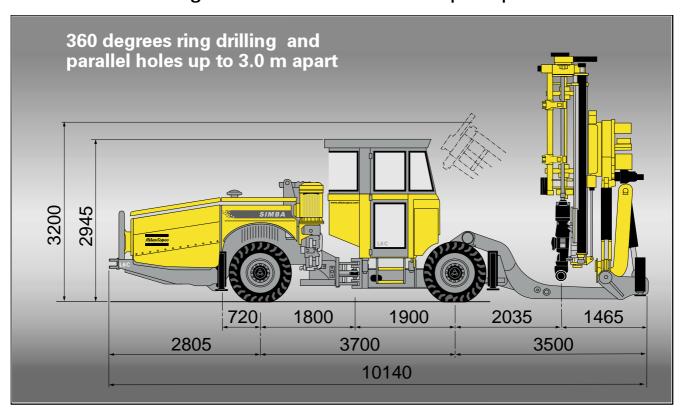
Atlas Copco

Simba L6 C

Hydraulic top-hammer production drill rig with computer-based drilling system for high productivity and precision. Hole diameter range 89-115 mm and hole depth up to 51 m.



Features

- Rig Control System (RCS) with interactive operator control panel with full-colour display of the computer-based drilling system. 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. Distributed hydraulic system with fewer and shorter hoses for increased availability. PC-card for transfer of data and for service engineers to store optimal drill settings.
- COP 4050 powerful, high performance rock drill with its long, slender piston and double reflex dampener gives genuine high speed drilling and excellent drill steel economy. Optional extractor device available COP 4050MEX for smooth uncoupling and easy retrieval of a stuck drill string.
- Stingers mounted directly on feed (two stingers are standard, up to four optional) and a sturdy positioning unit for accurate positioning and drilling precision.
- Sturdy, articulated carrier with turbocharged water-cooled, low emission diesel engine. High ground clearance, four-wheel traction and articulated steering for easy manoeuvering in narrow drifts and fast tramming in steep ramps.
- Optional Simba ABC control systems for different levels of automation.
- Smart oil leakage shut-down system minimises hydraulic oil pollution.
- Standard rig includes FOPS approved telescopic protective roof, fixed seat, hydraulic driven compressor and water booster pump, cable reel and working lights.



Rock drill COP 4050ME/MEX (89-115 mm)

TDS 76, TDS 87 40 kW Impact power, at max pressure Impact rate 40-60 Hz Hydraulic pressure, up to 210 bar Rotation system separate rotation, 2 xOMS160 Rotation speed 0-130 rpm Rotation torque, max. 1320 Nm Lub. air consump. (at 3 bar) 8 l/s Water consumption approx. 2.0 l/s

390/410 kg

Feed

Weight

Feeds BMH 200 series including BSH55 drill steel support and BSC 55 cutting deflector.

Feed type	Length	Rec. drift	Height	
	mm	Min. width	Min.	Max.
BMH 244	3390	3590	4000	4900
BMH 245	3695	3895	4000	5200
BMH 246	4000	4200	4300	5500
BMH 244X *	3590	3790	4200	5100
BMH 245X *	3895	4095	4200	5400
BMH 246X *	4200	4400	4500	5700

^{*}additional X = extractor device for rock drill (backhamring unit).

Positioning System

- Feed extension 900 mm (with 4' drill steel) and 1200 mm (with 5' and 6' drill steel)
- Rotary Actuator BHR 60-2 for 360° ring drilling
- 1 x Stinger BSJ 8-200 backward on feed
- 1 x Stinger BSJ 8-115 forward on feed
- Tilt of positioning system +45° forward and -30° backward in drilling,
- Positioning sideways ±1.5 m

Electronic system

- Rig Control System, CAN-based network. Versatile and scalable to higher degree of automation
- One electronic control panel with colour display mounted in operator compartment
- PC-card for transfer of data and for service engineers to store optimal drill settings
- Integrated diagnostic system
- All needed parameters can be viewed on display i.e pressure gauges, collaring angles with hole depth etc
- Exposed components are designed and tested acc. to IP 65 standard

Hydraulic system

- Two hydraulic pump units: one for percussion and one for feed, dampening/positioning and rotation.
- Pumps unloaded at start
- System pressure 150-240 bar
- Hydraulic oil tank, volume max 250 l, min 200 l
- Low oil level indicator and shut-down
- Oil temperature gauge on oil tank, electronically supervised
- Smart oil leakage shut-down system
- Filtration, 20 micron absolute
- Oil filter indicator
- Water cooled, stainless steel oil cooler
- Mineral hydraulic oil

Water system

- Water booster pump CR 16-80
- · Capacity, max 250 I/min at 15 bar boost
- Min water inlet pressure 2 bar
- Hydraulic drive, axial piston motor 10 cc
- Water pressure gauge
- · Water flow guard

Carrier

- FOPS approved protective roof
- Fixed seat for tramming, incl. safety belt
- Deutz BF4M 1013C diesel engine, water-cooled turbocharged 115 kW (156 hp) at 2300 rpm, 572 Nm at 1400 rpm
- Articulated steering with +/- 41 degree steering angle
- · Four wheel drive
- Hydrostatic power steering system
- Hydrodynamic Clark 24000 transmission
- Hurth 176HD front axle
- Hurth 176HD rear axle with +/- 8 degree oscillation
- Automatic differential lock on front axle, limited slip
- Tyres front and rear 12.00 x 20 Michelin X-mine D2
- Clearance outside axles 15 degree
- Hydraulic jacks 2 (extendable) 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 sideways
- Horn
- 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
- Beacon warning lamp
- Reverse alarm

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
- Digital volt/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- · Battery charger
- Transformer 8 kVA
- 2 x 1000 W halogen working lights, mounted on roof
- Cable reel, diameter 1600 mm

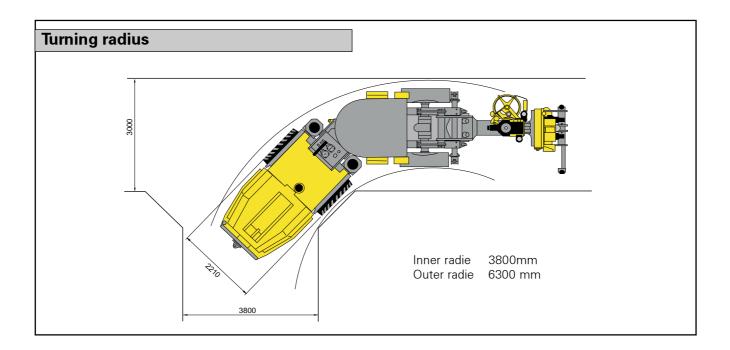
Recommended cable size and length							
Voltage	Type Dimension		Diameter	Length			
400V	H07RN-F	4G150 mm ²	67 mm	60 m			
440 V	H07RN-F	4G120 mm ²	60 mm	75 m			
440 V	Buflex	3x1150+3G35 mm ²	52 mm	100 m			
460-500 V	H07RN-F	4G120 mm ²	60 mm	75 m			
460-500 V	Buflex	3x150+3G25 mm ²	52 mm	100 m			
500-550 V	H07RN-F	4G95 mm ²	55 mm	90 m			
500-550 V	Buflex	3x120+3G25 mm ²	46 mm	135 m			
660-700 V	H07RN-F	4G70 mm ²	49 mm	110 m			
660-700 V	Buflex	3x95+3G16 mm ²	42 mm	155 m			
1000 V	Buflex	3x50+3G10 mm ²	32 mm	275 m			

G = Protection yellow/green

Valid for ambient temperature below 30°C

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



Optional equipment

Rock drill/Drill system

- · Extractor unit for rock drill
- Air-water mist flushing, external air
- Rock drill lubrication warning kit

Feed/Positioning system

- Rig alignment laser RAL 650
- Additional stinger forward on feed, BSJ 8-115 (stroke length 1150 mm)
- Additional stinger backward on feed, BSJ 8-200 (stroke length 2000 mm)
- Automatic lubrication for positioning system
- Central lubrication for positioning system
- Rod handling system RHS 27

Software

- Simba ABC Basic with angle and hole length indication, and basic logging
- Simba ABC Regular including ABC Basic, collaring and 1hole drilling automatics, and maintenance logging
- Optional Break-through Automatic Stop, BAS system ideal complement to ABC Regular when drilling between levels.
- MWD (Measuring While Drilling) logging

Protective roof

 Alternative mounting height: lowered 140 mm (rig height roof up 2820 mm/down 2265 mm); or increased 60 mm (rig height roof up 3020 mm/down 2325 mm) or 310 mm (rig height roof up 3270 mm/down 2575 mm)

Cabin

- Cabin with fixed seat, FOPS approved 80 dB(A)
- Air conditioning unit for cabin, hydraulic powered
- Heater for cabin, 1.2 kW
- Swingable suspended seat for cabin without sfety belt
- Additional operator's control panel
- CD player mounted in cabin
- Alternative mounting height: lowered 200 mm (rig height 2810mm) or increased 250 mm (rig height 3260 mm)
- 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)
- Dual controls for hose reel
- Water hose 60 m, diam. 11/2"

Hydraulic system

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

Carrier

- Exhaust water scrubber 150 l
- Exhaust catalyser
- Fume diluter (NA std option)
- High altitude setting (>3000 m above sea level)
- Fire suppression system Ansul
- Fire suppression system Forrex
- Particle filter UNIKAT
- Automatic fire suppression system, including suppression inside electric cabinet
- Spare wheel
- Shelf for drill bits and tools

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, see recommendations
- Dual controls for cable reel
- Limit switch for cable reel
- Electric plugs 380 660 V, max 250 A
- Electric socket 380 660 V, max 250 A
- Plug for cable (with wire hose mesh)
- Power supply (incl. male plug)
- Electric outlet for accessories, 16 Amp (Voltage = main supply voltage if no extra transformer is chosen. Not for 1000 V.)
- Extra transformer, 10 kVA (not CSA)
- CSA approved electrics (Canadian regulations)
- Australian electrics according to AUS 3000
- Extra work lights 2 x 200 W, 24 V (on tripod)
- Extra work lights 2 x 500 W, 220 V (on tripod)

Miscellaneous

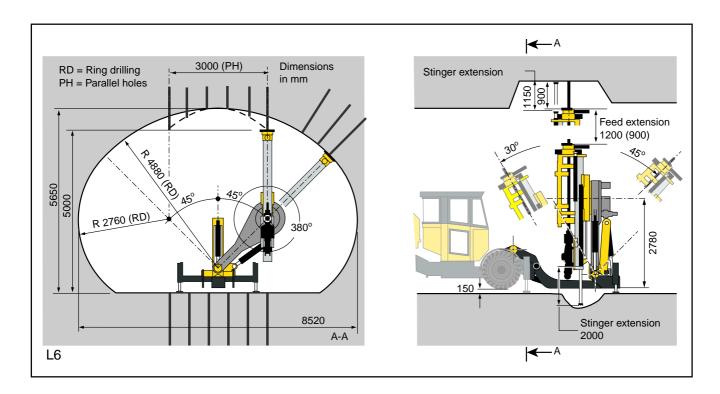
- Rig washing kit, with water hose and reel
- Manual lubrication system, grease-gun with hose and reel (incl. 18 kg grease barrel)
- Service tool box for electronic system

Simba L6 C

Dimensions and weights

Valid for rock drill COP 4050MEX and feed 246X

Width	2210 mm
Height tramming	3200 mm
Height	2945 mm
Length tramming	10500 mm
Ground clearance	205 mm
Gross weight (basic rig+RHS)	22600 kg
Axle load, boom side	16000 kg
engine side	6600 kg



Rock Drilling Tools

Rock drill	Hole diameter	Drill steel	Shank adapter	
COP 4050ME	89 - 102 mm	TDS 76	ST 58	
COP 4050MEX	89 - 102 mm	TDS 76	ST58	
COP 4050ME	89 - 115 mm	TDS 87	ST 68	
COP 4050MEX	89 - 115 mm	TDS 87	ST 68	

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

