

Built to perform

The robust Simba SM60 S is a long-hole production drill rig designed for small to medium-drift mining. It accommodates a range of drill bits and rock drills to adapt to your specific needs. Simba SM60 S has the capability to drill parallel holes with 1.5 meter spacing in the side walls, and drilling up and down. The rig operator enjoys excellent visibility and enhanced safety in the comfortable ROPS and FOPS certified cabin.



New smaller hydraulic box with improved sealing to prevent water entrance, overall resulting in better serviceability.



The newly developed RHS 17 single-layer carousel gives a fast rod handling, robust design and easier handling. Maximum rod size is the ET45.



The horseshoe drill unit frame is designed to minimize the transport height, while providing outstanding robustness and stability during drilling. The four stingers ensure a correct setup for drilling.

• Main benefits

Safe productivity and Live Work Elimination (LWE) with electrical control systems that enables a higher degree of autonomous operations.

Improved effectiveness thanks to a wide range of automation software, the new carousel design, and improved rock drill control.

Excellent drilling quality with consumables such as the ET-series tube drilling system, which creates a balanced setup to mitigate in-hole-deviation.



S - Smar

Machines within the Smart series are equipped with Epiroc's Rig Control System, RCS, which makes them ready for automation and remote control.

Precise production drilling with higher consistency

The new Simba SM60 S is the latest developed rig in the Simba fleet with clear focus on remote and autonomous control. The rig utilizes the latest technology in regards to autonomous operations and drilling consumables to ensure high performance and increased efficiency.



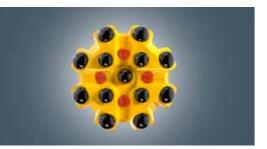
+ Safety

Ensuring operator safety is always a top priority. Live Work Elimination around energized parts is facilitated by a higher degree of automation, allowing the operator to be more of a process operator.



+ Built for small to medium drift sizes

The entire machine is built to have a minimal tramming height, to ensure optimal performance in smaller drifts. While still offering all the valuable options that Simba customers expect for maximum efficiency.



+ Quality boosting consumables

The Powerbit X drill bit range together with the newly developed ET-series tubes (Epiroc Tubes) significantly contribute to increasing the overall hole quality and effectiveness. Straighter drilling, longer service life and easier service planning make the ET-series the obvious next step towards higher quality drilling.



A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

Technical specifications

Drilling system	
COP 1838+	0
COP 1838MUX+, COP 1838HUX+	0
COP 2550UX+	0
Water mist flushing, external water and air supply (hydraulic oil cooled by water cooler) $\mbox{\ensuremath{^{\circ}}}$	0
Water mist flushing, external water and air supply (hydraulic oil cooled by air fan) $$	0
Hole blowing kit	0
Thread lubrication spray kit	0
* Watermist flushing is included when ordering option: GAR 30 compressor+air	

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receiver.	

Boom/drilling unit	
Rod Handling System, RHS 17 (17+1 rods) mechanized drilling up to 30 m	•
Adaptable to 4', 5' and 6' rods	•
Adaptable to T38, T45, TDS 64 drill rods	0
Adaptable to ET38, ET45	0
2 rear and 2 front stinger	•
Automatic lubrication for positioning unit	0
Central lubrication for drilling and positioning unit	•

Feed	
BMH 200-series 3 143 mm, 3 448 mm, 3 753 mm	0
BMH 200-series (extractor) 3 348 mm, 3 653 mm, 3 958 mm*	0

* +55 mm for COP 2550 UX

Total installed drilling power 103 kW (main motors 1x95 kW) 24 V batteries 2x125 Ah Electric system 24 V Voltage 400-1 000 V 50/60 Hz Starting method star/delta (400-690 V) Soft start of main electrical motors (not for 1 000 V) Electronic overload protection for electric motors Digial voltmeter/amperage meter in electric cabinet Electric outlet for accessories, 16 A (CE)/32 A (CE) Extra transformer 8 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 Transpired lights 9x32 LED 2x70 W 24 V DC	Electrical system	
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Limit switch for cable reel with signal lamp and brake connection Stainless steel electrical enclosure	Battery charger	•
Stainless steel electrical enclosure	Dual controls for cable reel	•
O Commission of the Commission	Limit switch for cable reel with signal lamp and brake connection	•
Tramming lights 9x22 LED 2x70 W 24 V DC	Stainless steel electrical enclosure	0
Hallilling lights oxez EED, 2X/O W, 24 V DC	Tramming lights 8x22 LED, 2x70 W, 24 V DC	•
Working lights 4x150 LED, 24 V DC	Working lights 4x150 LED, 24 V DC	•
Illuminated stairs for platform LED	Illuminated stairs for platform LED	•

Hydraulic system	
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	0
Heater kit for hydraulic oil tank and electric motors	0
Biodegradable hydraulic oil	0
Ni-Cr plated piston rods (limitations exist)	0
Kidney filter	0

● = Standard ○ = Option

Control system	
Epiroc Rig Control System (RCS)	•
Advanced Boom Control (ABC) Regular	0
Advanced Boom Control (ABC) Total	0
Breaktrough automatic stop	0
Underground manager pro *	0
Drill plan handling *	0
Drill plan handling with raise view *	0
Measure While Drilling (MWD)	0
Void detection	0
Automatic parallel holding *	0
Remote cradle control/remote feed control	0
Rig Remote Access (RRA)	0
Mobile tele-remote/multi tele-remote	0
Remote operating kit	0
Additional panel	0
Remote controlled camera on tripod with monitor in cabin	0
Total station navigation	0

Air system	
Compressor: Atlas Copco LE7	•
Compressor: Atlas Copco GAR 30	0
external air supply connection for hole blowing	•

* Included in ABC Total

	1
Water system	
Minimum water inlet pressure 2 bar	•
Hydraulic water booster pump. Capacity at 15 bar 250 l/min	•
Water injection pump. Capacity 50 l/min	0
Water hose reel including hose	0
High pressure rig washing kit with hose and reel	0
Low pressure rig washing kit with hose and reel	0
Remote controlled water cannon	0

4 5

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Carrier	
Deutz TCD 3.6, Stage 3A/Tier 3, 90 kW	•
Deutz TCD 3.6, Stage V/Tier 4F, 90 kW	0
Deutz TCD 3.6, CN4, 85 kW	0
Rear axel DANA Spicer 114/S1 +-8 degree oscillation	•
Articulated steering ±38° steering angle	•
Four-wheel drive	•
Hose/cable guiding at water/cable reel	0
Automatic differential lock on front axle, limited slip	•
Tires 12.00xR24	•
Rig alignment laser	•
Front and rear hydraulic jacks	•
Fuel tank, volume 110 l	•
Central grease point	•
Fire suppression system ANSUL (manual or automatic)	0
Fire suppression system FORREX (manual or automatic)	0
Manual lubrication kit	0
Boot washing kit	0

Drifter rods/pipes

Rock drill	Rod/pipe	Guide tubes	Hole diameter (mm)
COP 1838+ COP 1838+MUX	T38 Speedrod	TDS 64	51-64 64-76
COP1838+HUX	T45 Speedrod	TDS 64/TDS 76	76-89
	TDS 45	N/A	48-76
	TDS 54	N/A	64-89
	TDS 64 (ET45)	N/A	70-89
COP 2550UX	TDS 64 (ET45)	N/A	76-115

Note: ET45 is replacement for TDS pipes.

Recommended cable size and length

Voltage	Туре	Dimension (mm²)	Diameter (mm)	Length (m)	Area (mm²)
380-400 V	Rockflex	3x185+3G35+2x1.5	56	70	150
440 V	Rockflex	3x150+3G25+2x1.5	52	110	120
500-550 V	Rockflex	3x120+3G25+2x1.5	47	120	95
660-690 V	Rockflex	3x95+3G16+2x1.5	42	130	70
1000 V	Rockflex	3x35+3G6+2x1.5	28	200	35

Recommendations are given for surrounding temperature of 40°C and up to a height of 2 000 m. Cable dimension for battery version depends on charging cycle.

Cabin

Cabiii	
ROPS and FOPS certified cabin, noise level <65 dB(A)	•
Low profile cabin ROPS and FOPS certified 150 mm lower than standard - seated operation only	0
Swingable seat for drilling and tramming	0
Reversing camera with monitor	•
Reel camera	0
12 V outlet	•
Joystick-controlled spotlights left and/or right, 70 W	0
FOPS-approved grizzly bar for front window	0
Mediaplayer	0
Air condition	•
Heating function for air conditioning (water transferred)	0
Electrical heater, 1.2 kW, 230 V (CE)	0
Cabin body made of stainless steel	0

Recommended drift size

Feed	Rod	Minimum HxW
BMH 214/234	1220	3 800x3 800 mm
BMH 215/235	1525	4 000x4 000 mm
BMH 216/236	1830	4 200x4 200 mm

Noise and vibration

Operator sound pressure level in cabin, drilling, free field (ISO 11201)	65±3 dB(A) re 20 uPa
Operator sound pressure level working close to machine, drilling, free field	104±6 dB(A) re 20 uPa
Sound power level (ISO 3744), drilling, free field	128 dB(A) re 1 pW
Vibration levels seated, drilling (ISO 2631-1) cabin	0.07±0.07 m/s^2
Vibration levels standing, drilling (ISO 2631-1) cabin	0.07±0.07 m/s^2

Dimensions

Measurement	Simba SM60 S	
Width	2 040 mm	
Length, tramming	10 089 mm	
Height with cabin	2 799 mm	
Ground clearence	296 mm	
Turning radius outer/inner	6 400/3 100 mm	

Tramming speed On flat ground (rolling resistance 0.05)*

On flat ground (rolling resistance 0.05)*	>15 km/h
On incline 1:8	>5 km/h
* Electric driveline >12 km/h	

Gross weight (depending on configuration)

Rig type	Total	Boom side	Engine side
Simba SM60 S	20 500 kg	15 500 kg	5 000 kg

Technical specifications

Dimensions in millimeters

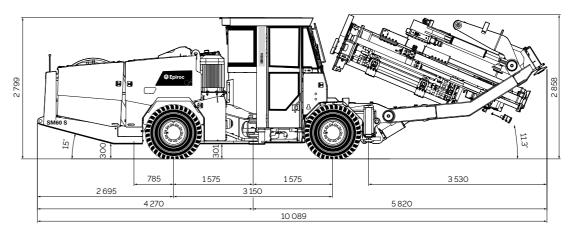
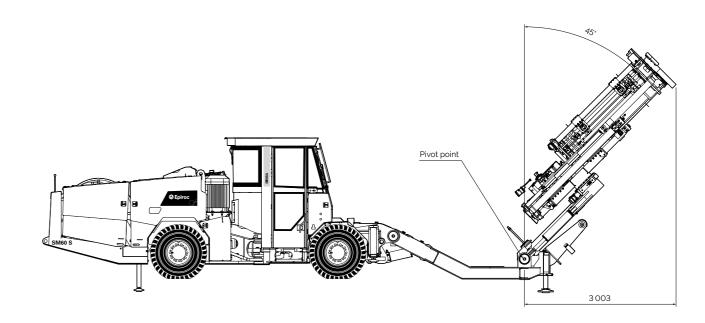
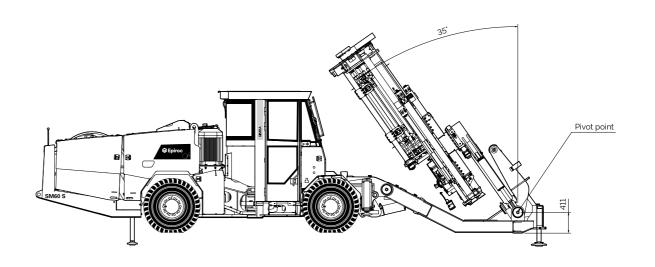


Illustration shows Simba SM60 S in right side view.



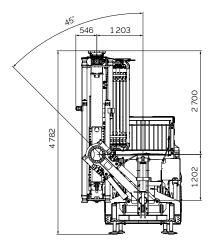


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Technical specifications

Dimensions in millimeters





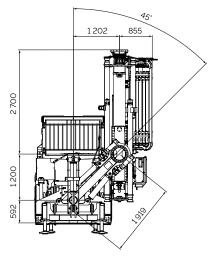


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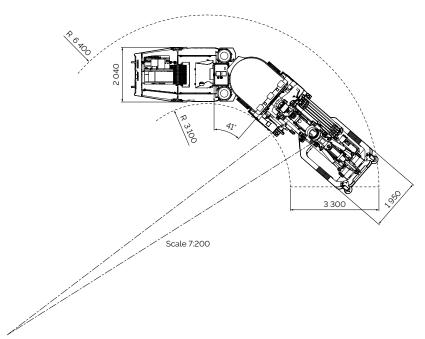


Illustration shows turning radius of Simba SM60 S.

United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward.

Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.

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