Coaxial Two Way Switch (DPDT) || BN 512698

Product manual: M36022

Radio frequency characteristics

Interface type (4 connections)	7/8” EIA according to EN 122150 (threaded flanges)					
Characteristic impedance	50 Ω					
Frequency range	0 to 100 MHz	100 to 230 MHz	230 to 860 MHz	860 MHz to 2.0 GHz	2.0 to 3.0 GHz	3.0 to 3.5 GHz
VSWR, max.	1.02	1.02	1.04	1.06	1.10	1.20
Isolation, min.	80 dB	80 dB	80 dB	70 dB	60 dB	60 dB
Insertion loss, max.	0.03 dB	0.03 dB	0.03 dB	0.05 dB	0.20 dB	0.20 dB
Average power capability * at ambient temperature -10 to +45°C	7.5 kW	4.5 kW	2.4 kW	1.5 kW	1.2 kW	1.1 kW
Peak voltage capability *	3.5 kV					

Electrical and mechanical data

Switch type		Two way switch, DPDT
Actuator type		Motor drive, latching, self cutoff
Connector J2 ** for mains connection		5 pole SPINNER connector BN 126920, certified according to VDE-Reg. No. B687, DIN EN 61984: 2009-11; EN 61984: 2009
Mains connection		L, N, PE, TN-System
Operating	Operating voltage	187 to 253 V AC 50/60 Hz
	Current, typ. ***	0.5 A
	Nominal fuse	The switch must be externally fused by time-delay, 1 A
Connector J1 ** for control, interlock contacts and signaling		25 pole connector according to DIN 41652 / IEC 807-2
Control	Control voltage	SELV circuits according to IEC-EN-60950-1, 8 to 31 V DC
	Current, typ. ***	22 mA
	Nominal fuse	The circuit must be externally fused to 0.5 A

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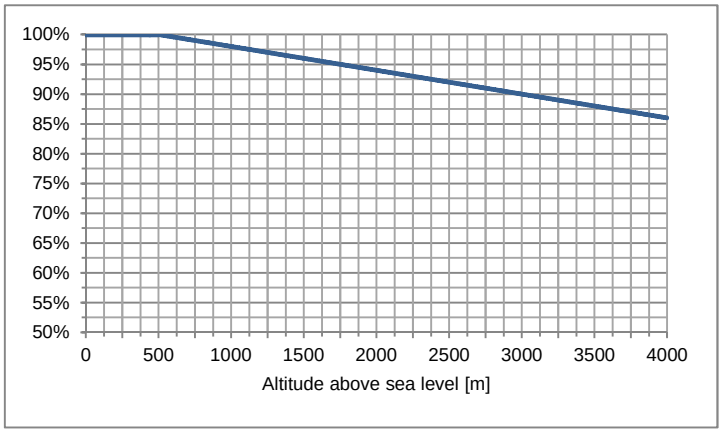
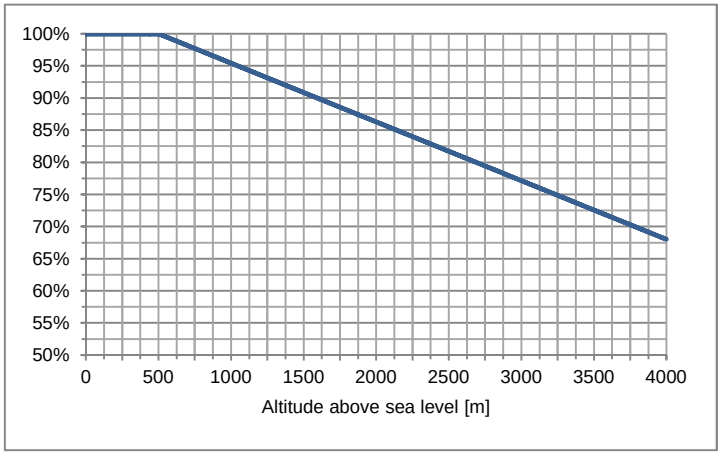
Signal contacts Interlock contacts	Lead time typ.***	9 ms (the interlock/signal contacts open 9 ms before and close 9 ms after switching of the RF contacts)
	Maximum ratings	SELV circuits according to IEC-EN-60950-1, 42.4 V ACpk / 60 V DC / 0.5 A
	Nominal fuse	The circuit must be externally limited to 0.5 A
Switching time, typ.***		0.12 s
Command hold time, min.		0.12 s (during this time, the voltage at control input must not change)
Switching frequency, max.		10 operations per minute
Life, min.		250,000 operations
Weight, approx.		2.5 kg

Environmental conditions

Operational conditions	ETSI EN 300 019-1-3 V2.3.2 (2009-1) class 3.1 N
Ambient temperature ****	-10 to +60°C
Condensation	Not allowed
Relative humidity, max.	95%
Derating of input power with increasing altitude	The maximum input power can be applied up to 500 m or 1600 ft above sea level unless noted otherwise in the data sheet. Above this height the maximum input power must be reduced as shown in the diagram. 
Derating of voltage with increasing altitude	The maximum voltage can be applied up to 500 m or 1600 ft above sea level unless noted otherwise in the data sheet. Above this height the voltage must be reduced as shown in the diagram. 

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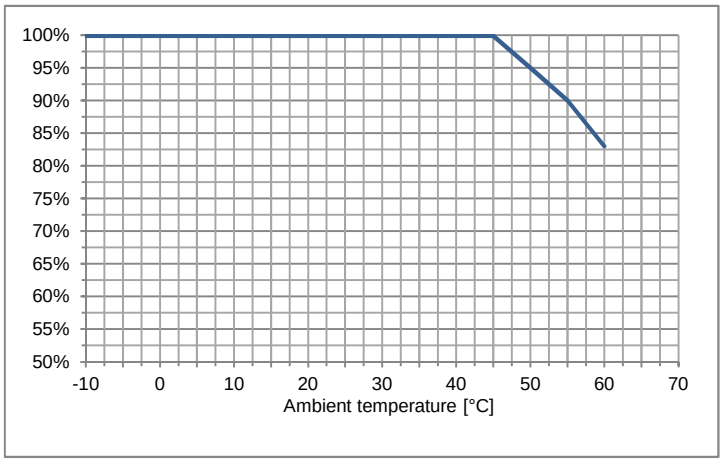
Derating of input power with increasing ambient temperature	The maximum input power can be applied up to +45°C ambient temperature unless noted otherwise in the data sheet. Above this ambient temperature the maximum input power must be reduced as shown in the diagram. 
Max. altitude above sea level	4,000 m or 13,120 ft according to IEC EN 60664-1
Protection class	I according to IEC EN 61140
IP protection level	IP40 according to IEC EN 60529 (all interfaces equipped with appropriate gaskets)
Installation position	Any
Transport conditions	ETSI EN 300 019-1-2 V2.1.4 (2003-04) class 2.2
Ambient temperature	-25 to +70°C
Rain, condensation, icing	Not allowed
Storage conditions	ETSI EN 300 019-1-1 V2.1.4 (2003-04) class 1.2
Ambient temperature	-10 to +60°C
Rain, condensation, icing	Not allowed

* *Standard conditions:*
Dielectric: Dry air under standard pressure at sea level (p = 1013 hPa)
Load VSWR, max. 1.0 (no standing wave)
No modulation, sinusoidal carrier only
** *Suitable mating connector included*
*** *At room temperature and nominal voltage 230 V AC*
**** *Extended temperature range on request*

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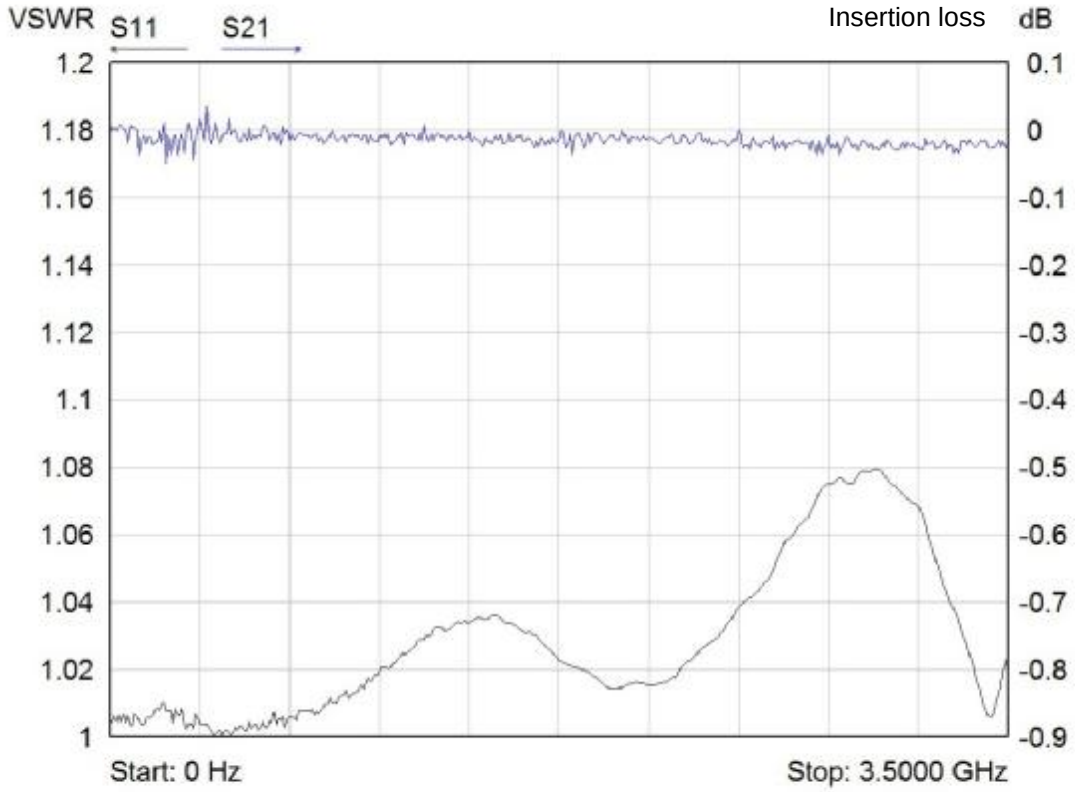
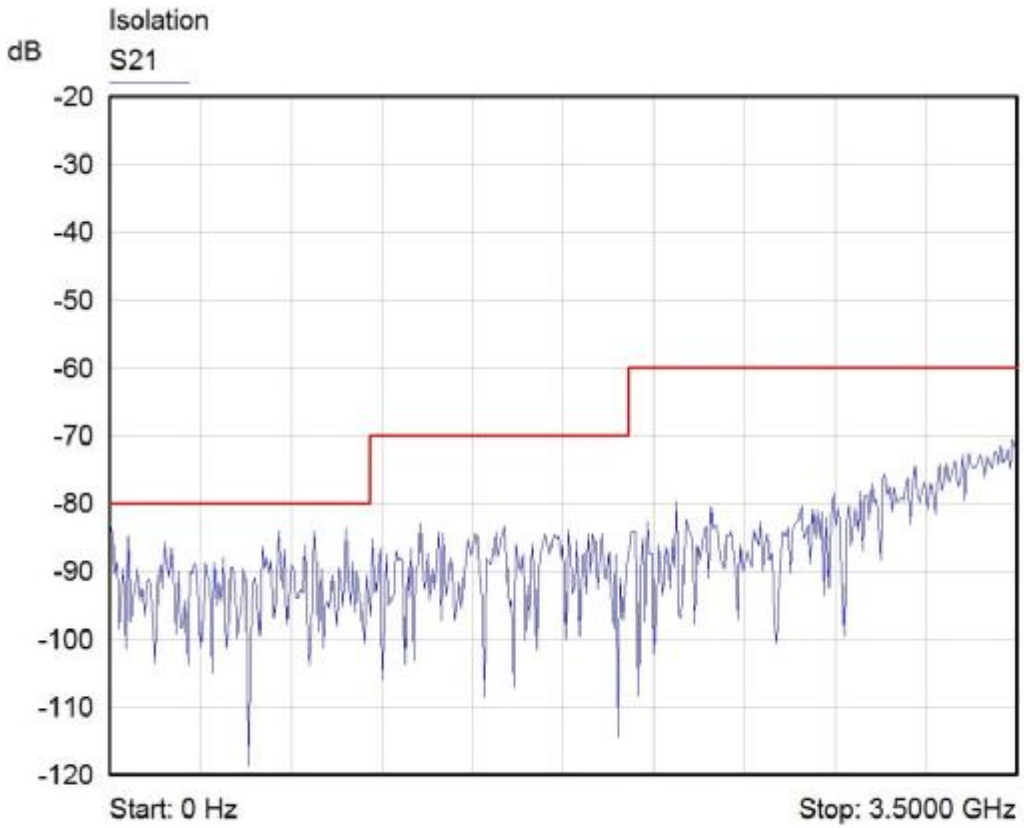
Typical diagrams





Template TD-00002J

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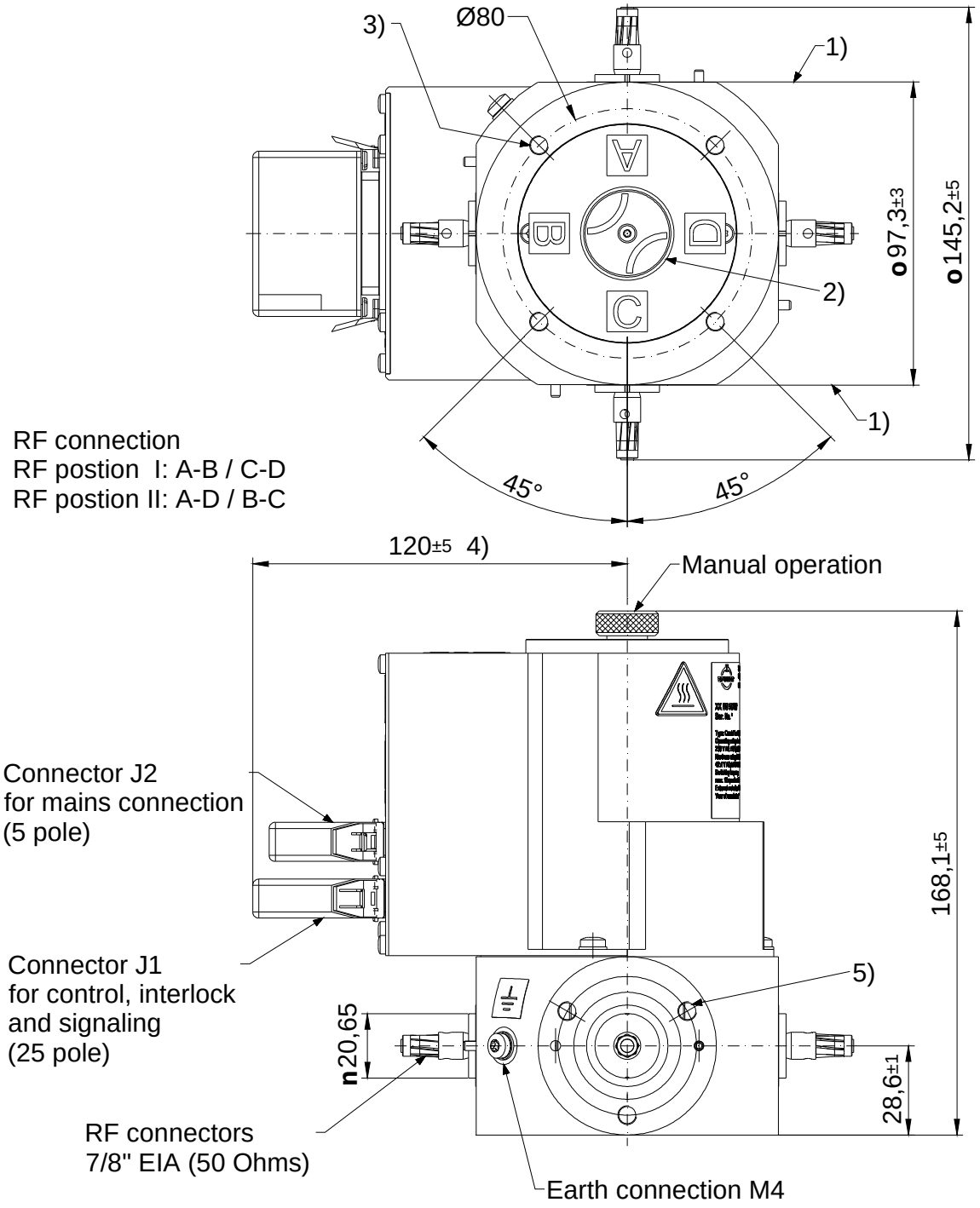
Outline (all dimensions in millimeters)



1) Reference plane
2) Position indicator buttom side, current position is shown by pictogram
3) Four threaded mounting holes M6/12 deep
4) + 10 mm to disconnect the connectors
5) Fastening set for RF connectors is part of delivery

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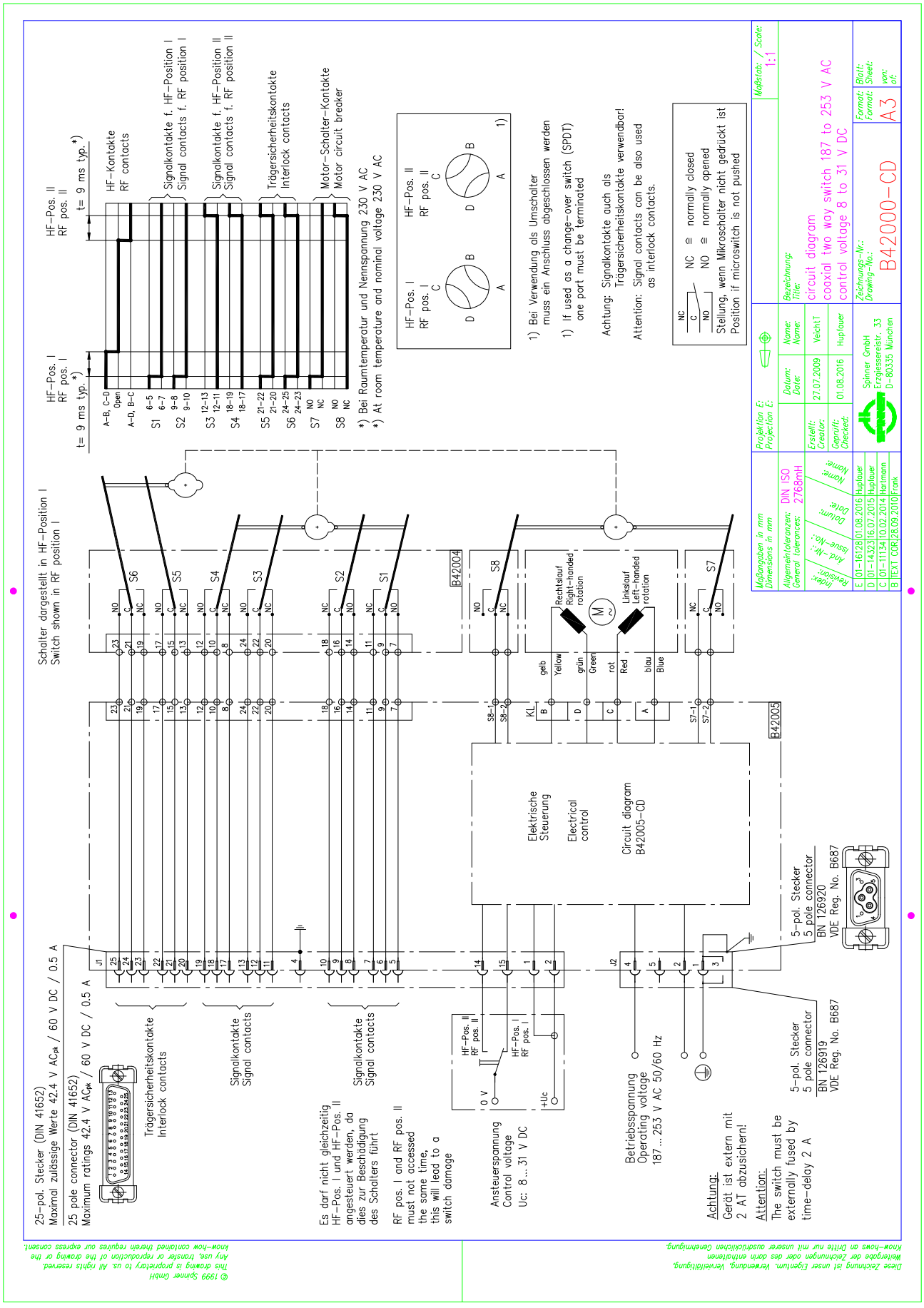
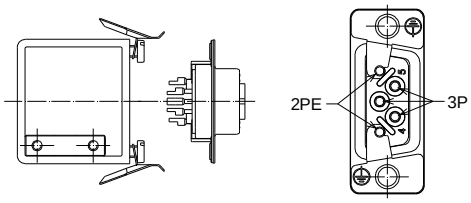
Circuit diagram (B42000-CD, Issue E)



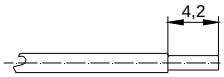
Coaxial Two Way Switch (DPDT) || BN 512698
Cable socket (126919-0E, Issue D)

Anleitung für den Kabelanschluss
Instructions for cable connection

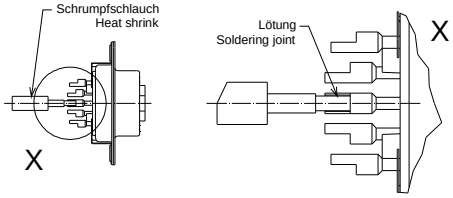
1.
Entfernen des Schutzgehäuses
Removing of the protective housing



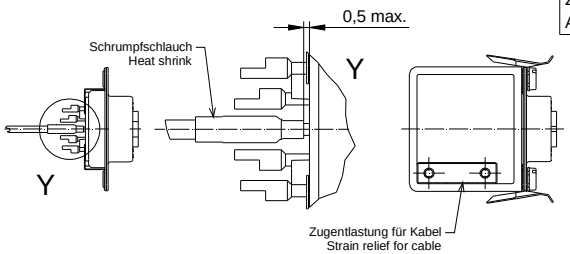
2.
Absetzen der Kabellitzen
Trimming of the cable strands

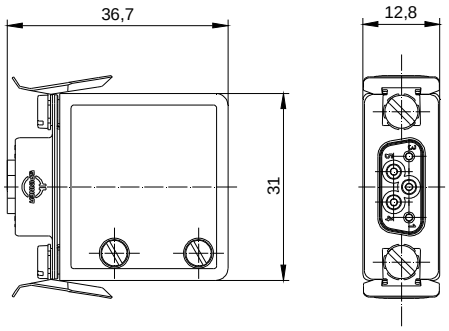


3.
3.a Anbringen der drei Schrumpfschläuche (PIN 2/4/5)
3.a Placing of the three heat shrinks (pins 2/4/5)
3.b Löten der fünf Kabellitzen
3.b Soldering of the five cable strands



4.
4.a Aufschrumpfen der drei Schrumpfschläuche (PIN 2/4/5)
4.a Shrinking three heat shrinks (pins 2/4/5)
4.b Montage des Schutzgehäuses
4.b Assembling of the protective housing





Technical data

5-polige Kabelkupplung 5 pole cable socket	ohne Schaltleistung Without breaking capacity
Bemessungsspannung Rated voltage	250 V AC
Bemessungsstrom Rated current	2 A
Bemessungsstoßspannung Rated impulse voltage	2.5 kV
Polzahl Number of poles	3P + 2PE
Anschlussart Kind of termination	Lötanschluss Solder termination
Leiterquerschnitt Cross section area	Max. 0.75 mm^2 / min. 0.50 mm^2
Kabeldurchmesser Values for cable clamp	Ø 6 mm ... Ø 8 mm
Temperaturbereich Temperature range	-25 °C ... +85 °C
Steckzyklen Operation cycles	10
Schutzart Degree of protection	IP 20 nach / acc. to IEC EN 60529
Verschmutzungsgrad Degree of pollution	2
Max. Einsatzhöhe über N.N. Max. altitude above sea level	4000 m / 13,120 ft nach / acc. to IEC EN 60664-1
Schrumpfschlauch über Pins 2/4/5 Heat shrink above pins 2/4/5	
Zertifiziert nach Certified according to	VDE-Reg.-No. B687 DIN EN 61984: 2009-11; EN 61984: 2009
Zugelassene Steckerleiste Approved plug connector	BN 126920

Beim Anschluss eines Kabels sind die gültigen Sicherheitsvorschriften zu beachten!
Please attend the valid safety rules for assembling!

Konstruktionsänderungen vorbehalten
Design is subject to change without notice

Maßangaben in mm Dimensions in mm	Projektion E: Projection E:			Maßstab: / Scale:
Allgemeintoleranzen: General tolerances: DIN ISO 2768mH		Datum: Date:	Name: Name:	Bezeichnung: Title: Kabelkupplung cable socket 5-polig / 5 pole, 250 VAC
	Erstellt: Creator:	31.01.2011	Frank	
	Geprüft: Checked:	12.12.2013	Hartmann	

Index: Revision:	Änd.-Nr.: Issue-No.:	Datum: Date:	Name: Name:
D	01-10772	03.12.2013	Hartmann
C	01-09071	27.02.2013	Hupfauer
B	DIV.CORR	01.02.2011	Frank
A	Startindex	31.01.2011	Frank

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Zeichnungs-Nr.:
Drawing-No.: 126919-0E

Format: A4

Blatt: Sheet: 1
von: of: 1

Template TD-00002J