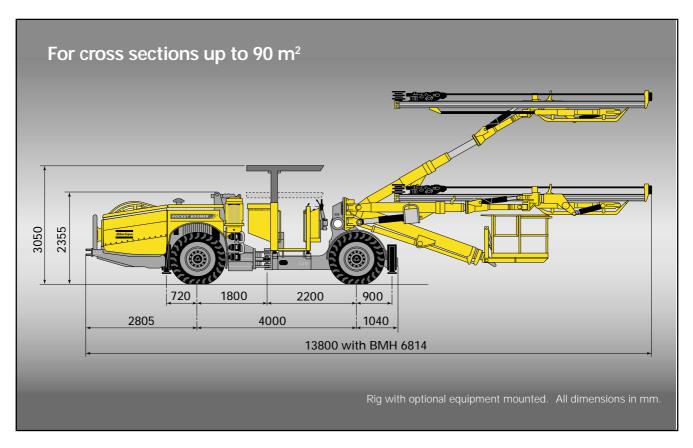
Atlas Copco

Rocket Boomer L2D

Direct controlled hydraulic tunnelling and mining rig with COP 1838 rock drills. Designed for power and productivity.



Features

- Direct controlled drilling system which incorporates excellent anti-jamming function RPCF (Rotation Pressure Controlled Feed force). Separate pumps for percussion, dampening/positioning and rotation for independent control and maximum output.
- COP 1838 rock drill with modern double reflex dampening giving genuine high speed drilling and good drill steel economy. New lubrication system with separate lubrication of driver and gear gives, pressurized sidebolts and mating surfaces gives reliable operation, low maintenance cost and long intervals between overhauls.
- BMH 6800 heavy-duty aluminium hydraulic feeds with double bottom for high torsional resistance. Snap-on stainless steel sleeves and polymer contact pads for long life and low maintenance cost.
- BUT 35 heavy-duty booms for direct, fast and accurate positioning between holes. Improved linkage bearings in main boom joints and new axial bearings in all boom joints
- Sturdy, articulated carrier with four wheel drive for easy manoeuvering in narrow tunnels and drifts. Powered by a turbocharged, water-cooled 4-cylinder, low emission diesel engine for high mobility. Four jacks for stable set up.
- Basic rig includes FOPS-approved protective roof, fixed seat for tramming, cable reel, water booster pump, screw compressor and work lights.

Main components

Rock drill 2 x COP 1838ME Feed 2 x BMH 6800-series Boom 2 x BUT 35F Drilling system DCS1800



Rock drill COP 1838-07

Shank adapter R32, R38 or T38
Height over drill centre 88 mm
Impact power 20kW
Impact rate 60 Hz
Hydraulic pressure, max. 230 bar
Rotation system separate rotation

Hydraulic pressure, max.

Rotation system

Rotation speed

Rotation torque, max.

Lub. air consump. (at 3 bar)

Water consumption

Weight

Sound level

230 bar

separate rotation
0-240 rpm
700 Nm
5 l/s
0.8 l/s
171 kg
<106 dB(A)

Feeds BMH 6800

	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)	4043	4668	5268	5843
Weight, incl. rock				
drill (kg)	631	665	696	721
Feed force, max. (kN)	20.0	20.0	20.0	20.0

Boom BUT 35F

Feed extension	1800 mm
Boom extension	1600 mm
Parallel holding	Complete
Feed roll-over	360 degrees
Max. lifting angle	+65 degrees
	-30 degrees
Max. swinging angle	±45 degrees
Weight, boom only	2920 kg

Hydraulic system

- Hydraulic pumps: 2 separate units, one for each boom. Each unit consists of two variable pumps for percussion and dampening/positioning, and one constant flow pump for rotation.
- Pumps unloaded at start
- System pressure 150-240 bar
- Hydraulic oil tank, volume max 250 l, min 200 l
- Low oil lever indicator (incl.shut down when power supply is connected)
- Oil temperature meter on oil tank
- Filtration, 20 µm absolute
- · Oil filter indicator
- · Water cooled oil cooler, stainless steel
- · Mineral hydraulic oil

Air system

- Atlas Copco GA 5 screw compressor
- Capacity, max 20 l/s at 7 bar and 5400 rpm
- Hydraulic drive, axial piston motor 10 cc
- Adjustable speed
- Air pressure gauge

Water system

- Water booster pump CR 16-80
- Capacity, max 125 I/min at 9 bar boost
- Min water inlet pressure 2 bar
- Hydraulic drive, axial piston motor 5 cc
- Water pressure gauge
- Water flow gauge

Carrier

- Deutz BF4M 1013C diesel engine, water-cooled turbocharged 115 kW (156 hp) at 2300 rpm, 572 Nm at 1400 rpm
- Articulated steering with +/- 38 degree steering angle
- · Four wheel drive
- Hydrostatic power steering system
- Hydrodynamic Clark 24000 transmission
- Hurth 176 front axle
- Hurth 176 rear axle with +/- 8 degree oscillation
- Automatic differential lock on front axle, limited slip
- Tyres front and rear 14.00 x R24 Michelin XKA
- Clearence outside axles 15 degree
- Hydraulic jacks; 2 extensible with large plates 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) fully enclosed wet disc brakes
- Fuel tank, volume 100 l
- Electric system 24 V
- Batteries 2 x 125 Ah
- Tramming lights 8 x 70 W
- Illuminated stairs for platform, 2 x 70 W
- · Central lubrication system
- Silencer
- · Fire extinguisher
- Spirit levels one for longitudinal and one for sideway
- Horn
- Shelf for drill bits and tools
- · Gradeability 1:4 at max. load on drive wheels
- Tramming speed on flat ground >15 km/hr (at rolling resistance 0,05); on incline 1:8 > 5 km/hr

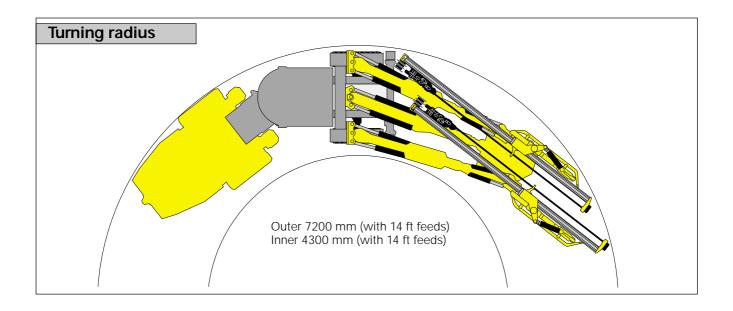
Electrical system

- Total installed power 158 kW
- Main motors 2 x 75 kW
- Voltage (as per customer specification) 400-690 V
- Frequency (as per customer specification) 50-60 Hz
- Starting method star/delta (400 690 V)
- Electronic overload protection for electric motors
- Percussion hour meters on A-panel
- Digital volt/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 8 kVA
- 2 x 1000 W working lights, halogen
- Cabel reel, diameter 1600 mm

Recommended cable size and length

Voltage	Туре	Dimension	Diameter	Length
400 V	RDOT	4x150 mm ²	67 mm	60 m
440 V	RDOT	4x120 mm ²	60 mm	75 m
440 V	Buflex	3x185+3x35 mm ²	56 mm	90 m
460-500 V	RDOT	4x120 mm ²	60 mm	75 m
460-500 V	Buflex	3x150+3x25 mm ²	52 mm	100 m
500-550 V	RDOT	4x95 mm ²	55 mm	90 m
500-550 V	Buflex	3x120+3x25 mm ²	46 mm	135 m
660-700 V	RDOT	4x70 mm ²	49 mm	110 m
660-700 V	Buflex	3x95+3x16 mm ²	42 mm	155 m
1000 V	Buflex	3x50+3x10 mm ²	32 mm	275 m

Surrounding temperature < 40 degrees C.



Dimensions	and	weights

Width	2530 mm
Height roof down	2355 mm
roof up	3050 mm
Mounting height platform, standard	+140 mm
Length (with 14 ft feeds)	13800 mm

Ground clearance	277 mm
Gross weight (basic rig)	23600 kg
Axle load boom side	17600 kg
engine side	6000 kg

Optional equipment

Rock drill/Drill system

- Rock drill rotation motor -05 (540 Nm, 0-300 rpm)
- · Hole blowing kit, with 80 I air receiver
- Water mist flushing with external water and air supply (incl. extra hydraulic driven fan for oil cooling or water-oil cooling))
- Rock drill lubrication warning kit for three booms
- · Big hole drilling kit

Feed

- Telescopic feed BMHT 6800-series for left/right handed booms, max 16 ft.
- Hydraulic drill steel gripper BSH 110 for extension drilling
- Rod Adding System RAS, max 18+12 ft rods (on booms with fixed segment max 16+10 ft)

Boom

- Extended boom reach with 700 mm long fixed boom segment (not for Booms with BMHT)
- · Boom lubrication system, rear part of boom
- Ni-Cr plated piston rods (limited selection) on request

Software

- FAM 1, Electronic lookout indicator
- FAM 2, Electronic lookout indicator, with hole depth measuring (only for BMH and BMHS feeds)

Operator's platform

- Protective roof mounting height lowered 140 mm (rig height roof up 2910 mm/down 2355 mm) or increased 60 mm (rig height roof up 3110 mm/down 2415 mm) 310 mm (rig height roof up 3360 mm/down 2665 mm)
- · Safety belt
- Manual spot lights, 2 x 70 W

Water system

- Water hose reel (diam.1100 mm) for hose diam. 1½", length 60 m at 70% filling rate (not in combination with extra transformer or extra air compressor)
- · Dual controls for hose reel
- Water hose diam. 11/2"
- · Water flow gauge

Hydraulic system

- Electric oil filling pump
- Heater kit for hydraulic oil tank, electric motor and diesel engine, 1.0 kW

Carrier

- Exhaust water scubber 95 or 150 l
- · Exhaust catalyser
- · Ansul fire suppression system, dry or wet
- Spare wheel
- · High altitude setting of diesel engine

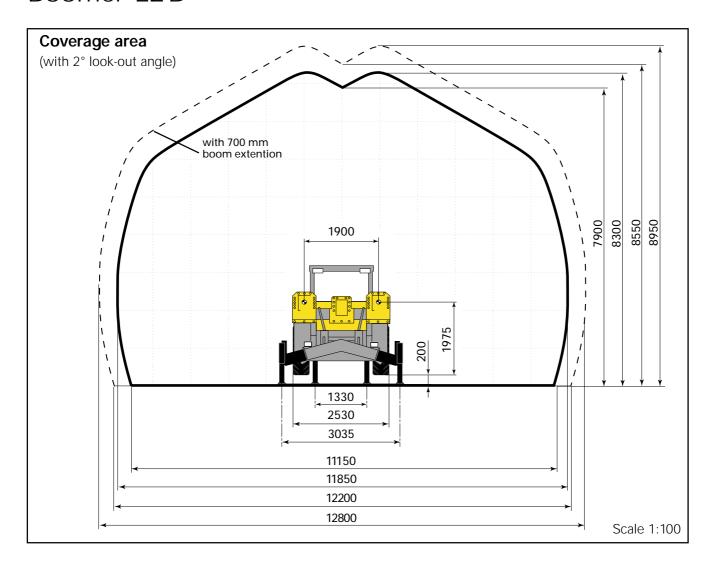
Electrical system

- Soft start for electrical motors, for 400 700 V (not for CSA approved rigs)
- 1000 V electric system, direct start only
- Electric cable, type RDOT or Buflex see recommendations
- · Dual controls for cable reel
- · Limit switch for cable reel
- · Plug for cable (with wire hose mesh)
- Power supply (incl. male plug)
- Electric outlet for accessories, 32 Amp (Voltage = main supply voltage if no extra transformer is chosen. Not for 1000 V.)
- Extra transformer, 15 kVA (not in combination with water hose reel and not CSA)
- CSA approved electrics (Canadian regulations)
- Australian electrics according to AUS 3000

Miscellaneous

- Service platform HL 210-MBE
- Protective roof for service platform, FOPS approved
- Hydraulic Swellex pump
- 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)

Boomer L2D



Rock Drilling Tools

Drifter rods	Shank adapters				
Dimension	Min. hole dia, mm	Thread	Dia, mm	Length, mm	Part No.
R38-Hex 35-R32	45	R38	38	435	404-09101,00
FI38-Hex 35-R32	45	FI38	38	435	435-09101,00
FI38-Hex 35-R32 MF-rod	45	R32	38	525	403-09103,00*
R38-Hex35- SR35 MF-rod	45	FI38	38	525	435-09103,00*
FI38-Hex 35-SR35	45	*- Intende	ed for rod adding	r system RAS a	and extension
FI38-Rnd 39-SR35	45	*= Intended for rod adding system, RAS, and extension drilling with BSH 110.			
FI38-Hex 35-R35	48				
FI38-Hex 35-R35 MF-rod	48				
FI38-Rnd 39-R35	48				
FI38-Rnd 39-R35 MF-rod	48				
Extension rods for inj Dimension R32 MF-rod F138 MF-rod	iection drilling/RAS Min. hole dia, mm 51 64	Coupling Thread R38 F138	Dia, mm 55 55	Length, mm 170 190	Part No. 304-0055,00 335-0055,00

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

