

MESSRS :

Brochure

CUSTOMER'S PRODUCT NAME:

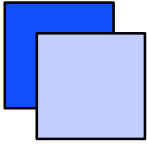
TDK PRODUCT NAME: DC/AC INVERTER UNIT NEW-CXA Series



TDK-Lambda Corporation

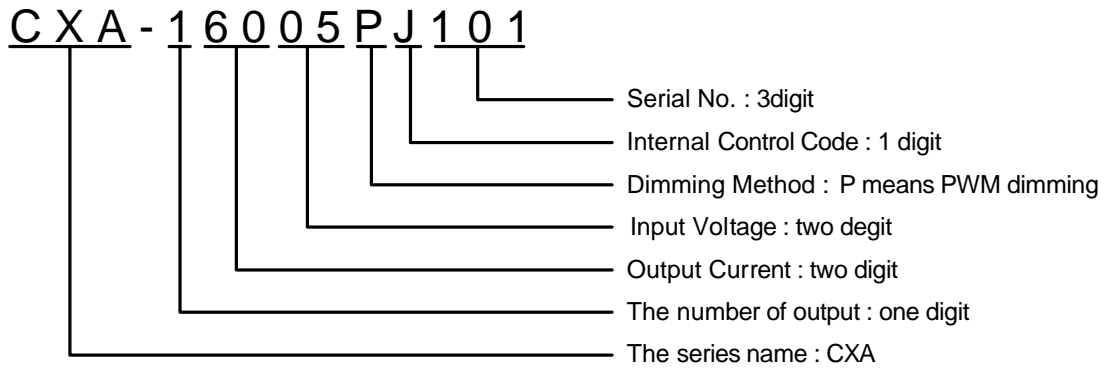
PREPARED BY	APPROVED BY	AUTHORIZED BY
<i>Nov.9th,2009 K. Yamaishi</i>	<i>Nov.9th,2009 K. Yamaishi</i>	<i>Nov.9th,2009 H. Masuoka</i>

DWG. No.	CTR-3308-H
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New_CXA-series

1.Name of new CXA-series

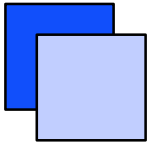


2.New CXA specification parametric table

item name	# of lamps	Input Voltage (Vdc)	Output Current (mArms)	freq. (kHz)	Burst freq. (Hz)	Vopen min (Vrms)	Dimensions	PWB
CXA-16012PJ102	1	10.8~13.2	6	50	220	1700	100.0(typ.)x20.0(typ.)x8.5(max)	τ=1.0
CXA-26012PJ103	2	10.8~13.2	6	50	220	1700	110.0(typ.)x37.0(typ.)x8.5(max)	τ=1.0
CXA-26012PJ104	2	10.8~13.2	6	45	220	1700	110.0(typ.)x37.0(typ.)x8.5(max)	τ=1.0
CXA-26012PJ105	2	10.8~13.2	6	50	220	1700	130.0(typ.)x35.0(typ.)x8.5(max)	τ=1.0
CXA-46012PJ106	4	10.8~13.2	6	45	220	1700	180.0(typ.)x37.0(typ.)x8.5(max)	τ=1.0
CXA-46012PJ107	4	10.8~13.2	6	45	220	1700	180.0(typ.)x37.0(typ.)x8.5(max)	τ=1.0
CXA-46012PJ108	4	10.8~13.2	6	45	220	1700	180.0(typ.)x37.0(typ.)x8.5(max)	τ=1.0
CXA-46012PJ109	4	10.8~13.2	6	60	220	1700	180.0(typ.)x37.0(typ.)x8.5(max)	τ=1.0

*Vopen is determined by 5pF output capacitor because there is stray capacitance between output connector and panel.

item name	Input Connector	Corresponding	vendor	Output Connector	Corresponding	vendor
CXA-16012PJ102	53261-0771	51021-0700	molex	SM02B-BHSS-1	BHSR-02VS-1	JST
CXA-26012PJ103	53261-0771	51021-0700	molex	SM02(8.0)B-BHS-1	BHR-03VS-1	JST
CXA-26012PJ104	53261-0771	51021-0700	molex	SM03(7-D1)B-BHS-1	BHR-04VS-1	JST
CXA-26012PJ105	S7B-PH-SM4	PHR-7	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	JST
CXA-46012PJ106	S7B-PH-SM4	PHR-7	JST	SM02B-BHSS-1	BHSR-02VS-1	JST
CXA-46012PJ107	S7B-PH-SM4	PHR-7	JST	SM02(8.0)B-BHS-1	BHR-03VS-1	JST
CXA-46012PJ108	S7B-PH-SM4	PHR-7	JST	SM03(7-D1)B-BHS-1	BHR-04VS-1	JST
CXA-46012PJ109	S7B-PH-SM4	PHR-7	JST	SM02B-BHSS-1 SM02(4.0)B-BHS-1	BHSR-02VS-1 BHR-02VS-1	JST

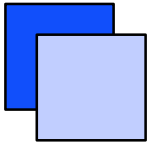


3. New CXA common functions

- Built in circuit protector.
- Shutdown function available.
- Alarm signal output function.
- Silicon resin is painted on high voltage generation area to avoid dust and insects.

4. Absolute Maximum Ratings

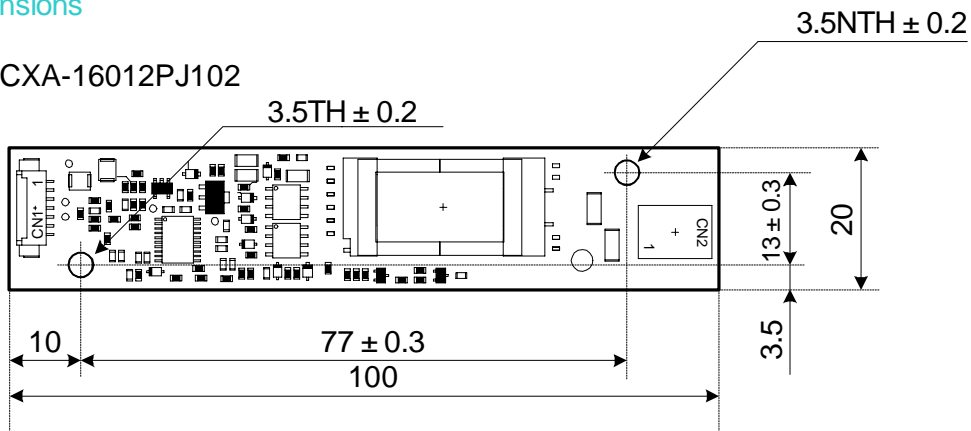
Item	Symbol	Specification	Unit	Notes
Input Voltage	Vin	13.2	Vdc	
	Vrmt	-1 ~ Vin+1	Vdc	
	Vbr	-1 ~ Vin+1	Vdc	
Operating Temp. Range	Ta	-30 ~ 80	degC	
Storage Temp. Range	Ts	-40 ~ 85	degC	
Maximum Humidity	RH	95	%RH	A maximum wet ball temp is 38 degC.



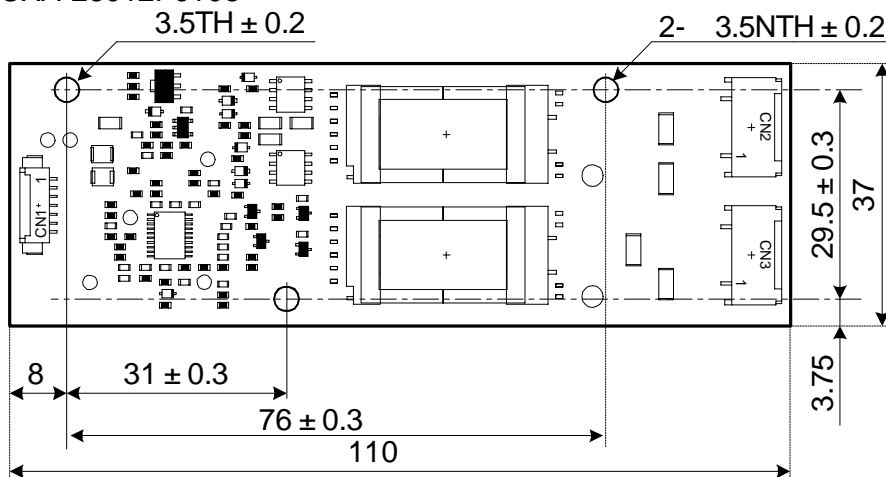
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5. Dimensions

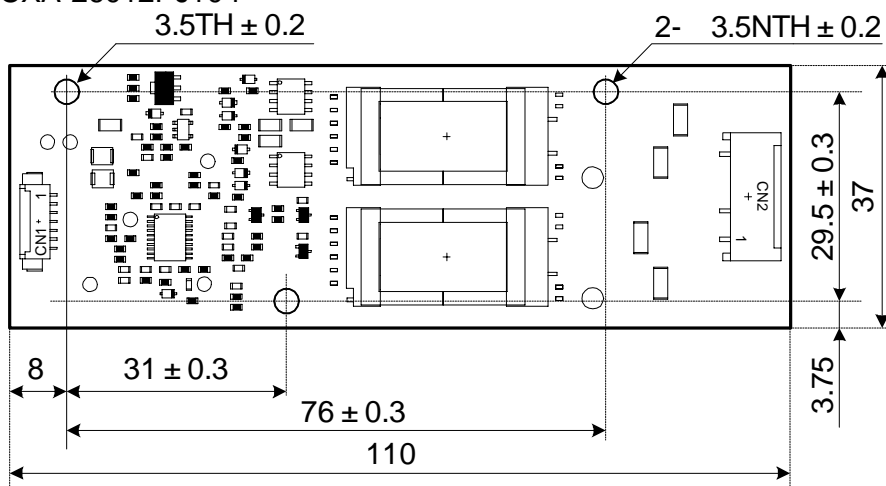
5-1. CXA-16012PJ102



5-2. CXA-26012PJ103



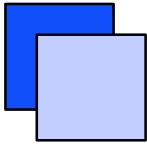
5-3. CXA-26012PJ104



unit in mm

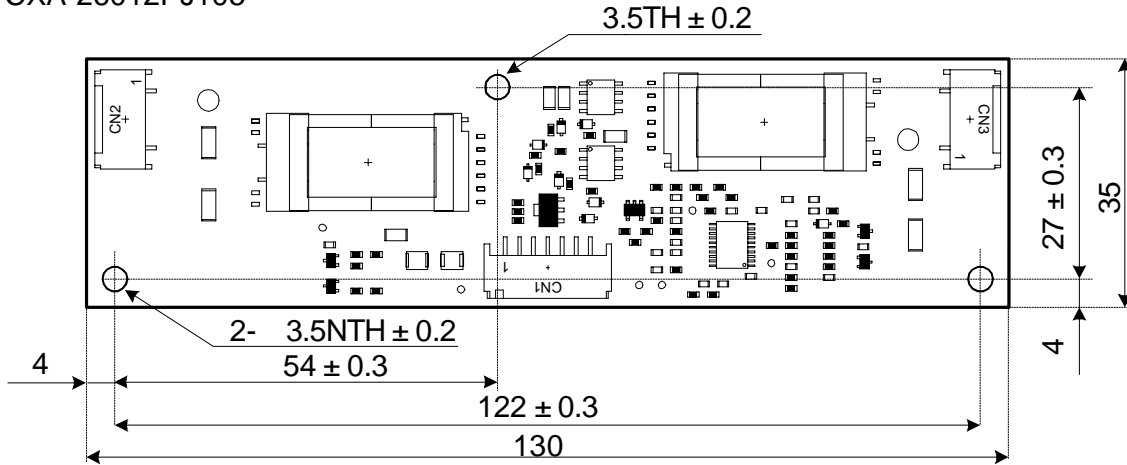
tolerance is ± 0.5mm unless otherwise specified.

All mounting holes have to tighten the screws to protect from vibrations and shocks.

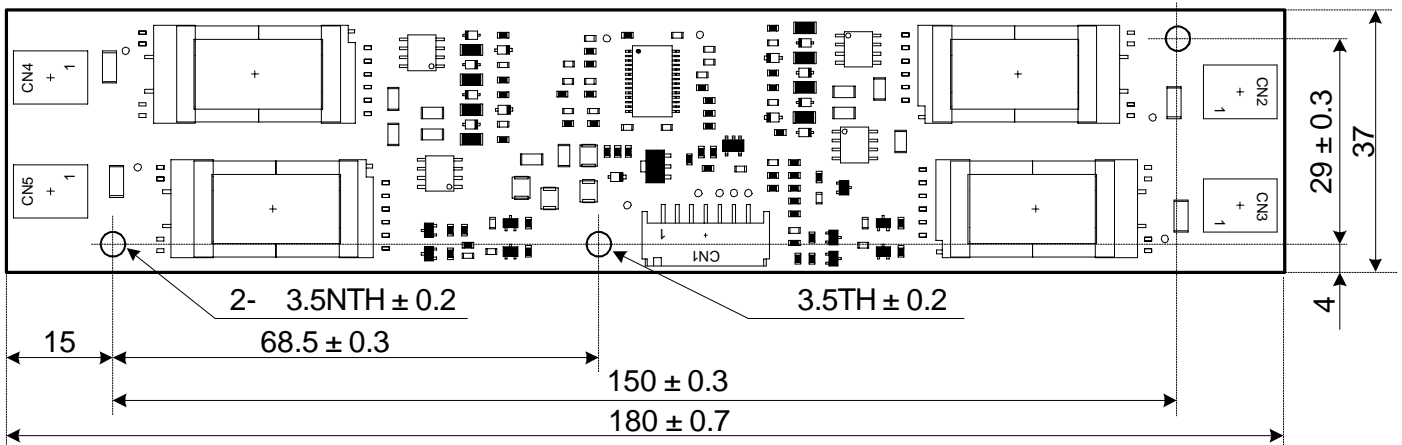


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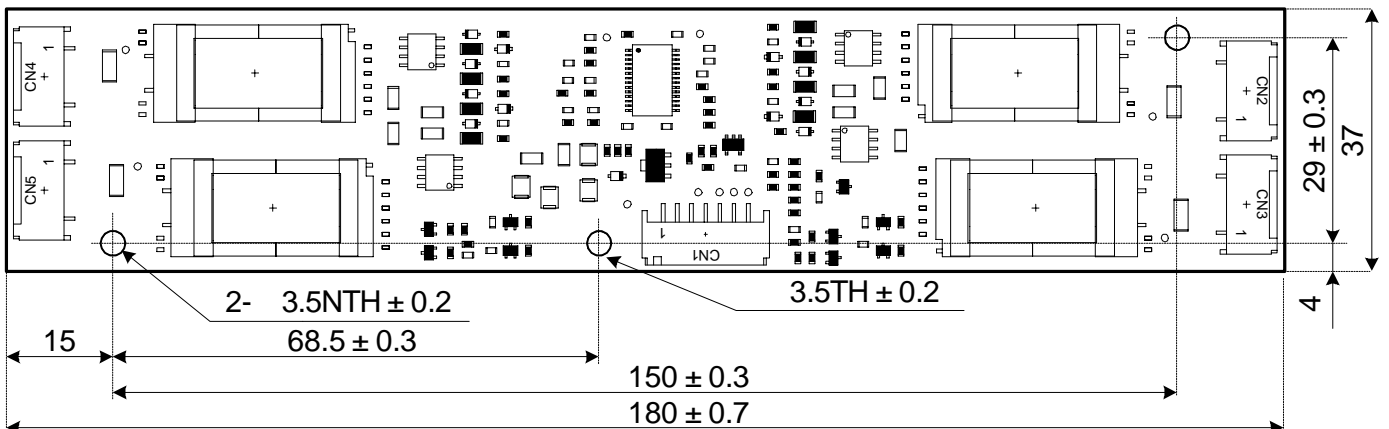
5-4. CXA-26012PJ105



5-5. CXA-46012PJ106



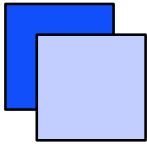
5-6. CXA-46012PJ107



tolerance is ± 0.5 mm unless otherwise specified.

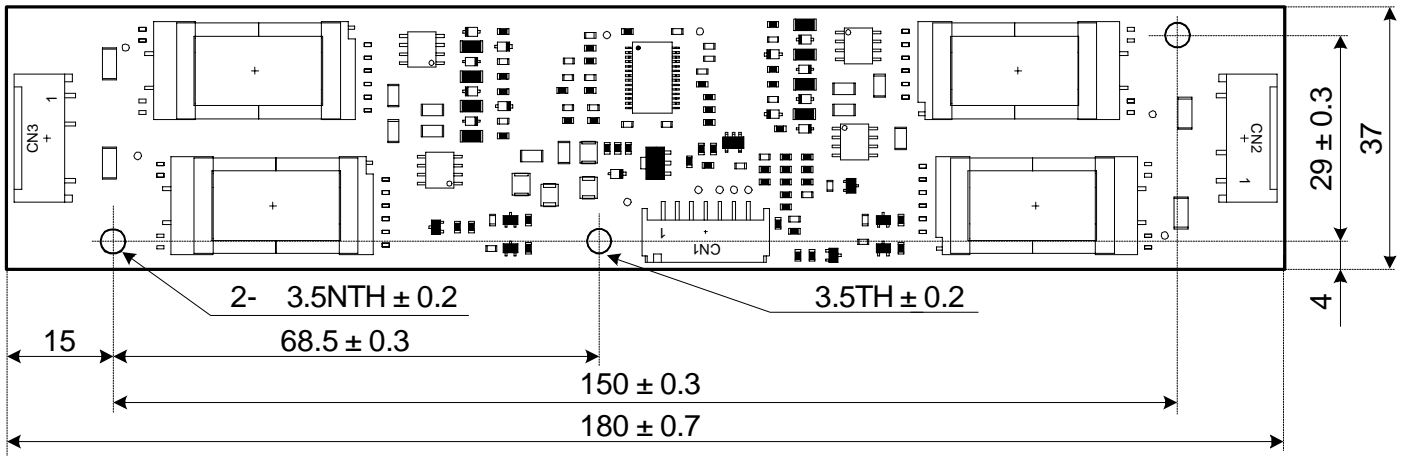
All mounting holes have to tighten the screws to protect from vibrations and shocks.

unit in mm

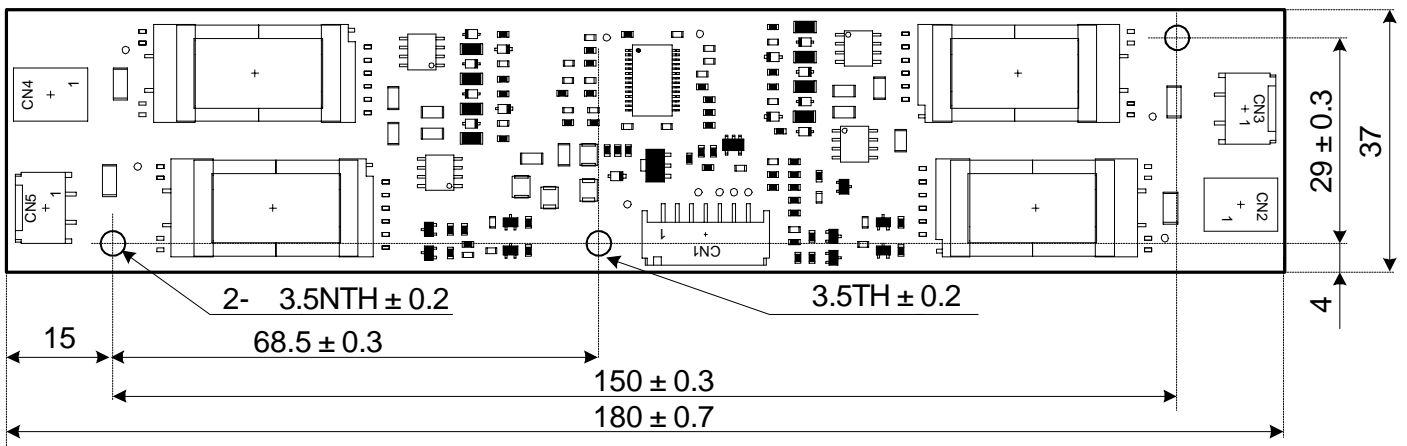


New_CXA-series

5-7. CXA-46012PJ108



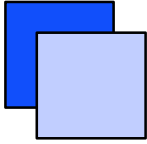
5-8. CXA-46012PJ109



unit in mm

tolerance is ± 0.5 mm unless otherwise specified.

All mounting holes have to tighten the screws to protect from vibrations and shocks.



6.Pin Configuration

6-1.Input Connector Configuration

All New CXA series have same pin configuration for Input connector.

CN1: 53261-0771 / molex or S7B-PH-4-TB(LF)(SN)

Pin	Symbol	Specification	Note
CN1-1	Vin	10.8~13.2(Vdc)	Input Voltage
CN1-2			
CN1-3	GND	0(V)	GND
CN1-4			
CN1-5	Vrmt	0~0.8(Vdc) : OFF 2.0~Vin(Vdc): ON	Remote Control
CN1-6	Vbr	0~2.5(Vdc)	Brightness Control *Note4
	Rbr	0~10(kΩ)	
CN1-7	Vst (Output)	0(V) / 3(Vdc)	Alarm Signal *Note2

*Note2 : Alarm signal is active in abnormal condition.0(V) at normal operation.

6-2.Output Connector Configuration

6-2-1. CXA-16012PJ102

CN2: SM02B-BHSS-1 /JST

Pin	Symbol	Note
CNx-1	Vhigh	HV Output
CNx-2	Vlow	Lamp Return

6-2-2. CXA-26012PJ103

CN2,3: SM02(8.0)B-BHS-1 /JST

Pin	Symbol	Note
CNx-1	Vhigh	HV Output
CNx-2	N.C.	N.C.
CNx-3	Vlow	Lamp Return

6-2-3. CXA-26012PJ104

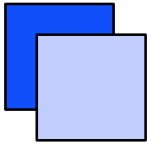
CN2: SM03(7-D1)B-BHS-1 /JST

Pin	Symbol	Note
CNx-1	Vhigh1	HV Output1
CNx-2	Vhigh2	HV Output2
CNx-3	N.C.	N.C.
CNx-4	Vlow	Lamp Return

6-2-4. CXA-26012PJ105

CN2,3: SM02(8.0)B-BHS-1 /JST

Pin	Symbol	Note
CNx-1	Vhigh	HV Output
CNx-2	N.C.	N.C.
CNx-3	Vlow	Lamp Return



New_CXA-series

6-2-5. CXA-46012PJ106

CN2,3,4,5: SM02B-BHSS-1 /JST

Pin	Symbol	Note
CNx-1	Vhigh	HV Output
CNx-2	Vlow	Lamp Return

6-2-6. CXA-46012PJ107

CN2,3,4,5: SM02(8.0)B-BHS-1 /JST

Pin	Symbol	Note
CNx-1	Vhigh	HV Output
CNx-2	N.C.	N.C.
CNx-3	Vlow	Lamp Return

6-2-7. CXA-46012PJ108

CN2,3: SM03(7-D1)B-BHS-1 /JST

Pin	Symbol	Note
CNx-1	Vhigh1	HV Output1
CNx-2	Vhigh2	HV Output2
CNx-3	N.C.	N.C.
CNx-4	Vlow	Lamp Return

6-2-8. CXA-46012PJ109

CN2: SM02B-BHSS-1 /JST

Pin	Symbol	Note
CN2-1	Vhigh1	HV Output1
CN2-2	Vhigh2	HV Output2

CN4: SM02B-BHSS-1 /JST

Pin	Symbol	Note
CN4-1	Vhigh3	HV Output3
CN4-2	Vhigh4	HV Output4

CN3: SM02(4.0)B-BHS-1 /JST

Pin	Symbol	Note
CN3-1	Vlow	Lamp Return1
CN3-2	Vlow	Lamp Return2

CN5: SM02(4.0)B-BHS-1 /JST

Pin	Symbol	Note
CN5-1	Vlow	Lamp Return3
CN5-2	Vlow	Lamp Return4

7. Reliability Tests

The following reliability test items are guaranteed.

Items	Conditions	Judgement
High Temp. Continuous Operation	85°C 500h Load condition: TYP.	Electrical characteristics and visual appearance are within the specifications.
Heat shock	-40°C to 85°C 30min. Each 100 Cycles	
Humidity Continuous Operation	60°C 90~95%RH 500h 1h ON / 3h OFF Load cond.: TYP	
Vibration	5~10Hz Amplitude 10mm 10~200Hz or 21.6m/s ² Log Sweep: 10min. 60min. each axis X,Y,Z	
Shock	588m/s ² 11ms Half-sine wave 3 time each axis ±X,Y,Z	