

# Declaration on environmental compatibility in the fields of EMC<sup>1)</sup>, climate and mechanical stress

RE 30156-U/05.09

1/4

## Type VT-MAC8-1X

Multi-Axis Motion Control

### Product types

- VT-MAC8-1X according to data sheet RE 30156

### Description of the product family

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MAC-8 is the digital Rexroth Multi-Axis Motion Control for hydraulic applications. It has a modular design consisting of one master card without axis controller and/or with two or four axis controllers and can be extended as and when required with up to seven slave cards for four axes each to up to 32 axes.

<sup>1)</sup> In the sense of the EMC law of 30th August 1995 and Directive 89/336/EEC

## The products comply with the following standards:

### 1. EMC (electromagnetic compatibility)

Testing in accordance with generic standard EN 61000-6-2:2001, VDE 0839 part 6-2 Interference immunity

EN 61000-4-2:1995 +A1:1998 +A2:2000 IEC 1000-4-2	VDE 0847-4-2	ESD (electrostatic discharge)	Air discharge: Severity 3 / assessment criterion A Contact discharge: Severity 4 / assessment criterion A
EN 61000-4-3:2006		HF fields	Severity 3 / assessment criterion A 80 MHz...2,7 GHz
EN 61000-4-4:2004 IEC 1000-4-4	VDE 0847-4-4	BURST (transient discharge)	Repetition rate 5 kHz: Supply voltage: Severity 3 / assessment criterion A Data cables: Severity 4 / assessment criterion A  Repetition rate 100 kHz: Supply voltage: Severity 3 / assessment criterion A Data cables: Severity 4 / assessment criterion A
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 Data cables: Severity 2, asymmetrical / assessment criterion A
EN 61000-4-6:1996 +A1:2001 IEC 1000-4-6	VDE 0847-4-6	HF fields, conducted interference	Severity 3 / assessment criterion A

Testing in accordance with generic standard EN 61000-6-4:2001, VDE 0839 part 6-4 (Emission)

EN 55011:1998 +A1:1999 +A2:2002	VDE0875-11	Emission Radio interference voltage	Class A / 0,15...30 MHz
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Testing in accordance with generic standard EN 61000-6-3:2001, VDE 0839 part 6-3 (Emission)

EN 55022:1998 +A1:2000 +A2:2003	VDE0875-22	Emission Radio interference voltage	Class B / 0,15...30 MHz when using the power supply unit VT-NE40 (mat. no. R900782039)
EN 55022:1998 +A1:2000 +A2:2003 IEC 1000-4-2	VDE0878-22	Emission Radio interference voltage	Class B / 30...1000 MHz
EN 55011:1998 +A1:1999 +A2:2002 IEC 1000-4-2	VDE0875-11	Emission Radio interference voltage	Class B / 1...18 GHz

## The products comply with the following standards:

### 2. Klima

Testing in accordance with EN 60068-2 / IEC 68-2 (environmental testing)

EN 60068-2-1:1994		Cold test	2 cycles -5 °C Dwell time 2 hours
EN 60068-2-2:1993		Dry heat test	2 cycles +55 °C Dwell time 2 hours
EN 60068-2-1:1994 EN 60068-2-2:1993		Storage temperature	-25 °C, dwell time 16 hours +85 °C, dwell time 16 hours
	IEC 68-2-14:1986	Temperatur cycle	2 cycles -5 °C to +55 °C Dwell time 3 hours each at min. / max. temperature
EN 60068-2-30:1999		Damp heat, cyclical	Variant 2 +25 °C to +40 °C 93 % to 97 % relative humidity 2 cycles 24 hours each

### 3. Mechanical stress

Vibration and shock test in accordance with EN 60068-2 / IEC 68-2 / DIN 40046 (environmental testing)

Testing in three axes (X/Y/Z)

EN 60068-2-6:1996			Sine test	20 cycles, 5...500 Hz at a logarithmic frequency change rate of 1 oct./min. 5 to 57 Hz, amplitude 0.3 mm (p-p) 57 to 500 Hz, amplitude 2 g
	IEC 68-2-36:1973	DIN 40046-24:1977	Random test Wide band noi- se	20 to 500 Hz, amplitude 0,01 g <sup>2</sup> / Hz (2.2 g RMS) Testing time 30 min
EN 60068-2-27:1993			Shock test	Half sine 15g / 11 ms, 3 x in positive/ 3 x in negative direction per axis; in to- tal, 18 individual shocks

## Notizen

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