

Coaxial Two Way Switch (DPDT) || BN 640082C0110



Typical illustration

Radio frequency characteristics

Interface type (4 connections)	1 5/8" 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 1.6 GHz	1.6 to 2.0 GHz
VSWR, max.	1.03	1.03	1.05	1.08	1.08
Isolation, min.	80 dB	80 dB	80 dB	70 dB	60 dB
Insertion loss, max.	0.05 dB	0.05 dB	0.05 dB	0.10 dB	0.10 dB
Average power capability * at ambient temperature -10 to +45°C	19.0 kW	12.7 kW	6.6 kW	4.8 kW	4.3 kW
Peak voltage capability *	5.1 kV				

Electrical and mechanical characteristics

Switch type		Two way switch, DPDT
Actuator type		Motor drive, latching, self cutoff
Connector J2 ** for mains connection		IEC appliance inlet C14 according to IEC 60320-1
Mains connection		L, N, PE, TN-System
Operating	Operating voltage	95 to 140 V AC 50/60 Hz
	Current, typ. ***	0.7 A
	Nominal fuse	F1 / F2: 2 A T according to EN 60127-2-3
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.	12 mA at control voltage 24 V DC
	Current limiting	The circuit must be externally limited to 0.5 A

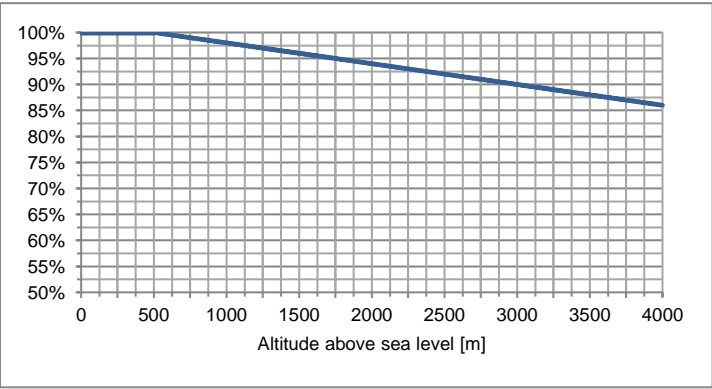
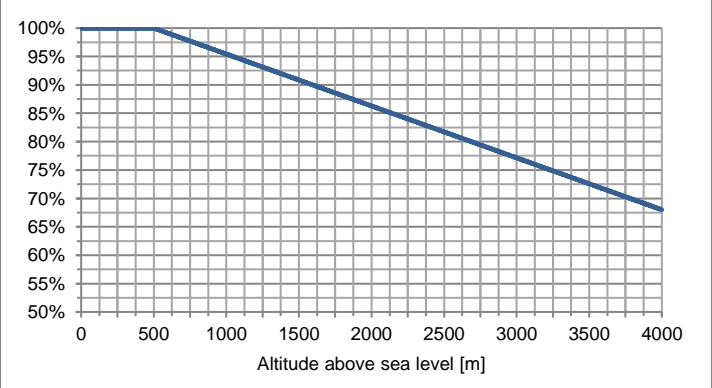
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Signal contacts Interlock contacts	Lead time, typ.***	9 ms (the interlock/signal contacts open 9 ms before and close 9 ms after switching of the RF contacts)
	Maximum ratings	SELV circuits according to IEC EN 60950-1, 42.4 V ACpk / 60 V DC / 0.5 A
	Current limiting	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.		5 cycles per minute, max. 50 cycles per hour (10 operations per minute, max. 100 operations per hour)
Life, min.		250,000 cycles (500,000 operations)
Weight, approx.		5 kg

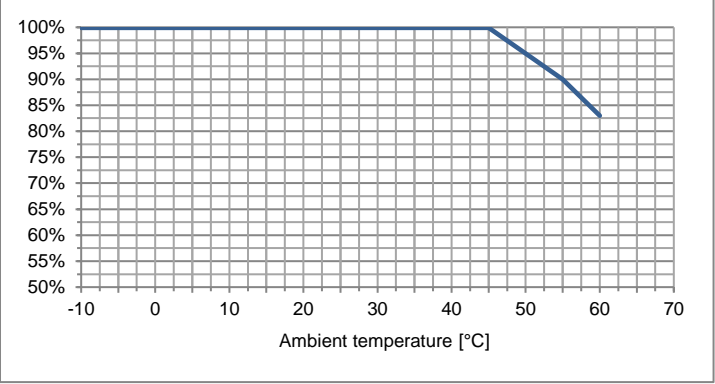
Environmental conditions

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	<p>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.</p>  <table border="1"> <caption>Derating of input power with increasing altitude</caption> <thead> <tr> <th>Altitude above sea level [m]</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>0</td><td>100%</td></tr> <tr><td>500</td><td>100%</td></tr> <tr><td>1000</td><td>98%</td></tr> <tr><td>1500</td><td>96%</td></tr> <tr><td>2000</td><td>94%</td></tr> <tr><td>2500</td><td>92%</td></tr> <tr><td>3000</td><td>90%</td></tr> <tr><td>3500</td><td>88%</td></tr> <tr><td>4000</td><td>85%</td></tr> </tbody> </table>	Altitude above sea level [m]	Percentage	0	100%	500	100%	1000	98%	1500	96%	2000	94%	2500	92%	3000	90%	3500	88%	4000	85%
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<p>Derating of input power with increasing ambient temperature</p>	<p>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.</p>  <table border="1"> <caption>Derating of input power data</caption> <thead> <tr> <th>Ambient temperature [°C]</th> <th>Input power (%)</th> </tr> </thead> <tbody> <tr><td>-10</td><td>100</td></tr> <tr><td>0</td><td>100</td></tr> <tr><td>10</td><td>100</td></tr> <tr><td>20</td><td>100</td></tr> <tr><td>30</td><td>100</td></tr> <tr><td>40</td><td>100</td></tr> <tr><td>45</td><td>100</td></tr> <tr><td>50</td><td>95</td></tr> <tr><td>60</td><td>82</td></tr> </tbody> </table>	Ambient temperature [°C]	Input power (%)	-10	100	0	100	10	100	20	100	30	100	40	100	45	100	50	95	60	82
Ambient temperature [°C]	Input power (%)																				
-10	100																				
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10	100																				
20	100																				
30	100																				
40	100																				
45	100																				
50	95																				
60	82																				

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 terminated)
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 US power supply cord and 25 pole mating connector included*
- *** *At room temperature and nominal voltage 120 V AC, 60 Hz*
- **** *Extended temperature range on request*

Applicable documents

Product manual	M36023
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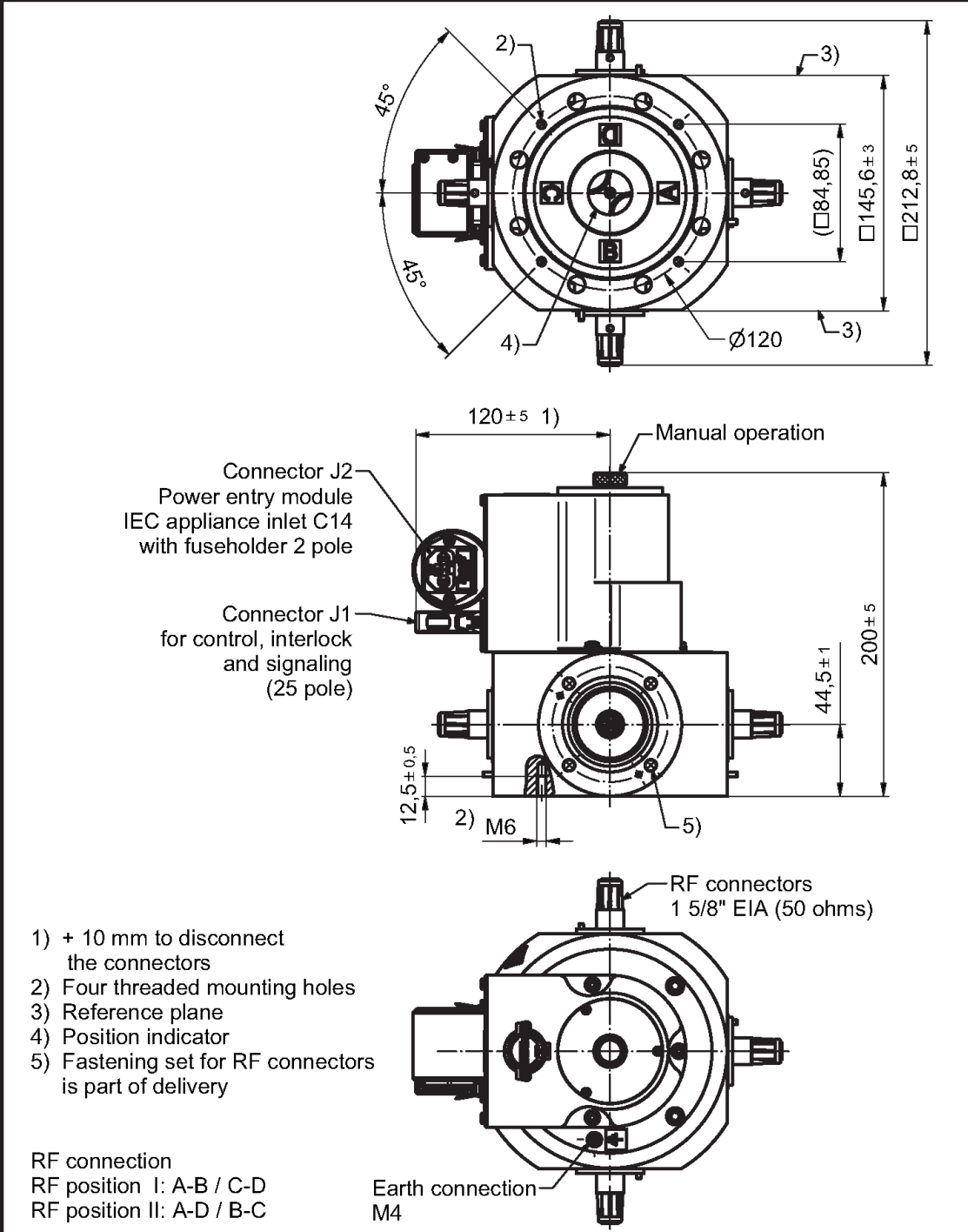
Coaxial Two Way Switch (DPDT) || BN 640082C0110

Outline drawing (all dimensions in millimeter)

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- 1) + 10 mm to disconnect the connectors
- 2) Four threaded mounting holes
- 3) Reference plane
- 4) Position indicator
- 5) Fastening set for RF connectors is part of delivery

RF connection
 RF position I: A-B / C-D
 RF position II: A-D / B-C

Maßangaben in mm Dimensions in mm		Projektion E: Projection E:		Maßstab: / Scale: 1 : 3,25	
Allgemeintoleranzen: DIN ISO General tolerances: 2768mH		Datum: Date:	Name: Name:	Bezeichnung: Title:	
Index: Revision:	Änd.-Nr.: Issue-No.:	Erstellt: Creator:	Datum: Date:	coaxial two way switch outline drawing	
	Datum: Date:	Geprüft: Checked:			
A Startindex 12.09.2019 Hupfauer		Spinner GmbH Ergzjessereistr. 33 D-80335 München		Zeichnungs-Nr.: Drawing-No.:	Format: Format:
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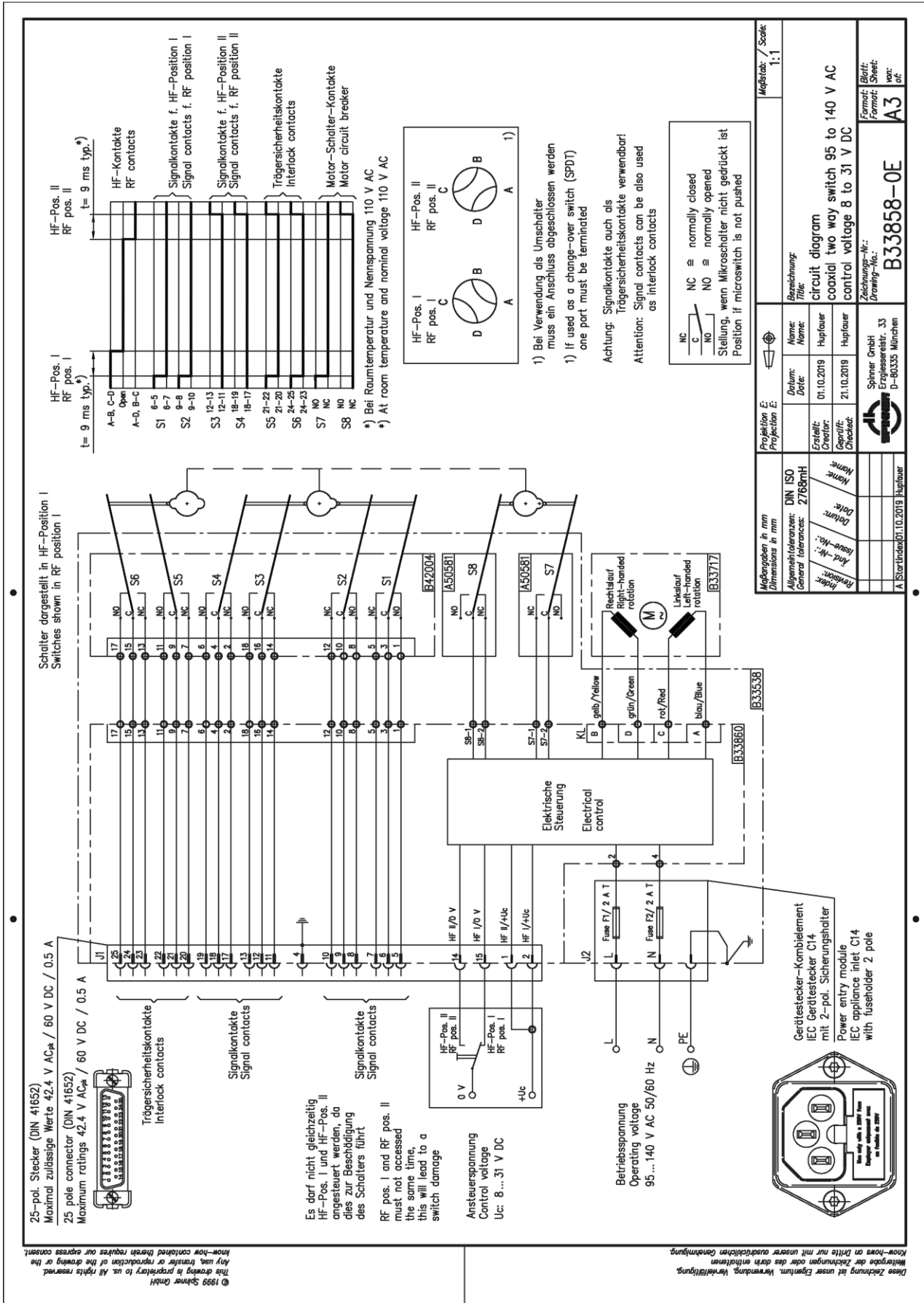
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Circuit diagram

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Coaxial Two Way Switch (DPDT) || BN 640082C0110

Accessories (optional)
 Installation kit BN 640082C3000

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Installation kit BN 640082C3000:

Installation instructions for BN 640082C3000-installation kit:

Coaxial two way switch
 BN 640081XXXXXX
 or BN 640082XXXXXX

Screw M6x16 (4x):
 use a torque wrench to tighten the
 bolted connections to 6 Nm

Mounting plate
 Washer B6.4

Do not use the installation kit to support additional mechanical loads.

Maßstab / Scale 1 : 1,5	
Projektion E Projection E	Bezeichnung / Title Installation kit for coaxial two way switch (DPDT)
Name: Hupfauer	Name: Hupfauer
Datum: 16.09.2019	Datum: 16.09.2019
Erstellt: Hupfauer	Erstellt: Hupfauer
Geprüft: Hupfauer	Geprüft: Hupfauer
Zeichnungs-Nr.: 640082C3000-0E	Zeichnungs-Nr.: 640082C3000-0E
Blatt: 1	Blatt: 1
Format: A3	Format: A3
Drawing-No.: 640082C3000-0E	Drawing-No.: 640082C3000-0E
Spinner GmbH Engesserstr. 33 D-80335 München	Spinner GmbH Engesserstr. 33 D-80335 München
Maßstab: 1:1,5 Datum: 16.09.2019 Hupfauer	Maßstab: 1:1,5 Datum: 16.09.2019 Hupfauer

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