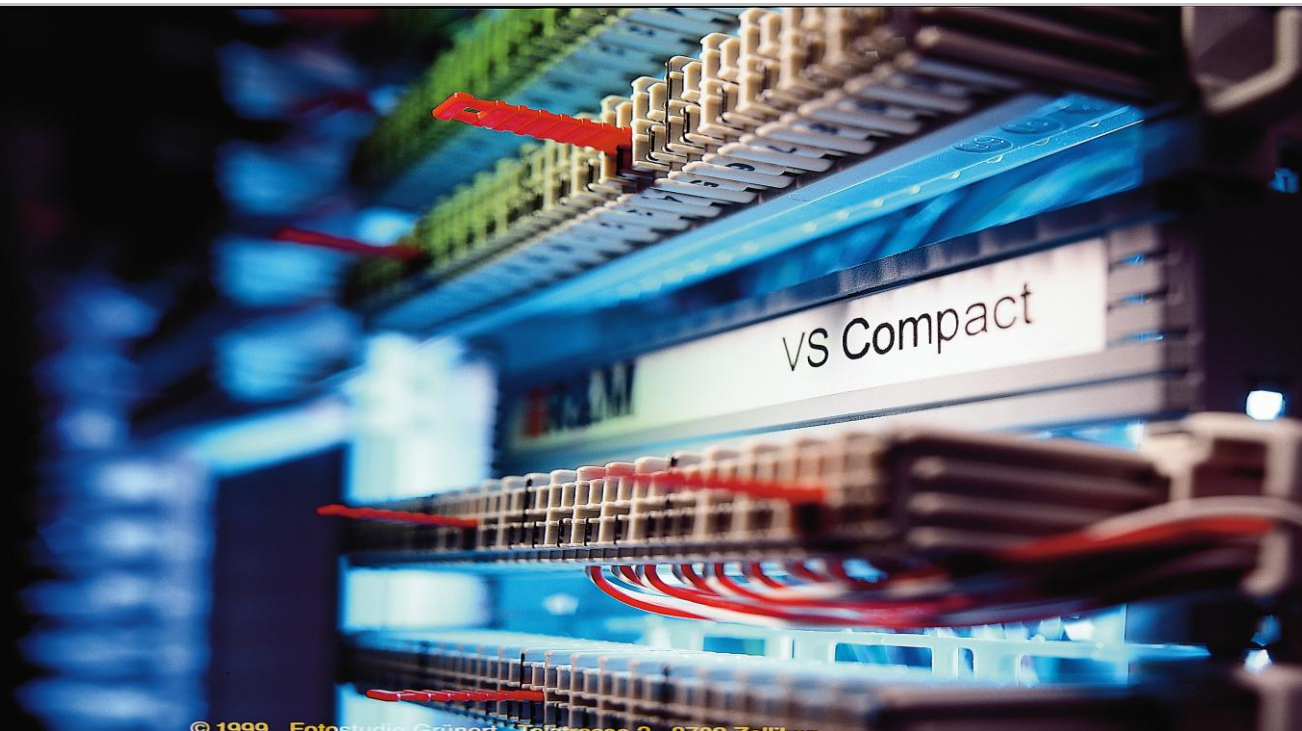


Data Sheet



VS Compact Modules

1. VS Compact

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 / PTFE	-
No. of connectable wires per contact	1 cable side 2 patch side	-
Multiple wiring up to	> 200 > 100	TE 015.897 IEC 60 352-4
Wiring force at 0.40 – 0.50 wires	≤ 50 N	-
Wiring force at 0.60 – 0.80 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

The greatest possible care has been taken in preparing this document, which represents the current technological situation at the time of its printing. Any revisions and/or corrections to this document will be incorporated edition without announcement into the next new. Subject to technical changes.

1.2 Materials

Designation	Material	Identification
Modules base	Polycarbonate (10% fibre glass reinforced)	PC-GF 10
Connection contact	spring bronze	CuSn 6
Surface treatment		
- Disconnecting and rear contact	Ni	1 – 2 µm
	AuCo	>= 0.8 µm
- IDC	Ni	1 – 2 µm
	Sn	2 – 4 µm

1.3 Connection module

Criterion	Data/Value	Standard
Base colour similar to RAL	lightgrey 7035	-
Wire diameter range on jumper side	0.35 – 0.80 mm (27-20 AWG)	-
Double wiring	0.35 – 0.50 mm (27-24 AWG)	-
Insulation diameter range on jumper side	0.60 – 1.60 mm	PE / PVC
Double wiring	0.60 – 1.00 mm	
Wire diameter range cable side	0.35 – 0.80 mm (27-20 AWG)	-
Insulation diameter range cable side	0.60 – 1.60 mm	PE / PVC
Stranded wire	AWG 26 – 24 (7 x 0.15)	PE

1.3.1 Test point

Criterion	Indications/Value	Standard
Number of plug cycles	> 750	-

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	2 g / 10 – 500 Hz	IEC 60 068-2-6
Axial lead pulling force		
∅ 0.40 mm	> 25 N	DIN 47608-2
∅ 0.65 mm	> 60 N	
Radial lead pulling force		
∅ 0.40 mm	> 7 N	DIN 47608-2
∅ 0.65 mm	> 15 N	

1.6 Climate load

Criterion	Indications/Value	Standard
Laboratory storage (15 weeks / 23° C / 55 % relative humidity)	$\Delta R_L < 10 \text{ m}\Omega$ $R_{INST} < 5 \text{ m}\Omega$	PTT 839.76
Dry head (15 weeks / 85° C)	$\Delta R_L < 10 \text{ m}\Omega$ $R_{INST} < 5 \text{ m}\Omega$	IEC 60 068-2-2 Ba
Humid head (15 weeks / 40° C / 93 % relative humidity)	$\Delta R_L < 10 \text{ m}\Omega$ $R_{INST} < 5 \text{ m}\Omega$	IEC 60 068-2-3
Climate sequence (15 weeks / 22 – 55° C / 90 – 95 % relative humidity)	$\Delta R_L < 10 \text{ m}\Omega$ $R_{INST} < 5 \text{ m}\Omega$	IEC 60 068-2-30 Db
Corrosive gas test SO ₂ 10 ppm (10 days / 25° C / 75 % relative humidity)	$\Delta R_L < 10 \text{ m}\Omega$ $R_{INST} < 5 \text{ m}\Omega$	IEC 60 068-2-42
Corrosive gas test H ₂ S 1 ppm (10 days / 25° C / 75 % relative humidity)	$\Delta R_L < 10 \text{ m}\Omega$ $R_{INST} < 5 \text{ m}\Omega$	IEC 60 068-2-43
Salt spray test 5 % NaCL (48 h / 35° C / 75 % relative humidity)	$\Delta R_L < 10 \text{ m}\Omega$ $R_{INST} < 5 \text{ m}\Omega$	IEC 60 068-2-11

1.7 Electrical data

Criterion	Indications/Value	Standard
IDC contact resistance	$R_C \leq 3 \text{ m}\Omega$ Type < 1.0 mΩ	IEC 60 352-4
Transmission resistance connection module R _{CM}	$\leq 10 \text{ m}\Omega$ Type < 6.5 mΩ	IEC 60 512-2-1
Transitional resistance disconnecting module R _{DM}	$\leq 15 \text{ m}\Omega$ Type < 11 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	> 2000 V	IEC 60 512-4-1
Lead – earth	> 2000 V	DIN 47 608-2
Surge voltage resistance U _{SS} (1.2 / 50 μs)	> 3600 V	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	< 0.05 dB	IEC 11801
16 MHz	< 0.05 dB	
100 MHz	< 0.10 dB	
Near end cross talk (NEXT)		
1 MHz	> 70 dB	IEC 11801
16 MHz	> 50 dB	
100 MHz	> 34 dB	
Return loss (RL)		
1 MHz	> 35 dB	IEC 11801
16 MHz	> 35 dB	
100 MHz	> 25 dB	
Category	Cat. 5e	TL 012.041

1.8 Dimensions

Article	Article-No	Length x Width x Height
VS Compact Module 8 pairs, grid size 20mm	300035	86mm x 20.0mm x 36mm
VS Compact Module 10 pairs, grid size 20mm	300039	100mm x 20.0mm x 36mm
VS Compact Module 10 pairs, grid size 17.5mm	300043	100mm x 17.5mm x 36mm
VS Compact Module 16 pairs, grid size 25mm	300045	142mm x 25.0mm x 36mm
VS Compact Module 20 pairs, grid size 25mm	300049	170mm x 25.0mm x 36mm
VS Compact Module 25 pairs, grid size 25mm	300674	205mm x 25.0mm x 36mm

1.9 Test Result, Cat.5e ISO 11801 Class D

