TECHNICAL DATA SHEET

V. 01 | REV. 01 | 21 - 06 - 2022

ROTAIR

powerful ›› compact

MDVN

PORTABLE COMPRESSORS

83 Eco 5

AXLE WITHOUT BRAKES	1320 KG 2910 LB
AXLE WITH BRAKES	1395 KG 3075 LB
SKID VERSION	1330 KG 2932 LB



PORTABLE
COMPRESSORS
powerful ›› compact

MDVN 83
TECHNICAL FEATURES

COMPRESSOR

Operating pressure	7 bar - 102 psi	10 bar - 145 psi	12 bar - 174 psi
Free air delivery	8000 l/min - 282 cfm	6400 l/min - 226 cfm	5600 l/min - 198 cfm
Minimum working pressure	5 bar - 73 psi		
Drive system engine-airend	Direct Drive		
Compressor cooling system	Air / Oil		
Oil cooling capacity	16 lt - 3.52 UK gal		
Air outlet temperature	40°C - 105°F + Ambient temperature		
Outlet valves	2 x 3/4" + 1 x 1"		
Noise level EECno 2000/14	< 98 LWA		
Battery capacity	12V cc - 950A-132Ah (EN)		
Fuel tank capacity	140 lt - 30.8 UK gal		
Consumes	13,4 lt/h @100% - 7,2 lt/h @60% 2.95 UK gal/h @100% - 1.58 UK gal/h @60%		

DIESEL ENGINE

Engine make	KOHLER
Engine type	KDI 2504-TCR St V
Engine system	4 strokes - Inline - Direct Injection
Emissions	Stage V / Tier 4 Final
Filtration	DOC + DPF
Displacement	2482 cc
N. cylinders	4
Aspiration	Turbo
Max engine power @2100 RPM	55,4 kW - 75.3 HP
Max engine speed	2100 RPM
Min engine speed	1700 RPM
Cooling system	Water
Cooling system capacity	18 lt - 3.96 UK gal
Lubrication system	Oil
Lubrication system capacity	9 lt - 1.98 UK gal

ENVIRONMENTAL CONDITIONS

Max ambient temperature	50°C - 122°F
Max altitude	1800 m a.s.l.
Min working temperature	-10°C / 14°F

AXLE WITHOUT BRAKES
WITH ARTICULATED DRAWBAR
Slow towing from construction site

1320 KG
2910 LB

AXLE WITH BRAKES
WITH ARTICULATED DRAWBAR
Suitable for road traffic

1395 KG
3075 LB

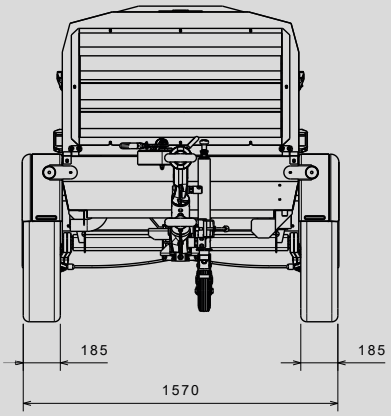
SKID VERSION

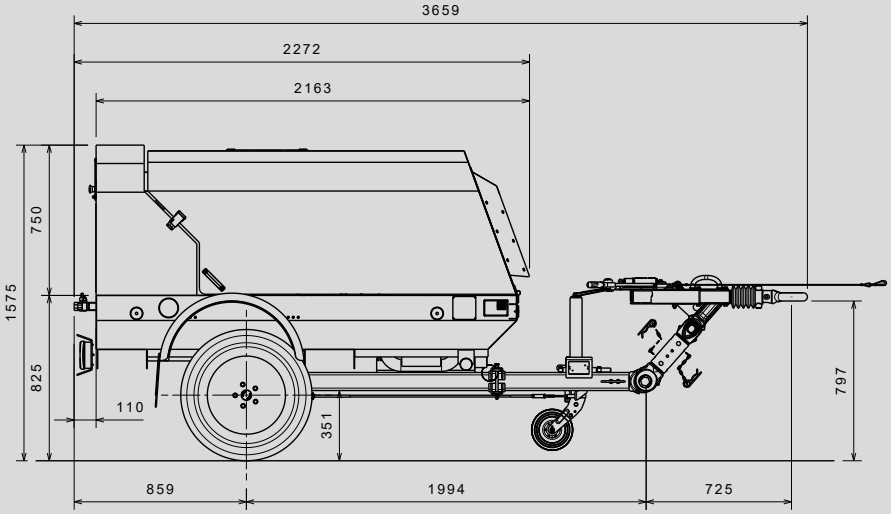
1330 KG
2932 LB

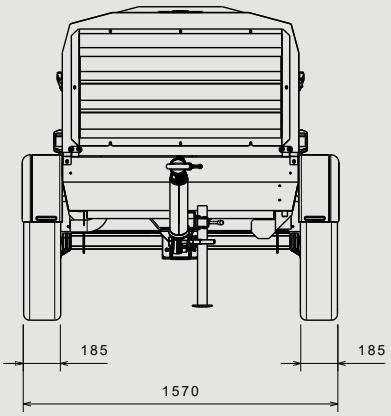
Eco 5

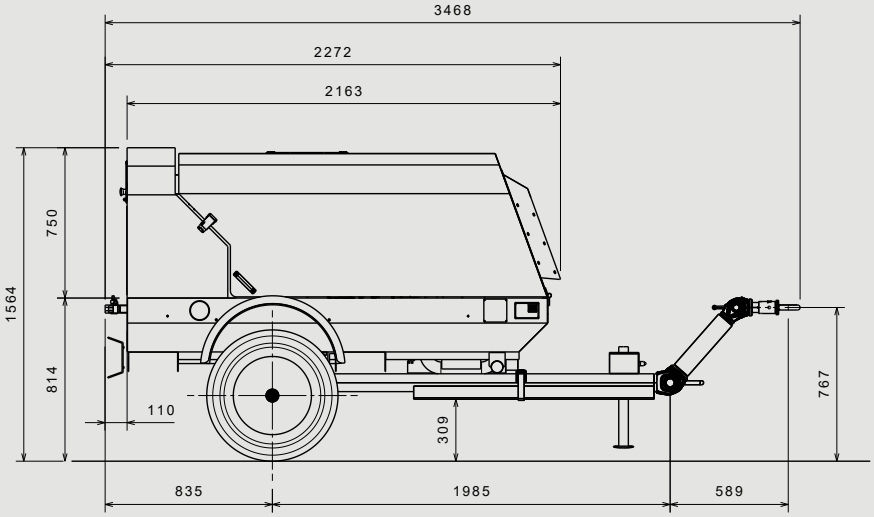
PORTABLE COMPRESSORS

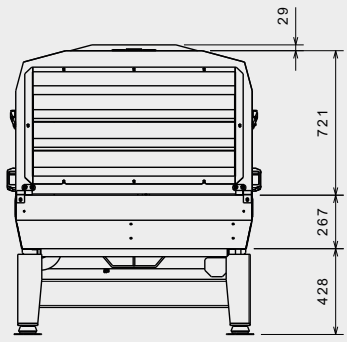
powerful ›› compact

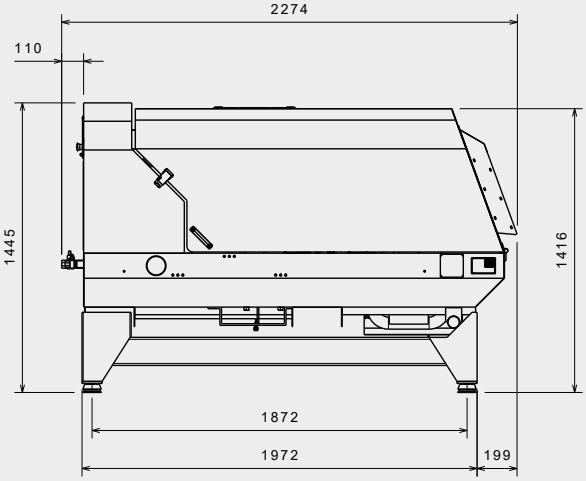












MDVN 83 ECO 5

PORTABLE COMPRESSORS

MAIN FEATURES

- Design with modern, slender and aggressive line
- Electro-galvanized bodywork and chassis with advanced painting procedure to grant an excellent preservation through time
- Compact dimensions for easy handling and optimum dimensions / delivered power ratio
- Light weight
- Filters "spin-on" type for quick maintenance
- Full accessibility for easy and rapid maintenance and service
- Exclusive pneumatic control system, developed by ROTAIR, to adjust automatically engine revs, depending on the air to be delivered. This system is highly reliable and ensures fuel consumption saving.
- Air/oil separator filter, highly oversized, can guarantee an excellent air/oil separation.
- The air and oil filters of the compressor and the air and oil filters of the engine are independent.
- Single stage oversized air filter for compressor part, to guarantee good filtering of the air intake by airend. As option, Two-stage air filter.
- Two-stage air filter for engine part.
- Combined radiator allowing both compressor oil cooling and engine liquid cooling.
- Start/stop "INTELLIGENT SYSTEM", exclusive from ROTAIR, to prevent the risk of incorrect procedures during specific functioning.

OPTIONS & ACCESSORIES

BS sandblasting version INTEGRATED to the unit (cooler for compressed air cooling and condensate separator). The more the compressed air is cooled inside the final refrigeration kit of a compressor, the more its efficiency is prompted and the more water vapor condenses, thus allowing easy use of tools such as sandblasting kits.

Example, IN TYPICAL ENVIRONMENTAL CONDITIONS (Temperature = 20 °C / Relative humidity = 50% / Air outlet pressure = 7 bar) THE FOLLOWING VALUES ARE OBTAINED:

Difference with ambient temperature of delivered air	Water drawn in	Water drained		Water at outlet valves	
+11 °C	1,8 lt/h	0,91 lt/h	50,56%	0,89 lt/h	49,44%

EXTERNAL DEHUMIDIFIER DEVICE "BS" WITH A HIGH DEGREE OF DEHUMIDIFICATION
(combinable with portable compressors with flow rates from 2000 to 8000 lt/min).
This particular device ensures a quality of the delivered air with low outlet temperature; example: with an ambient temperature of 20 ° C, temperature of delivered air is 0-2 ° C higher than ambient temperature (for more information see the specific product sheet). The air, largely dehumidified, is an indispensable condition in the execution of particular processes such as: sandblasting - optical fibers installation - use of pneumatic tools sensitive to humidity. The external "BS" device is easy to connect to your portable compressor by means of a special kit of air pipes and is electrically powered by the portable compressor itself. Easily transportable and easy to handle thanks to its wheels, it is the unique and ideal device that satisfies the most severe and demanding operating conditions.

REEL FOR AIR PIPE
complete with 20 m of tubing diam. 19 x 30 with fittings to use any work tool at a distance without having to move the compressor.

FUEL LEVEL CHECK WITH WARNING LIGHT
important in order to protect the engine from sudden running out of fuel and subsequent choke, cleaning and filter replacement problems, etc

LINE LUBRICATOR FOR PNEUMATIC EQUIPMENT
Provides automatic lubrication to air-operated pneumatic tools to prevent rust and corrosion and steer the tools to have a smoother more effective operation, which prolongs the life of tools.

CONTROL WITH CLOGGING SENSOR FOR ENGINE AND COMPRESSOR AIR FILTERS
essential accessory in order to avoid bad air supply with the advantage of always having the maximum efficiency of the diesel engine and the supply of compressed air at the correct pressure.

EUROPEAN ROAD HOMOLOGATION in process of achievement with competent Authorities.

EXCLUSIVE ROTAIR "FUEL SAVING SYSTEM" for fuel savings of up to 20%.

COMPRESSED AIR FOR CIVIL ENGINEERING

- GOMMAIR RANGE
- DS RANGE
- MDVN RANGE
- MDVS RANGE
- VRK RANGE
- VRK FIBER RANGE
- VRH RANGE
- TVR RANGE

ROTAIR DELIVERING WORLD-CLASS COMPRESSORS

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ROTAIR - A brand of ELGi Equipments Ltd.

Further information available on request. The manufacturer reserves the right to modify the technical characteristics indicated above without prior notice.