

The certification body of TÜV Informationstechnik GmbH hereby awards this certificate to the company

**Infotech GmbH**  
**Holthoffstraße 122a**  
**45659 Recklinghausen, Germany**

to confirm that its prototype data center

## **Container MDC40**

fulfils all requirements of a type certification (Proof of Concept – PoC) for extended protection of the criteria catalogue

## **Trusted Site Infrastructure TSI V3.3 PoC Level 2 (extended)**

of TÜV Informationstechnik GmbH. The requirements are summarized in the appendix to the certificate.

The appendix is part of the certificate and consists of 4 pages.

The certificate is valid only in conjunction with the evaluation report.



**Certificate ID: 66316.16**

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A handwritten signature in blue ink, appearing to read 'CS', is written over the printed name of the Head of Certification Body.

Essen, 2016-06-30

Dr. Christoph Sutter  
Head of Certification Body

**TÜV Informationstechnik GmbH**  
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Certificate valid until  
2018-06-30

**Certificate**

## Certification Scheme

The certification body of TÜV Informationstechnik GmbH performs its certification on the basis of the following certification scheme:

- German document: “Zertifizierungsprogramm (nicht akkreditierter Bereich) der Zertifizierungsstelle der TÜV Informationstechnik GmbH”, version 1.0 as of 2015-08-24, TÜV Informationstechnik GmbH

## Evaluation Report

- German document: “PoC Prüfbericht – Trusted Site Infrastructure (TSI), Container MDC40”, version 1.0 as of 2016-06-30, TÜV Informationstechnik GmbH

## Evaluation Requirements

- “Trusted Site Infrastructure – TSI Criteria Catalogue”, version 3.3 as of 2016-06-01, TÜV Informationstechnik GmbH

The Evaluation Requirements are listed at the end. Not applicable requirements are printed in grey.

## Evaluation Target

The target of evaluation is the prototype data center “Container MDC40” of Infotech GmbH. It is detailed in the evaluation report.

## Evaluation Result

The result is “PoC Level 2 (extended)”: all requirements of the evaluation aspects FIR, SEC and ACV of the next higher level are fulfilled.

## Summary of the Evaluation Requirements

The requirements for Trusted Site Infrastructure (TSI), version 3.3 – Proof of Concept (PoC):

### 1 Basics / Prerequisites

The type evaluation is performed in contrast to standard data center evaluations according to the following principles:

The evaluation of the environment (ENV) and the organization (ORG) is not covered by the type certification.

At least 60 % of the relevant TSI criteria in the targeted level of the following disciplines are fulfilled.

TSI criteria not covered by the prototype are explained for the end user in an operating manual provided by the vendor.

### 2 CON - Construction

Walls, doors and windows offer protection against access, fire and debris. It has also been ensured that building sections threatened by water, EM/RF interference fields, and dangerous next-door production processes are avoided. The building is protected against lightning. The security area is located in a separate fire protection area and not directly adjacent to the public. IT and technical equipment are separated.

### 3 FIR - Fire Alarm / Extinguishing Systems

A fire alarm system has been installed in the complete security area and linked with the fire brigade. Adjacent rooms, raised floors, suspended ceilings and air ducts are included in the fire monitoring. Apart from signalling an alarm, damage containment measures such as a gas extinguishing system in the security area are triggered.

Furthermore appropriate hand fire extinguishers are available.

#### **4 SEC - Security**

An access control system including appropriate access rules does exist. The protection against breaking and entering features several levels, and all security sensitive areas are monitored by means of an intrusion detection system. These security systems are connected to the emergency power supply and to a permanently manned control room.

#### **5 POW - Power Supply**

The electrical installations are realized in accordance with the relevant DIN standards and VDE regulations. They are protected against over voltage and realized with adapted separations and with protection of the electric circuits. The IT- and the security systems are connected to an uninterruptible power supply. For the supply alternative possibilities exist.

#### **6 ACV - Air Conditioning and Ventilation**

Air conditioning for the IT systems and infrastructure components is sufficiently given. It has been ensured that air temperature, humidity and dust content comply with specified limits. The measured values are remotely controlled. Dampers are installed according to the fire protection concept. Outages are handled by redundant systems.

## **7 DOC – Documentation**

There is given a prototype description, an operating manual and a parts list of the components used. Floor plans and schematics for the technical components are provided.

## **L PoC Level**

- PoC Level 1 medium protection requirements (according to the BSI infrastructure requirements of the baseline protection manual)
- PoC Level 2 extended protection requirements (extended requirements to all above mentioned aspects)
- PoC Level 3 high protection requirements (complete redundancy of essential components, no single point of failures, climate limits according to EN 1047-2)
- PoC Level 4 very high protection requirements (advanced access control, no adjacent hazard potentials, with minimal intervention time)