ROHDE & SCHWARZ

Beschreibung

100-W-BELASTUNGSWIDERSTAND

RD 010/50	RD 010/60
101.0028.50	101.0028.60

ENGLISH INSTRUCTION BOOK
see page 9

Eigenschaften

Nennbelastbarkeit	100 W
Frequenzbereich	0...600 MHz
Eingangswiderstand	
bei RD 010/50	50 Ω
bei RD 010/60	60 Ω
Welligkeitsfaktor s	
bei 0... 50 MHz	≦ 1,05
bei 50...600 MHz	≦ 1,1
Max. Spannung bei Impuls.	2000 V
Anschluß	Kurzhubstecker Dezifix B, umrüstbar auf andere Stecker- oder Buchsensysteme
Kühlung	Luftkonvektion
Abmessungen	250 x 520 x 175 mm
Gewicht	7,2 kg

Umrüsten des Anschlusses

Wenn nicht anders bestellt, so ist der Anschluß mit einem Kurzhubstecker Dezifix B ausgerüstet. Zur Umrüstung des Anschlusses für andere Stecker- und Buchsensysteme stehen die auf Seite 4 aufgeführten Umrüstsätze zur Verfügung. Im Bild auf Seite 17 in der Mitte beispielsweise ist der Dezifix-Stecker durch eine Buchse der Serie UHF ersetzt, im Bild unten durch einen Stecker der Serie UHF. Der Umrüstvorgang ist sehr einfach: Man schraubt den Außenleiter 1+2 mit dem Schlüssel FZM 10900 und den Innenleiter 3+4 mit einem 4-mm-Schraubenzieher heraus und ersetzt diese Teile durch die des jeweils erforderlichen Umrüstsatzes (im Bild sind 5+6 die Buchse FJ 017.5217, 7+8+9 sind der Stecker FJ 017.7384).

Gewünschter Anschluß am Gerät	Umrüstsatz Bestell-Nummer
50-Ω-Buchse Serie UHF	FJ 017.5217
50-Ω-Stecker Serie UHF	FJ 017.7384
50-Ω-Buchse Serie N	FJ 017.5398
50-Ω-Stecker Serie N	FJ 017.7532
50-Ω-Buchse Serie C	FJ 017.5530
50-Ω-Stecker Serie C	FJ 017.7761
50-Ω-Buchse Serie BNC	FJ 017.5730
50-Ω-Stecker Serie BNC	FJ 017.7832
50-Ω-HF-Buchse 4,1/9,5	FK 017.8516
50-Ω-HF-Stecker 4,1/9,5	FK 017.9106
50-Ω-HF-Buchse 7/16	FK 017.8739
50-Ω-HF-Stecker 7/16	FK 017.9258
60-Ω-HF-Buchse 3,5/9,5 DIN 47281	FK 017.8580
60-Ω-HF-Stecker 3,5/9,5 DIN 47281	FK 017.9158
60-Ω-HF-Buchse 6/16 DIN 47282	FK 017.8780
60-Ω-HF-Stecker 6/16 DIN 47282	FK 017.9306
50-Ω-Anschluß General Radio 874 B	FJ 017.9512
50-Ω-Anschluß Marconi H 4	FJ 017.9835

Schaltteilliste zu RD 010/50

Kenn-zei-chen	Benennung	Wert	R&S-Sach-Nr.
R1	Schichtwiderstand	2,5 Ω ±2 %/6 W	WFS 1/2,5/2/6
R2	Schichtwiderstand	2,75 Ω ±2 %/6 W	WFS 1/2,75/2/6
R3	Schichtwiderstand	3,04 Ω ±2 %/6 W	WFS 1/3,04/2/6
R4	Schichtwiderstand	3,67 Ω ±2 %/6 W	WFS 1/3,67/2/6
R5	Schichtwiderstand	4,17 Ω ±2 %/6 W	WFS 1/4,17/2/6
R6	Schichtwiderstand	4,67 Ω ±2 %/6 W	WFS 1/4,67/2/6
R7	Schichtwiderstand	5,67 Ω ±2 %/6 W	WFS 1/5,67/2/6
R8	Schichtwiderstand	7,25 Ω ±2 %/6 W	WFS 1/7,25/2/6
R9	Schichtwiderstand	10 Ω ±2 %/6 W	WFS 1/10/2/6
R10	Schichtwiderstand	15,25 Ω ±2 %/6 W	WFS 1/15,25/2/6
R11	Schichtwiderstand	31,8 Ω ±2 %/6 W	WFS 1/31,8/2/6
R12	Schichtwiderstand	2 kΩ ±2 %/3 W	WFS 1/2 k/2/3
R13	Schichtwiderstand	2 kΩ ±2 %/3 W	WFS 1/2 k/2/3
R14	Schichtwiderstand	1,82 kΩ ±2 %/3 W	WFS 1/1,82 k/2/3
R15	Schichtwiderstand	1,82 kΩ ±2 %/3 W	WFS 1/1,82 k/2/3
R16	Schichtwiderstand	1,64 kΩ ±2 %/3 W	WFS 1/1,64 k/2/3
R17	Schichtwiderstand	1,64 kΩ ±2 %/3 W	WFS 1/1,64 k/2/3
R18	Schichtwiderstand	1,37 kΩ ±2 %/3 W	WFS 1/1,37 k/2/3
R19	Schichtwiderstand	1,37 kΩ ±2 %/3 W	WFS 1/1,37 k/2/3
R20	Schichtwiderstand	1,2 kΩ ±2 %/3 W	WFS 1/1,2 k/2/3
R21	Schichtwiderstand	1,2 kΩ ±2 %/3 W	WFS 1/1,2 k/2/3
R22	Schichtwiderstand	1,07 kΩ ±2 %/3 W	WFS 1/1,07 k/2/3
R23	Schichtwiderstand	1,07 kΩ ±2 %/3 W	WFS 1/1,07 k/2/3

Kenn-zei-chen	Benennung	Wert	R&S-Sach-Nr.
R24	Schichtwiderstand	883 Ω ±2 %/3 W	WFS 1/883/2/3
R25	Schichtwiderstand	883 Ω ±2 %/3 W	WFS 1/883/2/3
R26	Schichtwiderstand	692 Ω ±2 %/3 W	WFS 1/692/2/3
R27	Schichtwiderstand	692 Ω ±2 %/3 W	WFS 1/692/2/3
R28	Schichtwiderstand	500 Ω ±2 %/3 W	WFS 1/500/2/3
R29	Schichtwiderstand	500 Ω ±2 %/3 W	WFS 1/500/2/3
R30	Schichtwiderstand	338 Ω ±2 %/3 W	WFS 1/338/2/3
R31	Schichtwiderstand	338 Ω ±2 %/3 W	WFS 1/338/2/3
R32	Schichtwiderstand	172 Ω ±2 %/3 W	WFS 1/172/2/3
R33	Schichtwiderstand	172 Ω ±2 %/3 W	WFS 1/172/2/3
R34	Schichtwiderstand	50 Ω ±2 %/6 W	WFS 1/50/2/6

Schaltteilliste zu RD 010/60

Kennzeichen	Benennung	Wert	R&S-Sach-Nr.
R1	Schichtwiderstand	3 Ω ±2 %/6 W	WFS 1/3/2/6
R2	Schichtwiderstand	3,3 Ω ±2 %/6 W	WFS 1/3,3/2/6
R3	Schichtwiderstand	3,65 Ω ±2 %/6 W	WFS 1/3,65/2/6
R4	Schichtwiderstand	4,4 Ω ±2 %/6 W	WFS 1/4,4/2/6
R5	Schichtwiderstand	5 Ω ±2 %/6 W	WFS 1/5/2/6
R6	Schichtwiderstand	5,6 Ω ±2 %/6 W	WFS 1/5,6/2/6
R7	Schichtwiderstand	6,8 Ω ±2 %/6 W	WFS 1/6,8/2/6
R8	Schichtwiderstand	8,7 Ω ±2 %/6 W	WFS 1/8,7/2/6
R9	Schichtwiderstand	12 Ω ±2 %/6 W	WFS 1/12/2/6
R10	Schichtwiderstand	18,25 Ω ±2 %/6 W	WFS 1/18,25/2/6
R11	Schichtwiderstand	38,2 Ω ±2 %/6 W	WFS 1/38,2/2/6
R12	Schichtwiderstand	2,4 kΩ ±2 %/3 W	WFS 1/2,4 k/2/3
R13	Schichtwiderstand	2,4 kΩ ±2 %/3 W	WFS 1/2,4 k/2/3
R14	Schichtwiderstand	2,18 kΩ ±2 %/3 W	WFS 1/2,18 k/2/3
R15	Schichtwiderstand	2,18 kΩ ±2 %/3 W	WFS 1/2,18 k/2/3
R16	Schichtwiderstand	1,97 kΩ ±2 %/3 W	WFS 1/1,97 k/2/3
R17	Schichtwiderstand	1,97 kΩ ±2 %/3 W	WFS 1/1,97 k/2/3
R18	Schichtwiderstand	1,64 kΩ ±2 %/3 W	WFS 1/1,64 k/2/3
R19	Schichtwiderstand	1,64 kΩ ±2 %/3 W	WFS 1/1,64 k/2/3
R20	Schichtwiderstand	1,44 kΩ ±2 %/3 W	WFS 1/1,44 k/2/3
R21	Schichtwiderstand	1,44 kΩ ±2 %/3 W	WFS 1/1,44 k/2/3
R22	Schichtwiderstand	1,28 kΩ ±2 %/3 W	WFS 1/1,28 k/2/3
R23	Schichtwiderstand	1,28 kΩ ±2 %/3 W	WFS 1/1,28 k/2/3

Kenn-zei-chen	Benennung	Wert	R&S-Sach-Nr.
R24	Schichtwiderstand	1,06 kΩ ±2 %/3 W	WFS 1/1,06 k/2/3
R25	Schichtwiderstand	1,06 kΩ ±2 %/3 W	WFS 1/1,06 k/2/3
R26	Schichtwiderstand	830 Ω ±2 %/3 W	WFS 1/830/2/3
R27	Schichtwiderstand	830 Ω ±2 %/3 W	WFS 1/830/2/3
R28	Schichtwiderstand	600 Ω ±2 %/3 W	WFS 1/600/2/3
R29	Schichtwiderstand	600 Ω ±2 %/3 W	WFS 1/600/2/3
R30	Schichtwiderstand	405 Ω ±2 %/3 W	WFS 1/405/2/3
R31	Schichtwiderstand	405 Ω ±2 %/3 W	WFS 1/405/2/3
R32	Schichtwiderstand	206 Ω ±2 %/3 W	WFS 1/206/2/3
R33	Schichtwiderstand	206 Ω ±2 %/3 W	WFS 1/206/2/3
R34	Schichtwiderstand	60 Ω ±2 %/6 W	WFS 1/60/2/6

Instruction Book

100 W LOAD RESISTOR

Type RD 010/50 Type RD 010/60

101.0028.50 101.0028.60

R 27979 Bl. 9

Specifications

Power rating	100 w
Frequency range	0 to 600 Mc
Input impedance	
for Type RD 010/50	50 Ω
for Type RD 010/60	60 Ω
VSWR	
for 0 to 50 Mc	better than 1.05
for 50 to 600 Mc	better than 1.1
Maximum input, pulse	2000 v
Connector	Dezifix B, adaptable to other plug or socket systems
Cooling	air convection
Dimensions	250 x 520 x 175 mm
Weight	7.2 kg

Adapting the Connector

Unless ordered otherwise the unit is provided with a Dezifix B connector. For adaptation to other plug and socket systems the screw-in connectors listed on the next page are available. In the middle of the drawing on page 17, e.g., the Dezifix connector has been replaced by a UHF socket, in the drawing below by a UHF plug. Adapting the connector is very simple: Loosen the outer conductor 1+2 using wrench FZM 10900 and the inner conductor 3+4 using a 4-mm wrench and replace these parts by those of the screw-in connector to be used (in the drawing socket FJ 017.5217 is indicated by 5+6, plug FJ 017.7384 by 7+8+9).

Desired connector system at the instrument	Order Number of screw-in connector
50-Ω socket UHF series	FJ 017.5217
50-Ω plug UHF series	FJ 017.7384
50-Ω socket N series	FJ 017.5398
50-Ω plug N series	FJ 017.7532
50-Ω socket C series	FJ 017.5530
50-Ω plug C series	FJ 017.7761
50-Ω socket BNC series	FJ 017.5730
50-Ω plug BNC series	FJ 017.7832
50-Ω RF socket 4,1/9,5	FK 017.8516
50-Ω RF plug 4,1/9,5	FK 017.9106
50-Ω RF socket 7/16	FK 017.8739
50-Ω RF plug 7/16	FK 017.9258
60-Ω RF socket 3,5/9,5 DIN 47281	FK 017.8580
60-Ω RF plug 3,5/9,5 DIN 47281	FK 017.9158
60-Ω RF socket 6/16 DIN 47282	FK 017.8780
60-Ω RF plug 6/16 DIN 47282	FK 017.9306
50-Ω connector General Radio 874 B	FJ 017.9512
50-Ω connector Marconi H 4	FJ 017.9835

Table of Replaceable Parts for Type RD 010/50

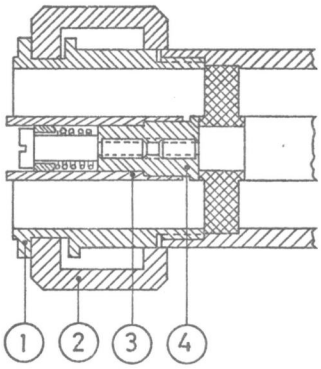
Ref. No.	Designation	Ratings	R&S Stock No.
R1	Resistor, depos. carbon	2.5 Ω ±2%/6 w	WFS 1/2,5/2/6
R2	Resistor, depos. carbon	2.75 Ω ±2%/6 w	WFS 1/2,75/2/6
R3	Resistor, depos. carbon	3.04 Ω ±2%/6 w	WFS 1/3,04/2/6
R4	Resistor, depos. carbon	3.67 Ω ±2%/6 w	WFS 1/3,67/2/6
R5	Resistor, depos. carbon	4.17 Ω ±2%/6 w	WFS 1/4,17/2/6
R6	Resistor, depos. carbon	4.67 Ω ±2%/6 w	WFS 1/4,67/2/6
R7	Resistor, depos. carbon	5.67 Ω ±2%/6 w	WFS 1/5,67/2/6
R8	Resistor, depos. carbon	7.25 Ω ±2%/6 w	WFS 1/7,25/2/6
R9	Resistor, depos. carbon	10 Ω ±2%/6 w	WFS 1/10/2/6
R10	Resistor, depos. carbon	15.25 Ω ±2%/6 w	WFS 1/15,25/2/6
R11	Resistor, depos. carbon	31.8 Ω ±2%/6 w	WFS 1/31,8/2/6
R12	Resistor, depos. carbon	2 kΩ ±2%/3 w	WFS 1/2 k/2/3
R13	Resistor, depos. carbon	2 kΩ ±2%/3 w	WFS 1/2 k/2/3
R14	Resistor, depos. carbon	1.82 kΩ ±2%/3 w	WFS 1/1,82 k/2/3
R15	Resistor, depos. carbon	1.82 kΩ ±2%/3 w	WFS 1/1,82 k/2/3
R16	Resistor, depos. carbon	1.64 kΩ ±2%/3 w	WFS 1/1,64 k/2/3
R17	Resistor, depos. carbon	1.64 kΩ ±2%/3 w	WFS 1/1,64 k/2/3
R18	Resistor, depos. carbon	1.37 kΩ ±2%/3 w	WFS 1/1,37 k/2/3
R19	Resistor, depos. carbon	1.37 kΩ ±2%/3 w	WFS 1/1,37 k/2/3
R20	Resistor, depos. carbon	1.2 kΩ ±2%/3 w	WFS 1/1,2 k/2/3
R21	Resistor, depos. carbon	1.2 kΩ ±2%/3 w	WFS 1/1,2 k/2/3
R22	Resistor, depos. carbon	1.07 kΩ ±2%/3 w	WFS 1/1,07 k/2/3
R23	Resistor, depos. carbon	1.07 kΩ ±2%/3 w	WFS 1/1,07 k/2/3

Ref. No.	Designation	Ratings	R&S Stock No.
R24	Resistor, depos. carbon	883 Ω ±2%/3 w	WFS 1/883/2/3
R25	Resistor, depos. carbon	883 Ω ±2%/3 w	WFS 1/883/2/3
R26	Resistor, depos. carbon	692 Ω ±2%/3 w	WFS 1/692/2/3
R27	Resistor, depos. carbon	692 Ω ±2%/3 w	WFS 1/692/2/3
R28	Resistor, depos. carbon	500 Ω ±2%/3 w	WFS 1/500/2/3
R29	Resistor, depos. carbon	500 Ω ±2%/3 w	WFS 1/500/2/3
R30	Resistor, depos. carbon	338 Ω ±2%/3 w	WFS 1/338/2/3
R31	Resistor, depos. carbon	338 Ω ±2%/3 w	WFS 1/338/2/3
R32	Resistor, depos. carbon	172 Ω ±2%/3 w	WFS 1/172/2/3
R33	Resistor, depos. carbon	172 Ω ±2%/3 w	WFS 1/172/2/3
R34	Resistor, depos. carbon	50 Ω ±2%/6 w	WFS 1/50/2/6

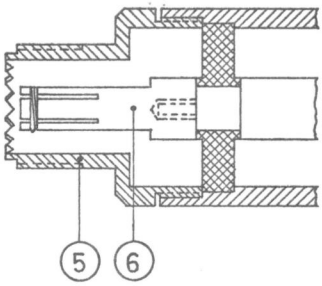
Table of Replaceable Parts for Type RD 010/60

Ref. No.	Designation	Ratings	R&S Stock No.
R1	Resistor, depos. carbon	3 Ω ±2%/6 w	WFS 1/3/2/6
R2	Resistor, depos. carbon	3.3 Ω ±2%/6 w	WFS 1/3,3/2/6
R3	Resistor, depos. carbon	3.65 Ω ±2%/6 w	WFS 1/3,65/2/6
R4	Resistor, depos. carbon	4.4 Ω ±2%/6 w	WFS 1/4,4/2/6
R5	Resistor, depos. carbon	5 Ω ±2%/6 w	WFS 1/5/2/6
R6	Resistor, depos. carbon	5.6 Ω ±2%/6 w	WFS 1/5,6/2/6
R7	Resistor, depos. carbon	6.8 Ω ±2%/6 w	WFS 1/6,8/2/6
R8	Resistor, depos. carbon	8.7 Ω ±2%/6 w	WFS 1/8,7/2/6
R9	Resistor, depos. carbon	12 Ω ±2%/6 w	WFS 1/12/2/6
R10	Resistor, depos. carbon	18.25 Ω ±2%/6 w	WFS 1/18,25/2/6
R11	Resistor, depos. carbon	38.2 Ω ±2%/6 w	WFS 1/38,2/2/6
R12	Resistor, depos. carbon	2.4 kΩ ±2%/3 w	WFS 1/2,4 k/2/3
R13	Resistor, depos. carbon	2.4 kΩ ±2%/3 w	WFS 1/2,4 k/2/3
R14	Resistor, depos. carbon	2.18 kΩ ±2%/3 w	WFS 1/2,18 k/2/3
R15	Resistor, depos. carbon	2.18 kΩ ±2%/3 w	WFS 1/2,18 k/2/3
R16	Resistor, depos. carbon	1.97 kΩ ±2%/3 w	WFS 1/1,97 k/2/3
R17	Resistor, depos. carbon	1.97 kΩ ±2%/3 w	WFS 1/1,97 k/2/3
R18	Resistor, depos. carbon	1.64 kΩ ±2%/3 w	WFS 1/1,64 k/2/3
R19	Resistor, depos. carbon	1.64 kΩ ±2%/3 w	WFS 1/1,64 k/2/3
R20	Resistor, depos. carbon	1.44 kΩ ±2%/3 w	WFS 1/1,44 k/2/3
R21	Resistor, depos. carbon	1.44 kΩ ±2%/3 w	WFS 1/1,44 k/2/3
R22	Resistor, depos. carbon	1.28 kΩ ±2%/3 w	WFS 1/1,28 k/2/3
R23	Resistor, depos. carbon	1.28 kΩ ±2%/ 3 w	WFS 1/1,28 k/2/3

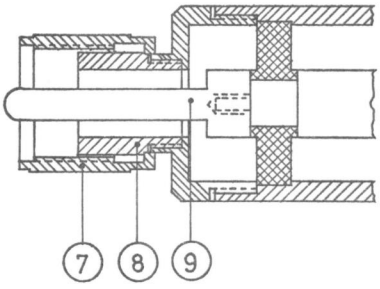
Ref. No.	Designation	Ratings	R&S Stock No.
R24	Resistor, depos. carbon	1.06 kΩ ±2%/3 w	WFS 1/1,06 k/2/3
R25	Resistor, depos. carbon	1.06 kΩ ±2%/3 w	WFS 1/1,06 k/2/3
R26	Resistor, depos. carbon	830 Ω ±2%/3 w	WFS 1/830/2/3
R27	Resistor, depos. carbon	830 Ω ±2%/3 w	WFS 1/830/2/3
R28	Resistor, depos. carbon	600 Ω ±2%/3 w	WFS 1/600/2/3
R29	Resistor, depos. carbon	600 Ω ±2%/3 w	WFS 1/600/2/3
R30	Resistor, depos. carbon	405 Ω ±2%/3 w	WFS 1/405/2/3
R31	Resistor, depos. carbon	405 Ω ±2%/3 w	WFS 1/405/2/3
R32	Resistor, depos. carbon	206 Ω ±2%/3 w	WFS 1/206/2/3
R33	Resistor, depos. carbon	206 Ω ±2%/3 w	WFS 1/206/2/3
R34	Resistor, depos. carbon	60 Ω ±2%/6 w	WFS 1/60/2/6



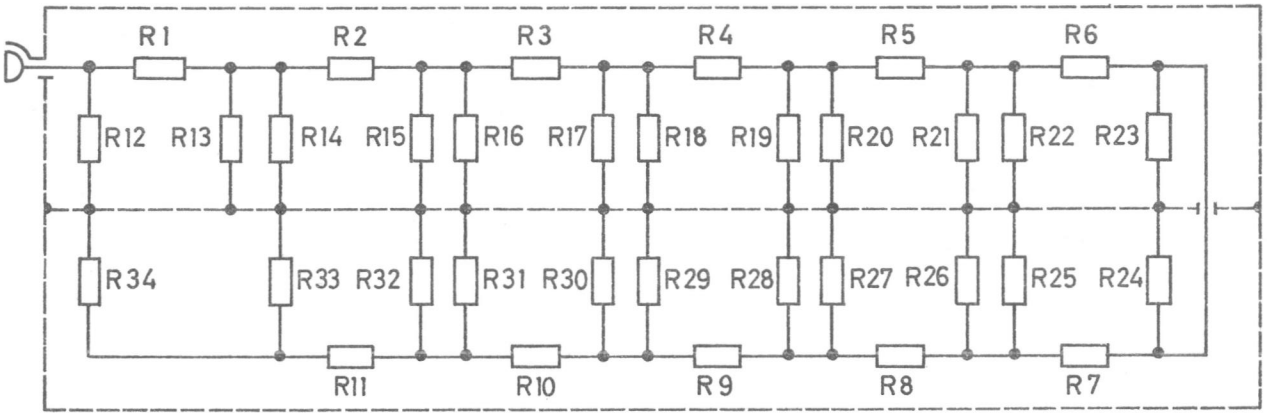
Stecker
Plug
Dezifix B



Buchse
Serie UHF
Socket
UHF series



Stecker
Serie UHF
Plug
UHF series



Schaltung des UHF - Belastungswiderstandes Type RD 010/50 und Type RD 010/60

Circuit diagram of UHF Load Resistor Type RD 010/50 and Type RD 010/60