

SIMBA M6

Hydraulic production drill rig for long-hole mining and medium-to-large holes ranging from 51 to 178 mm in diameter.



Atlas Copco



SIMBA HIGH PRECISION SOLUTION

THE STURDY SIMBA M6 IS A LONG-HOLE PRODUCTION DRILL RIG FOR MEDIUM TO LARGE-DRIFT MINING. IT ACCOMMODATES A RANGE OF DRILL BITS, ROCK DRILLS AND IN-THE-HOLE HAMMERS TO ADAPT TO YOUR SPECIFIC NEEDS. THE RIG OPERATOR ENJOYS EXCELLENT VISIBILITY AND ENHANCED SAFETY IN THE COMFORTABLE CABIN. WHEN YOU SEEK A HARD-WORKING, HIGH-PRECISION SOLUTION FOR LONG-HOLE DRILLING, RELY ON THE POWERFUL SIMBA M6.

+ MAIN BENEFITS

Sturdy and precise The Simba M6 drilling unit is mounted on an I-frame with a pendulum arm for easy setup and steady, accurate drilling.

Suits your needs The Simba M6 can accommodate a wide range of top-hammers and in-the-hole hammers to best suit your operation and optimize your performance, hole quality and drill steel economy.

Precision and productivity The Simba M6 features our acclaimed rig control system (RCS) and can be equipped with smart automated single-hole or multi-hole drilling functions. With tele-remote control, the Simba M6 can be operated from one or more remote locations.



The bit changer increases efficiency and keeps the operator at a safe distance from the drilling zone.

The cabin is ROPS and FOPS approved for a safe, ergonomic operating environment.

The reverse camera enhances visibility and safety while transporting the drill rig.



FAST AND PRECISE ROCK DRILLING SIMBA M6

SIMBA M6 MODELS ARE BUILT FOR FAST ON-SITE POSITIONING AND ACCURATE HOLE PLACEMENT. INTELLIGENT FUNCTIONS ON THESE HIGH-PERFORMANCE RIGS BOOST EFFICIENCY AND PRODUCTIVITY WHILE MAKING THE OPERATOR'S JOB SAFER AND EASIER.



+ SAFETY

The Simba M6 is designed with safety in mind. The rig operator sits in a ROPS and FOPS-approved cabin that offers excellent visibility and comfort. Barrier sensors protect the operator and other workers from rotating parts during automatic drilling.



+ AUTOMATION

Boost your productivity by equipping your Simba M6 with smart automated functions such as ABC Regular or ABC Total. Your Simba M6 can then effectively continue to drill unattended throughout personnel breaks and shift changes. With the tele-remote control function, the rig operator can safely and comfortably command the rig from a distance.



+ ATLAS COPCO RIG CONTROL SYSTEM

We introduced the first version of our computerized drill rig control system in 1998 to take the market by storm. Throughout the years, the Rig Control System (RCS) has been further advanced and refined to include increasingly sophisticated functions informed by practical work experience and an on-going dialogue with clients. More than 3 000 RCS-equipped rigs are currently in operation the world over. At Atlas Copco, we continue to drive development in the drilling and mining industry.

ATLAS COPCO SERVICE – IT'S NOT JUST ABOUT OUR PROMISES, IT'S ABOUT DELIVERY

We offer several levels of service to meet the requirements of your operation and ensure your productivity. Choose a service agreement that will help you build a quality operation. Minimize unplanned downtime through proactive, planned maintenance. We offer expert advice and maintenance on every machine, component and accessory in our inventory.



DRILLING SYSTEM	A	B
COP 1838+	○	
COP 1838MUX+, COP 1838HUX+	○	
COP 2550UX+	○	
COP 3060MUX	○	
COP 4050MUX	○	
COP 44 to COP 64		○
Dry drilling system	○	
Collar Pipe Inserter (CPI)	○	
Thread lubrication kit	○	○
Bit changer	○	
Water mist flushing, external water and air supply (Hydraulic oil cooled by water cooler)	○	●
Water mist flushing, external water and air supply (Hydraulic oil cooled by air fan)	○	
Hole blowing kit	○	
Rock drill lubrication warning kit	●	

BOOM/DRILLING UNIT	A	B
Automatic lubrication for drilling and positioning unit	○	○
Central lubrication for drilling and positioning unit	●	●
Rod Handling System, RHS 17 (17+1 rods) Mechanized drilling up to 32 m	○	
Rod Handling System, RHS 27 (27+1 rods) Mechanized drilling up to 51 m	○	○
Rod Handling System, RHS 35 (35+1 rods) Mechanized drilling up to 63 m		○
Adaptable to 4', 5' and 6' rods	●	
Adaptable to 5' and 6' rods		●
2 x Rear and 2 x front stinger	●	●

FEED	A	B
BMH 200-Series 3 160 mm, 3 465 mm, 3 770 mm	○	
BMH 200-Series (Extractor) 3 365 mm, 3 670 mm, 3 975 mm	○	
BMH 200-Series 3 620 mm, 3 925 mm		○

AIRSYSTEM	A	B
Air flow guard	●	●
Compressor: Atlas Copco GAR 5	●	
Compressor: Atlas Copco GAR 30	○	
Compressor: Double GAR 30 +air receiver	○	
Compressor: On-board booster, 25 bar/ 380 l/s		○
External air supply connection for hole blowing	●	
HECL lubrication system with electric filling pump		●

WATERSYSTEM	A	B
Minimum water inlet pressure 2 bar	●	●
Hydraulic water booster pump. Capacity, at 15 bar 250 l/min	●	
Water injection pump. Capacity 50 l/min	○	●
Water hose reel including hose*	○	○

*Not applicable when booster compressor is installed on ITH drill rigs

HYDRAULIC SYSTEM	A	B
Low oil level indicator and shut-down	●	●
Smart oil leakage shut-down system	●	●
Oil temperature gauge on oil tank, electronically supervised	●	●
Hydraulic oil thermostat	●	●
Water/Oil cooler in stainless steel	●	●
Filtration 16 µm	●	●
Oil filter indicator	●	●
Mineral hydraulic oil	●	●
Electrical oil filling pump	●	●
Heater kit for hydraulic oil tank, diesel engine and electric motors	○	○
Biodegradable hydraulic oil	○	○
Nr-Cr plated piston rods (limited selection on request)	○	○

CONTROL SYSTEM	A	B
Atlas Copco Rig Control System (RCS)	●	●
Advanced Boom Control (ABC) Regular	○	○
Advanced Boom Control (ABC) Total	○	○
Breakthrough Automatic Stop	○	○
Underground Manager pro	○	○
Drill plan handling	○	○
Drill plan handling with raise view	○	○
Full Drilling Data Handling	○	○
Measure While Drilling (MWD)	○	○
Void Detection	○	
Remote Cradle Control/Remote Feed Control	○	○
Rig Remote Access (RRA)	○	○
Mobile Tele Remote/Multi Tele Remote	○	○
Remote operating kit	○	○
Additional panel	○	○
Remote controlled camera on tripod with monitor in cabin	○	○
Total Station Navigation	○	○
Certiq professional	○	○

ELECTRICAL SYSTEM	A	B
Total installed power 118 kW (Main motors 2 x 55 kW)	●	
Total installed power 63 kW (Main motor 1 x 55 kW)		●
Total installed power 158 kW (Main motor 1 x 95 kW, Equipped with booster compressor)		○
Total installed power 158 kW (Main motors 2 x 75 kW)*	○	
Voltage 400-1 000 V 50/60 Hz	●	●
Starting method star/delta (400-690 V)	●	●
Soft start of main electrical motors (not for 1000 V)	○	○
Electronic overload protection for electric motors	●	●
Digital voltmeter/amperage meter in electric cabinet	●	●
Electric outlet for accessories, 16 A (CE) / 32 A (CE)	○	○
Extra transformer 15 kVA	○	○
PC4 or PC5 Plug/Socket	○	○
Phase sequence and eart fault indicator	●	●
Battery charger	●	●
Dual controls for cable reel	●	●
Limit switch for cable reel with signal lamp and brake connection	●	●
Stainless steel electrical enclosure	○	○

*Only when equipped with COP 3060MUX and COP 4050MUX.

CARRIER	A	B
Deutz TCD 2013 L04 2V Stage III A Tier 3 (120 kW)	○	○
Deutz TCD 4.1 L04 Stage IV / Tier 4F (115 kW)	○	○
Deutz TCD 2012 L06 2V Stage III A Tier 3 (155 kW)	○	○
Deutz TCD 6.1 L06 Stage IV / Tier 4F**	○	○
Front axel DANA Spicer 123/90	○	○
Rear axel DANA Spicer 123/90 ±8° oscillation	○	○
Articulated steering ±41° steering angle	●	●
Four-wheel drive	●	●
Electric system 24 V	●	●
Batteries 2 x 125 Ah	●	●
Hose/cable guiding at water/cable reel	○	○
Automatic differential lock on front axle, limited slip	●	●
Tires 12 x R24	●	●
Tramming lights 8 x 22 LED, 24 V DC	●	●
Working lights 4 x 150 LED, 24 V DC	●	●
Rig alignment laser	●	●
Illuminated stairs for platform LED	●	●
Front and rear jacks	●	●
Fuel tank, volume 110 L	●	●
Central grease point	●	●
Fire suppression system ANSUL (manual or automatic)	○	○
Fire suppression system FORREX (manual or automatic)	○	○
Hot climate tramming kit	○	○
Rig washing kit*	○	○
Manual lubrication kit	○	○
Boot washing kit*	○	○

*Not applicable when equipped with dry drilling system.
 **Maximum ambient temperature 25°

CABIN (OPTIONAL)	A	B
ROPS and FOPS approved cabin	●	●
Mounting height -140 mm	○	○
Cabin lift/tilt system, 375 mm/15°	○	○
Swingable seat for drilling and tramming	○	○
Front window 22 mm (P8B safety classified)	○	○
Reversing camera with monitor	○	○
12 V Outlet	●	●
Joystick-controlled spotlights left and/or right, 70 W	○	○
FOPS-approved grizzly bar for front window	○	○
Low-designed cabin, for seated operator cabin height 2 735 mm	○	○
Mediaplayer	○	○
Air condition	●	●
Heating function for air conditioning (water transferred)	○	○
Electrical heater, 1.2 kW, 230 V (CE)	○	○
Cabin body made of stainless steel	○	○

PROTECTIVE ROOF	A	B
FOPS approved	●	●
Swingable seat for drilling and tramming	○	○
Stainless steel	○	○
Joystick-controlled spotlights left and/or right, 70 W	○	○

DRIFTER RODS/PIPES			
Rock drill	Rod/Pipe	Guide tubes	Min. hole diameter (mm)
COP 1838+, HUX+, MUX+	R32 Speedrod	TDS 45	51-64
	T38 Speedrod	TDS 54/TDS 64	64-76
	T45 Speedrod	TDS 64/TDS 76	76-89
COP 2550UX	T51	TDS 76	76-115
	TDS 64/TDS 76	N/A	89-102 (ST58 Shank adapter)
COP 3060MUX	TDS 76	N/A	89
	TDS 87	N/A	102
COP 4050	TDS 76	N/A	89
	TDS 87	N/A	102-147
COP 44	TAC 76/89	N/A	110-125
COP 54	TAC 89 (TDS102)	N/A	134-152
COP 64	TAC 89 (TDS102)	N/A	156-178

RECOMMENDED CABLE SIZE AND LENGTH					
Voltage	Type	Dimension (mm²)	Diameter (mm)	Length (m)	Length ITH (m)
380-400 V	Buflex	3x185+3G35	56	80	65
440-500 V	Buflex	3x150+3G25	52	120	70
550 V	Buflex	3x120+3G25	46	120	95
660-690 V	Buflex	3x95+3G16	45	150	125
1 000 V	Buflex	3x50+3G10	33	200	200

Recommendations are given for surrounding temperature of 40 °C and up to a height of 2 000 m.

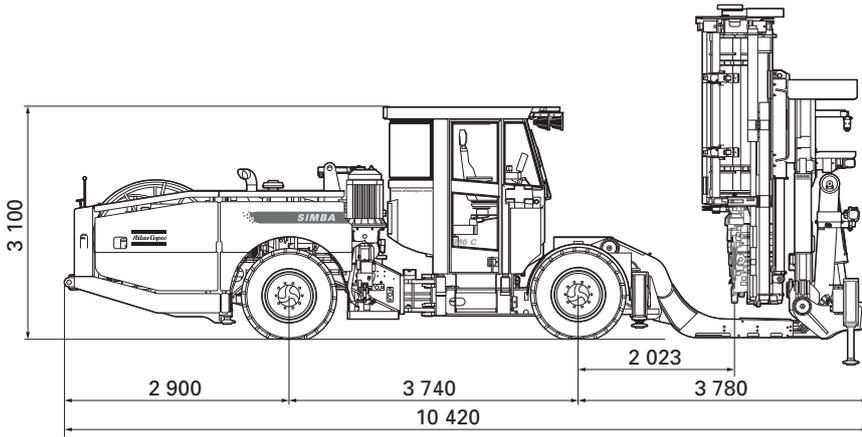
NOISE AND VIBRATION	
Operator sound pressure level in canopy, drilling, free field (ISO 11201)	104±6 dB(A) re 20uPa
Operator sound pressure level in cabin, drilling, free field (ISO 11201)	75± 3 dB(A) re 20uPa 75± 3 dB(A) re 20uPa (DH)
Operator sound pressure level working close to machine, drilling, free field	104±6 dB(A) re 20uPa
Peak C-weighted instantaneous sound pressure level (EN16228)	Less than 130 dB
Sound power level (ISO 3747), drilling, free field	128 dB(A) re 1pW
Vibration levels seated, drilling (ISO 2631-1)	0.07± 0.07 m/s²
Vibration levels standing, drilling (ISO 2631-1)	0.07±0.07 m/s²

RECOMMENDED DRIFT SIZE		
Feed	Rod	Minimum (H x W)
BMH 214/234	1 220	4 600 x 3 600 mm
BMH 215/235	1 525	4 900 x 3 900 mm
BMH 216/236	1 830	5 200 x 4 200 mm

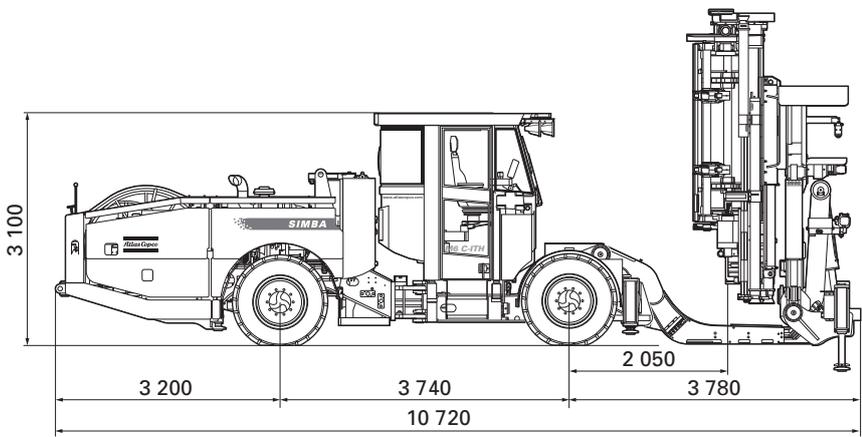
DIMENSIONS		
Measurement	Simba M6	Simba M6 ITH
Width	2 210 mm	2 210 mm
Height with cabin	3 100 mm	3 100 mm
Height roof up/down	3 050/2 945 mm	3 144/2 518 mm
Length tramming	10 420 mm	10 720 mm
Ground clearance	265 mm	265 mm
Turning radius outer/inner	6 900/3 800 mm	7 625/4 750 mm

TRAMMING SPEED	
On flat ground	>15 km/h
On incline 1:8	>5 km/h

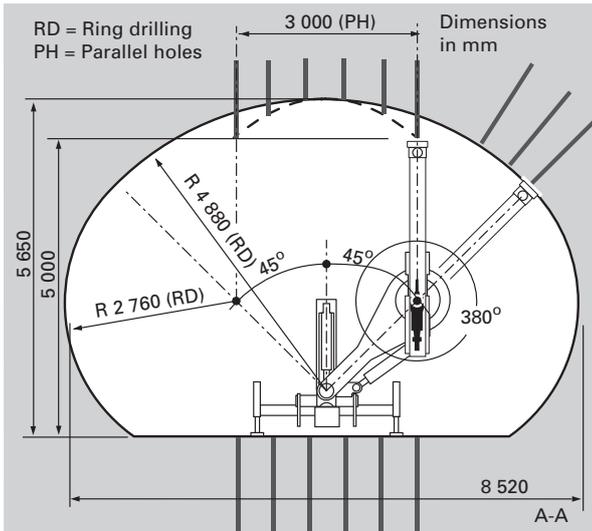
GROSS WEIGHT (DEPENDING ON CONFIGURATION)			
Rig type	Total	Boom side	Engine side
Simba M6	26 000 kg	14 500 kg	6 400 kg



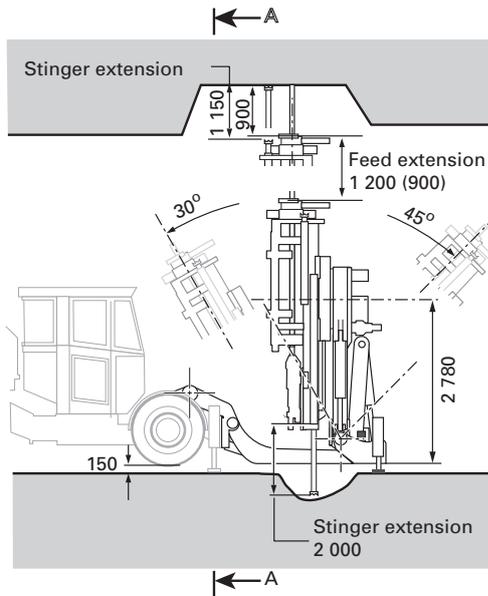
Simba M6/Simba M6-ITH



Simba M6-ITH, equipped with booster compressor.



Coverage area



COMMITTED TO SUSTAINABLE PRODUCTIVITY

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.

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