Rittal – The System.

Faster – better – everywhere.



DK 7338.221

Early fire detection system

State: 26/11/2026 (Source: www.rittal.com/com-en)

ENCLOSURES | POWER DISTRIBUTION | CLIMATE CONTROL | IT INFRASTRUCTURE | SOFTWARE & SERVICES

FRIEDHELM LOH GROUP

DK 7338.221 - Early fire detection system EFD III

The EFD system is a compact 482.6 mm (19"), 1 U early fire detection system with active smoke extraction system.

Features

Model No.	DK 7338.221
Product description	The EFD III early fire detection system includes the smoke extraction system in a 482.6 mm (19") subrack with just 1 U. An integral fan continuously extracts air from the area being protected via a system of pipes. The air drawn in passes two fire detectors. If smoke is detected, the highly sensitive detector will emit a pre-alarm, while the second detector will activate the main alarm. The fire detectors are permanently monitored for correct functioning by the evaluation and control electronics on the control card.
Benefits	Early fire detection 482.6 mm (19") rack mount with just 1 U Tested by VdS Schadenverhütung GmbH CAN bus interface to the CMC III monitoring system Floating relay outputs (pre-alarm/main alarm/collective fault)
Material	Sheet steel
Colour	Enclosure: RAL 7035 Front: RAL 9005
Interfaces	4 x/3 x relay outputs for alarms and faults (terminals/RJ12 jacks) 1 x/1 x input for door contact switch (terminal/RJ12 jack) 2 x CAN connections for master-slave networking 3 x connection (external alarm/manual call point/tank and fill level) 1 x voltage output for DET-AC slave III (24 V DC max. 500 mA) 1 x USB 2 x CAN bus interfaces to CMC III (max. 16 on PU/4 on PU Compact)
Uninterruptible mains electricity operation	approx. 4 h

Features

Note	This system is designed solely for use in closed, non-accessible enclosure systems. To ensure professional assembly and commissioning of the fire alarm and extinguisher system, it must be installed by a trained specialist. Rittal will be happy to assist you and can provide the relevant service.
Display	Plain-language display with 6 LEDs
Sensors	Optical smoke detector (sensitivity: approx. 3.5%/m light obscuration) Optical smoke detector HS (sensitivity: approx. 0.25%/m light obscuration)
Dimensions	Width: 482.6 mm Height: 44 mm Depth: 490 mm
Operating temperature range	10 °C...40 °C
Storage temperature range	-20 °C...65 °C
Storage temperature range of batteries	-15 °C...40 °C
Relative humidity (non-condensing)	96 %
Rated operating voltage	100 V - 240 V, 1~, 50 Hz/60 Hz
Air flow monitoring	approx. ±10% of total airflow
Packs of	1 pc(s).
Net weight	14 kg
Gross weight	15 kg
PCF per pack (cradle-to-gate)	57.2 kg CO2 eq (Cat B)
CRA risk class	Default (Low Risk)
Note on PCF category	Category B: PCF value (cradle-to-gate) based on the product weight, approximately calculated and self-declared
Customs tariff number	85311095
ETIM 9	EC002685

Features

ECLASS 8.0	40040104
Product description	DK EFD III, Early fire detection including smoke extraction system, Designed solely for use in closed, non-accessible enclosure systems, 482.6 mm (19") rack mount, 1 U

Approvals

Certificates	VDS
Explanations	Declaration of conformity

Tender text

EFD III early fire detection system

The early fire detection system is able to detect fires at an early stage. The compact system occupies 1 U of rack space and is designed for installation in the 19" level of closed server enclosure systems.
An integrated fan continuously draws in air from the protected space via a pipe system. This air passes two smoke detectors. If smoke aerosols are detected, the high-sensitivity smoke detector triggers a pre-alarm state. The second smoke detector triggers the main alarm. The proper functioning of the smoke detectors is monitored continuously by the evaluation and control electronics on the control board.
Alarms and fault messages can be output and forwarded to a higher-level system (monitoring or control system) via floating contacts.
An integrated CAN bus interface enables direct connection to the CMC III system.
As an option, the early fire detection system offers a possibility to control an external extinguishing agent tank. When the second fire alarm threshold is reached, the relay output "Main alarm" and the output for the external extinguishing agent tank are triggered.
The commissioning must be carried out by Rittal.
Technical data:
Width: 482.6 mm (19")
Height: 44 mm (1 U)
Depth: 490 mm
Housing material: Sheet steel
Weight: approx. 9.6 kg
Rated voltage: 100-240 V AC, 50/60 Hz
Emergency power supply: approx. 4 h
Max. permissible active current: 1.0 A at 24 V (the sum of all connected devices must not exceed the permissible active current of 1.0 A)
Max. permissible charging current: 350 mA at 24 V
Ambient temperature:
+10 °C to +40 °C (operation),
-20 °C to +65 °C (storage without batteries),
-15 °C to +40 °C (battery storage)
Humidity: up to 96% (relative), non-condensing
Protection category: IP 30
Connections:
Terminal for relay output "Pre-alarm", "Fire alarm", "Extinguishing"

Terminal for relay output "Collective fault"
Terminal for door contact switch
Socket (RJ 12) for connection of door contact switch
3x sockets (RJ 12) for signal outputs "Fault", "Pre-alarm", "Main alarm"
2x CAN connection for system networking
Connection for external alarm device
Connection for external filling level monitoring and control of an external tank, max. 500 mA
Connector for manual alarm
Voltage supply (UB), max. 500 mA
USB port
CAN bus interface to CMC III
Displays:
1 plain-language display for status messages
1 LED green, "Operation"
1 LED yellow, "Shutdown"
1 LED red, "Extinguishing system primed"
1 LED red, "Extinguishing system activated"
1 LED yellow, "Blocked"
1 LED yellow, "Fault"
Sensors (2 different scattered-light sensors for 2 alarm thresholds):
Optical smoke detector
(sensitivity: approx. 3.5%/m obscuration)
Optical smoke detector HS
(sensitivity: approx. 0.25%/m obscuration)
Air flow monitoring: approx. +/-10% of overall air flow
External devices:
Connection for manual alarm
Connection for door contact
Connection for external alarm device
CAN bus interface to Rittal CMC III
Model No.: 7338.221
Manufacturer: Rittal GmbH & Co. KG

© Rittal 2026