



Caterpillar Inc.
100 NE Adams Street,
Peoria, IL 61629 USA
www.cat.com
UENR8481



Operational Document

Supplemental Information

Regulatory Compliance Information For Machine Security System MSS3i (A5:S1)

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Name of product: Cat® Machine Security System (MSS3i)

Make: Cat® Brand

Model: MSS3i (A5:S1)

Part Number: 432-8662

Type: Wireless Device (Module for providing machine security to the current device hardware via RFID Communication)

SMCS Code: 7631

The A5:S1 part number 4860923 is the buy-level part that includes a radio equipment and a software tied to the machine integration. The radio equipment contained in the A5:S1 is 432-8662. Such radio equipment complies with the applicable regional product compliance requirements as demonstrated with the attached DoC. The software included in the buy-level part does not impact regulatory performance parameters.



Name of product: Cat® Key FOB

Make: Cat® Brand

Model: Key FOB

Part Number: 285-3231

Type: Wireless Device (Chip-key for operator identification with RFID)

SMCS Code: 7631



Properties (Main parameters affecting safety i.e. voltage rating, radio frequency range, current, temperature)

MSS3i Safety Parameters

Input Voltage	
Operating Voltage Range	9VDC to 32VDC
Protection	Reverse Polarity
RFID Communication	
Transmit Frequency	134.2Khz
Transmit Output Power	12dBμA/m @ 10m 23dBμA/m @ 3m
Current Consumption (max)	
Max operational current draw	1.5A @ 24V
Environment	
Operating Temperature	-40° C (-40° F) to 85° C (185° F)
Storage Temperature	-50° C (-58° F) to 85° C (185° F)



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EU Declaration of Conformity

The Declaration of Conformity is issued under the sole responsibility of the manufacturer.

The undersigned, representing the manufacturer

Caterpillar Inc.

100 N.E. Adams
Peoria, IL 61629
USA

hereby declares that the product, object of this description: **Machine Security System RFID Key Reader**

Brand: Caterpillar

Model: MSS3i (A5S1)

Part #: 432-8662

Antenna: Internal

Is in conformity with the relevant Union harmonization legislation:

Directive 2014/30/EU

Directive 2014/53/EU

Directive 2011/65/EU

Conformity is shown by compliance with the applicable requirement of the following documents:

Assessment Procedure: ☒ Annex II, ☐ Annex III, ☐ Annex IV

2014/30/EU

EMCD

EN 13309:2010

2014/53/EU:

RED

LVD (Sec 3.1a):

EN 60950-1:2006/A2:2013

EMC (Sec 3.1b):

EN 301 489-1 V2.2.0

EN 301 489-3 V2.1.1

EN 301 489-17 V3.2.0

RF (Sec 3.2)

EN 300 330 V2.1.1

2011/65/EU

RoHS

EN 50581

Signature: Michael Caruthers

Name: Michael Caruthers

Place: Mossville, IL

Title: Engineering Manager

Date: __04oct2018__



Conditions for Assembly, Storage, Transfer and Disposal

All MSS3i locations use isolation mounts regardless of location. The isolation mounts cannot be removed to allow only the use of the M6 bolt for hard-mounting.

Mounting Locations

Ensure that the following guidelines are met when mounting the MSS3i Machine Security System.

- Mount the MSS3i inside the cab if used for operator ID applications.
- Ensure that the radio frequency propagation is not inhibited. Do not fully enclose the transceiver in metal. The transceiver may be mounted to a metal plate inside a panel or compartment as long as most of the panel material is non-metallic.

Term and Conditions of Storage and Transportation

The product is packed in consumer packaging of manufacturer. The product should be stored in the factory packing and storage conditions for climatic factors of Group 4 in accordance with GOST 15150-69. When loading and transportation requirements on warning labels on the boxes must be followed, shocks and bumps that can affect the appearance and performance of the device should not be allowed. Transportation can be done by all kinds of covered transport vehicles. When transporting by air, ensure that the device is transported in a sealed compartment.

Transfer and Disposal

Contact an authorized dealer to determine the disposal and transfer conditions.

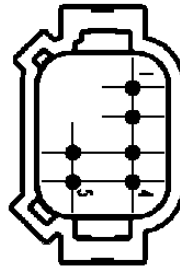


Electrical Connection

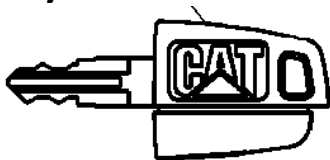
MSS3i:

Pinout of 8-pin DT connector

J1 PIN	IO NAME
1	+BATTERY (SWITCHED FOR ON/OFF)
2	-BATTERY
3	CAN HI
4	CAN LO
5	TIRIS SIGNAL
6	TIRIS RETURN



KeyFOB:



Preventative Maintenance

No preventative maintenance is required for these devices.

Safe Operation

To Ensure the safe operation of this device proper wire harness must be connected to the device as well as it must be mounted as per the instructions.



Information about the faults and corrective actions

Before calling to the dealer for repair, check the integrity of the electric wires, and cycle the battery power to the device. Cycling battery power can be accomplished by:

- Turning the machines master disconnect off and then back on.
- Unplugging the harness from the device and then plugging the harness back in.
- Disconnecting the negative cable from the negative battery terminal and then reconnect the cable.
- If these solutions do not help, call the local dealer for service.

Date of Manufacture

Contact an authorized dealer to determine the date of manufacture using the serial number.