

## SIMBA

PRODUCTION DRILLING IN MEDIUM TO LARGE SIZED DRIFTS, IN THE 51 TO 127 MM RANGE. THE SIMBA E-SERIES IS EQUIPPED WITH A BOOM-MOUNTED DRILLING UNIT FOR IMPROVED VERSATILITY, ADAPTABLE TO ANY CHALLENGE FOR EXAMPLE DRILLING PARALLEL HOLES UPWARD AND DOWNWARD UP TO 6.9 M SPACING.

### **MAIN BENEFITS**

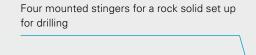
**Fleibility and precision** The boom-mounted drilling unit makes the rig flexible and adaptable for all types of drilling. The robust boom can handle a large variation of drilling tools, including our most powerful rock drills.

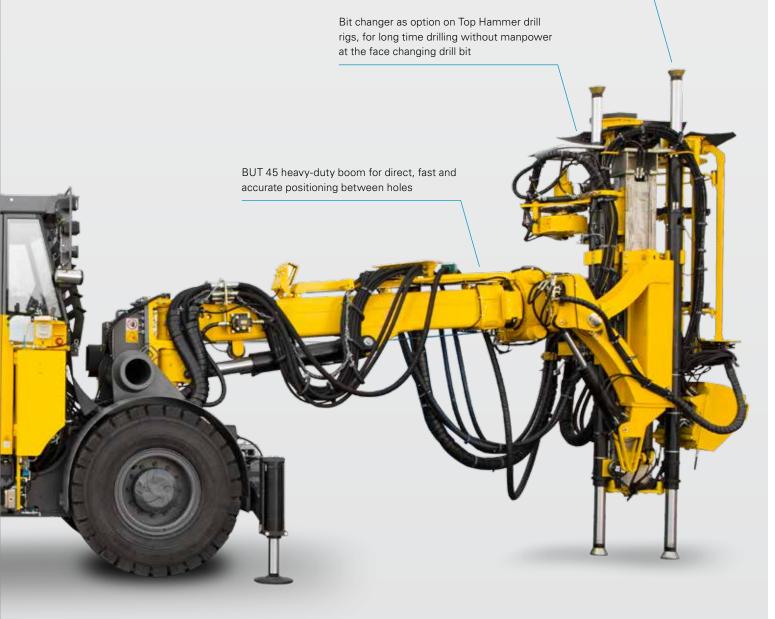
**Rock drill to suit your needs** Simba E-series is highly adaptable with a wide range of options and needs. The rig can be customized to suit your requirements in terms of performance, hole quality and drill steel economy.

**Precision and productivity** With the Rig Control System (RCS) Simba can achieve single hole automatic or multi hole automated functions to increase productivity. Tele-remote control capability expands the rigs functionality to single or multiple controls of machines from remote locations.

FOPS and ROPS approved cab for a safe and comfortable operator environment







## FAST AND PRECISE ROCK DRILLING FOR INCREASED PRODUCTIVITY

THE SIMBA E-SERIES IS FLEXIBLE, HIGH-PERFORMANCE
PRODUCTION DRILL RIGS, WITH FAST POSITIONING AND A HIGH
LEVEL OF HOLE ACCURACY. THE IMPRESSIVE LEVEL OF INTELLIGENCE
SIMPLIFIES THE OPERATOR'S WORK, WHICH CONTRIBUTES TO
INCREASE PRODUCTIVITY.



#### + SAFETY

Incidents and accidents related to unsafe operations, not only cause personal suffering, they also often damage equipment as well, resulting in costly production stoppages. That's why Simba E-series has a strong focus on safety. The operator sits in a FOPS/ROPS approved cabs that give excellent visibility and safe comfort. Optional tele-remote control improves safety by removing the operator from the machine and potential hazardous areas. Barrier sensors protect operator and maintenance people from rotation parts during automatic drilling.



#### + AUTOMATION

Higher equipment availability and enhanced overall productivity of machine are benefits that come with the smart automation functions on the Simba. They give you the possibility to increase operational efficiency by allowing drilling through shift change and breaks.

Tele-remote functions gives the operator good visibility of the drilling performance in a safe and comfort environment.



#### + ATLAS COPCO RIG CONTROL SYSTEM

The Atlas Copco Rig Control System (RCS) simplifies the operator's work and creates more productive conditions for long-hole production drilling. Rig Control System helps to improve drilling rate and steel economy. Long experience and an ongoing dialogue with customers have resulted in a new intuitive interface, upgraded software and a user-friendly environment.

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

We offer several levels of service agreements to meet the requirements of your operation and to secure your productivity. Our service agreements help you build a quality operation focused on proactive, planned maintenance to minimize unplanned downtime. We support maintenance with detailed parts information on every piece within our full inventory of components, accessories, and tools.



● = STANDARD ○ = OPTION
A = SIMBA ME7 B = SIMBA E7
C = SIMBA E7 ITH

DRILLING SYSTEM	Α	В	С
COP 1838+	0		
COP 1838MUX+, COP 1838HUX+	0		
COP 2550UX+	0		
COP 3060MUX		0	
COP 4050MUX		0	
COP 44 to COP 64			0
Dry drilling system	0	0	
Collar Pipe Inserter (CPI)	0	0	
Bit changer	0	0	
Water mist flushing, external water and air supply (Hydraulic oil cooled by water cooler)	0	0	0
Water mist flushing, external water and air supply (Hydraulic oil cooled by air fan)	0	0	
Hole blowing kit	0	0	
Rock drill lubrication warning kit	•	•	•
Thread lubrication kit	0	0	•

BOOM/DRILLING UNIT	A	В	С
BUT 45 PDS		•	•
BUT 45 PDL	•		
Drill steel support	•	•	•
Rod Handling System, RHS 17 (17+1 rods) Mechanized drilling up to 30 m	•		
Rod Handling System, RHS 27 (27+1 rods) Mechanized drilling up to 51 m	0	•	•
Rod Handling System, RHS 35 (35+1 rods) Mechanized drilling up to 63 m			0
Adaptable to 4', 5' and 6' rods	•	•	
Adaptable to 5' and 6' rods			•
Adaptable to TDS 64, TDS 76 drill rods	0		
Adaptable to TDS 76, TDS 89		0	0
2 x Rear and 2 x front stinger	•	•	•
Automatic lubrication for positioning unit	0	0	0
Central lubrication for drilling and positioning unit	•	•	•

FEED	Α	В	С
BMH 200-Series 3 160 mm, 3 465 mm, 3 770 mm	0	0	
BMH 200-Series (Extractor) 3 365 mm, 3 670 mm, 3 975 mm	0	0	
BMH 200-Series 3 670 mm, 3 975 mm			0

AIRSYSTEM	Α	В	С
Compressor: Atlas Copco GA 5	•	•	
Compressor: Atlas Copco GA 30	0	0	
On-board booster compressor, 25 bar/ 380 l/s			0
External air supply connection for hole blowing	•	•	
HECL lubrication system with electric filling pump			•

WATERSYSTEM	Α	В	С
Minimum water inlet pressure 2 bar	•	•	•
Hydraulic water booster pump. Capacity, at 15 bar 250 I/min	•	•	
Water injection pump. Capacity 50 I/min	0		•
Water hose reel including hose*	0	0	0

 $<sup>*</sup>Not \ applicable \ when \ booster \ compressor \ is \ installed \ on \ ITH \ drill \ rigs$ 

HYDRAULIC SYSTEM	Α	В	С
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	0	0
Biodegradable hydraulic oil	0	0	0
Ni-Cr plated piston rods (limitations exist)	•	•	•

CONTROL SYSTEM	A	В	С
Atlas Copco Rig Control System (RCS)	•	•	•
Advanced Boom Control (ABC) Regular	0	0	0
Advanced Boom Control (ABC) Total	0	0	0
Breaktrough Automatic Stop	0	0	0
Underground Manager pro	0	0	0
Drill plan handling	0	0	0
Drill plan handling with raise view	0	0	0
Full Drilling Data Handling	0	0	0
Measure While Drilling (MWD)	0	0	0
Void Detection	0	0	0
Boom alignment laser	0	0	0
Automatic Parallel Holding	0	0	0
Remote Cradle Control/Remote Feed Control	0	0	0
Rig Remote Access (RRA)	0	0	0
Mobile Tele Remote/Multi Tele Remote	0	0	0
Remote operating kit	0	0	0
Additional panel	0	0	0
Remote controlled camera on tripod with monitor in cabin	0	0	0
Total Station Navigation	0	0	0

ELECTRICAL SYSTEM	Α	В	С
Total installed power 118 kW (Main motors 2x55 kW)	•	•	
Total installed power 63 kW (Main motor 1x55 kW)			•
Total installed power 158 kW (Main motor 1x95 kW, Equipped with booster compressor)			0
Total installed power 158 kW (Main motors 2x75 kW)*		0	
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)	0	0	0
Electronic overload protection for electric motors	•	•	•
Digial voltmeter/amperage meter in electric cabinet	•	•	•
Electric outlet for accessories, 16 A (CE) / 32 A (CE)	0	0	0
Extra transformer 8 kVA	•	•	•
Extra transformer 15 kVA	0	0	0
PC4 or PC5 Plug/Socket	0	0	0
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	0	0	0

 $<sup>*</sup>Only\ with\ COP\ 4050MUX$ 

● = STANDARD ○ = OPTION A = SIMBA ME7 B = SIMBA E7 C = SIMBA E7 ITH

CARRIER	Α	В	С
Deutz TCD 2013 L04 2V Stage III A tier 3 (120 kW)	0	0	0
Deutz TCD 4.1 L04 Stage III B Tier 4i (115 kW)	0	0	0
Deutz TCD 2012 L06 2V Stage III A Tier 3 (155 kW)	0	0	0
Deutz TCD 6.1 L06 Stage III B Tier 4i (180 kW)**	0	0	0
Articulated steering ±38° steering angle		•	•
Articulated steering ±41° steering angle	•		
Four-wheel drive	•	•	•
Electric system 24 V	•	•	•
Batteries 2x125 Ah	•	•	•
Hose/cable guiding at water/cable reel	0	0	0
Automatic differential lock on front axle, limited slip	•	•	•
Tires 14.00 x R24		•	•
Tires 12 x R24	•		
Tramming lights 6 x 40 W LED, 2 x 70 W, 24 V DC	•	•	•
Working lights 4 x 80 W LED, 24 V DC	•	•	•
Rig alignment laser	•	•	•
Illuminated stairs for platform LED	•	•	•
Front and rear hydraulic jacks	•	•	•
Fuel tank, volume 110 L	•	•	•
Central grease point	•	•	•
Fire suppression system ANSUL (manual or automatic)	0	0	0
Fire suppression system FORREX (manual or automatic)	0	0	0
Hot climate tramming kit	0	0	0
Rig washing kit*	•	•	•
Manual lubrication kit	•	•	•
Boot washing kit*	•	•	•

*Not applicable when	n equipped wi	ith dry drilling system.	
----------------------	---------------	--------------------------	--

<sup>\*\*</sup>Maximum ambient temperature  $25^{\circ}$ 

CABIN (OPTIONAL)	Α	В	С
FOPS/ROPS approved cabin, noise level <80 dB(A)	•	•	•
Mounting height -140 mm from standard height	0	0	0
Cabin lift/tilt system, 375 mm/15°	0	0	0
Swingable seat for drilling and tramming	•	•	•
Front window, 24 mm	0	0	0
Front window, 16 mm	•	•	•
Reversing camera with monitor	0	0	0
12 V Outlet	•	•	•
Joystick-controlled spotlights left and/or right, 70 W	0	0	0
FOPS-approved grizzly bar for front window	0	0	0
Low-designed cabin for seated operator, cabin height 2 735 mm	0		
Low-designed cabin for seated operator, cabin height 2 823 mm		0	0
Mediaplayer	•	•	•
Air condition	•	•	•
Heating function for air conditioning (water transferred)	0	0	0
Electrical heater, 1.2 kW, 230 V (CE)	0	0	0
Cabin body made of stainless steel	0	0	0

PROTECTIVE ROOF	Α	В	С
Swingable seat for drilling and tramming	•	•	•
Stainless steel	0	0	0
FOPS Approved	0	0	0
Joystick-controlled spotlights left and/or right, 70 W	0	0	0

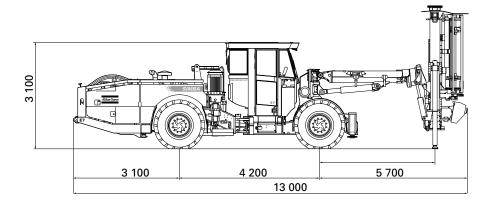
DRIFTER RODS/PIPES				
Rock drill	Rod/Pipe	Guide tubes	Min. hole diameter (mm)	
	R32 Speedrod	TDS 45	51-64	
COP 1838	T38 Speedrod	TDS 54/TDS 64	64-76	
	T45 Speedrod	TDS 64/TDS 76	76-89	
COP 2550UX	T51	TDS 76	89-102	
	TDS 64/TDS 76	N/A	89-102 (ST58 Shank adapter)	
COP 3060	TDS 76	N/A	89	
	TDS 87	N/A	102	
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	

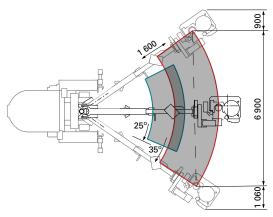
RECOMENDED CABLE SIZE AND LENGTH					
Voltage	Type	Dimension (mm²)	Diameter (mm)	Length (m)	Length ITH (m)
380-400 V	Buflex	3x185+3G35	56	80	65
440-500 V	Buflex	3x150+3G25	52	120	70
550 V	Buflex	3x120+3G25	46	120	95
660-690 V	Buflex	3x95+3G16	45	150	125
1 000 V	Buflex	3x50+3G10	33	200	200

Recommendations are given for surrounding temperature of 40  $^{\circ}$ C and up to a height of 2 000 m.

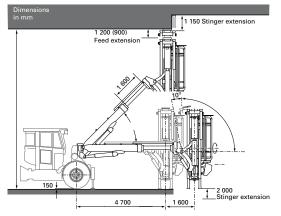
NOISE AND VIBRATION	
Operator sound pressure level in canopy, drilling, free field (ISO 11201)	106±6 dB(A) re 20uPa
Operator sound pressure level in cabin, drilling, free field (ISO 11201)	75± 3 dB(A) re 20uPa
Operator sound pressure level working close to machine, drilling, free field	106±6 dB(A) re 20uPa
Sound power level (ISO 3744), drilling, free field	126 dB(A) re 1pW
Peak C-weighted instantaneous sound pressure level (EN16228)	Less than 130 dB
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
Vibration levels seated, drilling (ISO 2631-1) Canopy	0.1 ± 0.15 m/s^2
Vibration levels seated, drilling (ISO 2631-1) Canopy	0.1 ± 0.15 m/s^2

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





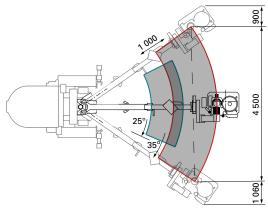
Simba ME7



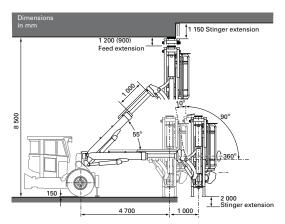
Simba ME7

DIMENSIONS				
Measurement	Simba ME7	Simba E7	Simba E7 ITH	
Width	2 515 mm	2 550 mm	2 550 mm	
Length, tramming	12 270 mm	12 748 mm	13 700 mm	
Height with cabin	3 100 mm	3 100 mm	3 100 mm	
Height roof up/down	2 494 / 2 994 mm	2 578 / 3 078 mm	2 578 / 3 078 mm	
Ground clearence	265 mm	300 mm	300 mm	
Turning radius outer/inner	6 500/3 800 mm	7 625 / 4 750 mm	8 300/4 700 mm	

TRAMMING SPEED	
On flat ground (Rolling resistance 0.05)	>15
On incline 1:8	>5



Simba E7 / Simba E7 ITH



Simba E7 C / Simba E7 ITH

GROSS WEIGHT (DEPENDING ON CONFIGURATION)			
Rig type	Total	Boom side	Engine side
Simba ME7	27 000 kg	18 000 kg	9 000 kg
Simba E7	27 300 kg	18 300 kg	9 000 kg
Simba E7-ITH	27 500 kg	17 500 kg	10 000 kg

