MODELS: FR-XC

NAGOYA WORKS

File No.: MF-S-169A

Date of issue: 2017-06-19

Modified date: 2017-07-11

TITLE: EMC DATA EXAMPLE (FR-XC)

(1) EMC data example when using multi-function regenerative converter FR-XC in combination with inverter.

Conditions

Inverter and multi-function regenerative converter conform to EN61800-3 product standard.

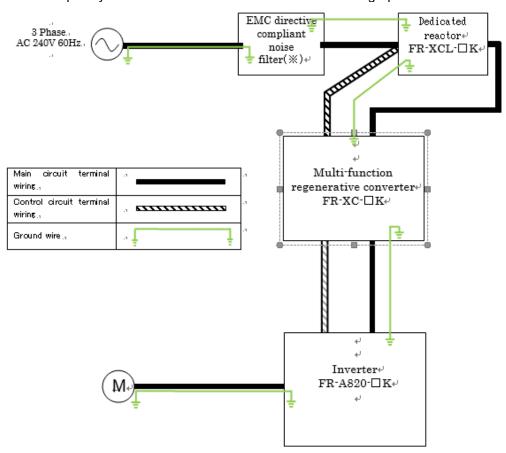
Measurement conditions were based on 2nd Environment Category C3 as described in EN61800-3.

Output interconnection (motor) length: 20m

Output cable type : Shielded cable

Inverter frequency : 30Hz

Carrier frequency : Indicated above each graph



EMC directive compliant noise filters are used

Multi-function regenerative converter	Model	Manufacturer
FR-XC-11K	HF3060C-UQC	SOSHIN ELECTRIC CO., LTD.
FR-XC-15K	FTB-80-663-L	COSEL CO., LTD.
FR-XC-30K	FTB-150-663-L	

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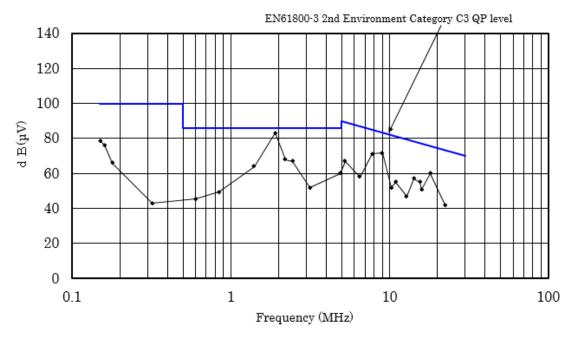
EXAMPLE OF MEASUREMENT RESULTS

FR-XC-11K

◆Conducted noise

MODELS: FR-XC

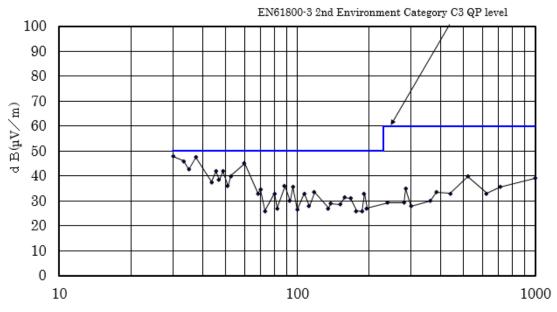
FR-XC-11K (Carrier frequency: 2kHz)



(Note) The QP value will not exceed the peak value

◆Radiated noise

FR-XC-11K (Carrier frequency: 2kH z)



Frequency (MHz)

(Note) The QP value will not exceed the peak value

MODELS: FR-XC

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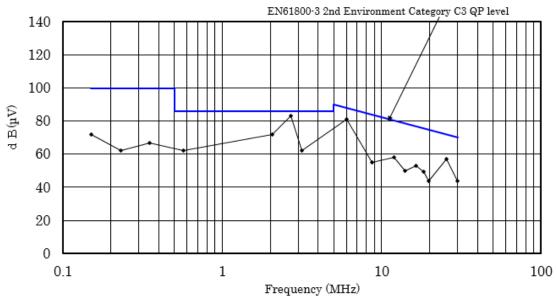
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FR-XC 15K

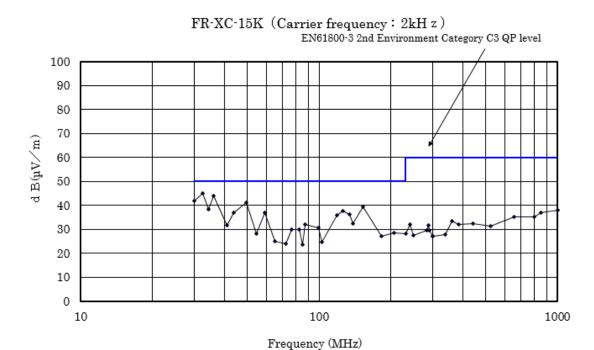
♦Conducted noise

FR-XC-15K (Carrier frequency: 2kH z)



(Note) The QP value will not exceed the peak value

◆Radiated noise



(Note) The QP value will not exceed the peak value

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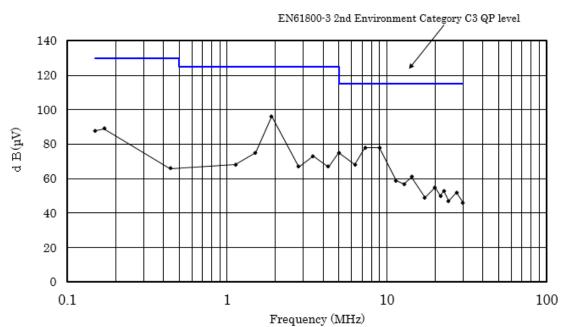
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MODELS: FR-XC

FR-XC-30K

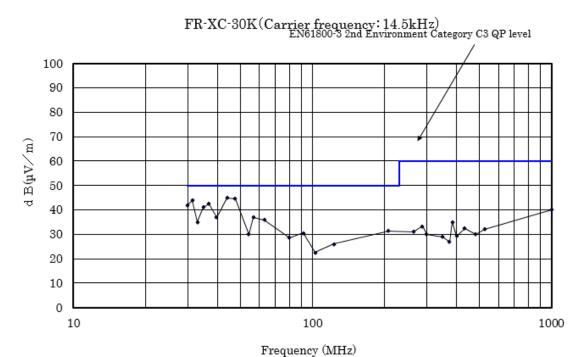
◆Conducted noise

FR-XC-30K (Carrier frequency: 14.5kH z)



(Note) The QP value will not exceed the peak value

◆Radiated noise



(Note) The QP value will not exceed the peak value

MODELS: FR-XC

File No.: MF-S-169A

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Modified date: 2017-07-11

NAGOYA WORKS

FR-XC-PWM

(2) EMC data example when using multi-function regenerative converter FR-XC-PWM in combination with inverter.

Conditions

Inverter and multi-function regenerative converter conform to EN61800-3 product standard.

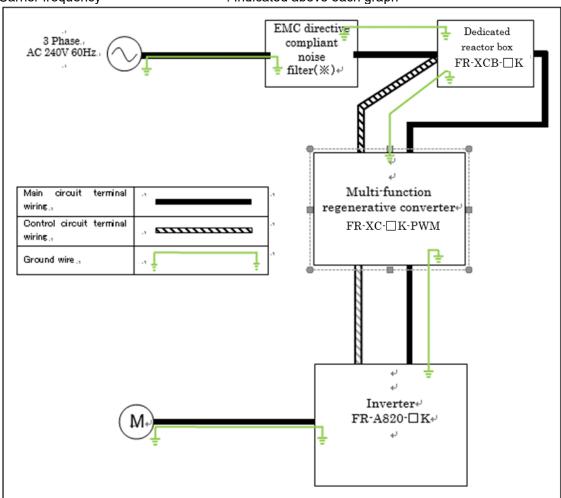
Measurement conditions were based on 2nd Environment Category C3 as described in EN61800-3.

Output interconnection (motor) length: 20m

Output cable type : Shielded cable

Inverter frequency : 30Hz

Carrier frequency : Indicated above each graph



EMC directive compliant noise filters are used

Multi-function regenerative converter	Model	Manufacturer
FR-XC-22K-PWM	FTB-150-663-L	COSEL CO., LTD.

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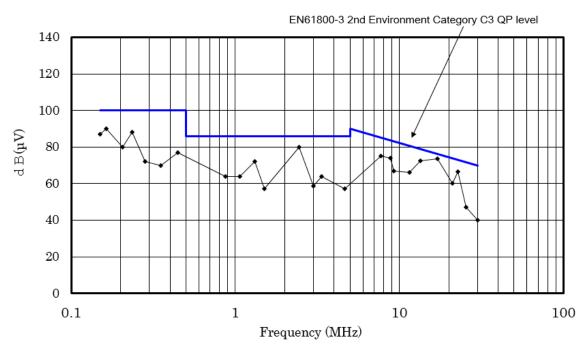
MODELS: FR-XC

EXAMPLE OF MEASUREMENT RESULTS

FR-XC-22K-PWM

◆Conducted noise

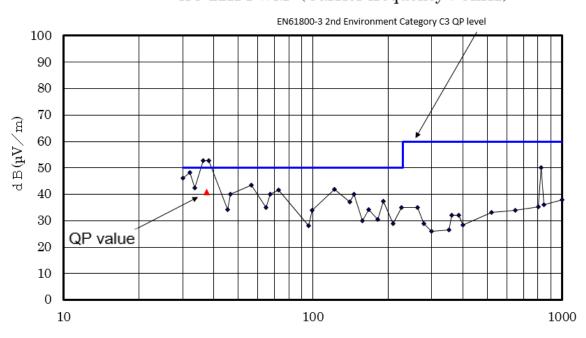
XC-22K-PWM (Carrier frequency : 5kHz)



(Note) The QP value will not exceed the peak value

♦Radiated noise

XC-22K-PWM (Carrier frequency: 5kHz)



Frequency (MHz)

(Note) The QP value will not exceed the peak value