# SIEMENS



Sinteso™

## FDUD291, FDUD292, FDUD293, FDUL221, RE6, RE6T, RE10, FDUM291, FDUM292

CE

### **Test equipment and accessories**

- The detector exchanger FDUD291 serves for the rational inserting and removal of Sinteso point detectors.
- The detector exchanger and tester FDUD292/293 is a universal tool serving for the rational inserting and removal of Sinteso point detectors, as well as for the commissioning, maintenance and troubleshooting with point detectors, manual call points, alarm sounders, in-/output modules and linear smoke detectors.
- The line tester FDUL221 serves for diagnosis of the detector line with wiring and connected devices. The device can be operated as stand-alone device, or can be connected to a PC for more sophisticated applications.
- For the periodic performance check of fire detectors
  - Detector tester RE6 for smoke detectors, with environmentally compatible test gas
  - Test gas REF8 and REF8-S for smoke detectors
  - Test gas REF8-C for CO detectors
  - Detector tester RE6T for heat detectors
  - Detector tester RE10 for linear smoke detectors
- The telescope rods FDUM291/292 with continuous length adjustment serve as extension of the exchanger, tester and other tools.

### **Building Technologies**

### Characteristics

- ecologically processing
- recyclable materials
- detector exchange possible without ladder or scaffold up to 8 m room height
- Joint springs facilitate all-side inclination for beveled insertion or removal of point detectors.
- The point detector can be gripped in four turning positions for increased work efficiency.
- Specially developed springs retain the point detector in the detector extractor.
- compatible with the telescope rods FDUM291/292 and the conventional extension rods VR10/11/12/13 and the MP/MT grab rods and extension rods

### Function

- rational insertion and removal of point detectors FDO, FDOOT, FDT



#### Detector exchanger and tester FDUD292, FDUD293

The detector exchanger and tester FDUD292/293 is a universal tool for the insertion and removal of point detectors, the FDUD292 for the commissioning and maintenance and the FDUD293 for maintenance of the FDnet devices, with the exception of the flame detector FDF and the line separator FDCL.

### Characteristics

- ecologically processing
- recyclable materials
- electronic und synthetic material simple separable
- efficient and ecological detector testing without gas
- detector exchange possible without ladder or scaffold up to 8 m room height
- elastic springs facilitate all-side inclination for beveled insertion or removal of point detectors

- The point detector can be gripped in four turning positions for increased work efficiency.
- Specially developed springs retain the point detector in the detector extractor.
- Efficient operation due to alphanumeric display including lighting and keypad.
- good visible LED display for test OK, exchange recommended, exchange necessary
- 9 V battery
- compatible with the telescope rods FDUM291/292 and the conventional extension rods VR10/11/12/13 and the MP/MT grab rods and extension rods
- Update of the device software (Firmware) via PC possible.

### **Function FDUD292**

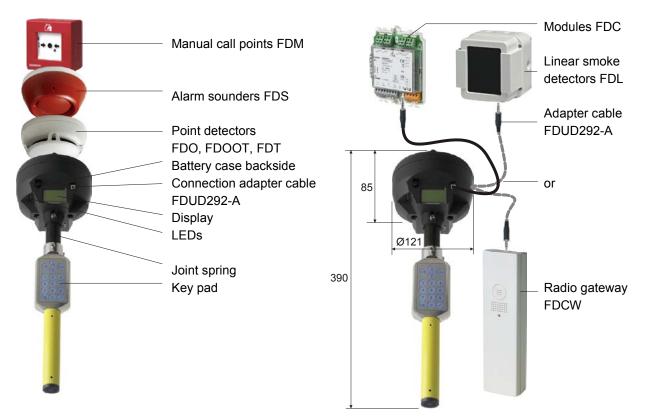
- rational insertion and removal of point detectors FDO, FDOOT, FDT
- Commissioning, maintenance, status check and testing of detectors with extend diagnosis information on site.
- polling parameters such as bus address and changes to detector settings
- efficient troubleshooting with detectors, installation and control unit
- access levels with different functionality

### **Function FDUD293**

- rational insertion and removal of point detectors FDO, FDOOT, FDT
- testing and activation of detectors
- efficient troubleshooting with detectors, installation and control unit

### Application

- for all point detectors FDO, FDOOT, FDT, manual call points FDM, alarm sounders FDS (wireless MC link)
- for all modules FDCI, FDCIO (except FDCI221 and FDCIO221), linear smoke detectors FDL via adapter cable FDUD292-A



### **Detector tester RE6**



### **Detector tester RE6T**



- The RE6 detector tester is used together with the REF8, REF8-S, REF8-C test gas can. It is designed for testing ionization and optical scattering type smoke detectors and CO detectors.
- The detector tester is placed over the detector and given a brief push to release the test gas and so simulate the presence of fire aerosols. The detector responds quickly and actuates an alarm.
- REF8 und REF8-S have been developed as environmentally friendly test gases and fulfill severe environmental regulations, but contain flammable substances. REF 8 can be used in the temperature range of 0... +40 °C, REF8-S for -20... +40 °C in dry or humid environment. REF8-S is primarily used at temperatures below 0°C or for detectors reacting only with high smoke concentrations, or with long signal integration.
- REF8-C is used to test the CO functionality of detectors with a CO sensor. REF8-C can be used in dry or humid environments at temperatures of -20... +50 °C.
- Transport by car is advised in a heat protection.
- Comply with the operating instructions on the detector tester.
- This detector tester contains a hot air generator. For the performance check, the tester is pushed over the detector. The hot air released heats the detector and so actuates an alarm.

## STOP

Forbidden in electrical switching stations or areas where there is a danger of explosion!

• Comply with the operating instructions on the detector tester.

### Detector tester RE10, Alarm test filter TF04



- For performance check on linear smoke detectors. In compliance with the type of detector to be tested, the alarm test filter TF04\* is inserted in the detector tester.
- The detector tester is then held in front of the optic parts of the detector (i.e. into the infrared ray). The detector reacts after a few seconds.
- \* One alarm test-filter is also included in the adjustment device set FDLU291

### Telescope rods FDUM291 and FDUM292

### Characteristics

- yellow plastic tubes in light and robust execution (non-conductive material)
- plastic sockets and slide bearings provide for easy sliding of the tubes
- quick spring-type locking mechanisms and continuous length adjustment
- The tubes can be extended to their maximum length and are protected against further extension by a stop bolt.
- Further extension of the telescope rods is not possible.
- The use with previous test devices is possible.

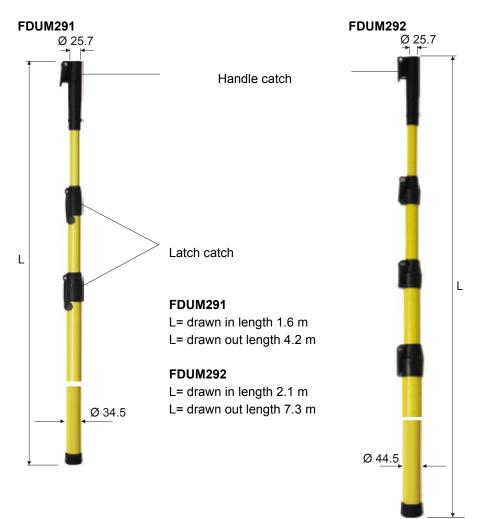
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### FDUM291

- light telescope rod for all applications, for room heights up to 5.5 m
- latch catch for continuous length adjustment
- three-part telescope with tri-oval tubes as practical grip
- distortion of the tubes is not possible
- weight 1.2 kg without attached tool

### FDUM292

- long, robust telescope rod for room heights up to 8 m
- handle catch for continuous length adjustment
- stable, four-part telescope with round tubes
- weight 3.4 kg without attached tool





Beware of falling objects when working with a telescope rod. Hardhat required.

### Characteristics

- ecologically processing
- recyclable materials
- 4-line display with 20 characters per line
- easy, menu-guided operation
- power supply via battery or mains adapter
- Update of the device software (Firmware) via PC possible

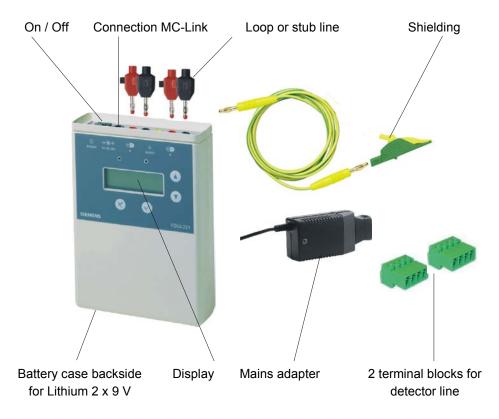
### Function

Different functions can be polled, e.g.:

- number of devices found at the A and B connection
- number and place of line errors found
- short circuit, open line, ground fault with conductor(s)
- total resistance too high and/or charging voltage at the end of line too low
- data transmission fault due to too high line capacity
- scrolling from detector to detector, with indication of type and serial number
- indication of branches and selection of the branch for scrolling
- activation of the internal response indicator of the selected detector and recognition of the connected alarm sounder
- extended operation on the PC with special software

### Application

 The line tester FDUL221 is a universal device for the final testing of completely installed FDnet fire detection lines, when no control unit has been connected yet. For troubleshooting for electricians, installers or service technicians.



### **Technical data**

RE6 with test gas can	Operating and storage temperature	
	– REF8	-20 +40 °C
		recommended use 0 +40 °C
	– REF8-S	-20 +40 °C
	– REF8-C	-20 +50 °C
	Number of detector tests, depending on model	max. 400
RE6T	Mains connection	220 VAC / 50… 60 Hz, ≈300 W
Detector exchanger and	Operating voltage	9 VDC
tester, Intelligent detector	– Alkali battery	Commercial 9 V
tester	for temperatures under -10°C	
lester	<ul> <li>Lithium brownstone battery</li> </ul>	ULTRALIFE U9VL or U9VL-J
		Capacity 950 – 1200 mAh
	Operating current	
	<ul> <li>Stand by (light off / on)</li> </ul>	2 mA / 42 mA
	<ul> <li>– Stand by (light on 7 on)</li> <li>– Communication (3 LEDs + Summer)</li> </ul>	95 mA
	Operating temperature	-20 +40 °C
	Storage temperature	-30 +75 °C
	<b>C</b> .	-25 +60 °C
	- with battery	≤95 % rel.
	Humidity (no condensation permitted)	293 % [6].
Line tester	Operating voltage	min. 10 VDC, max. 30 VDC
	<ul> <li>Battery or via</li> </ul>	2 x 9 V
	<ul> <li>Mains adapter</li> </ul>	240 VAC/24 VDC, 625 mA
	Current consumption during measuring	depending on number of devices and dis- play illumination
	Detection line voltage	
	– FDnet (FS20, AlgoRex)	32 VDC
	<ul> <li>FDnet (SIGMASYS)</li> </ul>	28 VDC
	Max. connection factor (MK) per line	
	– with mains adapter	min. 550
	<ul> <li>with harts adapted</li> <li>with battery</li> </ul>	min. 150
	Operating temperature	-25 +40 °C
	Storage temperature	-30 +75 °C
	<b>C</b> .	
	- with battery	-25 +60 °C
	Humidity ( no condensation permitted)	≤95 % rel.

### **Details for ordering**

	Туре	Part no	Designation	Weight
	FDUD291	A5Q00003585	Detector exchanger	0.594 kg
	FDUD292	A5Q00003357	Detector exchanger and tester incl. adapter cable FDUD292-A	1.079 kg
	FDUD293	A5Q00018261	Intelligent detector tester incl. adapter cable FDUD292-A	1.079 kg
Spare part	FDUD292-A	A5Q00004990	Adapter cable Audio stereo cable with 3.5 mm stereo jack	0.040 kg
Accessories	-	A5Q00004142	Lithium brownstone battery 9 V / 1.2 Ah	0.035 kg
Detector tester	RE6	BPZ:3680300001	Detector tester for smoke detectors	0.950 kg
Accessories	REF8	A5Q00011687	Test gas can	0.194 kg
	REF8-S	A5Q00011688	Test gas can	0.186 kg
	REF8-C	S54370-N2-A1	Test gas can CO	0,203 kg
Detector tester	RE6T	BPZ:3680270001	Detector tester for heat detectors	1.265 kg
	RE10	BPZ:3685190001	Detector tester for linear smoke detectors	0.345 kg
Alarm test filter for RE10 (is also included in Adjustment set FDLU291)	TF04	BPZ:4931090001	Alarm test filter (Absorption 77 %)	0.005 kg
	FDUM291	A5Q00004996	Telescope rod three-part telescope with tri-oval tubes (1.6 m / 4.2 m)	1.960 kg
Spare parts	_	A5Q00009787	Lever with screw and nut (Handle catch)	0.023 kg
	_	A5Q00009786	Adapter with lever, screw and nut incl. attachment and bushing screw	0.088 kg
	_	A5Q00009788	Small flap with screw and nut (Latch catch)	0.015 kg
	_	A5Q00009789	Large flap with screw and nut (Latch catch)	0.016 kg
	FDUM292	A5Q00004997	Telescope rod four-part telescope with round tubes (2.1 m / 7.3 m)	4.480 kg
Spare parts	_	A5Q00009787	Lever with screw and nut (Handle catch)	0.023 kg
	-	A5Q00009786	Adapter with lever, screw and nut incl. attachment and bushing screw	0.088 kg
	FDUL221	A5Q00004397	Line tester incl. line connection set FDUL221-A and power supply set FDUL221-B	1.567 kg
Spare parts	FDUL221-A	A5Q00008436	Line connection set	0.088 kg
	FDUL221-B	A5Q00008437	Power supply set	0.292 kg
	FDUL221-C	A5Q00008438	PC cable (RS232)	0.037 kg
				0.007 Kg

MCL USB adapter FDUZ221 see data sheet document no A6V10084591

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