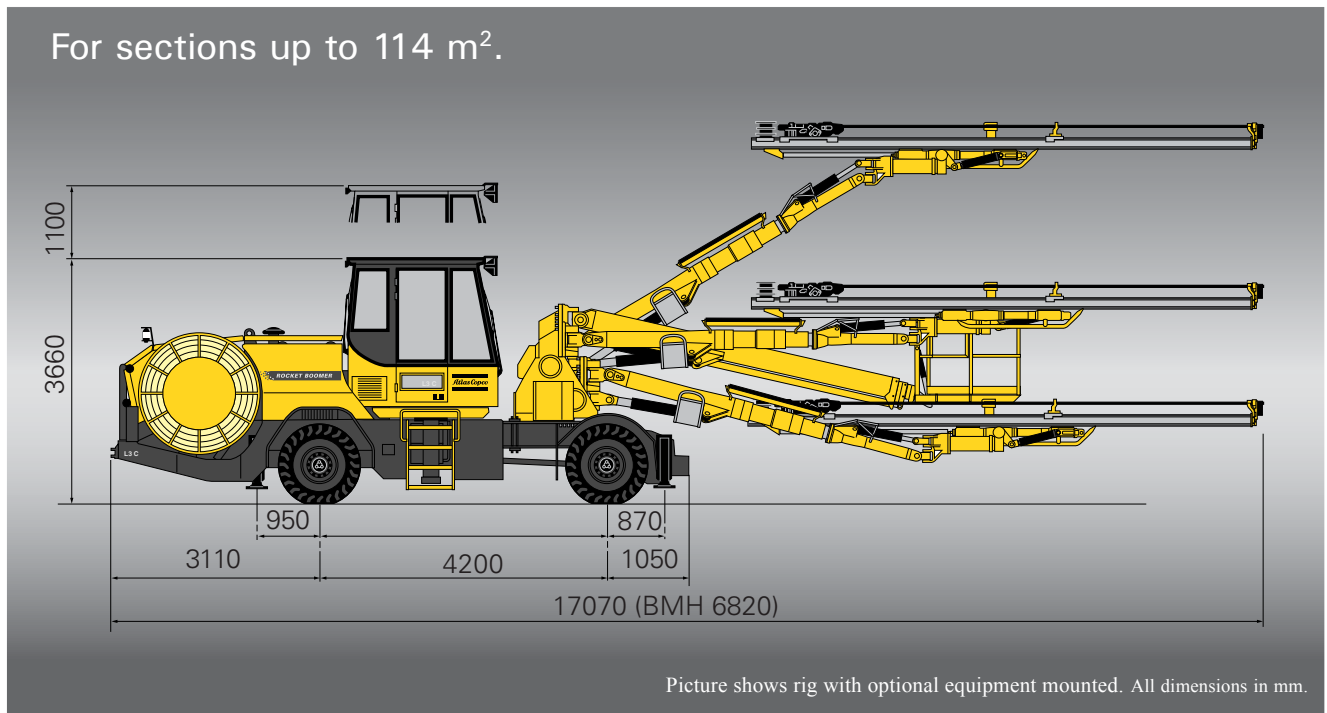


Rocket Boomer L3 C

Hydraulic tunnelling rig with fixed boom console for high capacity tunnelling.



Features

- Rig Control System (RCS) with interactive operator control panels and full-colour display. Automatic functions in the drilling process such as auto-collaring and anti-jamming protection as well as improved regulation of the rock drill provide high performance and outstanding drill steel economy. Integrated diagnostic and fault location system can immediately identify faulty electronic components.
- COP 1838 powerful, high performance rock drill with its long, slender piston and double reflex dampener gives genuine high speed drilling and excellent drill steel economy.
- PC-card for transfer of data and for service engineers to store preferred drill settings.
- BUT 35 heavy-duty booms for direct, fast and accurate positioning between holes. New powerful feed rotation unit and increased coverage. Improved linkage bearings in main boom joints and new axial bearings in all boom joints.
- Modular design of electronic and mechanical components for easy service and maintenance.
- Optional Advanced Boom Control (ABC) system supports and guides the operator in accurate drill hole positioning and alignment to reduce costly overbreak. ABC is available in three levels - Basic, Regular and Total.
- Large and ergonomic cabin with noise level reduced to 80dB(A). Possible to work standing or sitting with ergonomic panels.
- Sturdy carrier with all-wheel drive for easy manoeuvring. Powered by a turbo-charged, water-cooled 6-cylinder, low emission diesel engine for high mobility. Four jacks for stable set up.
- Basic rig includes FOPS approved cabin, hydraulic powered air condition/heating and filtered inlet air, adjustable electronic control panel with colour display for standing operator, hydraulic driven compressor and water booster pump, cable reel and working lights.

Main components

Rock drill	3 x COP 1838ME/HF
Feed	3 x BMH 6800-series
Boom	3 x BUT 35G
Drilling system	RCS
Carrier	DC 150

Rocket Boomer L3 C

Rock drill COP 1838ME-07

Drill steel	R32, R38 or T38
Height over drill centre	88 mm
Impact power	20 kW
Impact rate	60 Hz
Hydraulic pressure, max.	230 bar
Rotation system	separate rotation
Rotation speed	0-240 rpm
Rotation torque, max.	700Nm
Lub. air consump.(at 3 bar)	5 l/s
Water consumption	1.1 l/s
Weight	171 kg

Rock drill COP 1838HF-06

Drill steel	R32, R38 or T38
Height over drill centre	88 mm
Impact power	22 kW
Impact rate	73 Hz
Hydraulic pressure, max.	250 bar
Rotation system	separate rotation
Rotation speed,max	0-300 rpm
Rotation torque, max.	545 Nm
Lub. air consump.(at 3 bar)	6 l/s
Water consumption	1.2 l/s
Weight	171 kg

Feed

	BMH 6814	BMH 6816	BMH 6818	BMH 6820
Total length(mm)	5882	6502	7102	7677
Drill steel length(mm)	4310	4920	5530	6100
Hole depth(mm)	4048	4668	5268	5843
Weight, incl.rock drill (kg)	631	665	696	721
Feed force (kN)	20.0	20.0	20.0	20.0

Boom BUT 35G

Feed extension	1800 mm
Boom extension	1600 mm
Parallel holding	Complete
Feed roll-over	360 degrees
Max. lifting angle	+70 degrees -45 degrees
Max. swinging angle	±45 degrees
Weight, boom only	2860 kg

Hydraulic system

- Hydraulic pumps: 3 separate units, one for each boom. Each consists of two variable pumps for percussion and positioning, and two constant flow pumps for rotation and compressor
- Pumps unloaded at start
- System pressure max 250 bar
- Hydraulic oil tank, volume max 755 l, min 470 l
- Low oil level indicator
- Oil temperature gauge on oil tank, electronically supervised
- Mineral hydraulic oil
- Electric oil filling pump
- Filtration 16 µm

Air system

- Hydraulic driven Atlas Copco GA 5 screw compressor with 80 l air receiver
- Capacity, max 26 l/s at 9 bar
- Hydraulic drive, axial piston motor 10 cc
- Air pressure gauge

Water system

- Hydraulic driven water booster pump CR 16-80
- Capacity, max 300 l/min at 15 bar boost
- Min water inlet pressure 2 bar at 300 l/min
- Hydraulic drive, axial piston motor 10 cc
- Water pressure gauge
- Water flow guard

Carrier

- Deutz BF6M 1013C engine, water-cooled turbo-charged 170 kW (231 hp) at 2300 rpm, 847 Nm at 1400 rpm
- Rear axle steering with ±33 degree steering angle
- All-wheel drive
- Hydrostatic power steering system
- Hydrodynamic Clark 32000 transmission
- Hurth 184 boom axle
- Hurth 276 rear axle with ± 8 degree oscillation
- Manual actuated differential lock on boom axle
- Tyres front and rear 12.00 x R24 Michelin XKA (optional equipment require larger tyres)
- Clearance outside axles 15 degree
- Hydraulic jacks 2 (extensible) at front and 2 at rear
- Service brakes: Two separate circuits, hydraulically applied, fully enclosed wet disc brakes
- Emergency and parking brakes: SAHR (Spring Applied Hydraulic Released)
- Fuel tank, volume 150 l
- Electric system 24 V
- Batteries 2 x 125 Ah
- 8 x 70 W tramping lights
- Illuminated stairs 2 x 70W
- Gradeability 1:4 at max. load on drive wheels
- Tramming speed on flat ground 17km/hr (at rolling resistance 0,05); on incline 1:8 > 5 km/hr
- Beacon and reverse alarm

Cabin

- Large FOPS approved cabin, noise level 80 dB(A)
- Rubber-damped for comfort during tramming and drilling
- Safety glass. Two wipers with washer (front shield, rear shield)
- Fixed seat for tramming
- Cabin light 220 V, adjustable reading lamp 24 V
- Outlets socket 12 V for communication radio
- 220 V (10 A) electrical outlet for accessories
- Air conditioner/heating, hydraulic powered and water transferred, with heater control and stepless fan and filtered inlet air.
 - Refrigerant R134a
 - Cooling capacity at 35° C 50% Rh 5 kW. 95° F wet bulb 79.0 17.000 btu.
 - Heating capacity - 10 kW 34.000 btu diesel power, and 3 kW 10.500 btu with electric use
 - Airflow - 500 m³/h, 294 cfm

Electronic system

- Rig Control System, CAN-based network. Versatile and scalable to higher degree of automation
- One adjustable, electronic control panel with colour display for standing operator as standard. (Other configurations are available)
- PC-card for transfer of data and for service engineers to store preferred drill settings
- Integrated diagnostic system
- Pre-set drilling parameters for up to three bit types, e.g. big hole drilling

Electrical system

- Total installed power 237 kW
- Main motors 3 x 75 kW
- Voltage (as per customer specification) 400-700 V
- Frequency (as per customer specification) 50-60 Hz
- Starting method - star/delta
- Electronic overload protection for electric motors
- Percussion hour meter on operator's display
- Digital voltmeter/ampere meter in electric cabinet
- Battery charger
- Transformer 12 kVA
- 2 x 1500 W + 2 x 500 W working lights, halogen
- Cable reel, diameter 1800/1020 mm, capacity max. 1000 kg

Dimensions and weights

Width		
fixed boom console (12.00-24 tyres)	2500 mm	
fixed boom console (14.00-24 tyres)	2700 mm	
Height		
cabin fixed	3660 mm	
lifiable cabin down	3660 mm	
lifiable cabin up	4760 mm	
Length with 20 ft feeds	17070 mm	
without feeds	8360 mm	
Ground clearance (for 12.00-24 tyres)	375 mm	
(for 14.00-24 tyres)	435 mm	

Turning radius (depending on surface)		
outer		11800 mm
inner (for 12.00-24 tyres)		6800 mm
inner (for 12.00-24 tyres)		6700 mm
Gross weight (rig without option)		
Total		37000 kg
Boom side		28000 kg
Engine side		9000 kg

Optional equipment

Rock drill/Drill system

- Rock drill rotation motor –05 (435 Nm, 0-370 rpm)
- Hole blowing kit
- Spare rock drill
- Water mist flushing with external water and air supply (incl. extra hydraulic driven fan for oil cooling)
- Rock drill lubrication warning kit

Feed

- Telescopic feed BMHT 6800-series, max 18 ft. rod (not in combination with ABC Total)
- Extension drilling set BSH 110
- Rod adding system RAS, max 20+10 ft rods (max 18+10 ft on booms with fixed boom segment)
- Rig prepared for RAS

Boom

- Extended boom reach (BUT 35LG) with 700 mm long fixed boom segment
- Automatic boom lubrication system, rear part of boom

Software

- Advanced Boom Control system - ABC Basic
- Advanced Boom Control system - ABC Regular for computer assisted drilling. Tunnel Manager Lite included.
- Advanced Boom Control system - ABC Total for computer- controlled drilling. Tunnel Manager Lite included.
- Rig prepared for ABC Total
- Measure While Drilling - MWD, logging drill data for geological survey purposes

Cabin

- Operator's seat, six-way adjustable, with all drilling controls in the armrest
- Possible to work sitting or standing with ergonomic panels
- Second operator's panel as option (one panel for standing operator included in basic rig)
- Available configurations with additional operator's panel: 2 standing, 1 standing + 1 sitting or 2 sitting
- Spot lights, 3 x 70 W, or 2 x 55 W with joy-stick control
- CD player, radio and speakers mounted in cabin
- Lifting arrangement cabin 1.1 m

Hydraulic system

- Biodegradable hydraulic oil, Statoil Hydraway Bio PA 46 (PAO), Petro Canada Premium ECO HT-E 46/68
- Heater kit for hydraulic oil tank, 0.8 kW

Air system

- Extra compressor GA 5 additional 26 l/s at 9 bar (for charging)

Carrier

- Tyres 14.00xR24 Michelin XKA all round
- Exhaust water scrubber
- Exhaust catalyzer with silencer
- Particle filter
- Dual controls for cable reel
- Limit switch for cable reel
- Water hose reel diam.1800/920 mm, for 2" diam hose, length 60 m at 70% filling rate (not in combination with watermist)
- Water 2" diam hose
- Dual controls for hose reel
- Ansul 101, fire suppression system (required in CE countries)
- Spare wheel
- Hydraulic jacks (2x) with large plates
- High altitude setting of diesel engine
- Thelma brakes for extremely steep tunnels. Acting on drive shaft. (on special request)

Electrical system

- Soft start for electrical motors, for 400 - 700 V
- 1000 V electric system, direct start only
- Electric cable, type H07 or Buflex see recommendations
- Plug and socket for cable, male and female
- Electric outlet for accessories, 3-phase max 16 A, 400-700 V (same Voltage as rig)
- Extra transformer, 15 kVA incl 3-phase outlets 32 A and 16 A, 1-phase outlets 10 A
- CSA approved electrics (Canadian regulations), on special request

Miscellaneous

- Service platform HL 230MB-C, max. payload 400 kg (max. 16 feeds)
- Protective roof for service platform, FOPS approved
- Water and air outlet in service platform basket
- Hydraulic Swellex pump
- Holder for spare drill rods
- Rig washing kit, with water hose and reel (water supplied from booster pump)
- Manual lubrication system, grease-gun with hose and reel (incl. 18 kg grease barrel)
- Service tool box for electronic network system

Recommended cable size and length

Voltage	Type	Dimension	Diameter	Length
400-440 V	Buflex	3x240+3G50 mm ²	64 mm	100 m
500-550 V	H07RN-F	4G150 mm ²	67 mm	85 m
500-550 V	Buflex	3x185+3G35 mm ²	56 mm	125 m
660-700 V	H07RN-F	4G95 mm ²	55 mm	115 m
660-700 V	Buflex	3x120+3G25 mm ²	46 mm	175 m
1000 V	Buflex	3x95+3G16 mm ²	42 mm	200 m

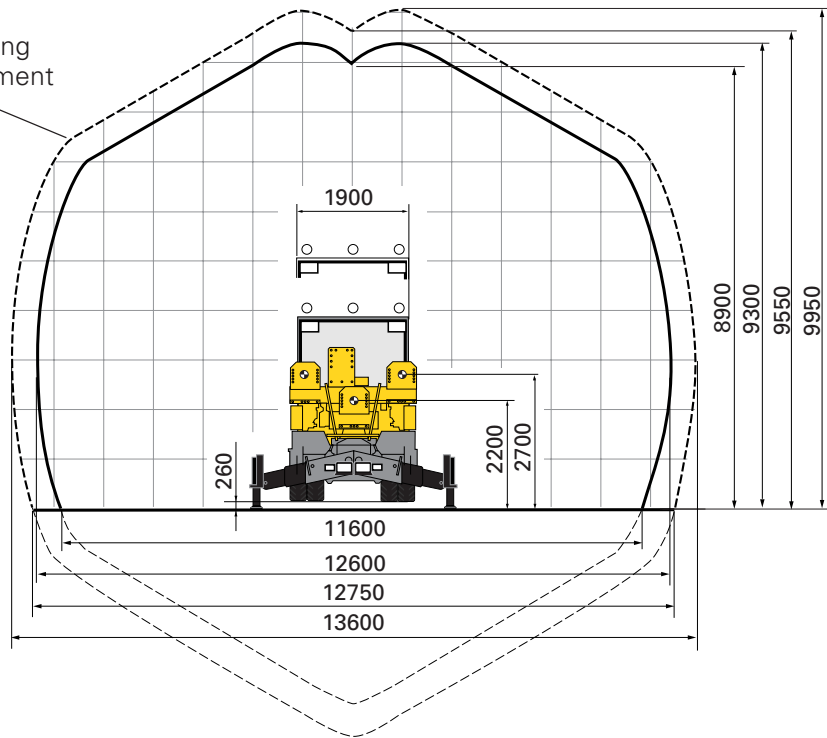
G = Protection yellow/green
Valid for ambient temperature below 30°C

Rocket Boomer L3 C

Coverage area

incl. 250 mm look-out

With 700 mm long fixed boom segment



Scale 1:150

Rock Drilling Tools

Drifter rods

Dimension	Min. hole dia, mm
R38-Hex 35-R32	45
T38-Hex 35-R32	45
T38-Hex 35-R32 Speedrod	45
R38-Hex35- SR35 Speedrod	45
T38-Hex 35-SR35	45
T38-Rnd 39-SR35	45
T38-Hex 35-R35	48
T38-Hex 35-R35 Speedrod	48
T38-Rnd 39-R35	48
T38-Rnd 39-R35 Speedrod	48

Extension rods for injection drilling/RAS

Dimension	Min. hole dia, mm
R32 Speedrod	51
R35 Speedrod	48
T38 Speedrod	64

Shank adapters

Thread	Dia, mm	Length, mm	Part No.
R38	38	435	404-09101,00
T38	38	435	435-09101,00
R32	38	525	403-09103,00*
R35	38	525	409-09103,00*
T38	38	525	435-09103,00*

*= Intended for rod adding system, RAS, and extension drilling with BSH 110.

Couplings

Thread	Dia, mm	Length, mm	Part No.
R38	55	170	304-0055,00
T38	55	190	335-0055,00

For other dimensions and more information please see Secoroc General Catalogue, printed matter No. 9851 2156 01.