

Coaxial Two Way Switch (DPDT) || BN 941934C0110



Typical illustration

Radio frequency characteristics

Interface type (4 connections)	4 1/16" <sup>1)</sup>			
Characteristic impedance	50 Ω			
Frequency range	1 MHz	10 MHz	100 to 230 MHz	230 to 800 MHz
VSWR, max.	1.04	1.04	1.04	1.06 <sup>2)</sup>
Isolation, min.	80 dB	80 dB	80 dB	70 dB
Insertion loss, max.	0.03 dB			
Average power capability * at ambient temperature -10 to +45°C	600 kW	200 kW	70 kW	38 kW
Peak voltage capability *	16 kV			

- 1) Interface compatible e.g. to Myat
- 2) Valid up to 700 MHz

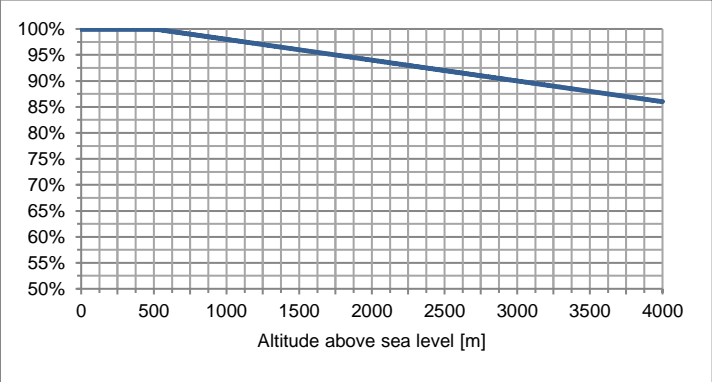
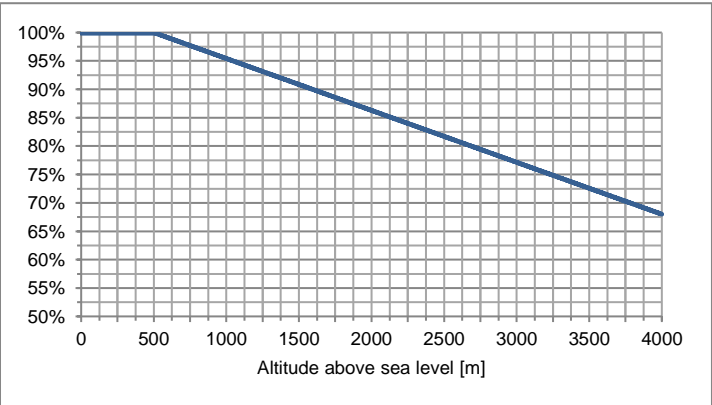
Electrical and mechanical characteristics

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. ***	1.5 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.***	200 ms (the interlock/signal contacts open 200 ms before and close 200 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.***		1.0 s
Command hold time, min.		1.0 s (during this time, the voltage at control input must not change)
Switching frequency, max.		3 cycles per minute, max. 30 cycles per hour (6 operations per minute, max. 60 operations per hour)
Life, min.		250,000 cycles (500,000 operations)
Weight, approx.		26.5 kg

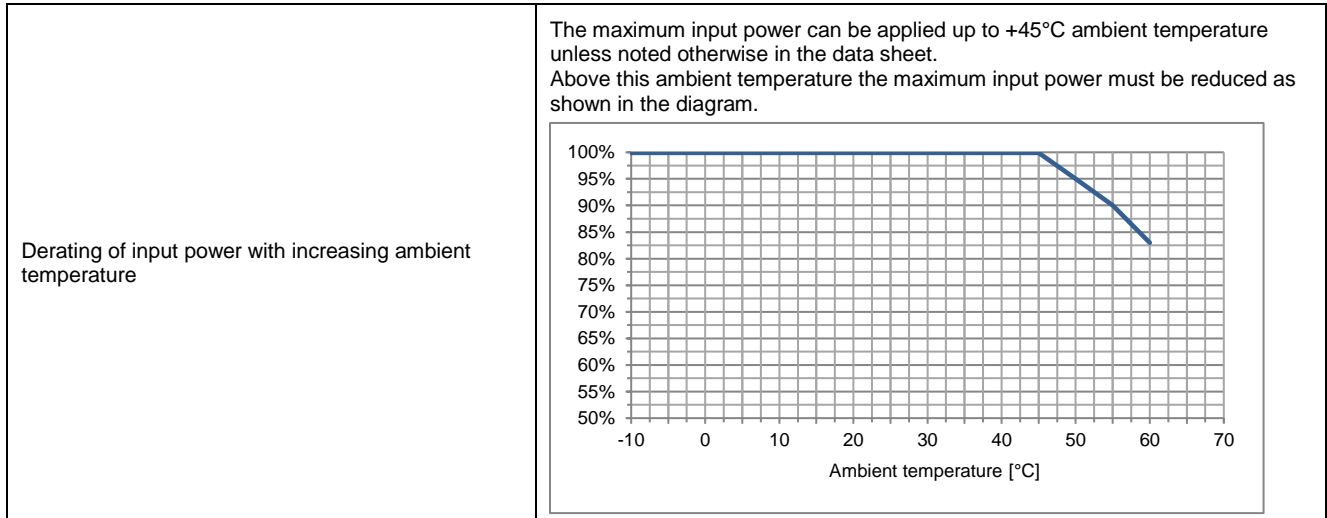
Environmental conditions

<b>Operational conditions</b>	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 [m]</th> <th>Power (%)</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 [m]	Power (%)	0	100	500	100	1000	98	1500	96	2000	94	2500	92	3000	90	3500	88	4000	85
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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
<b>Transport conditions</b>	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
<b>Storage conditions</b>	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**

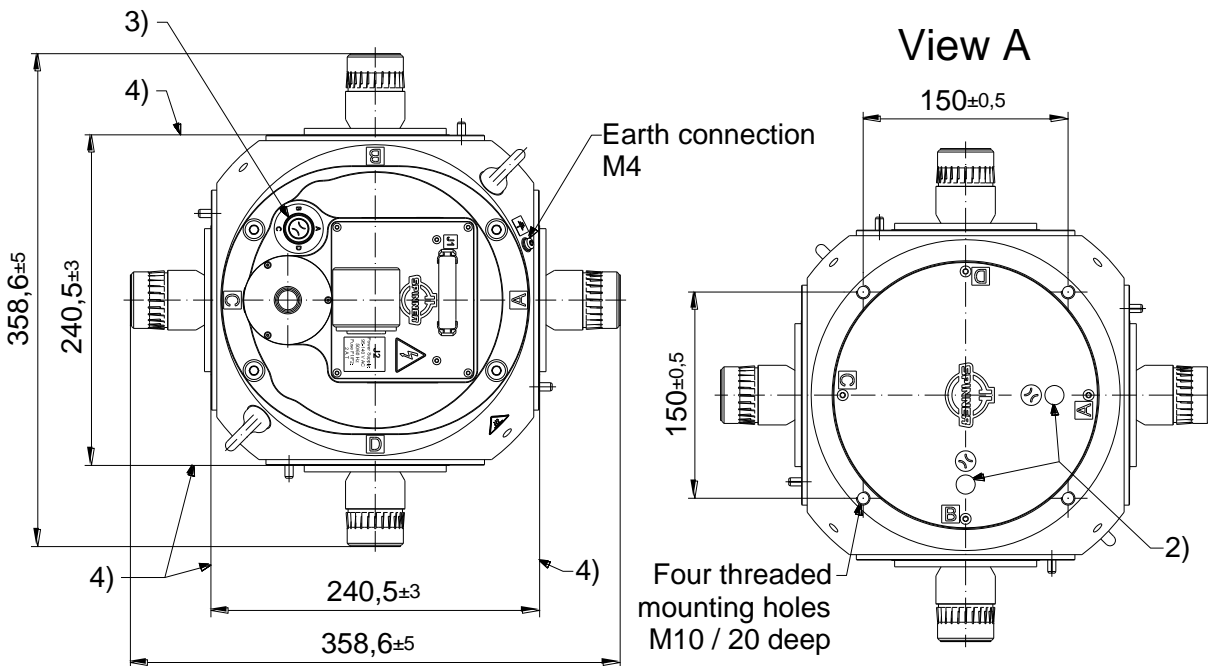
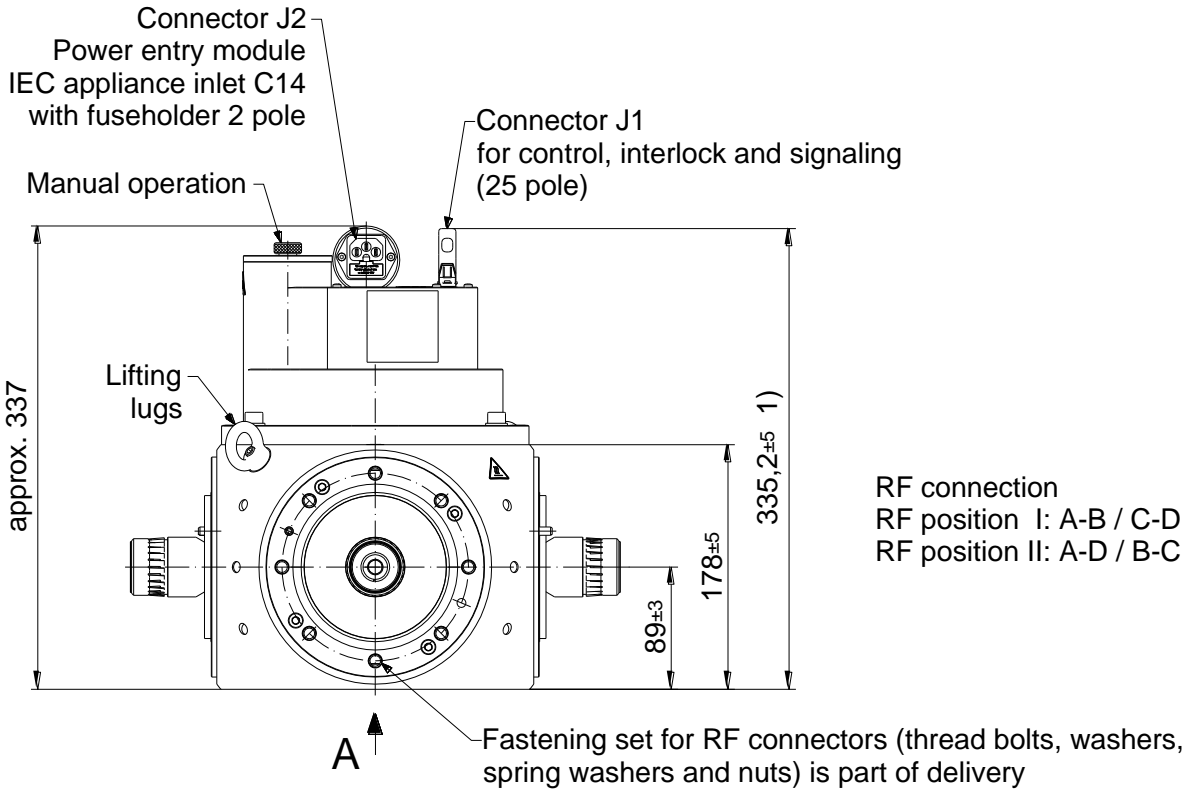
Product manual	M36393
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**Outline** (all dimensions in millimeter)



- 1) + 10 mm to disconnect the connectors
- 2) Position indicators bottom side - current position is shown by white dot (marking)
- 3) Position indicator top side - current position is shown by pictogram
- 4) Reference plane

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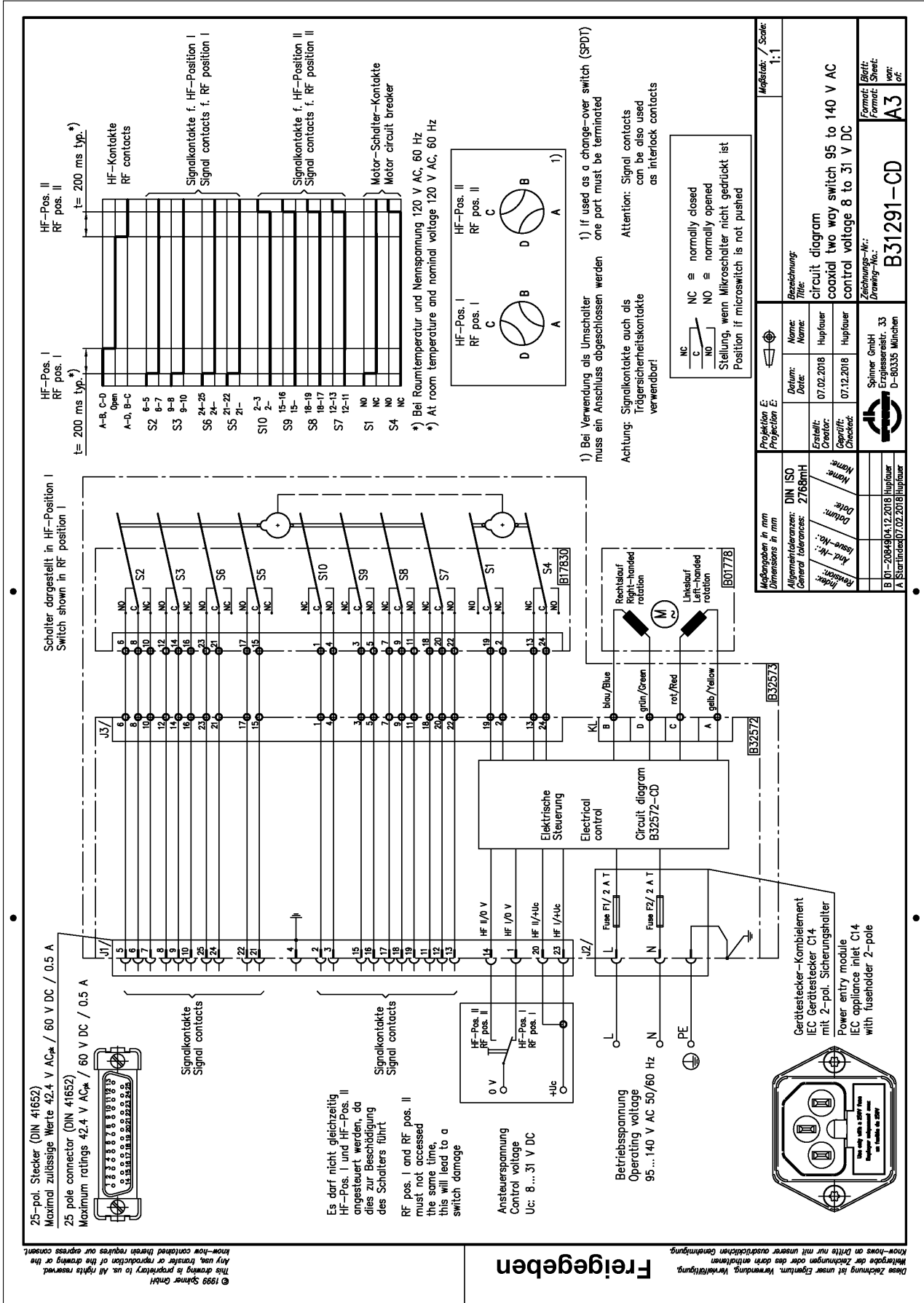
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Circuit diagram

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Projektion E: Projection E:	Maßstab: / Scale: 1:1
Name: Name:	Bezeichnung: Title:
Datum: Date:	circuit diagram coaxial two way switch 95 to 140 V AC control voltage 8 to 31 V DC
Erstellt: Creator:	Hupfauer
Geprüft: Checked:	Hupfauer
Zeichnungs-Nr.: Drawing No.:	B31291-CD
Firmen-Nr.: Firm No.:	A3
Blatt-Nr.: Sheet No.:	01

Maßangaben in mm Dimensions in mm	DIN ISO
Allgemeintoleranzen: General tolerances:	2768µmH
Name: Name:	Hupfauer
Datum: Date:	07.02.2018
Issue-Nr.: Issue No.:	01
Knd.-Nr.: Part No.:	B 01_208404.12.2018
Revision: Revision:	Hupfauer
A	07.02.2018

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Accessories (optional)  
Installation kit BN 941934C3000

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**Installation kit BN 941934C3000:**

Identification marking

Mounting holes  
4x Ø10,6 thru

17 (width across flats)

**Installation instructions for BN 941934C3000-installation kit:**

Coaxial two way switch  
BN 941934XXXXXX (4 1/16")  
or BN 941944XXXXXX (4 1/2")

Magnified view X (1:1):  
Washer B10.5  
Screw M10x30 (4x):  
use a torque wrench to tighten the bolted connections to 46 Nm

1x mounting plate (aluminum)  
4x washer B10.5 DIN125 - A2-70 (stainless steel)  
4x screw M10x30 DIN933 - A2-70 (stainless steel)

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

Maßangaben in mm Dimensions in mm General tolerances:		DIN ISO 2768mH		Projection E Projection E		Berechnung: File:	
Name:	Datum: Date:	Name: Name:	Datum: Date:	Name: Name:	Datum: Date:	Name: Name:	Datum: Date:
Erteilt: Created:	28.08.2019	Geprüft: Checked:	03.09.2019	Projekt: Project:	Hupflauer	Zeichnungs-Nr.: Drawing No.:	Blatt: Sheet:
Reviz.-Nr.: Rev. No.:	03.09.2019	Maßstab: Scale:	1:2,5	Zeichnungs-Nr.: Drawing No.:	941934C3000-0E	Blatt: Sheet:	1
Reviz.-Nr.: Rev. No.:	03.09.2019	Zeichnungs-Nr.: Drawing No.:	941934C3000-0E	Blatt: Sheet:	1	Reviz.-Nr.: Rev. No.:	1
Reviz.-Nr.: Rev. No.:	03.09.2019	Zeichnungs-Nr.: Drawing No.:	941934C3000-0E	Blatt: Sheet:	1	Reviz.-Nr.: Rev. No.:	1

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