KOMATSU

Utility

PC
15R-8

PC15R-8

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MINI-EXCAVATOR

NET POWER
SAE J1349
11,4 kW - 15,3 HP

OPERATING WEIGHT
From 1.575 kg
to 1.775 kg

SHAPING TECHNOLOGY

Fruit of KOMATSU technology and experience, the PC15R-8 miniexcavator responds perfectly to all requirements for compactness, easy handling and high performance. Ruggedness and excellent stability guarantee safety and confidence in all conditions. The characteristic tubular structure and the geometry of the boom ensure excellent digging parameters and optimum visibility on the work area. A wide range of possible configurations and the possibility to use the machine with various different attachments make it the best and indeed often the only solution for many difficult applications.

Engine

The PC15R-8 miniexcavator is fitted with a KOMATSU engine that guarantees all the power required and low fuel consumption. The advanced technology applied means minimum levels of noise and emissions.

Hydraulic System

The PC15R-8 uses the famous **CLSS** (***C**losed **L**oad **S**ensing **S**ystem*) hydraulic circuit, that is, a closed-centre circuit with load sensing, fed by a variable delivery pump that ensures smooth and perfectly synchronized combined movements. All this guarantees maximum productivity and minimum consumption.

Total Comfort

Designed with the utmost care in every minimum detail, the driving position offers the maximum operating comfort. Easy access, comfort, ergonomic controls, an efficient monitor for controlling the main functions and visibility in all directions, either in the standard version with canopy and in the version with cab.

“PPC” Proportional Servocontrols

The ease of use that characterizes the PC15R-8 allows even less expert operators to get the most out of their work. The dedicated controls for every movement are easy to understand and ergonomic. A smooth and constant response of the hydraulic system and perfect visibility on the work area are the features that ensure maximum output even in the most difficult situations.

Versatility

Owing to the considerable traction force, the machine can move easily even in the most demanding conditions. Furthermore, the second forward gear, which can be selected by means of a small pedal, facilitates faster transfers. The wide boom swing angle allows the PC15R-8 to work without difficulty even in the presence of obstacles or along walls. Large rear guards protect the body of the machine from accidental impacts and improve stability during work.
The hydraulic hoses are protected inside the structure of the arms and are screwed onto the jacks to simplify replacement.

High Stability

For the applications requiring maximum versatility in terms of size and stability, the PC15R-8 is available in the **HS** (***H**igh **S**tability*) version with hydraulic extension of the undercarriage, which can be easily obtained by operating a push button and the blade control lever from the driver's seat. This device makes the machine much more stable during work, with no compromise on manoeuvrability in restricted spaces.

Maintenance

Routine maintenance takes just a few minutes and is extremely simple to perform, without requiring any special tool.
The diesel oil tank made of special plastic prevents rusting and simplifies periodic cleaning operations.
The easy-to-reach engine, the use of self-lubricating bushings in the arms and the high reliability of the components have made it possible to drastically reduce maintenance times, thus lowering operating costs.

SPECIFICATIONS

ENGINE

Model.....Komatsu 3D68E-N3FB
Type .....low emissions 4-cycle diesel engine
Displacement .....784 cm^3
Cyl. bore x stroke .....68 x 72 mm
Number of cylinders 3
Combustion .....swirl pre-combustion chamber typel
Aspiration .....natural aspiration
Max power .....12,7 kW - 17 HP
Rated power:
(SAE J 1349) .....11,4 kW - 15,3 HP – 2.600 rpm
(80/1269/EC) .....11,2 kW - 15,0 HP – 2.600 rpm
Max torque .....49 Nm – 1.800 rpm
Cooling system.....water
Dry system .....dry
Starting .....electric motor with pre-heating air system for cold climate

OPERATING WEIGHT

Operational mass with standard bucket, fully serviced + 80 kg. Operator (ISO 6016).

Operating weight with rubber shoes.....1.575 kg
Operating weight with steel shoes .....1.650 kg (optional)
Heated cab weight .....+130 kg (optional)
Variable undercarriage weight (HS version).....+ 80 kg (optional)

HYDRAULIC SYSTEM

Type.....Komatsu CLSS
Main pumps .....Variable displacement pump +1 gear pump
Max delivery.....38,5+6,6 ℓ/min

Operating pressure:
working equipment.....MPa 20,6 (206 bar)
travel .....MPa 20,6 (206 bar)
swing.....MPa 12,3 (123 bar)

Hydraulic cylinders	**bore x stroke**
boom	60 x 355 (canopy) - 60 x 345 (cab) mm
arm	55 x 447 mm
bucket	50 x 385 mm
boom rotation	60 x 313 mm
blade	60 x 60 mm

Bucket breakout force (ISO 6015):
Arm 880 mm.....1.423 daN (1.450 kg)
Arm 1.130 mm.....1.423 daN (1.450 kg)
Arm breakout force (ISO 6015):
Arm 965 mm.....900 daN (920 kg)
Arm 1.215 mm.....740 daN (755 kg)

Digging equipment are fully controlled by PPC servo-controls.
All movements are stopped by lifting the safety levers on the tiltable cases.

SWING SYSTEM

The rotation is operated by means of an orbital hydraulic motor. Single ball - bearing ring with internal, induction hardened toothring. Centralised lubrication of the unit
Swing speed .....10,4 rpm

TRANSMISSION

Type .....hydrostatic transmission, with 2 speeds controlled and steered by means of two levers two pedals
Hydraulic motors .....2 x axial pistons
Reduction system .....epiclyclic reduction gear
Max traction force .....1.360 daN (1.390 kg)
Travel speed .....2,2 - 4,2 km/h

BLADE

Type.....electrowelded, single unit structure
Width x height .....1.000 x 250 mm
Max. lifiting above ground level .....280 mm
Max depth below ground level.....155 mm

UNDERCARRIAGE

Central lower frame and carriage frame with boxed section.
Shoes..... n. 31
Track rolles .....n. 3 each side
Shoes width (steel/rubber) .....230 mm
Ground pressure (std. version).....0,3 kg/cm^2

Hydraulically operated track extension (HS version - optional).

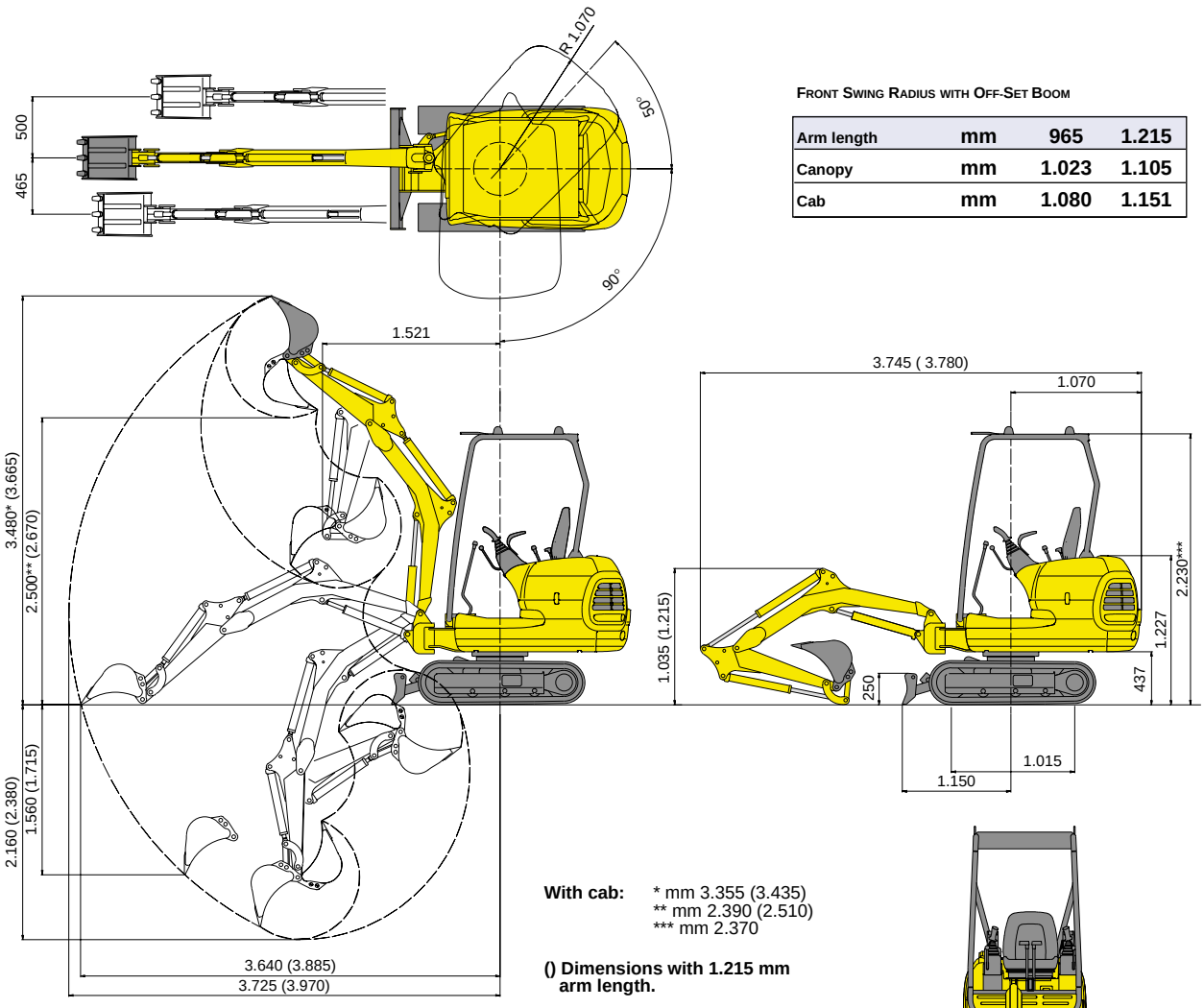
ELECTRIC SYSTEM

Operating voltage .....12 V
Battery .....45 Ah
Alternator .....20 A
Starter .....0,9 kW

REFILLS

Fuel tank .....20 ℓ
Radiator and system.....3,2 ℓ
Engine oil .....2,8 ℓ
Final reduction gears (for each side) .....0,6 ℓ
Hydraulic oil tank .....23 ℓ

DIMENSIONS



FRONT SWING RADIUS WITH OFF-SET BOOM

Arm length	**mm**	**965**	**1.215**
Canopy	**mm**	**1.023**	**1.105**
Cab	**mm**	**1.080**	**1.151**

With cab: * mm 3.355 (3.435)
** mm 2.390 (2.510)
*** mm 2.370

() Dimensions with 1.215 mm arm length.

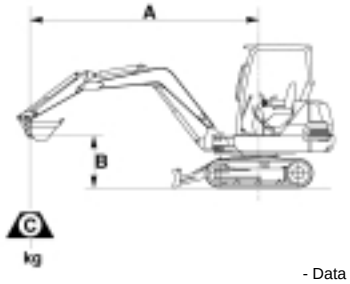
WORKING EQUIPMENT					
Bucket (ISO 7451) m³	**Width mm**	**Weight kg**	**Number of teeth**	**Arm 965 mm**	**Arm 1.215 mm**
0,03	250	19	2	O	O
0,035	300	20	3	O	O
0,04	350	22	3	O	O
0,05	400	23	3	O	X
0,06	450	25	4	O	X

This table is based on the lateral stability at the maximum outreach with full bucket.
- O with material density up to 1,8 t/m^3; - X non usable.

LIFTING CAPACITY

Machine with canopy, rubber shoes and 25 kg bucket
A- Distance from machine's center B- Heigt at bucket pin

Capacity over front Lateral or 360° capacity



LOWERED BLADE

Arm lenght	A / B	2 m		Full extended	
		360°	Front.	360°	Front.
L=965 mm	2 m	*265	*270	160	*175
	1m	320	*360	140	*220
	0 m	275	*340	140	*232
	-1 m	280	*360	180	*190
L=1.215 mm	0 m	260	*355	125	*240

- Data are based on ISO 10567 standard. Above lifting capacities include a 25% safety margin and don't exceed 87% of the actual capacity. Values with asterisk (*) are referred to hydraulic capacities.

STANDARD EQUIPMENT

- Rubber shoes
- Two travel speeds
- Blade
- Swing boom
- Boom cylinder protection
- 965 mm digging arm
- Hydraulic hammer circuit with piping up to the boom
- 2-way equipment circuit
- PPC servocontrols
- TOPS-FOPS canopy
- Indicators: hour meter, fuel level, engine oil level, engine oil pressure, cooling system temperature light, engine pre-heating
- Independent swing boom
- Swing lock pin
- Internal storage compartment
- Working light on boom
- External electric plug

OPTIONAL EQUIPMENT

- Steel shoes
- Variable undercarriage (HS version)
- 1.215 mm digging arm
- Completion of attachment's hydraulic circuit up to the arm with quick coupler
- Clamshell bucket
- Canopy front guard
- Heated TOPS cab with windshield wipers
- Cab FOPS protection
- Deluxe seat
- Rotating beacon
- Biodegradable oil
- Digging buckets range (250 ÷ 450 mm)
- Ditch cleaning bucket (1.000 mm)
- Hydraulic hammer

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CE

COMPANY WITH ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFIED BY DNV
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