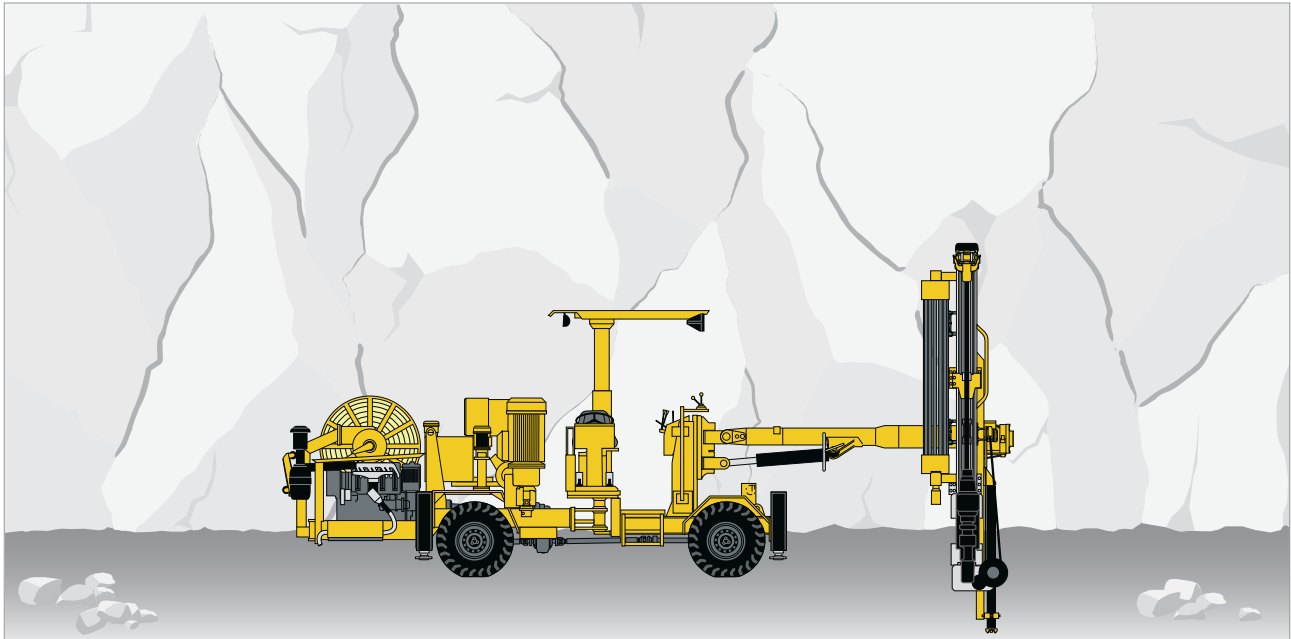


Simba 1257

Technical specification



Production drilling rig adapted for small- to medium-sized drifts. Production drilling with tophammer rock drill in the hole range 51–89 mm. Boom-mounted drilling unit for optimized reach and flexibility.

Standard features

» Rock drill

- Atlas Copco COP 1800-series
- Dual-damping system for shock wave absorption and continuous rock contact for high penetration
- Lubricated and pressurized mating surfaces giving long service intervals
- Shank adapters suitable for the given hole range

» Drilling unit

- BMHP 6000-series heavy-duty aluminium hydraulic feed
- Front-mounted stinger
- Drill steel support for guidance during collaring and as support during manual rod handling

» Positioning unit

- BUT 32PD boom with mine-adapted, sturdy components
- Boom mounted drilling unit
- Accurate and smooth movements

» Control system

- Direct Control System (DCS)
- Rotation Pressure Controls Feed (RPCF)
- Anti-jamming system
- Angle reading instrument, ARI 1257

» Carrier

- Mine-adapted carrier for small- to medium-sized drifts with articulated steering and four-wheel drive

» General

- Operator panel mounted under canopy
- FOPS-approved protective roof
- Electrical cable reel
- Working lights on protective roof

Specifications

| ROCK DRILL | |
|------------------------------|-------------------|
| COP 1838ME | |
| Shank adapter | R32, T38, (T45*) |
| Hole diameter | 51–89 mm |
| Impact power | 18 kW |
| Impact rate | 54 Hz |
| Hydraulic pressure, max. | 230 bar |
| Rotation motors | Separate rotation |
| Rotation speed | 0–210 rpm |
| Lub. air consump. (at 3 bar) | 6 l/s |
| Water consumption | 50 l/min |
| Weight | 171 kg |

*T45 gives 9 rods in carousel instead of 10

| FEED | | | |
|-----------------------------|----------|----------|----------|
| BMH 6800 | BMH 6804 | BMH 6805 | BMH 6806 |
| Total length | 3,141 mm | 3,448 mm | 3,753 mm |
| Drill rod length | 1,220 mm | 1,525 mm | 1,830 mm |
| Total length with extractor | 3,331 mm | 3,655 mm | 3,960 mm |

» Drilling unit

- Rod Handling System, RHS 10..... 10+1 rods
- Adaptable to 4', 5' and 6' rods
- Adaptable to R32, T38, (T45) drill rods
- Mechanized drilling up to 20 m

» Positioning system

- Boom BUT 32PD
- Feed extension..... 900 mm
- Boom extension..... 1,250 mm
- Stinger forward on feedBSJ 4-45
- Feed dump, drilling +24° forward and -79° backward
- Angle Reading Instrument, ARI 1257

» Control system

- Direct Control System, DCS
- Basic functions such as Rotation Pressure Controlled Feed (RPCF) and anti-jamming

» Power pack

- Hydraulic pump for percussion
- Hydraulic pump for rotation, positioning, feed
- Pumps unloaded at start
- System pressure, max..... 230 bar
- Hydraulic oil tank, volume..... 124 l
- Low oil level indicator and shut-down
- Oil temperature gauge on oil tank
- Electric oil filling pump
- Filtration, absolute..... 16 µm
- Oil filter indicator
- Water cooled oil cooler in stainless steel
- Mineral hydraulic oil

» Electrical system

- Total installed power 65 kW
- Main motor 55 kW
- Voltage 380–1,000 V
- Frequency 50–60 Hz
- Starting method star/delta (380–690 V)
- Electronic overload protection for electric motors
- Digital volt/amperage meter in electric cabinet
- Phase sequence indicator
- Earth fault indicator
- Battery charger
- Transformer 4 kVA
- Working lights, mounted on roof 2x500 W, 230 V
- Cable reel
- Limit switch for cable reel
- Manual spotlight, left side

» Air system

- Lubricated air for the rock drill
- Compressor Atlas Copco LE7
- Capacity at 5,400 rpm and 7 bar 12 l/s
- Air pressure gauge
- Adjustable flow/pressure
- Hole blowing kit with external air

» Water system

- Hydraulic driven water booster pump
- Capacity at 7 bar boost max 80 l/min
- Min water inlet pressure 2 bar
- Hydraulic drive, axial piston motor
- Water pressure gauge
- Water flow guard

» Carrier

- Engine Deutz F5L 912W
- Power rating at 2,300 rpm 52 kW (70 hp)
- Torque at 1,550 rpm 248 Nm
- Fixed seat for tramming, including safety belt
- Articulated steering ±41° steering angle
- Four-wheel drive
- FOPS-approved protective roof
- Hydrostatic power steering system
- Hydrodynamic transmission Clark 12000
- Front axle DANA 176
- Rear axle DANA 176, ±8° oscillation
- Automatic differential lock on front axle, limited slip
- Tyres 8.25 x R15
- Clearance outside axles 15°
- Hydraulic jacks, front 2 extendable
- Hydraulic jacks, rear 2
- Service brakes 2 separate circuits (hydraulically applied, fully enclosed wet disc brakes)
- Emergency and parking brakes SAHR
- Fuel tank, volume 60 l
- Electric system 24 V
- Batteries 2 x 70 Ah
- Tramming lights 8 x 70 W
- Illuminated stairs for platform
- Central lubrication system
- Silencer
- Catalyser
- Fire extinguisher
- Spirit levels
- Gradeability at max load on drive wheels 1:4
- Tramming speed on flat ground >10 km/h
- Tramming speed on incline 1:8 >4 km/h
- Horn, beacon and reverse alarm

Specifications

DRILL STEEL

| Rock drill | Hole diameter, mm | Drill rod | Shank adapter | Guide tube |
|------------|-------------------|----------------|---------------|------------|
| COP 1838ME | 51–64 | R32 Speedrod | R32 | N/A |
| COP 1838ME | 64–76 | T38 Speedrod | T38 | TDS 56 |
| COP 1838HE | 76–89 | (T45 Speedrod) | (T45) | TDS 64 |

Optional equipment

» Drilling system

- Water mist flushing, water oil cooler, external air supply
- Water mist flushing, air oil cooler, external air supply
- Rock drill lubrication surveillance system
- Big hole drilling kit
- Hole blowing kit with internal air
- COP 1838MEX, COP 1838HE, COP 1838HEX

» Positioning system

- Rig Alignment Laser RAL 650
- Stinger backward
- Thread lubrication kit
- Automatic lubrication for positioning/drilling system
- Central lubrication for positioning/drilling system

» Power pack

- Heater kit

» Carrier

- Fire suppression system ANSUL, manual
- Brake lights
- Outlet for communication radio, 12 V

» Electrical system

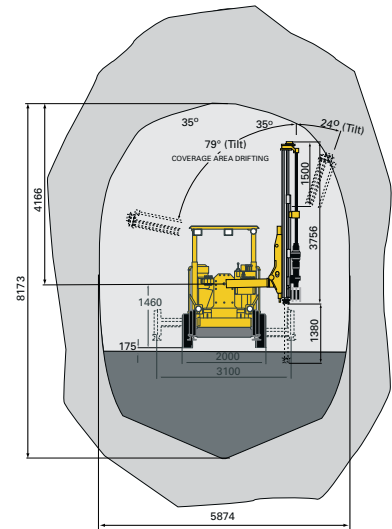
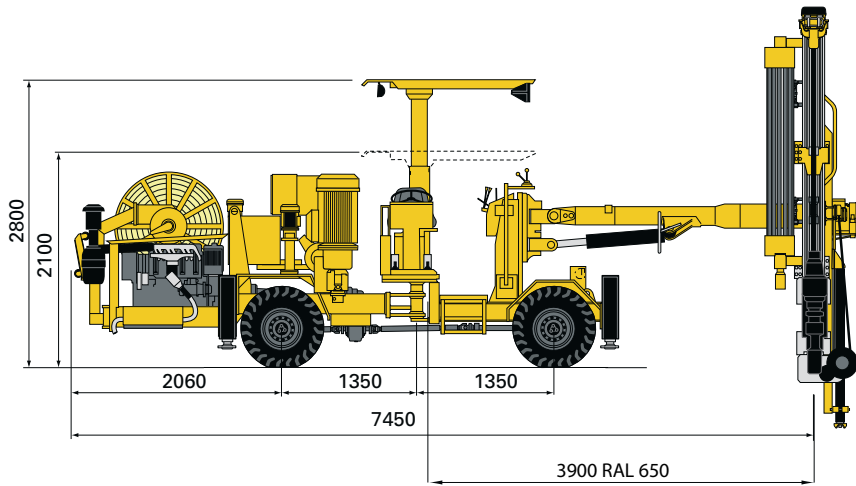
- Electrical cable on reel, H07RN-F
- Electrical cable on reel, Buxflex
- Plug PC4/PC5
- Socket PC4/PC5
- Switch gear
- Electrics according to local standards
- Working lights, 2x200 W, 24 V

» Miscellaneous

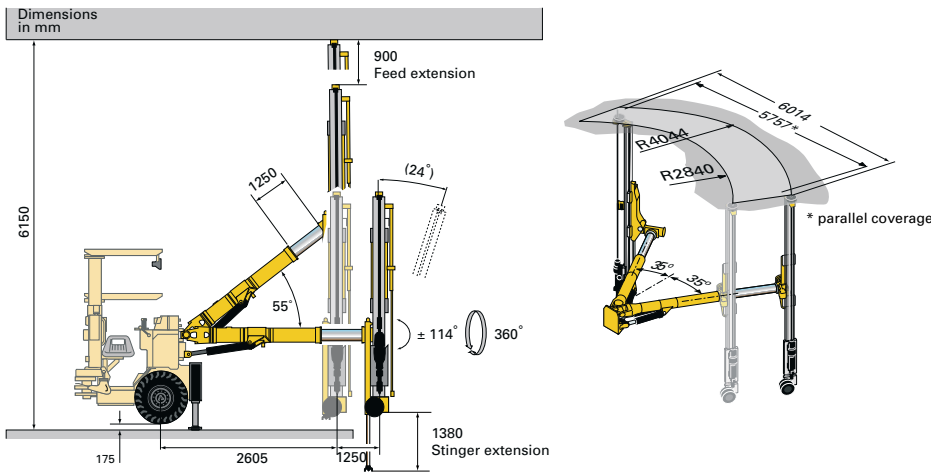
- Shelf for bits and tools
- Rod holder for extra drill rods
- Ni-Cr piston rods
- Manual lubrication kit
- Rig washing kit

Measurements

SIDE VIEW



COVERAGE AREA



TURNING RADIUS

depending on surface

| mm | Outer | 4,900 |
|----|-------|-------|
| | Inner | 2,700 |

DIMENSIONS

| mm | Width | 2,000 |
|----|---|----------------------|
| | Height tramping, roof down | 2,100 |
| | Height roof up | 2,800 |
| | Length tramping (with BHMP 214/215/216) | 8,805*/9,112*/9,417* |
| | Ground clearance | 335 |

*+200 mm with extractor

WEIGHT

gross weight

| kg | Total | 11,800 |
|----|-------------|--------|
| | Boom side | 7,800 |
| | Engine side | 4,000 |

RECOMMENDED CABLE SIZE AND LENGTH

| Voltage | Type | Dimension, mm ² | Diameter, mm | Length, m |
|-----------|---------|----------------------------|--------------|-----------|
| 380–400 V | H07RN-F | 4x50 | 38 | 40 |
| 380–400 V | Buflex | 3x70+3G35 | 37 | 60 |
| 440–575 V | H07RN-F | 4G35 | 38 | 60 |
| 440–575 V | Buflex | 3x50+3G25 | 32 | 80 |
| 660–700 V | H07RN-F | 4x25 | 34 | 70 |
| 660–700 V | Buflex | 3x35+3G25 | 28 | 105 |
| 1,000 V | Buflex | 3x35+3G10 | 28 | 105 |

G = Protection yellow/green
Recommendations are given for surrounding temperature of 40° C.

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