hose, 1,2m, complete with DIN & International "A" clamp Adaptors.
 - *Kevlar hoses are manufactured with very strong & resistant material and are pin pricked for air relief in atmosphere in case of damage.
- Safety Valves in all stages.
- Final Stage 400 bar manometer.
- Built-In Vibration Pads.
- Automatic belt tensioning system.



TYPHOON OPEN 15ES

2. High-pressure piston compressor for breathing air, air cooled, 3 staged, oil lubricated, manufactured by PARAMINA, model Typhoon Open 15ES 5,5kW-7,5Hp, open framed, suitable for all shipping, diving and fire-fighting applications with CE certificate.

Model	: Typhoon Open 15ES
Air Delivery FAD	: 250 lit/min
Max Working Pressure	: 350 bar
Stages	: 3
Cylinders	: 3
Cylinder Arrangement	: W
1 st stage cylinder diameter	: 80mm
2 nd stage cylinder diameter	: 36mm
3 rd stage cylinder diameter	: 14mm
Piston Stroke	: 60mm
Speed Rotation	: 1100 rpm
1 st Stage Pressure	: 5,2 – 5,5 bar
2 nd Stage Pressure	: 38 - 43 bar
Transmission	: V Belt
Motor power	: 5,5 kW/ 400V/50Hz or 440V/60Hz (Class F, IP 55)
Oil Capacity	: 2.2 lit synthetic compressor oil
Air outlet temperature	: 5 - 8 °C above ambient temperature
Max. permissible ambient temperature	: +5° to +45° C
Cooling air flow min required approximately	: 1980m³/ hr
Max. inclination of compressor	: 15 ⁰
Dimensions (L-W-H)	: 107 X 54 X 70 cm
Weight	: 165 Kg
Filling Time of 1 Cyl.10ltr @ 225bar	: 9,0 min ± 5%
Filling Time of 1 Cyl.10ltr @ 300bar	:10,0 min ± 5%



Standard Equipment:

- Micronic Air Inlet Filter.
- Condensate Separator after 2nd Stage.
- Large Stainless Steel Intercoolers & aftercooler at all stages.
- Large fan (500mm diam.) for optimum cooling of cylinders, intercoolers & aftercoolers, making the compressor capable for continuous operation.
- Combined BA Filter Ø80X535 including Coalescing Pre-filter (0,5mg/m³ oil residual) and 2x (Active Carbon / Molecular Sieve cartridge) Ø42X180 cartridges, with the supply of absolutely clean air exceeding by far the requirements of EN 12021:2014.
- Pressure maintaining valve & non-return valve allowing for safe, efficient & extended filtration.
- Direct on line starting system.
- Start/Stop switch.
- Motor thermal overload protection.
- Emergency Stop button.
- Manual Condensate Drains.
- One (1) Kevlar* Filling Hose, 1,2m, complete with DIN & International "A" clamp Adaptors.
 - *Kevlar hoses are manufactured with very strong & resistant material and are pin pricked for air relief in atmosphere in case of damage.
- Safety Valves in all stages.
- Final Stage 400 bar manometer.
- Built-In Vibration Pads.
- Automatic belt tensioning system.



Optional Equipment:

- Ø110x495 BA Filter (in replacement of standard BA Filter Ø80x535)
- Dual pressure filling facility with pressure regulator allowing simultaneous filling of 225 & 330bar
- Extra filling hose *(maximum hoses: 3)
- Final stage condensate separator.
- Interstage Manometers
- High Pressure outlet 1/4" or 8S, in replacement of filling hoses
- Two (2) wheels on the one side of the compressor for easy transport.