

Declaration on environmental compatibility in the field of EMC¹⁾, climate and mechanical stress

RE 30116-U/06.10
Replaces: 03.07

1/4

Type VT-SSPA1, series 1X

Plug-in proportional amplifier

Product types

- VT-SSPA1-...-1X... according to data sheet RE 30116

Description of the products

- Compact variant of plug-in design
- Suitable for controlling proportional valves without electrical position feedback
- Proportional command value / current characteristic curves for command values from 0 % to 100 %
- Differential input

¹⁾ In the sense of the EMC directive 2004/108/EC and the EMVG (act on the electromagnetic compatibility of operating media) dated 02/26/2008

The above products comply with the following standards:

1. EMC (electromagnetic compatibility)

Testing according to specialized basic standard EN 61000-6-2:2001, VDE 0839 part 6-2

EN 61000-4-2:1995 +A1:1998 +A2:2000 IEC 1000-4-2	VDE 0847-4-2	ESD (electrostatic discharge)	Air discharge: Severity 4 / assessment criterion A Contact discharge: Severity 4 / assessment criterion A
EN 61000-4-4:1995 +A1:2001 +A2:2001 IEC 1000-4-4	VDE 0847-4-4	BURST (transient discharge)	Supply voltage: Severity 3 / assessment criterion B Data cable: Severity 4 / assessment criterion B
EN 61000-4-5:1995 +A1:2001 IEC 1000-4-5	VDE 0847-4-5	SURGE (surge voltages)	Supply voltage: Severity 1 / assessment criterion A
EN 61000-4-6:1996 +A1:2001 IEC 1000-4-6	VDE 0847-4-6	RF fields, conducted interference	Severity 3 / assessment criterion A

Note:

To adhere to the above limit values, signal cables must be routed past the capacitor!

Please observe our notes in data sheet RE 30116.

2. Climate

Testing according to EN 60068-2 / IEC 68-2 (Environmental test)

Testing with solenoid current 2 A			
EN 60068-2-1:1994		Cold test	2 cycles -30 °C dwell time 2 hours
EN 60068-2-2:1993		Dry heat test	2 cycles +85 °C dwell time 2 hours
EN 60068-2-1:1994 EN 60068-2-2:1993		Storage temperature	-30 °C, dwell time 16 hours +85 °C, dwell time 16 hours
	IEC 68-2-14:1986	Temperature cycle	2 cycles -30 °C to +85 °C dwell time 3 hours at min./max. temperature
	IEC 68-2-30:1985	Damp heat, cyclical	Variant 2 +25 °C to +55 °C 93 % to 97 % relative humidity 2 cycles, 24 hours each
Additional test with solenoid current 2.5 A			
	IEC 68-2-14:1986	Temperature cycle	2 cycles -30 °C to +70 °C dwell time 3 hours at min./max. temperature

The above products comply with the following standards (continued):

3. Mechanical stress

Vibration and shock test according to EN 60068-2 / IEC 68-2 / DIN 40046 (Environmental test)

Tests were carried out in three axes (X/Y/Z)

prEN60068-2-6:1994		Vibration, sinusoidal	10 cycles, 5 to 2000 bis 5 Hz at a logarithmic frequency change rate of 1 Oct./Min. 5 to 57 Hz, amplitude 1.5 mm (p-p) 57 to 2000 Hz, amplitude 10 g
	IEC 68-2-36:1973 DIN 40046-24:1977	Random vibration Broadband noise	20 to 2000 Hz, amplitude 0.1 g ² /Hz (14 g _{RMS}), testing time 24 h
EN 60068-2-27:1993		Shock	Half sine 15 g / 11 ms, 3 x in positive direction 3 x negative direction (in total, 6 individual shocks)
	IEC 68-2-29	Bumping	Half sine 15 g / 11 ms 1000 x in positive direction 1000 x negative direction (in total, 2000 individual shocks)

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