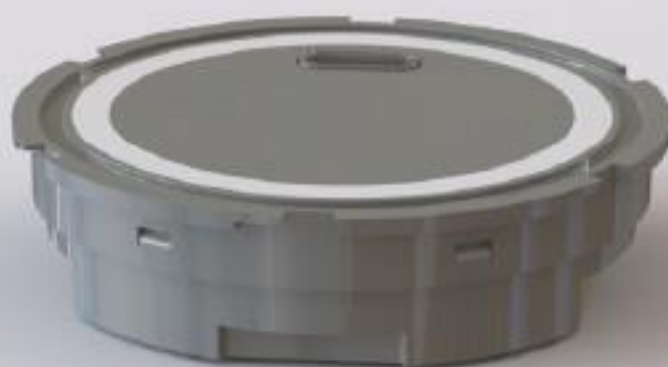


Adorn

Integration instruction

ASSA ABLOY
Global Solutions

Experience a safer
and more open world



FCC statements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.

ISED Canada statements

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1) This device may not cause interference.
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

Déclarations d'ISDE Canada

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) L'appareil ne doit pas produire de brouillage.
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

1. Purpose

The purpose of this document is to provide information on how the Adorn module should be integrated into host products.

2. Description of the module

The Adorn module is designed to be mounted in door locks by ASSA ABLOY Global Solutions. The module has two radios operating within the 13.110-14.010 MHz band and the 2400-2483.5 MHz band for RFID and BLE respectively.

2.1 Rules applicable to the module

The applicable FCC rules for the module are 47 CFR 15.207, 47 CFR 15.209, 47 CFR 15.225, and 47 CFR 15.247. The applicable ISED rules for the module are RSS-210, RSS-247, and RSS-Gen. The module must be labeled "FCC ID: 2BRES-ADORNV1C1" and "IC: 34655-ADORNV1C1". The module must also be labeled with its HVIN "ADORNV1C1".

2.2 Antenna information

The module has two antennas, and it is only approved with these antennas. The 2.4 GHz antenna is an SMT MID chip antenna with a peak gain of 3.7 dBi, and the 13.56 MHz antenna is a PCB trace antenna. The trace antenna has six coil turns with an outer diameter of 35 mm. Since the antennas are affixed to the module, and the only ones approved for the module, trace designs are not applicable.

3. Integration into a host product

The module is limited since it does not have any shielding of the radio circuitry. The module shall only be integrated according to the grant conditions. For each host product, the grant must be amended through a permissive change by the grantee ASSA ABLOY Global Solutions AB. Alternatively, ASSA ABLOY Global Solutions AB may allow a host integrator to take responsibility for the module as a change in ID and do the permissive change themselves. Another option is for ASSA ABLOY Global Solutions AB to allow a host integrator to proceed with a new certification of the host product including the module. As the module is intended for host products by the grantee, the following instructions are based on the grantee filing a permissive change for each host product. Contact ASSA ABLOY Global Solutions AB if another use case becomes relevant. Contact information can be found at the end of this document. KDB 996369 D04 shall be applied for the integration of the module.

3.1 Test plan and test modes

Testing of the host product with the module installed is required to ensure that compliance is maintained. RSE (Radiated Spurious Emissions) and fundamental field strength testing must be performed according to 15.209/15.225 and RSS-Gen/RSS-210 for the 13.110-14.010 MHz band. RSE and band edge testing must be performed according to 15.209/15.247 and RSS-Gen/RSS-247 for the 2402-2480 MHz band.

3.1.1 TESTING ACCORDING TO 15.209/15.225 AND RSS-GEN/RSS-210

Perform RSE for the 9 kHz– 1 GHz frequency range. Use ISO 14443-B 848 kbps, as it has been found to be the worst-case for RSE. Perform transmitter fundamental field strength & spectrum mask testing with ISO 14443-A 848 kbps, as it has been found to have the highest field strength.

3.1.2 TESTING ACCORDING TO 15.209/15.247 AND RSS-GEN/RSS-247

Perform RSE for the 9 kHz– 26 GHz frequency range. Perform these tests on the top channel (center frequency of 2480 MHz) with a data rate of 1 Mbps, as this mode has been found to have the highest peak output power. Perform band edge testing with a data rate of 1 Mbps on the top channel (center frequency of 2480 MHz) and the bottom channel (center frequency of 2402 MHz).

3.3 FCC requirements

For each host product a Class II permissive change must be filed by the grantee to ensure compliance. Every host product must comply with any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. For instance, Part 15 Subpart B compliance testing with the modular transmitter installed is required for every host product. The following must go in the manual for the host product:

FCC statements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

No changes shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a

particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

3.3.1 EXPOSURE INFORMATION

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. It should be installed and operated with a minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This information needs to be in the host product manual. If the host product is used in portable conditions (i.e. < 20 cm to the human body), SAR evaluation would be required. Guidance for that can be found in KDB 447498. This would require a C2PC of the module.

3.4 ISED requirements

For each host product a Class IV permissive change must be filed by the grantee to ensure compliance. Every host product must comply with any other ISED rules that apply to the host not covered by the modular transmitter grant of certification. The following must go in the manual for the host product:

ISED Canada statements

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1) This device may not cause interference.
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

Déclarations d'ISDE Canada

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) L'appareil ne doit pas produire de brouillage.
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

3.4.1 EXPOSURE INFORMATION

This equipment complies with ISED Canada radiation exposure limits set forth for an uncontrolled environment. It should be installed and operated with a minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter. This information needs to be in the host product manual. If the host product is used in portable conditions (i.e. < 20 cm to the human body), SAR evaluation would be required. Guidance for that can be found in RSS-102. This would require a C4PC of the module.

Cet équipement est conforme aux limites d'exposition aux rayonnements d'ISDE Canada établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps. Ces informations doivent figurer dans le manuel du produit hôte.

3.5 Labeling of the host product

The host product must be labeled with the following information:

“Contains FCC ID: 2BRES-ADORNV1C1”

“Contains IC: 34655-ADORNV1C1”

4. Contact information

Email: marineservice@assaabloy.com

Europe: +47 32 99 40 26

USA: +1 954 923 2209

5. Version history

Date	Description	Author
2025-10-27	Initial released version	RB