

EMC Table

Name / Type of controller:

- eFlow® study Controllers (with and without display)
- eBase® Controller
- eTrack® Controller
- eLete® Controller

Information as of: 2018-05



Electromagnetic compatibility - Guidance and manufacturer's declaration IEC 60601-1-2: Edition 4.0; 2014-02

Essential Performance

There are no essential performance characteristics according to the risk assessment.

Electromagnetic environment

The device¹⁾ is intended for use in the electromagnetic environment specified below. The customer or the user of the device¹⁾ should assure that it is used in such environment.

Emission test	Compliance	Electromagnetic environment – Guidance
RF emissions CISPR 11	Group 1	The device ¹⁾ uses RF energy only for its internal function. Therefore, its RF-emission is very low and not likely to cause any interference nearby electronic equipment.
	Class B	The device ¹⁾ is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Passed	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Passed	

1) eFlow® study Controllers (with and without display), eBase® Controller, eTrack® Controller, eLete® Controller

Immunity test	IEC 60601 test level		Compliance level	
Electrostatic discharge (ESD) IEC 61000-4-2	Contact :±8 kV Air : ±15 kV		Contact :±8 kV Air : ±15 kV	
Electrical fast transient /burst IEC 61000-4-4	5/50 ns, 100 kHz, ±2 kV		5/50 ns, 100 kHz, ±2 kV	
Surge IEC 61000-4-5	1.2/50 (8/20) µs LtL: ±1.0 kV LtG: ±2.0 kV		1.2/50 (8/20) µs LtL: ±1.0 kV LtG: ±2.0 kV	
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0 % UT for 0.5 cycle (1 phase) 0 % UT for 1 cycle 70 % UT for 25/30 cycles (50/60 Hz) 0 % UT for 250/300 cycles (50/60 Hz)		0 % UT for 0.5 cycle (1 phase) 0 % UT for 1 cycle 70 % UT for 25/30 cycles (50/60 Hz) 0 % UT for 250/300 cycles (50/60 Hz)	
Power frequency (50 Hz/60 Hz) magnetic field IEC 61000-4-8	30 A/m		30 A/m	
Conducted RF IEC 61000-4-6	150 kHz - 80 MHz ISM Bands 80 % / 1 kHz	3 V	150 kHz - 80 MHz ISM Bands 80 % / 1 kHz	3 V
Amplitude modulated				
Radio-frequency electromagnetic field. Amplitude modulated IEC 61000-4-3	80 MHz - 2.7 GHz 10 V/m Home Healthcare Prof. Healthcare 80 % / 1 kHz	10 V/m 10 V/m 3 V/m	80 MHz - 2.7 GHz 10 V/m Home Healthcare Prof. Healthcare 80 % / 1 kHz	10 V/m 10 V/m 3 V/m

Immunity test	IEC 60601 test level	Compliance level
Proximity fields from RF wireless communications equipment IEC 61000-4-3	380 - 390 MHz 27 V/m; PM 50 %; 18 Hz 430 - 470 MHz 28 V/m; (FM ± 5 kHz, 1 kHz sine) PM; 18 Hz 704 - 787 MHz 9 V/m; PM 50 %; 217 Hz 800 - 960 MHz 28 V/m; PM 50 %; 18 Hz 1700 - 1990 MHz 28 V/m; PM 50 %; 217 Hz 2400 - 2570 MHz 28 V/m; PM 50 %; 217 Hz 5100 - 5800 MHz 9 V/m; PM 50 %; 217 Hz	380 - 390 MHz 27 V/m; PM 50 %; 18 Hz 430 - 470 MHz 28 V/m; (FM ± 5 kHz, 1 kHz sine) PM; 18 Hz 704 - 787 MHz 9 V/m; PM 50 %; 217 Hz 800 - 960 MHz 28 V/m; PM 50 %; 18 Hz 1700 - 1990 MHz 28 V/m; PM 50 %; 217 Hz 2400 - 2570 MHz 28 V/m; PM 50 %; 217 Hz 5100 - 5800 MHz 9 V/m; PM 50 %; 217 Hz
Measurement of radiated broadband and narrowband electromagnetic emissions	ECE R10, Rev. 5, annex 7 and 8 CISPR 25, 2. Edition + Corrigendum 2004	
Radiated and conducted emission of radio frequency energy	RTCA/DO-160G Section 21	Cat. M

WARNING:

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the device including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

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