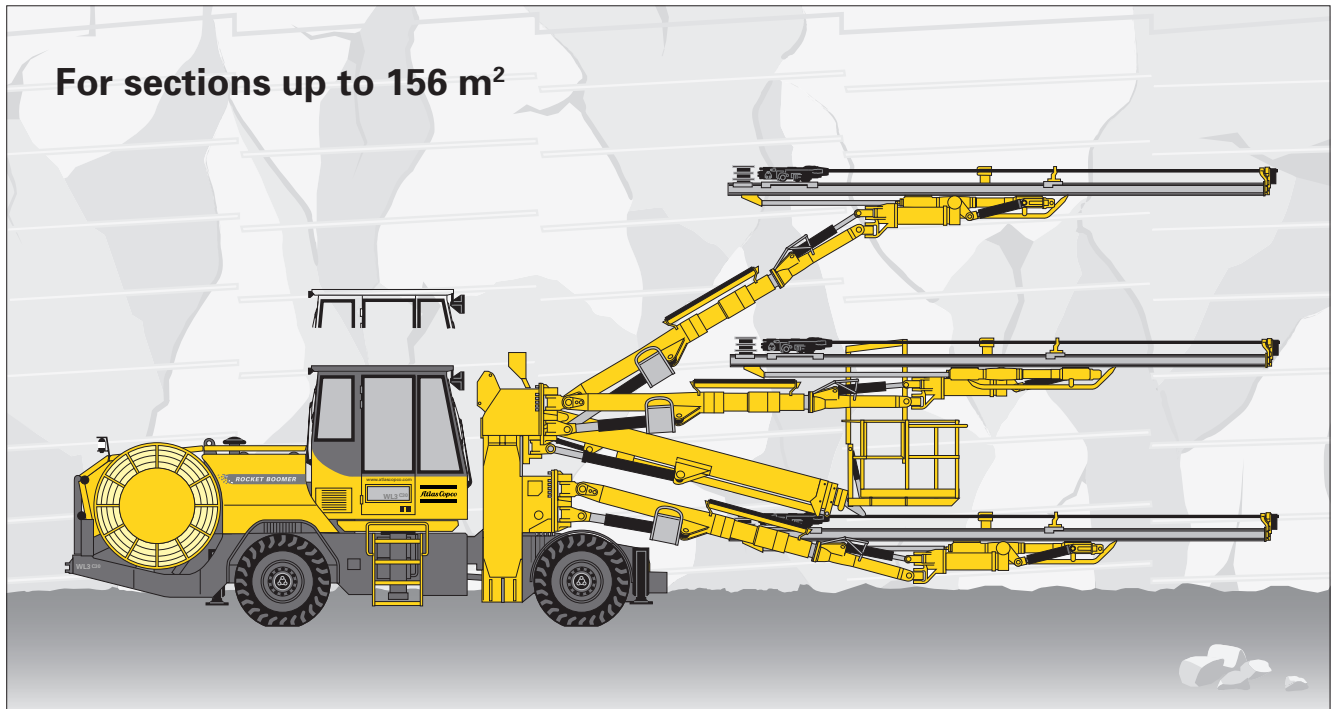


Atlas Copco Face Drilling Rigs

Technical specification Rocket Boomer® WL3 C30

Three boom hydraulic face drilling rig with wide reach boom console, computer controlled drilling system and COP 3038 rock drills for super-fast face drilling



Rocket Boomer WL3^{C30} with optional equipment mounted.

Features

Rock drill

The new high frequency hydraulic rock drill COP 3038 has almost twice as frequent blows as COP 1838 ME, but the same energy per blow. Together with the new improved double dampening system, which keeps the drill steel joints properly tight during drilling, COP 3038 gives 50 percent higher penetration speed compared to COP 1838 ME, yet same high service life of drill rods and shank adapters.

Drilling system

The state-of-the-art computer controlled drilling system RCS (Rig Control System) with interactive operators panel and full-colour display. Standard computer controlled automatic functions in the drilling system include soft collaring, anti-jamming protection, continuous regulation of the rock drill during drilling and provide high performance and outstanding drill steel economy. With the integrated diagnostic system displayed on the operator's screen, it is simple and fast to identify faulty electronic components.

The RCS electronic hardware is of modular design and can be interchanged with similar hardware on the same rig or on other rigs with RCS.

Hydraulic boom

BUT 35 heavy-duty booms for direct, fast and accurate positioning between holes. New powerful feed rotation unit gives increased coverage.

Carrier

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.

Large and ergonomic cabin with noise level below 80dB(A) and ergonomic operators panel for sitting or standing operation.

General

Basic rig includes FOPS approved cabin, hydraulic powered air condition/heating with filtered inlet air, adjustable 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 3038
Feed	3 x BMH 6900-series
Boom	3 x BUT 35
Drilling system	RCS vers 3
Carrier	DC 150

Rocket Boomer WL3 C30

Rock drill COP 3038

Drill steel.....	T38
Height over drill centre	84 mm
Length	990 mm
Impact power, max.....	30 kW
Impact rate	102 Hz
Hydraulic pressure, max.	200 bar
Rotation system.....	separate rotation
Rotation speed	0-380 (450) rpm
Rotation torque, max.....	400 Nm
Flushing water.....	20-40 bar
Lub. air consump. (at 6 bar).....	8 l/s
Water consumption (at 40 bar).....	1.7 l/s
Weight	165 kg

Feeds

	BMH 6914	BMH 6916	BMH 6918	BMH 6920	BMH 6921
Total length, mm	5988	6608	7208	7783	8078
Drill steel length, mm	4310	4920	5530	6100	6400
Hole depth, (mm)	4015	4635	5235	5810	6104
Weight, incl. rock drill, kg	666	700	731	756	785
Feed force, kN	22.0	22.0	22.0	22.0	22.0

Boom BUT 35

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 rock drill rotation, compressor and water pump
- 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, 6 cylinder water-cooled turbo-charged 165 kW (224 hp) at 2300 rpm, 847 Nm at 1400 rpm
- All-wheel drive
- Hydrostatic power steering system
- Hydrodynamic Dana 32000 transmission
- Dana 37R116 front axle
- Dana 276 rear axle with ± 8 degree oscillation
- Manual actuated differential lock on boom axle
- Tyres front and rear 14.00 x R24 Michelin XKA
- Clearance outside axles 15 degree
- Hydraulic jacks (2 extendable at front and 2 fixed 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
- Trimming lights 8 x 70 W
- Stairs illumination lights 2 x 70W
- Gradeability 1:4 at max. load on drive wheels
- Beacon and reverse alarm
- Horn

Cabin

- Large FOPS approved cabin, noise level 80 dB(A)
- Fixed seat for trimming
- Operator's panel for standing operation
- Cabin light 230 V, adjustable reading lamp 24 V
- Outlets socket 12 V for communication radio
- 230 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.

Electronic system

- Rig Control System, CAN-based network. Fast and reliable with possibility to upgrade
- One control panel with colour display
- PC-card for transfer of data and for service engineers to backup settings
- Integrated diagnostic system displayed on operator's screen
- Pre-set drilling parameters for up to five bit types
- Separate battery for electronic system

Electrical system

- Main motors 3 x 95 kW
- Voltage (as per customer specification) 690 - 1000 V
- Frequency (as per customer specification) 50-60 Hz
- Starting method - star/delta 690 V, direct start for 1000 V
- Electronic overload protection for electric motors
- Percussion hour meter on operator's display
- Digital voltmeter/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 12 kVA
- 4 x 1000 W + 2 x 500 W working lights, halogen
- Cable reel, diameter 1800/1020 mm

Recommended cable size and length

Voltage	Type	Dimension	Diameter	Length
690 V	Buflex	3x185+3G35 mm ²	56 mm	125 m
1000 V	Buflex	3x120+3G25 mm ²	46 mm	175 m

G = Protection yellow/green

Valid for ambient temperature below 30°C

Dimensions	
Width	3010 mm
Height	3660 mm
Height with lifted cabin*	4760 mm
Length with 20ft feeds	17070 mm
Ground clearance	435 mm

Weight (gross)*	
Total	43000 kg
Boom side	33000 kg
Engine side	10000 kg

Tramming speed	
On flat ground (at rolling resistance 0.05)	17 km/hr
On incline 1:8	> 5 km/hr

Turning radius (depending on surface)	
Outer	11800 mm
Inner	6600 mm

* =Depending on optional equipment

Optional equipment

Rock drill/Drill system

- Rock drill lubrication surveillance kit

Feed

- Telescopic feed BMHT 6900-series
- Extension drilling set BSH 110
- Rod adding system RAS, max 18+12 ft rods (on booms with fixed segments max 16 + 10ft)
- Rig prepared for RAS

Boom

- 700 mm long extension segment
- Automatic boom lubrication system, rear part of boom
- Ni-Cr plated piston rods (limited selection) on request
- Booms with top mounted feeds

Software

- ABC Regular for computer assisted drilling. Incl. Tunnel Manager
- ABC Total for computer controlled, operator supervised drilling. Incl. Tunnel Manager
- Rig prepared for ABC Total
- Electronic parallel holding (only ABC Regular)

- Navigation method C (ABC Regular and Total)
- Measure While Drilling - MWD, logging and analyzing of drill data
- Bolt view (ABC Regular and ABC Total)
- Rig Remote Access - RRA

Cabin

- Operator's seat, with all drilling controls in the armrests
- Additional operator's panel
- Configurations with additional operator's panels: 3 standing, 1 standing+1 sitting or 2 sitting
- Spot lights, 3 x 70 W manual control or 2 x 55 W with joystick control
- CD player
- Lifiable cabin arrangement 1.1 m

Carrier

- Exhaust catalyzer with silencer
- Particle filter
- Dual controls for cable reel
- Limit switch for cable reel
- Fire suppression system
- High altitude setting of diesel engine

Water system

- Water hose reel diam.1800 mm
- Water hose diam. 2", length 60 m at 70% filling rate
- Dual controls for hose reel

Air system

- Alternative compressor GAR 30 (62 l/s at 10 bar)

Hydraulic system

- Biodegradable hydraulic oil
- Heater kit for oil tank, electric motors and diesel engine

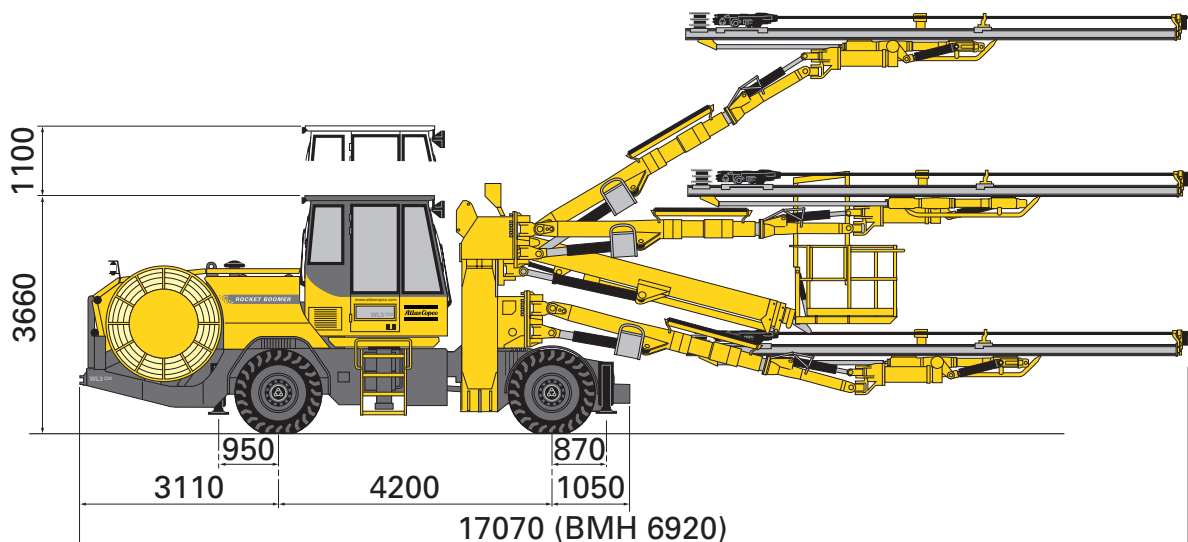
Electrical system

- Soft start for 690 V electrical motors
- 1000 V electric system, direct start only
- Electric cable, type Buflex see recommendations
- Dual controls for cable reel
- Limit switch for cable reel
- Power supply plug and socket
- Power supply plug and switch gear
- Electric outlet for accessories, 3-phase max 16 A, 690 V
- 3-phase outlets 32 A/16 A, with extra transformer 15 kVA, 1-phase outlets 10 A
- CSA approved electrics (Ca-

nadian regulations), on special request

Miscellaneous

- Service platform HL 300MB-C, max. payload 450 kg
- Protective roof for service platform, FOPS approved
- Water and air outlet in service platform basket
- Hydraulic Swellex pump
- Rig washing kit, with water hose and reel (water supplied from booster pump)
- Manual lubrication system with grease-gun with hose and reel
- Water loss measurement arrangement in the service basket
- Service tool box for electronic network system

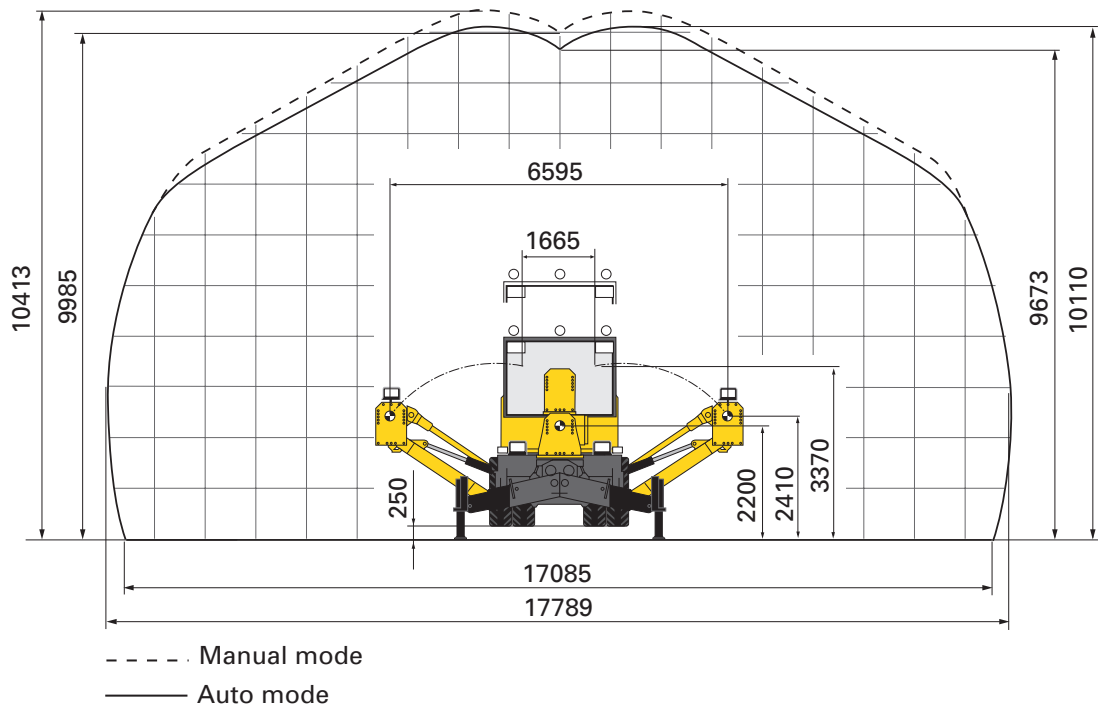


Picture shows rig with optional equipment mounted. All dimensions in mm.

Rocket Boomer® WL3 C30

Coverage area

Parallel holes



Scale 1:150

Rock Drilling Tools

Drifter rods

Dimension	Min. hole diameter
T38-HEX 35-SR35 Speedrod	45 mm
T38-HEX 35-SR35	45 mm
T38-Rnd 39-SR35	45 mm
T38-Rnd 39-SR35 Speedrod	45 mm
T38-HEX 35-SR35 Speedrod	48 mm
T38-Rnd 39-R35	48 mm
T38-HEX 35-R35	48 mm

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

Shank adapters

Thread	Diameter	Length	Part No.
T38	38 mm	435 mm	435-16901,30
T38	38 mm	525 mm	435-16903,30
TC45	45 mm	435 mm	470-16901,30*

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

Couplings

Thread	Diameter	Length	Part No.
T38	52 mm	170 mm	335-0052,00
T38/TC45	55 mm	170 mm	335-1055-70,00

Extension rods for injection drilling/RAS

Dimension	Min. hole diameter
T38 Speedrod	64 mm