

# **MARS 85**

**RANGE** 

Equipped with 75 hp engine, the Mars 85 range was developed to be competitive in the market of high-range isodiametric tractors thanks to an essential set-up but with wide choice of optionals to configure the tractor based on the specific needs. The Mars 85 range is available in 2 versions: AR - Chassis with central articulation, narrow wheel track and

contained turning radii.

use also in sloping areas.



Reversible driving position

**WIDE RANGE OF OPTIONALS** 

Height adjustable steering wheel, rear work light, Self Cleaning System™, hydraulically controlled upper link and tie rod link arm, lift with draft and positioncontrol, HDR hydraulic suspension, hydraulic circuit with increased flow rate for lift and control valves, front lift, tyres with various profiles.

> LED work lights (opt.)

Kohler engine

75 hp 4-cylinder

Turbo Intercooler.

and compact design thanks to the 8 cm lower bonnet offering greater visibility.

# CLEAN POWER

The Mars 85 range is equipped with a **75 hp 4-cylinder Turbo Intercooler engine** with particulate filter, that BCS Group worked on in collaboration with Kohler for an advanced regeneration strategy guaranteeing maximum performance and reducing machine downtime to a minimum.



The rpm is electronically controlled quickly and precisely through a console positioned to the right of the steering wheel, with these functions: increase and decrease engine speed, memorize and recall the set speed, switch off and switch to minimum speed.





### ALL EASY TO USE

The driving position of Mars 85 is set-up to-measure for the driver with all controls set up ergonomically and easy to use.

From the driver's seat there is a full unobstructed view of the implement as well as the machine: the visibility of the front side, the wheel track and the surrounding environment has been optimised by the compactness of the **new engine bonnet, which is 8 cm lower** than the previous model.

Comfort seat with adjustable suspension according to the operator's weight, height-adjustable steering wheel (opt.) to configure the driving position for the maximum operational comfort.

Hydrostatic steering guarantees **maximum manoeuvrability and contained turning radii** to work better even in tight spaces.

A modern dashboard integrates the analogue instruments with a colour digital display, for total control of the tractor's status.



### REVERSIBILITY

Available as an option, the reversible driving position makes it possible to work professionally with the implement positioned in front.

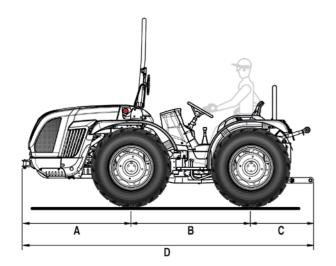
Just in a few seconds the operator can rotate the driving platform by 180° (seat, steering wheel and dashboard), to work with extreme precision, quickly, comfortably and safely.

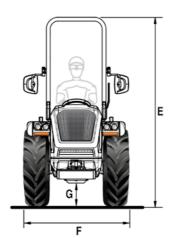




## MARS 85 AR

Data Sheet







Α	В	С	D	E min/max	F min/max	<b>G</b> min/max
1365	1450	925	3740	2240 / 2350	1125 / 1707	210 / 305

<sup>\*</sup> Dimensions in mm

	250/80-18	280/70 R18	280/70 R18 Galaxy Garden	250/85 R20	300/70 R20	300/70 R20 Galaxy Garden
	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim
Н	240	282	282	245	286	286
-1	912 / 1216	960 / 1284	960 / 1284	880 / 1334	984 / 1364	984 / 1364
F	1152 / 1456	1242 / 1566	1242 / 1566	1125 / 1579	1270 / 1650	1270 / 1650

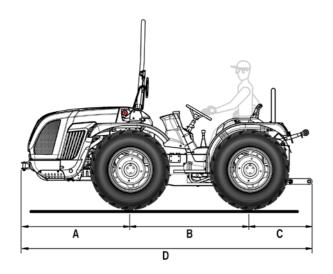
	340/65 R20	31x15.50-15 XTC	31x15.50-15 STG	33x15.50-15 XTC	320/65 R18	340/65 R18
	with adjustable rim	with fixed rim	with fixed rim	with fixed rim	with adjustable rim	with adjustable rim
н	343	368	394	391	320	343
1	984 / 1364	1006 / 1120	1120	1006 / 1120	1002 / 1216	1002 / 1216
F	1327 / 1707	1374 / 1488	1514	1397 / 1511	1322 / 1536	1345 / 1559

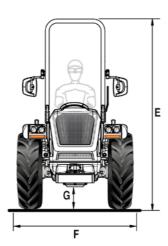
TECHNICAL FEATURES	MARS 85 AR
ENGINE	Kohler KDI 2504 TCR
No. of cylinders	4 in-line / 16 valves
Displacement (cc)	Zucha (Internacian
Intake	Turbo / Intercooler
Fuel system	"Common rail" direct injection - 2000 bar
Emissions compliance	Stage V
Balancing	Counter-balance shafts
Power (kW/hp)  Retad speed (rpm)	55.4/75.3
Rated speed (rpm)  Max torque (Nm/rpm)	300 / 1500
	Electronically regulated via a consolle with functions for: increase and decrease engine speed, memorize and recall the set speed, switch off and
Engine speed management	switch to minimum speed
Cooling	Liquid
Tank capacity (I)	58
CHASSIS	Swinging integral chassis (±15°) OS-FRAME with central articulation
DRIVE	Permanent four-wheel drive
TRANSMISSION	32-speed synchronised gearbox: 16 FWD and 16 REV with synchronised reverser
Min/max travel speed (km/h)	0.7/38
Transmission clutch	Multidisc in oil bath with hydraulic control
DIFFERENTIAL	Front and rear with simultaneous locking and electro-hydraulic control
AXLES	Front and rear with planetary reduction units
REAR PTO	Independent from the gearbox and synchronised with the forwarding speed. Negative safety hydraulic brake to stop the PTO
PTO clutch	Multidisc in oil bath with electro-hydraulic control
PTO rotation speed (rpm)	Standard: 540/540E - Optional: 540/1000
HYDRAULIC SYSTEM	Dual circuit with independent pumps and heat exchanger
Flow rate to the hydroguide and the electro-hydraulic controls (I/min)	33.5
Flow rate to the lift and the control valves (I/min)	29.5 (optional oversized pump with 51 l/min flow rate)
Maximum hydraulic pressure (bar)	180
REAR CONTROL VALVES	Mechanically controlled
Standard	For lift by rams: 1 double-acting with float + free flow oil return (total 3 hydraulic outlets) - For lift with draft and position control: 2 double-acting + free flow oil return (total 5 hydraulic outlets)
Optional	For lift by rams, in addition to the standard ones: 1 single-acting and 1 double-acting (total 6 hydraulic outlets) or 2 double-acting (total 7 hydraulic outlets) For lift with draft and position control, replacing the standard ones: 1 single-acting and 1 double-acting + free flow oil return (total 4 hydraulic outlets) or 1 double-acting and 1 double-acting with float + free flow oil return (total 5 hydraulic outlets)"
REAR LIFT	By two external rams. Standard: raising/lowering - Optional: position and draft control
3-point implement hitch	Standard: Normal couplings cat. 1 and 2. Optional: Quick-couplings cat. 1 and 2, L-shaped, arms adjustable in length and hooks adjustable in width
Third point tie rod	Standard: with manual adjustment - Optional: hydraulically controlled upper link and tie rod link arm
Ball joint lifting capacity (kg)	2300
FRONT LIFT (optional)	Two external rams with front protection and 2 double-acting control valves (total 4 hydraulic outlets)
Third point arms	Rigid with quick-couplings cat. 1 and 2
Lifting capacity (kg)	800
DRIVING POSITION	Monodirectional or Reversible with rotating platform and twin pedal assembly
Steering wheel	Standard: fixed - Optional: height adjustable
Seat	With safety belt and man-on-board sensor Standard: Comfort seat with adjustable suspension according to the operator's weight. Optional: 'Kab' lowered seat
SERVICE BRAKES	Multidisc in oil bath with mechanical control, acting on the rear wheels
Parking brake	Acting on service brakes
STEERING	Hydrostatic steering acting on the central joint. Flow deviator for steering unit in Reversible version
SAFETY	Front homologated roll-bar with gas springs for easy lowering and lifting
DASHBOARD	With TFT colour display showing: hours of operation, engine rpm, forwarding speed, PTO rpm, particulate filter clogging level, instantaneous fuel consumption, battery voltage and current time. Analogue instrumentation complete with engine rpm, engine coolant temperature and fuel level indicator. Warning lights and acoustic alarm
ELECTRIC SYSTEM	Battery 80 Ah / 12 V - Alternator 95 A
Standard equipment	Vehicle Control Unit, street light and indicator system, single-pole dashboard socket, rear 7-pin and 3-pin sockets
TYRES	250/80-18 * 280/70R18 * 280/70R18 Galaxy Garden * 320/65R18 * 340/65R18 * 250/85R20 * 300/70R20 * 300/70R20 Galaxy Garden * 340/65R20 * 31x15.50-15 XTC or STG * 33x15.50-15 XTC
TOW HOOKS (standard)	Front - Rear CUNA cat. C adjustable in height
Optional	Rear tow hook: EC approved or EC with Slider frame or CUNA with Slider frame or EC tow bar with Slider frame
RUNNING ORDER WEIGHT with roll-bar (kg)	2170
ADDITIONAL OPTIONS	Front bumper, beacon lamp, front LED working lights, rear adjustable working light, Self Cleaning System <sup>TM</sup> , front weights 150 kg and wheel weights 50 kg and wheel which which which which which weights 50 kg and wheel which whi
	kg each.

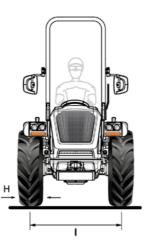
 $<sup>^{\</sup>star}$  Dimensions in mm - min / max H = Tyre width - I = Wheel track - F = Tractor width

### MARS 85 RS

Data Sheet







A	В	С	D	E min/max	F min/max	G min/max
1365	1450	925	3740	2240 / 2350	1291 / 1961	210 / 305

<sup>\*</sup> Dimensions in mm

	340/65 R18	280/70 R18	280/70R18 Galaxy Garden	320/65 R18	250/85 R20	300/70 R20	300/70R20 Galaxy Garden
	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim	with adjustable rim
н	343	270	270	320	245	286	286
-1	1098 / 1538	1098 / 1538	1098 / 1538	1166 / 1470	1046 / 1588	1134 / 1618	1134 / 1618
F	1509 / 1813	1368 / 1820	1368 / 1820	1486 / 1790	1291 / 1833	1420 / 1904	1420 / 1904

	320/70 R20	340/65 R20	31x15.50-15 XTC	31x15.50-15 STG	33x15.50-15 XTC	250/80-18
	with adjustable rim	with adjustable rim	with fixed rim	with fixed rim	with fixed rim	with adjustable rim
н	316	343	368	394	391	240
1	1134 / 1618	1134 / 1618	1260 / 1374	1260 / 1374	1260 / 1374	1166 / 1470
F	1450 / 1934	1477 / 1961	1628 / 1742	1654 / 1768	1651 / 1765	1406 / 1710

TECHNICAL FEATURES	MARS 85 RS
TECHNICAL FEATURES ENGINE	Kohler KDI 2504 TCR
No. of cylinders	4 in-line / 16 valves
Displacement (cc)	2482
Intake	Turbo / Intercooler
Fuel system	"Common rail" direct injection - 2000 bar
Emissions compliance	Stage V
Balancing	Counter-balance shafts
Power (kW/hp)	55.4 / 75.3
Rated speed (rpm)	2300
Max torque (Nm/rpm)	300 / 1500
Engine speed management	Electronically regulated via a consolle with functions for: increase and decrease engine speed, memorize and recall the set speed, switch off and switch to minimum speed
Cooling	Liquid
Tank capacity (I)	58
CHASSIS	Swinging integral chassis (±15°) OS-FRAME with steering wheels
DRIVE	Permanent four-wheel drive
TRANSMISSION	32-speed synchronised gearbox: 16 FWD and 16 REV with synchronised reverser
Min/max travel speed (km/h)	0.7 / 40
Transmission clutch	Multidisc in oil bath with hydraulic control
DIFFERENTIAL	Front and rear with simultaneous locking and electro-hydraulic control
AXLES	Front and rear with planetary reduction units
REAR PTO	Independent from the gearbox and synchronised with the forwarding speed. Negative safety hydraulic brake to stop the PTO
PTO clutch	Multidisc in oil bath with electro-hydraulic control
PTO rotation speed (rpm)	Standard: 540/540E - Optional: 540/1000
HYDRAULIC SYSTEM	Dual circuit with independent pumps and heat exchanger
Flow rate to the hydroguide and the electro-hydraulic controls (I/min)	33.5
Flow rate to the lift and the control valves (I/min)	29.5 (optional oversized pump with 51 I/min flow rate)
Maximum hydraulic pressure (bar)	180
REAR CONTROL VALVES	Mechanically controlled
Standard	For lift by rams: 1 double-acting with float + free flow oil return (total 3 hydraulic outlets) - For lift with draft and position control: 1 single-acting and 2 double-acting + free flow oil return (total 6 hydraulic outlets)
Optional	For lift by rams, in addition to the standard ones: 1 single-acting and 1 double-acting (total 6 hydraulic outlets) or 2 double-acting (total 7 hydraulic outlets).  For lift with draft and position control, replacing the standard ones: 1 single-acting, 1 double-acting and 1 double-acting with float + free flow oil return (total 6 hydraulic outlets) or up to 3 double-acting + free flow oil return (total 7 hydraulic outlets)"
REAR LIFT	By two external rams. Standard: raising/lowering - Optional: position and draft control
3-point implement hitch	Standard: Normal couplings cat. 1 and 2. Optional: Quick-couplings cat. 1 and 2, arms adjustable in length or Quick-couplings cat. 1 and 2, L-shaped, arms adjustable in length and hooks adjustable in width
Third point tie rod	Standard: with manual adjustment - Optional: hydraulically controlled upper link and tie rod link arm
Ball joint lifting capacity (kg)	2300
FRONT LIFT (optional)	Two external rams with front protection and 2 double-acting control valves (total 4 hydraulic outlets)
Third point arms	Rigid with quick-couplings cat. 1 and 2
Lifting capacity (kg)	800
DRIVING POSITION	Monodirectional or Reversible with rotating platform and twin pedal assembly
Steering wheel	Standard: fixed - Optional: height adjustable
Seat	With safety belt and man-on-board sensor Standard: Comfort seat with adjustable suspension according to the operator's weight. Optional: 'Kab' lowered seat
SERVICE BRAKES	Multidisc in oil bath with mechanical control, acting on the rear wheels. Independent manoeuvring brakes acting on the rear wheels
Parking brake	Acting on service brakes
STEERING	Hydrostatic steering with two rams acting on the front wheels. Flow deviator for steering unit in Reversible version
SAFETY	Front homologated roll-bar with gas springs for easy lowering and lifting
DASHBOARD	With TFT colour display showing: hours of operation, engine rpm, forwarding speed, PTO rpm, particulate filter clogging level, instantaneous fuel consumption, battery voltage and current time. Analogue instrumentation complete with engine rpm, engine coolant temperature and fuel level indicator. Warning lights and acoustic alarm
ELECTRIC SYSTEM	Battery 80 Ah / 12 V - Alternator 95 A
Standard equipment	Vehicle Control Unit, street light and indicator system, single-pole dashboard socket, rear 7-pin and 3-pin sockets
TYRES	250/80-18 * 340/65R18 * 280/70R18 * 280/70R18 Galaxy Garden * 320/65R18 * 250/85R20 * 300/70R20 * 300/70R20 Galaxy Garden * 320/70R20 * 340/65R20 * 31x15.50-15 XTC or STG * 33x15.50-15 XTC
TOW HOOKS (standard)	Front - Rear CUNA cat. C adjustable in height
Optional	Rear tow hook: EC approved or EC with Slider frame or CUNA with Slider frame or EC tow bar with Slider frame
RUNNING ORDER WEIGHT with roll-bar (kg)	2090
ADDITIONAL OPTIONS	HDR hydraulic suspension with accumulator including: 1 flow regulator, 1 double-acting and 1 double-acting with float (control valves replacing the standard ones), front bumper, beacon lamp, front LED working lights, rear adjustable working light, Self Cleaning System™, front weights 150 kg and wheel weights 50 kg each.

 $<sup>^{\</sup>star}$  Dimensions in mm - min / max H = Tyre width - I = Wheel track - F = Tractor width

### THE SERVICES



#### SPARE PARTS

A complete range of original spare parts, guaranteeddirectly by the manufacturer.



#### ASSISTANCE

A team of specialists, well prepared and available to assure an efficient and resolving service.



#### LUBRICANT:

We recommend to use the original PowerLube lubricants.



### FINANCIAL SERVICES

Financial solutions to meet the credit requirements.



MADE IN ITALY