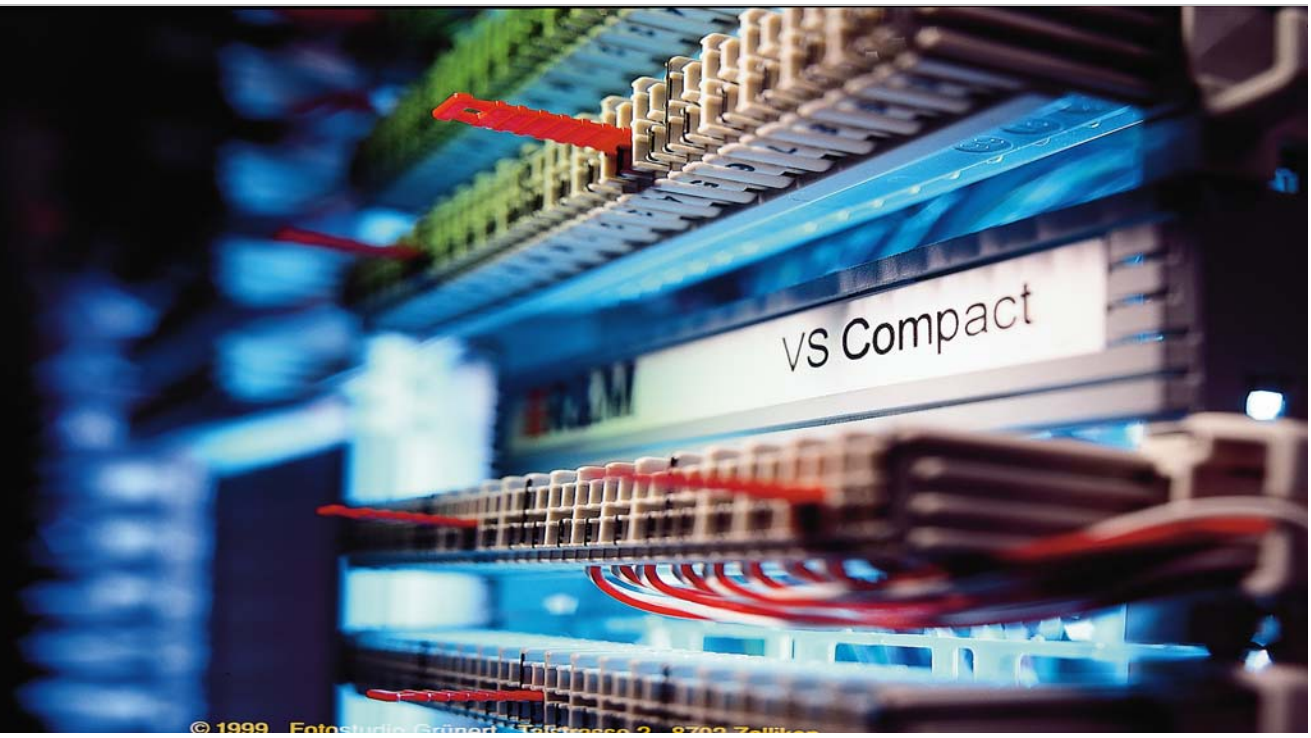
Data Sheet



VS Compact SLIM

R&M
Convincing cabling solutions

1. VS Compact SLIM

1.1 General data

Criterion	Data/Value	Standard
Application class (weatherproof, not temperature-controlled environment)	Class 3.3	ETS 300 019-1-3
Temperature range for storage	-40... + 85° C	-
Operational temperature range	-25... + 70° C	ITU-T L.51
IDC contact	Corresponding to	IEC 60 352-4
Insulation design for wiring	PVC / PE	-
No. of connectable wires per contact	1	-
Multiple wiring up to (with identical or increasing wire-Ø)	≥ 100	IEC 60 352-4
Wiring force at 0.40 – 0.65 wires	≤ 100 N	-
Air gap conductor – conductor	> 2.5 mm	DIN VDE 0110 Part 1
Leakage path conductor – conductor	> 3.0 mm	DIN VDE 0110 Part 1

About this technical data sheet

1.2 Materials

Designation	Material	Identification
Modules base	Polycarbonate (10% fibre glass reinforced)	PC-GF 10
Connection contact (IDC)	spring bronze	$CuSn_6$
Surface treatment - IDC	 Ni Sn	 1 – 2 µm 2 – 4 µm

1.3 Connection module

Criterion	Data/Value	Standard
Base colour similar to RAL	lightgrey 7035	-
Wire diameter range on jumper side	0.40 – 0.65 mm (26-22 AWG)	-
Insulation diameter range on jumper side	0.80 – 1.60 mm	PE / PVC
Wire diameter range cable side	0.40 – 0.65 mm (26-22 AWG)	-
Insulation diameter range cable side	0.80 – 1.60 mm	PE / PVC
Stranded wire (7x0.16 – 7x0.20)	AWG 26/7 – 22/7	PE / PVC

1.4 Combustibility

Criterion	Indications/Value	Standard
Combustibility	Class V-0	UL 94
Flame protection agent	halogen-free	IEC 60 472 Part 815

1.5 Mechanical data

Criterion	Indications/Value	Standard
Vibrations/oscillation	5 g / 10 – 500 Hz	IEC 60 068-2-6
Axial lead pulling force ∅ 0.40 mm ∅ 0.65 mm	 ≥ 20 N ≥ 50 N	 DIN 47608-2
Radial lead pulling force ∅ 0.40 mm ∅ 0.65 mm	 ≥ 3 N ≥ 8 N	 DIN 47608-2

1.6 Climate load

Criterion	Indications/Value	Standard
Laboratory storage (15 weeks / 23° C / 55 % relative humidity)	ΔR_L < 10 mΩ R_{INST} < 5 mΩ	PTT 839.76
Dry heat (15 weeks / 85° C)	ΔR_L < 10 mΩ R_{INST} < 5 mΩ	IEC 60 068-2-2 Ba
Humid heat (15 weeks / 40° C / 93 % relative humidity)	ΔR_L < 10 mΩ R_{INST} < 5 mΩ	IEC 60 068-2-3
Climate sequence (15 weeks / 22 – 55° C / 90 – 95 % relative humidity)	ΔR_L < 10 mΩ R_{INST} < 5 mΩ	IEC 60 068-2-30 Db
Corrosive gas test SO_2 10 ppm (10 days / 25° C / 75 % relative humidity)	ΔR_L < 10 mΩ R_{INST} < 5 mΩ	IEC 60 068-2-60
Corrosive gas test H_2S 1 ppm (10 days / 25° C / 75 % relative humidity)	ΔR_L < 10 mΩ R_{INST} < 5 mΩ	IEC 60 068-2-60

1.7 Electrical data

Criterion	Indications/Value	Standard
IDC contact resistance (solid wire)	$R_C \leq$ 5 mΩ Type < 1.0 mΩ	IEC 60 352-4
Transmission resistance connection module R_{CM}	≤ 10 mΩ Type < 6.5 mΩ	IEC 60 512-2-1
Insulation resistance R_{IS} (100 V normal climate)	> $5x10^5$ MΩ	IEC 60 512-3-1
Alternating voltage dielectric strength U_{eff} (50 Hz / 60 s) Lead – lead Lead – earth	 > 2000 V > 2000 V	 IEC 60 512-4-1 DIN 47 608-2
Rated current I_N	2 A	IEC 60512-5-1
Rated voltage U_N (a-b / a-G / b-G with DC and AC peak)	125V	-
Coupling capacitance C_K	< 0.8 pF	PTT VL 26.124 U
Coupling inductance I_K	< 1.0 nH	PTT VL 26.124 U
Attenuation (ATT) 1 MHz 16 MHz 100 MHz	 < 0.05 dB < 0.05 dB < 0.10 dB	 IEC 11801
Near end cross talk (NEXT) 1 MHz 16 MHz 100 MHz	 > 82 dB > 59 dB > 43 dB	 IEC 11801
Return loss (RL) 1 MHz 16 MHz 100 MHz	 > 35 dB > 35 dB > 25 dB	 IEC 11801
Category	Cat. 5e	

1.8 Dimensions