# GENESYS™ 7.5kW

# EMI

# DATA

| DWG: IA922-58-02 | | |
|---|---|---|
| APPD | CHK | DWG |
| Yaniv Nisinman<br>03/03/22 | Barak Marmor<br>22/02/2022 | Amichai Wald<br>06/01/22 |

***TDK-LAMBDA***

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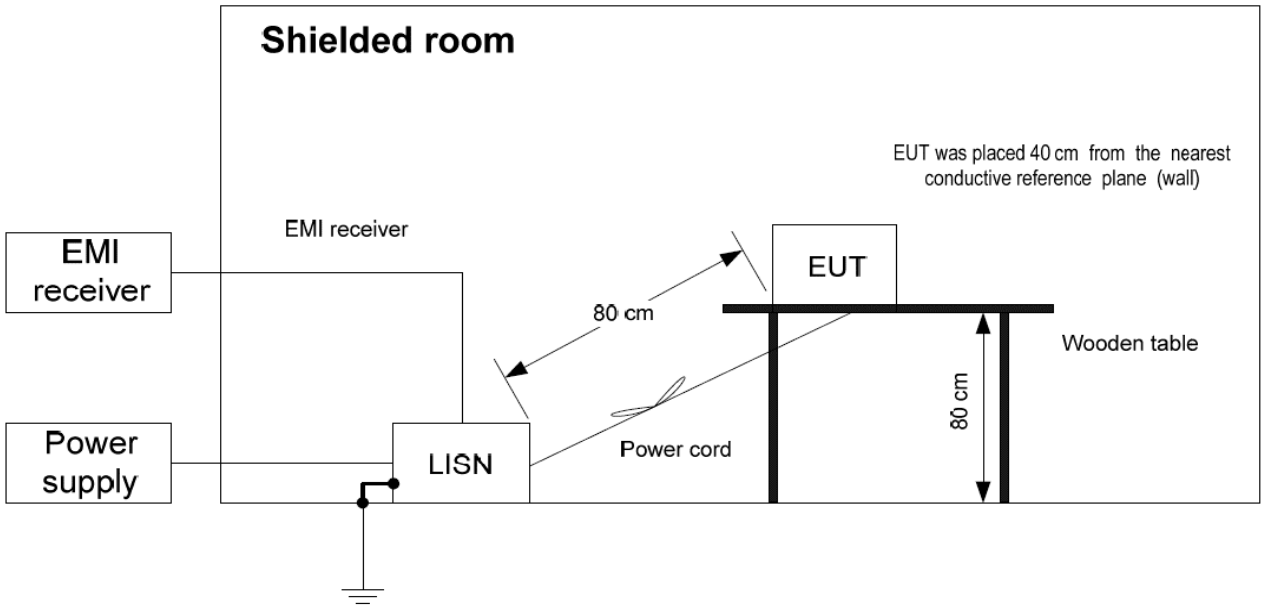
The above data is typical value data.
The values are considered to be actual capability data.

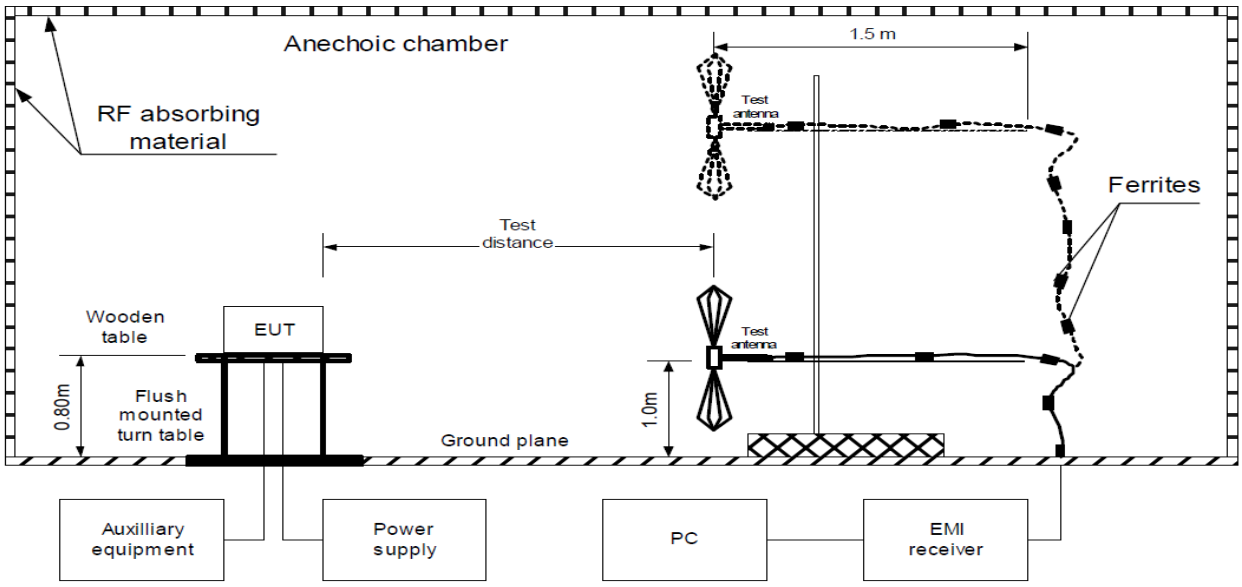
# 1.Test Method

## (1) Conducted Emission




| | | |
|---|---|---|
| EMI TEST RECEIVER | ESPI | (ROHDE & SCHWARZ) |
| LISN | ENV4200 | (ROHDE & SCHWARZ) |

## (2) Radiated Emission




| | | |
|---|---|---|
| SPECTRUM ANALYZER | MS2601A | (ANRITSU) |
| EMI TEST RECEIVER | 85462A | (HEWLETT. PACKARD) |
| BICONICAL ANTENNA | 3110BA30/200 | (EMCO) |
| LOG-PERIODIC ANTENNA | LP200000 | (ELECTROMETRIX) |
| | LPA2530 | (ELECTROMETRIX) |

# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G20-375 3P208**

(1) Test condition

Input voltage/frequency: 3PHASE 200VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| PHASE | FREQ | RESULT | LIMIT | MARGIN |
| | | AV | AV | AV |
| | MHz | dBµV | dBµV | dBµV |
| L1 | 0.18137 | 56.64 | 66.00 | 9.36 |
| L2 | 0.18173 | 56.67 | 66.00 | 9.33 |
| L3 | 0.18119 | 56.38 | 66.00 | 9.62 |

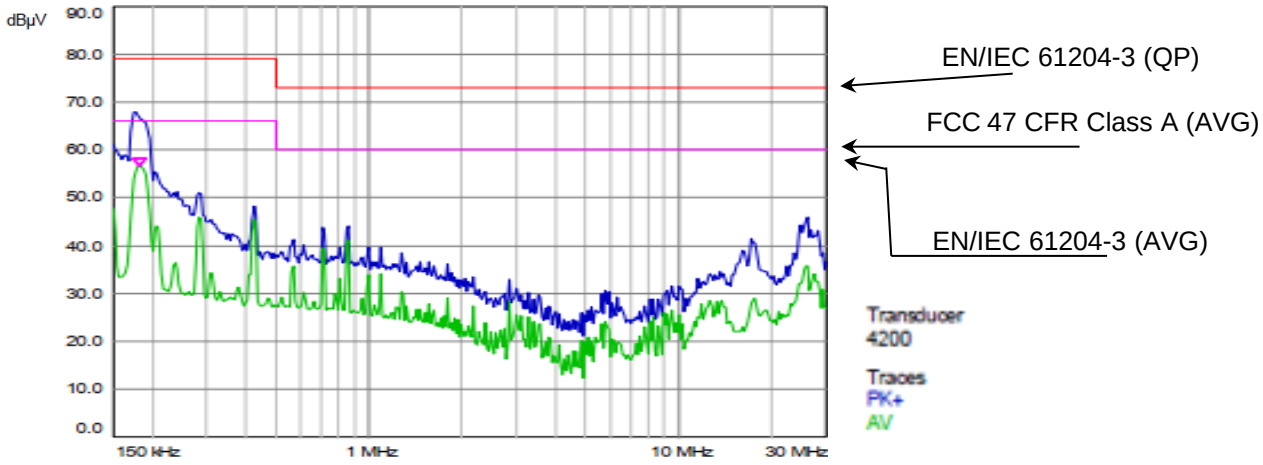
# 2. Test Data

## 2.1 Conducted Emission

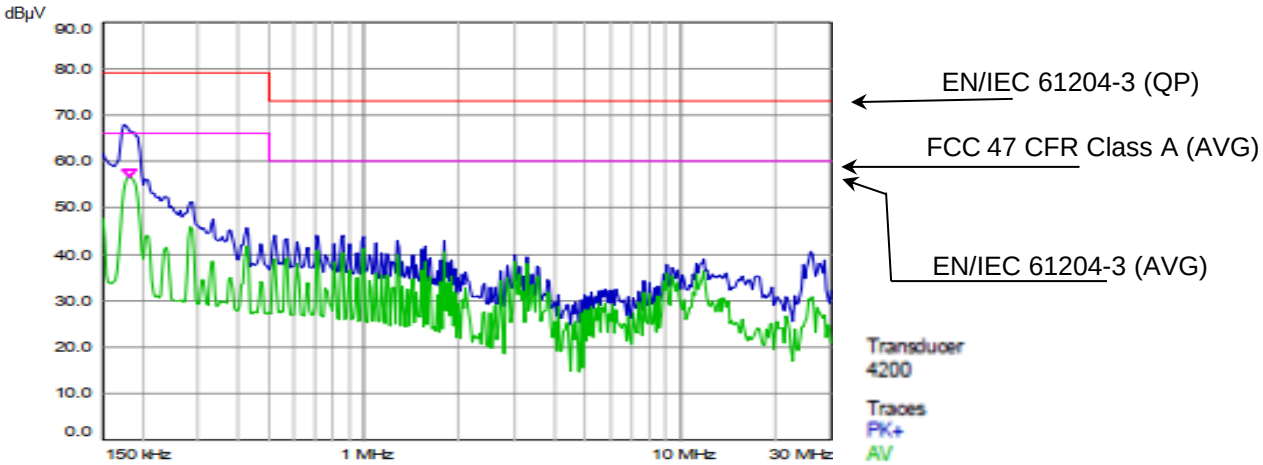
**MODEL: G20-375 3P208**

Conditions: Vin: 3PHASE 200VAC
Iout: 100%
Vout: 100%
Ta: 25°C

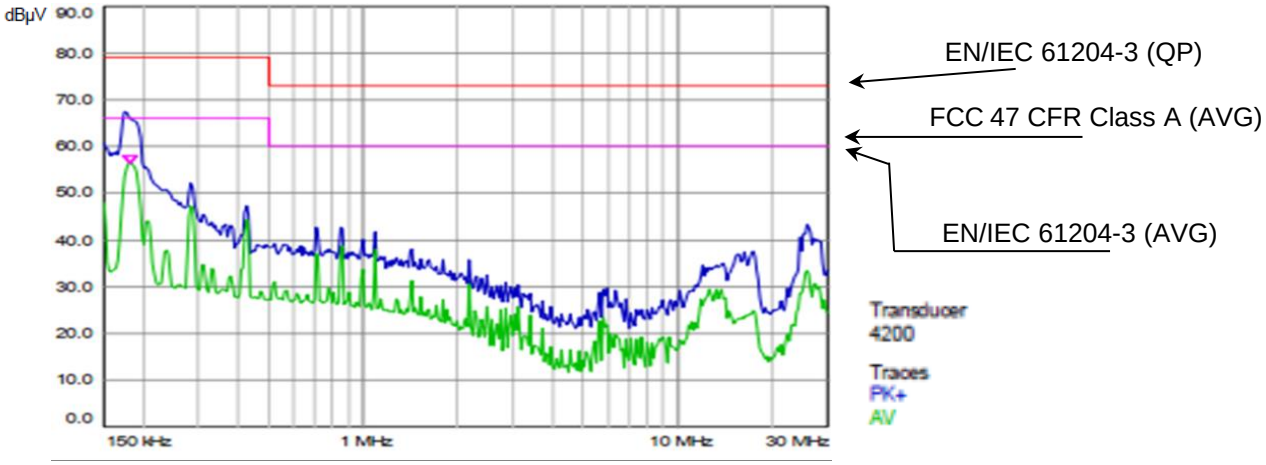
Phase L1




Phase L2




Phase L3



# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G20-375 3P480**

(1) Test condition

Input voltage/frequency: 3PHASE 400VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| PHASE | FREQ | RESULT | LIMIT | MARGIN |
| | | AV | AV | AV |
| | MHz | dBµV | dBµV | dBµV |
| L1 | 0.15105 | 43.54 | 66.00 | 22.46 |
| L1 | 1.80333 | 31.16 | 60.00 | 28.84 |
| L2 | 0.15105 | 45.91 | 66.00 | 20.09 |
| L2 | 10.18353 | 42.63 | 60.00 | 17.37 |
| L3 | 0.15045 | 45.19 | 66.00 | 20.81 |
| L3 | 1.80333 | 36.17 | 60.00 | 23.83 |

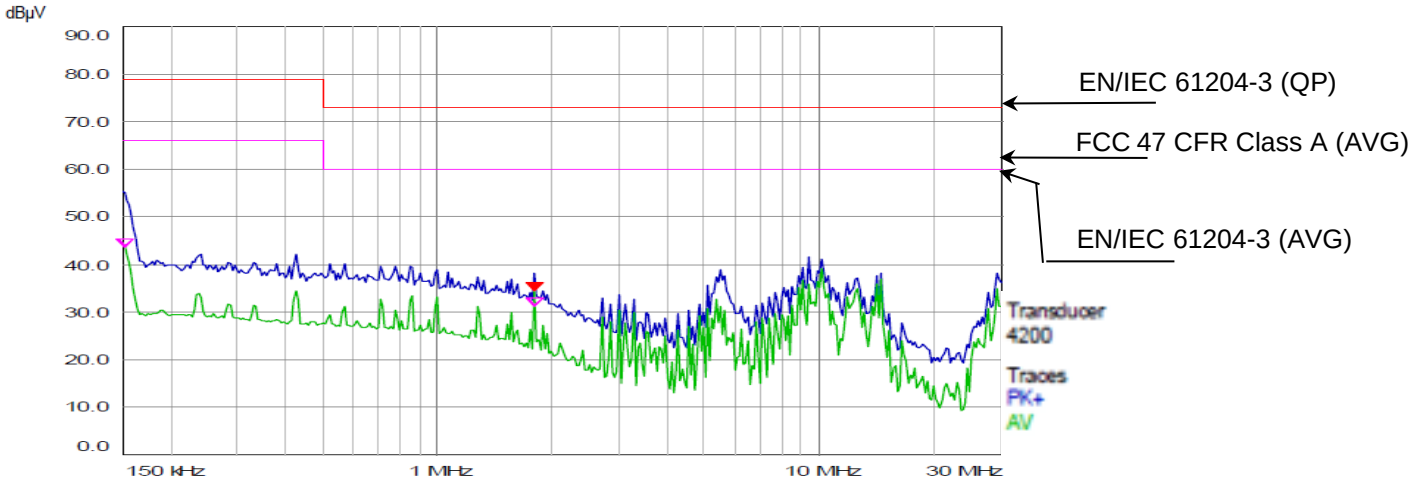
# 2. Test Data

## 2.1 Conducted Emission

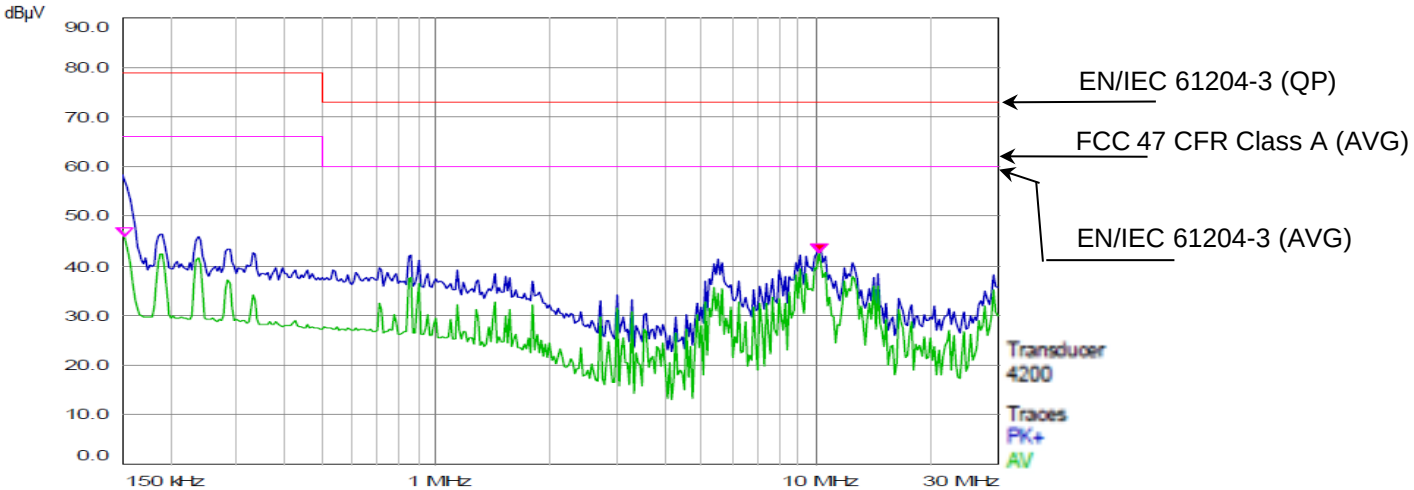
**MODEL: G20-375 3P480**

Conditions: Vin: 3PHASE 400VAC
Iout: 100%
Vout: 100%
Ta: 25°C

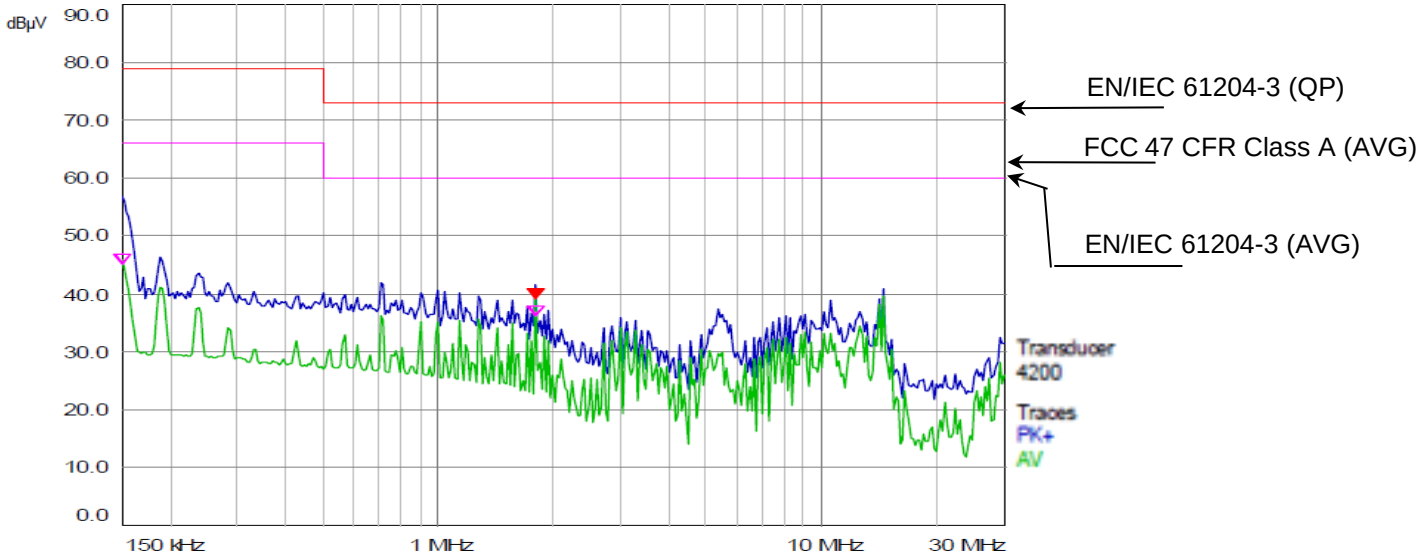
Phase L1




Phase L2




Phase L3



# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G100-75 3P208**

(1) Test condition

Input voltage/frequency: 3PHASE 200VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| PHASE | FREQ | RESULT | LIMIT | MARGIN |
| | | AV | AV | AV |
| | MHz | dBµV | dBµV | dBµV |
| L1 | 0.23708 | 57.42 | 66.00 | 8.58 |
| L2 | 0.23661 | 57.05 | 66.00 | 8.95 |
| L3 | 0.23708 | 57.08 | 66.00 | 8.92 |

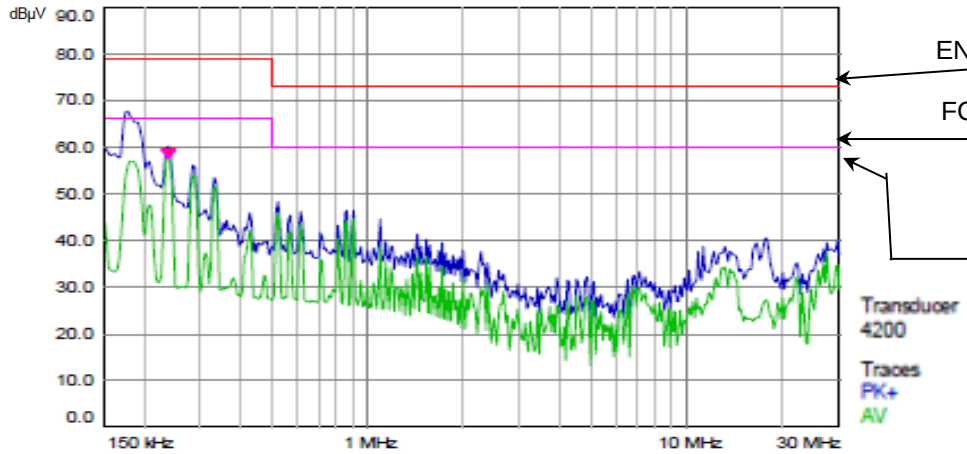
# 2. Test Data

## 2.1 Conducted Emission

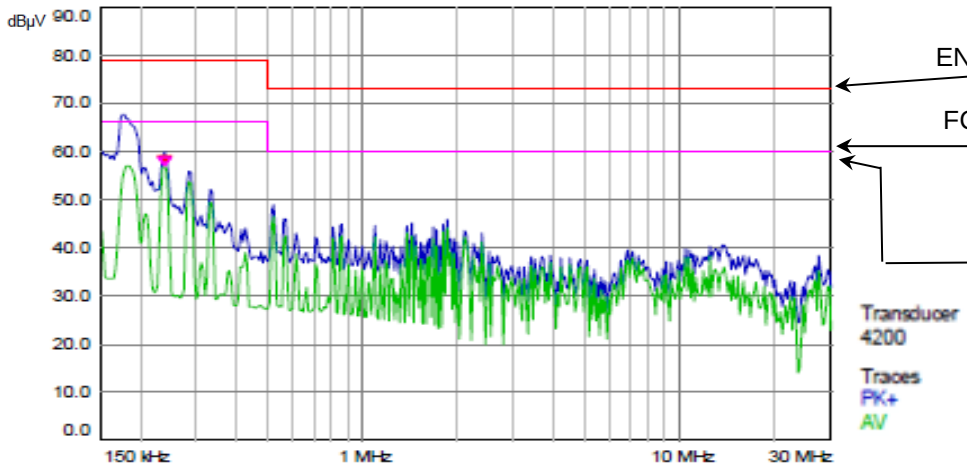
**MODEL: G100-75 3P208**

Conditions: Vin: 3PHASE 200VAC
Iout: 100%
Vout: 100%
Ta: 25°C

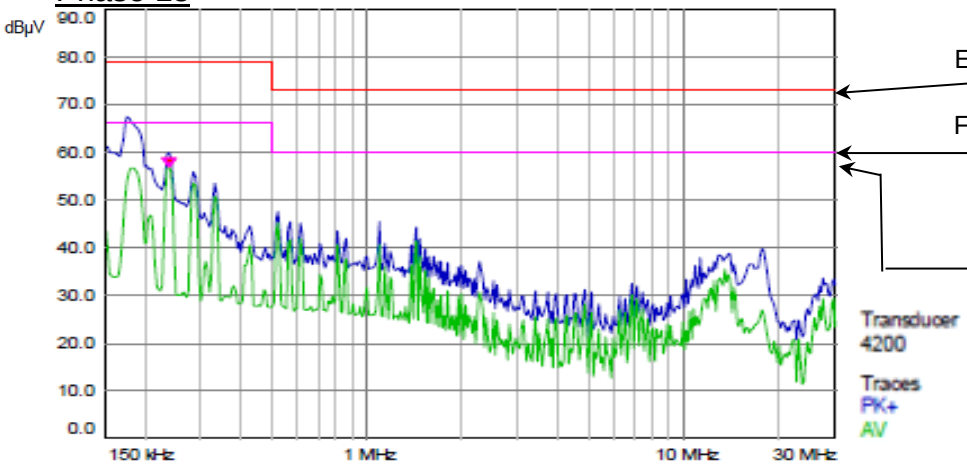
Phase L1




Phase L2




Phase L3



# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G100-75 3P480**

(1) Test condition

Input voltage/frequency: 3PHASE 400VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| PHASE | FREQ | RESULT | LIMIT | MARGIN |
| | | AV | AV | AV |
| | MHz | dBµV | dBµV | dBµV |
| L1 | 1.42298 | 36.74 | 60.00 | 23.26 |
| L2 | 1.42298 | 46.48 | 60.00 | 13.52 |
| L3 | 1.42298 | 42.40 | 60.00 | 17.60 |

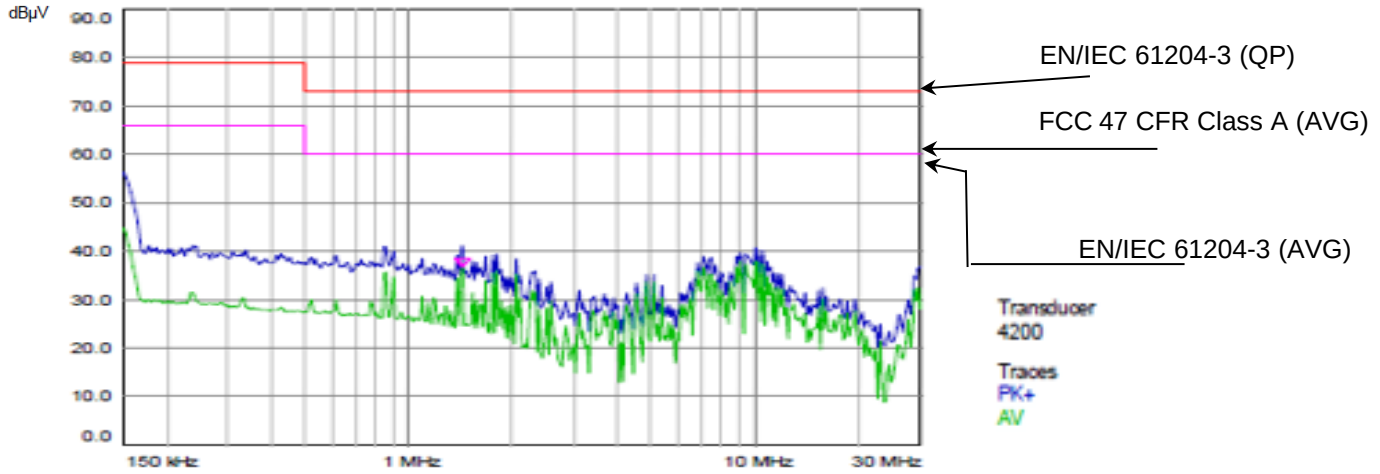
# 2. Test Data

## 2.1 Conducted Emission

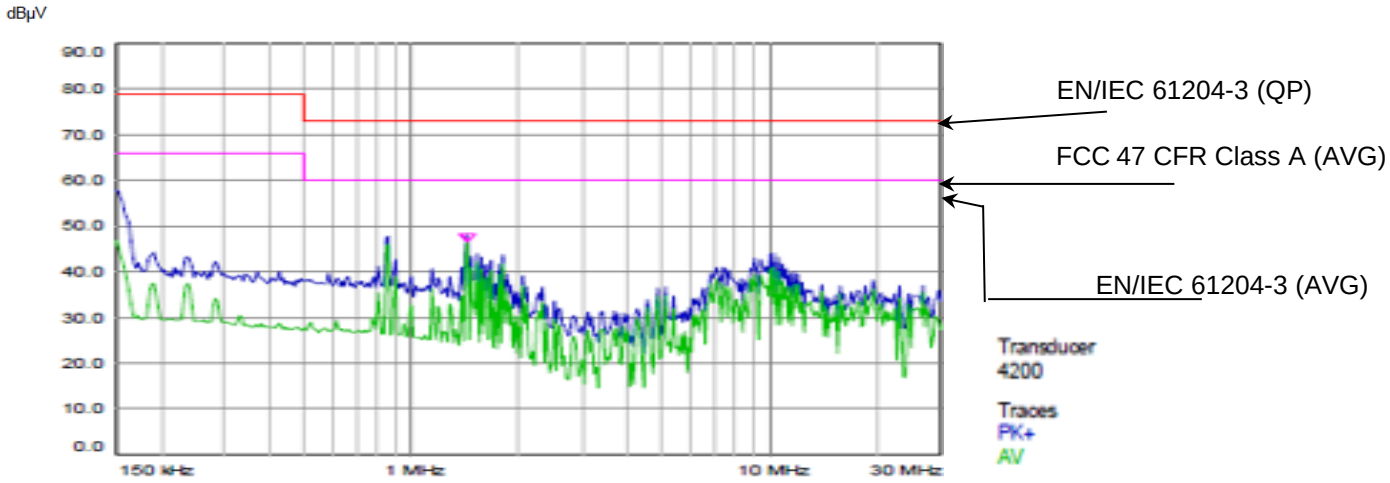
**MODEL: G100-75 3P480**

Conditions: Vin: 3PHASE 400VAC
Iout: 100%
Vout: 100%
Ta: 25°C

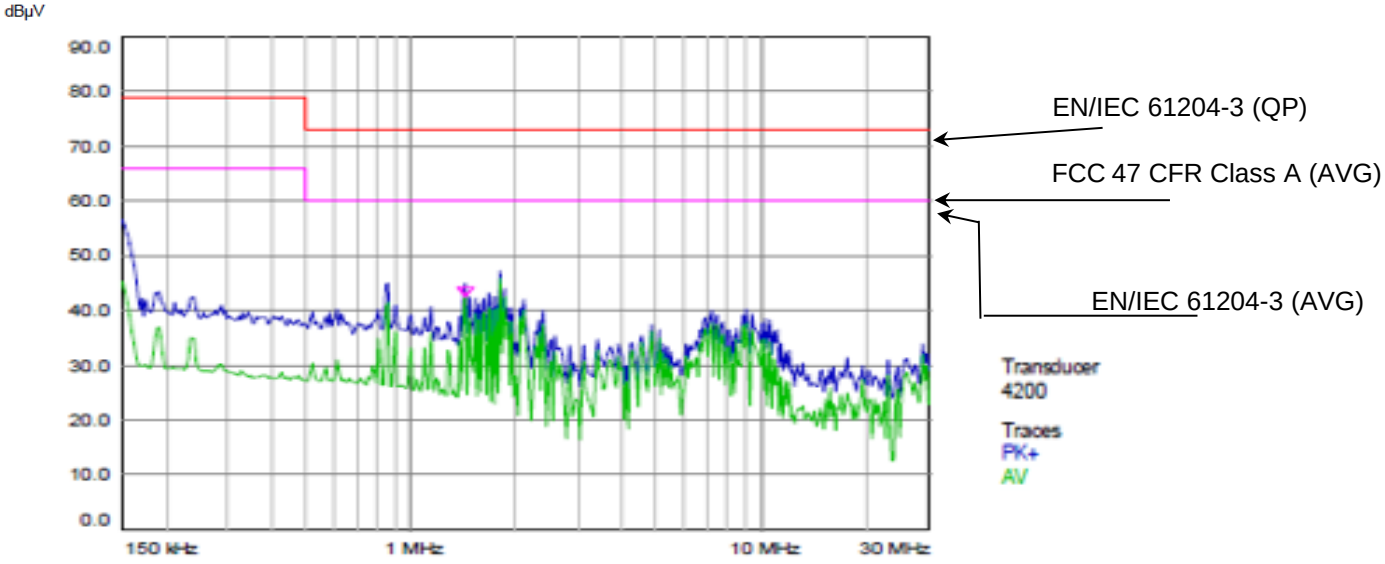
Phase L1




Phase L2




Phase L3



# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G600-12.5 3P208**

(1) Test condition

Input voltage/frequency: 3PHASE 200VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| **PHASE** | **FREQ** | **RESULT** | **LIMIT** | **MARGIN** |
| | | **AV** | **AV** | **AV** |
| | **MHz** | **dBµV** | **dBµV** | **dBµV** |
| L1 | 0.42629 | 59.05 | 66.00 | 6.95 |
| L2 | 0.42629 | 57.50 | 66.00 | 8.50 |
| L3 | 0.42629 | 57.72 | 66.00 | 8.28 |

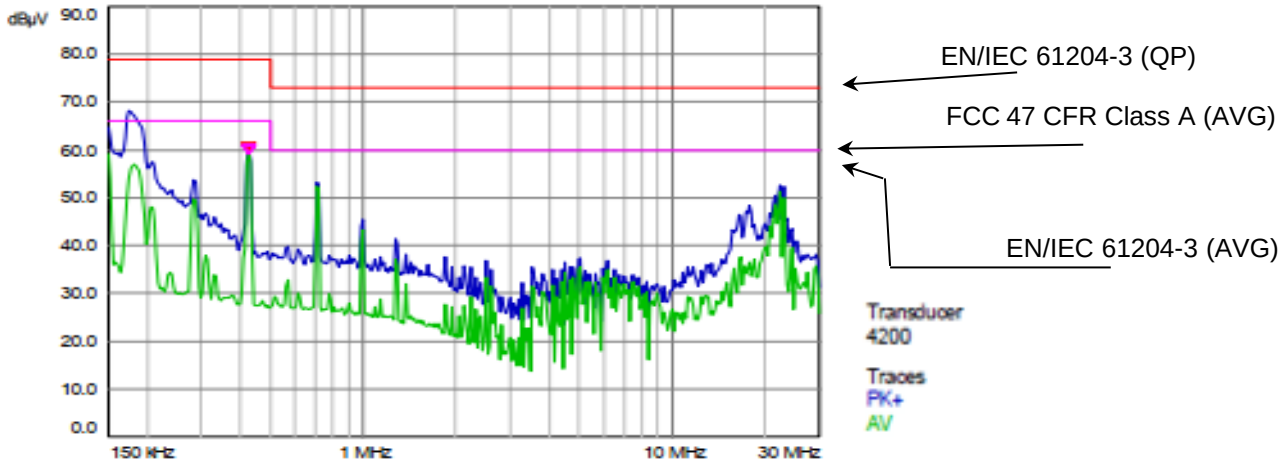
# 2. Test Data

## 2.1 Conducted Emission

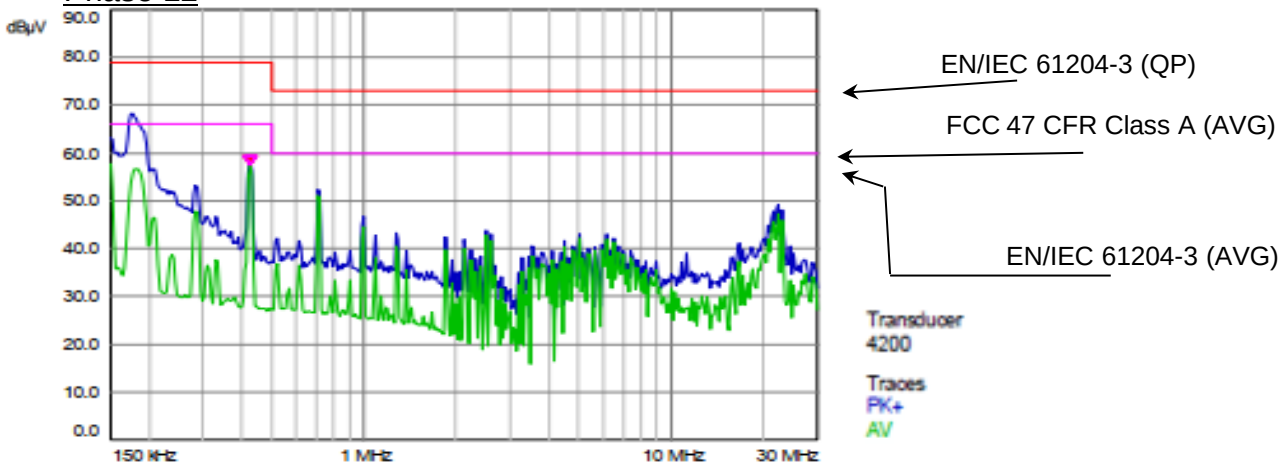
**MODEL: G600-12.5 3P208**

Conditions: Vin: 3PHASE 200VAC
Iout: 100%
Vout: 100%
Ta: 25°C

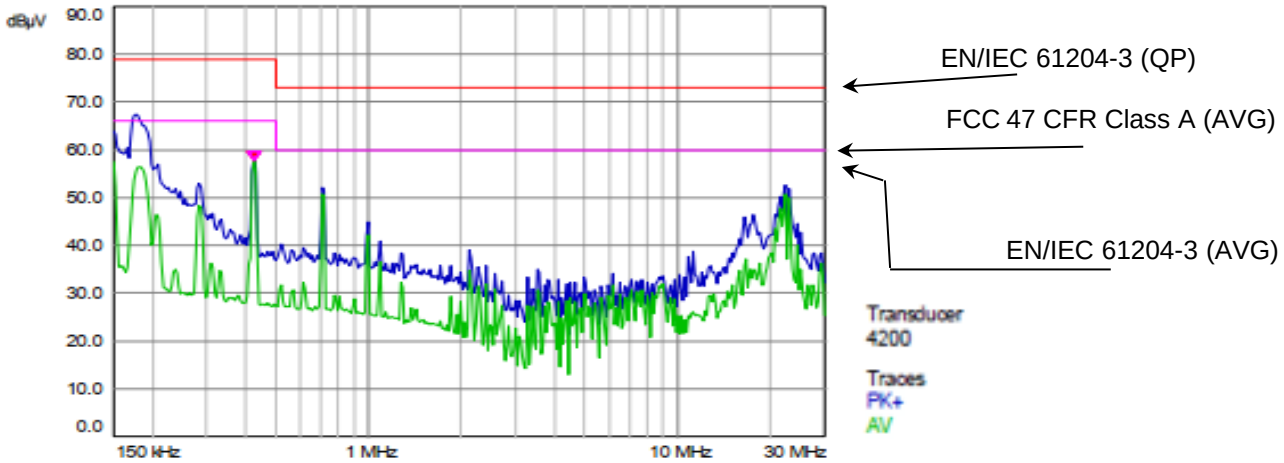
Phase L1




Phase L2




Phase L3



# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G600-12.5 3P480**

(1) Test condition

Input voltage/frequency: 3PHASE 400VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| **PHASE** | **FREQ** | **RESULT** | **LIMIT** | **MARGIN** |
| | | **AV** | **AV** | **AV** |
| | **MHz** | **dBµV** | **dBµV** | **dBµV** |
| L1 | ALL | N/A | Class A | >10 dB |
| L2 | ALL | N/A | Class A | >10 dB |
| L3 | ALL | N/A | Class A | >10 dB |

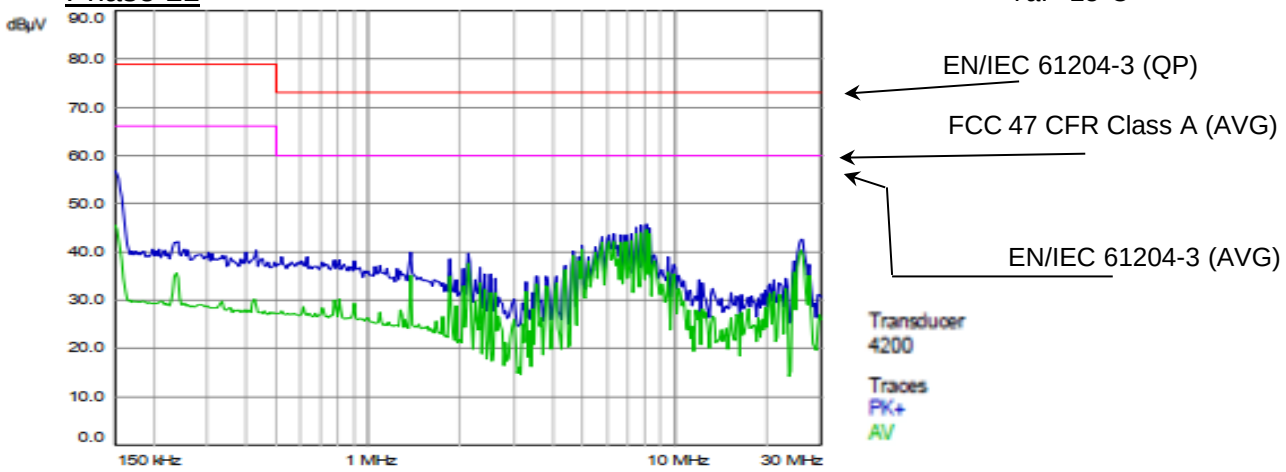
# 2. Test Data

## 2.1 Conducted Emission

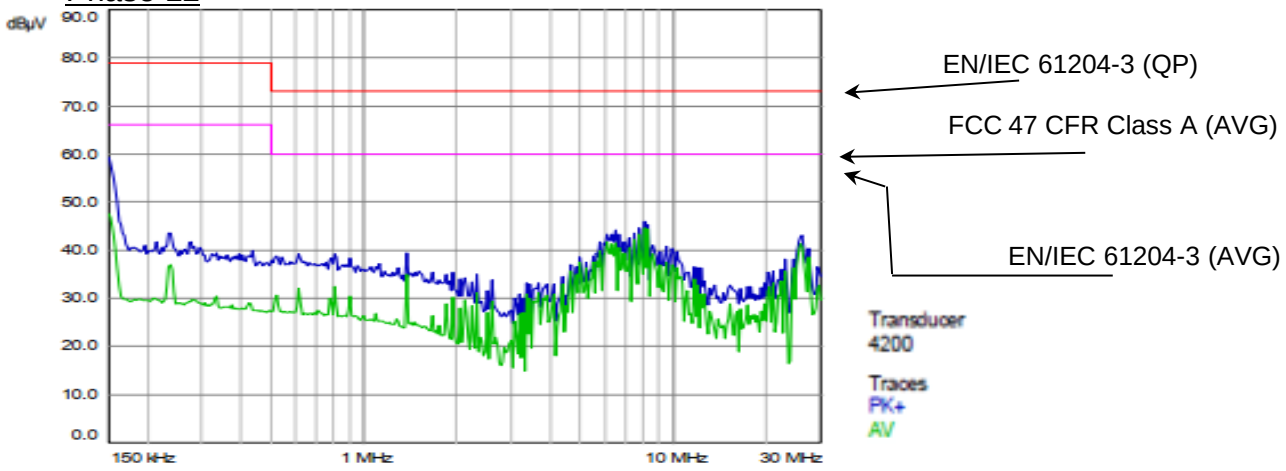
**MODEL: G600-12.5 3P480**

Conditions: Vin: 3PHASE 400VAC
Iout: 100%
Vout: 100%
Ta: 25°C

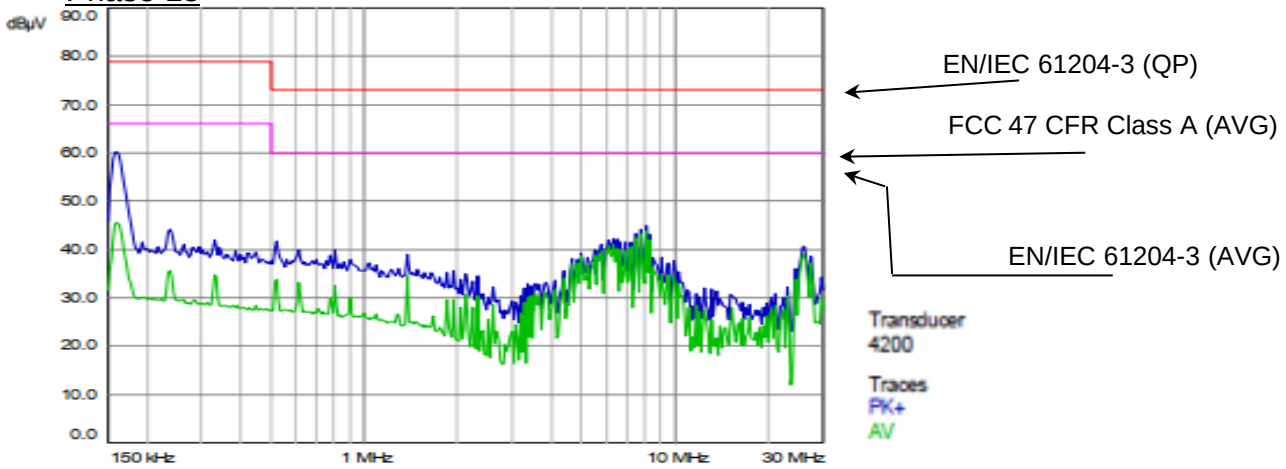
Phase L1




Phase L2




Phase L3



# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G1500-5 3P208**

(1) Test condition

Input voltage/frequency: 3PHASE 200VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| PHASE | FREQ | RESULT | LIMIT | MARGIN |
| | | AV | AV | AV |
| | MHz | dBµV | dBµV | dBµV |
| L1 | 0.23685 | 50.28 | 66.00 | 15.72 |
| L2 | 0.23708 | 49.45 | 66.00 | 16.55 |
| L3 | 0.23708 | 48.68 | 66.00 | 17.32 |

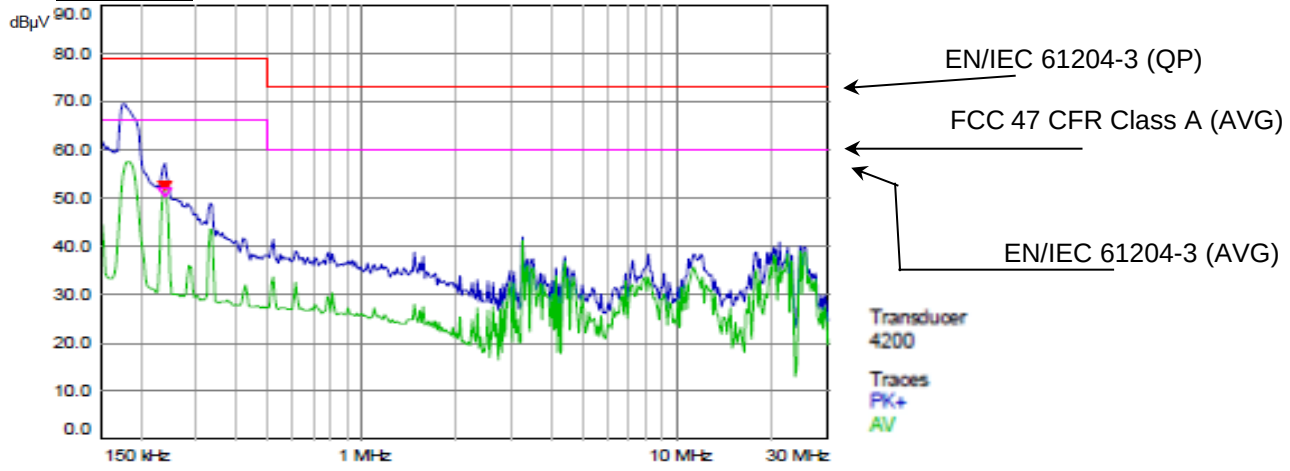
# 2. Test Data

## 2.1 Conducted Emission

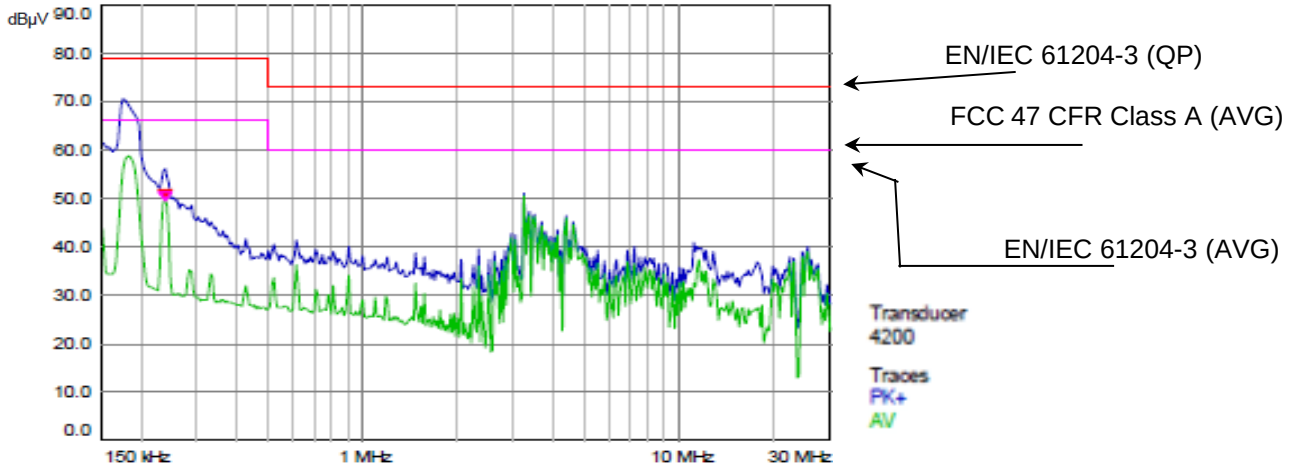
**MODEL: G1500-5 3P208**

Conditions: Vin: 3PHASE 200VAC
Iout: 100%
Vout: 100%
Ta: 25°C

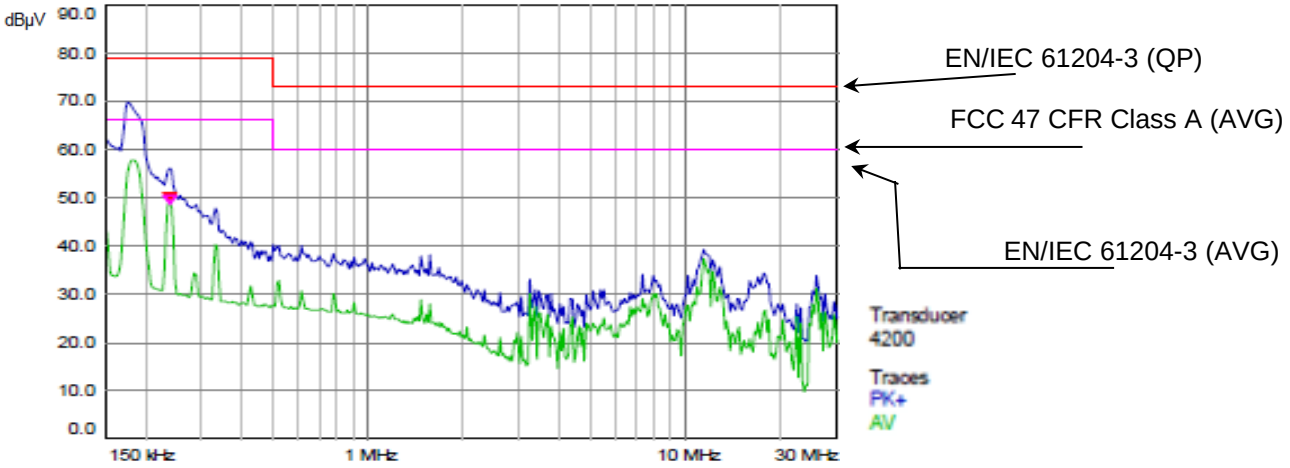
Phase L1




Phase L2




Phase L3



# 2. Test Data

## 2.1 Conducted Emission

**MODEL: G1500-5 3P480**

(1) Test condition

Input voltage/frequency: 3PHASE 400VAC/50Hz
Output current: 100%
Output voltage: 100%
Ambient temperature: 25°C
Regulation: FCC 47 CFR part 15 Class A, EN/IEC 61204-3, industrial environment

(2) Test results

Under the above test condition, emission level was below the limit line.
Refer to the following interference wave list and next page for spectrum data.

Inteference wave list

| FCC 47 CFR part 15 Class A, EN/IEC 61204-3 | | | | |
|---|---|---|---|---|
| PHASE | FREQ | RESULT | LIMIT | MARGIN |
| | | AV | AV | AV |
| | MHz | dBµV | dBµV | dBµV |
| L1 | 4.59592 | 45.65 | 60.00 | 14.35 |
| L2 | 4.59592 | 42.59 | 60.00 | 17.41 |
| L3 | 3.85071 | 21.84 | 60.00 | 38.16 |

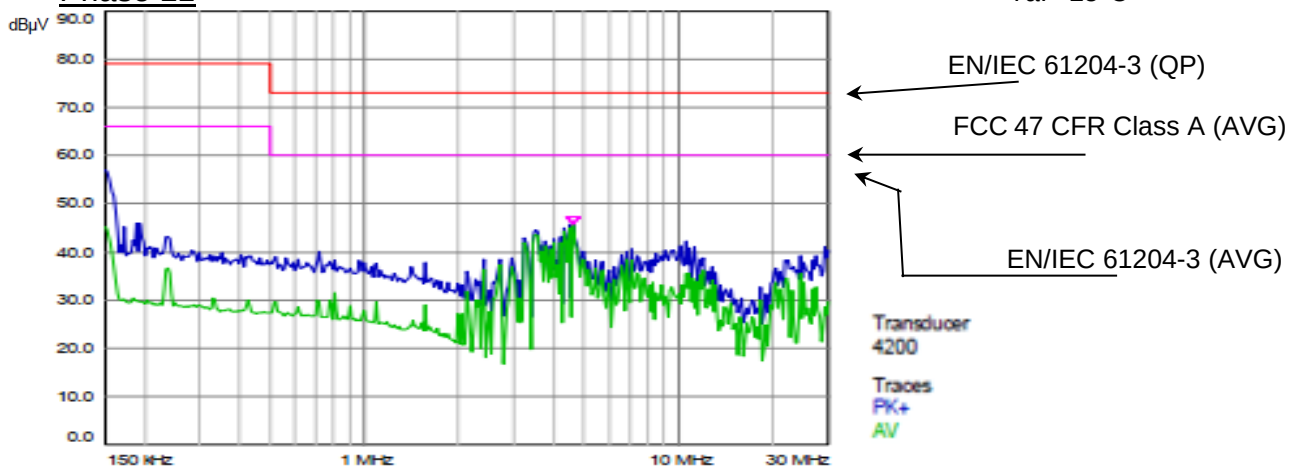
# 2. Test Data

## 2.1 Conducted Emission

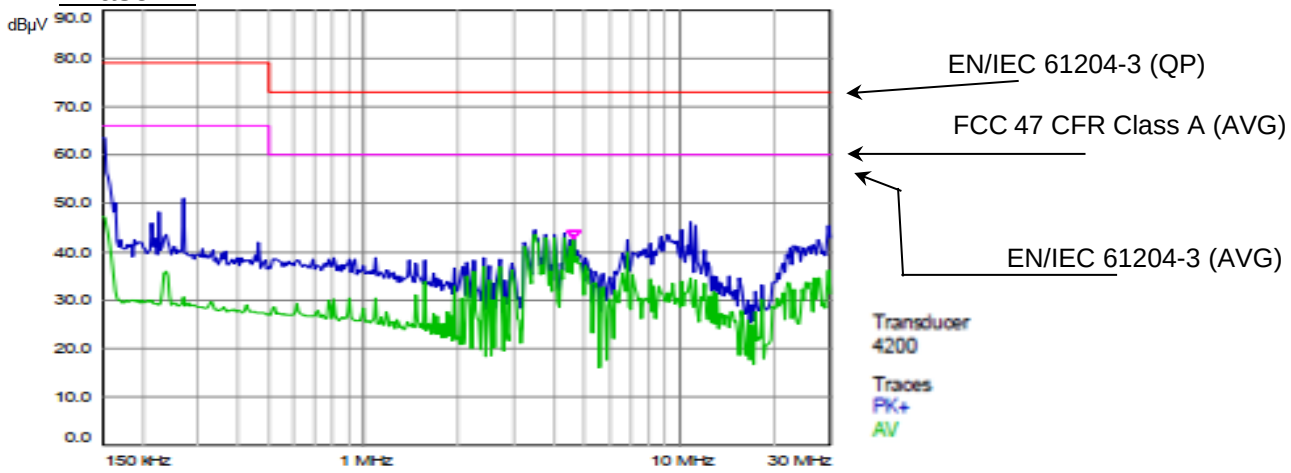
**MODEL: G1500-5 3P480**

Conditions: Vin: 3PHASE 400VAC
Iout: 100%
Vout: 100%
Ta: 25°C

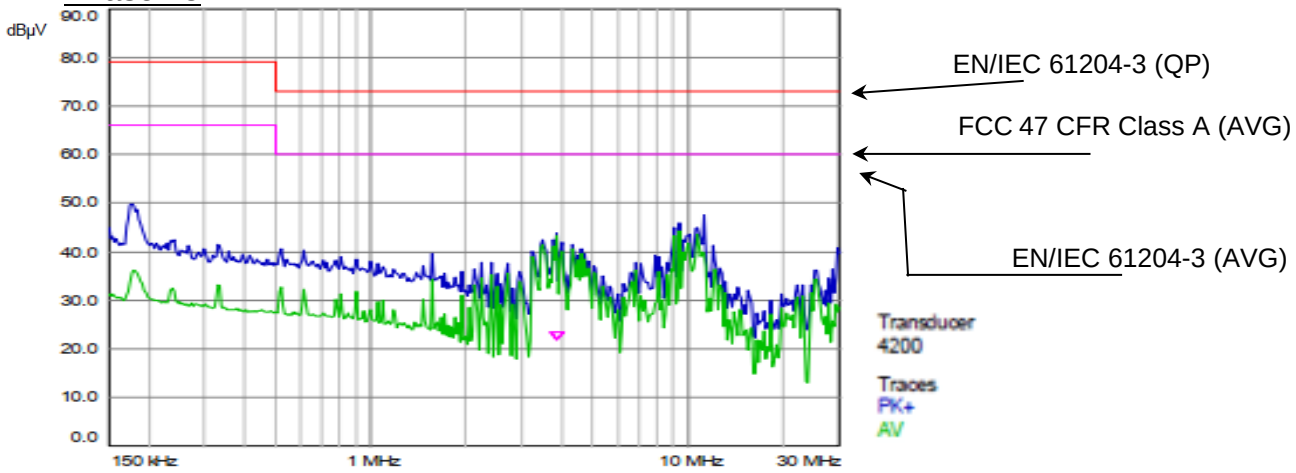
Phase L1




Phase L2




Phase L3



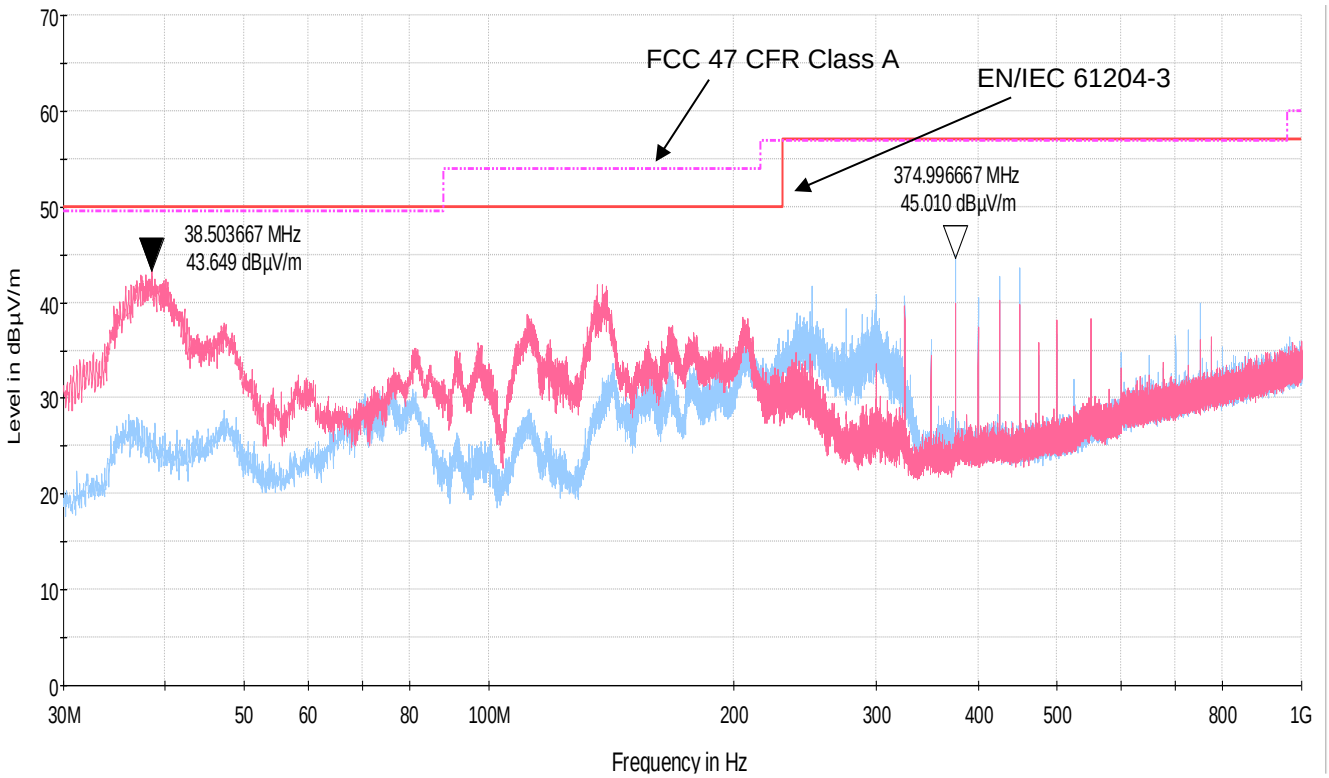
# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G20-375 3P208**

Conditions: Vin: 200Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL and VERTICAL




PINK- VERTICAL
BLUE- HORIZONTAL

| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| **FREQ** | **Quasi Peak** | **LIMIT** | **MARGIN** | **Hight** | **Pol** | **Azimuth** |
| **MHz** | **dBµV/m** | **dBµV/m** | **dB** | **cm** | | **deg** |
| 38.503667 | 40.45 | 49.50 | 9.05 | 100.0 | V | -153.0 |
| 374.996667 | 41.21 | 56.90 | 15.69 | 100.0 | H | 84.0 |

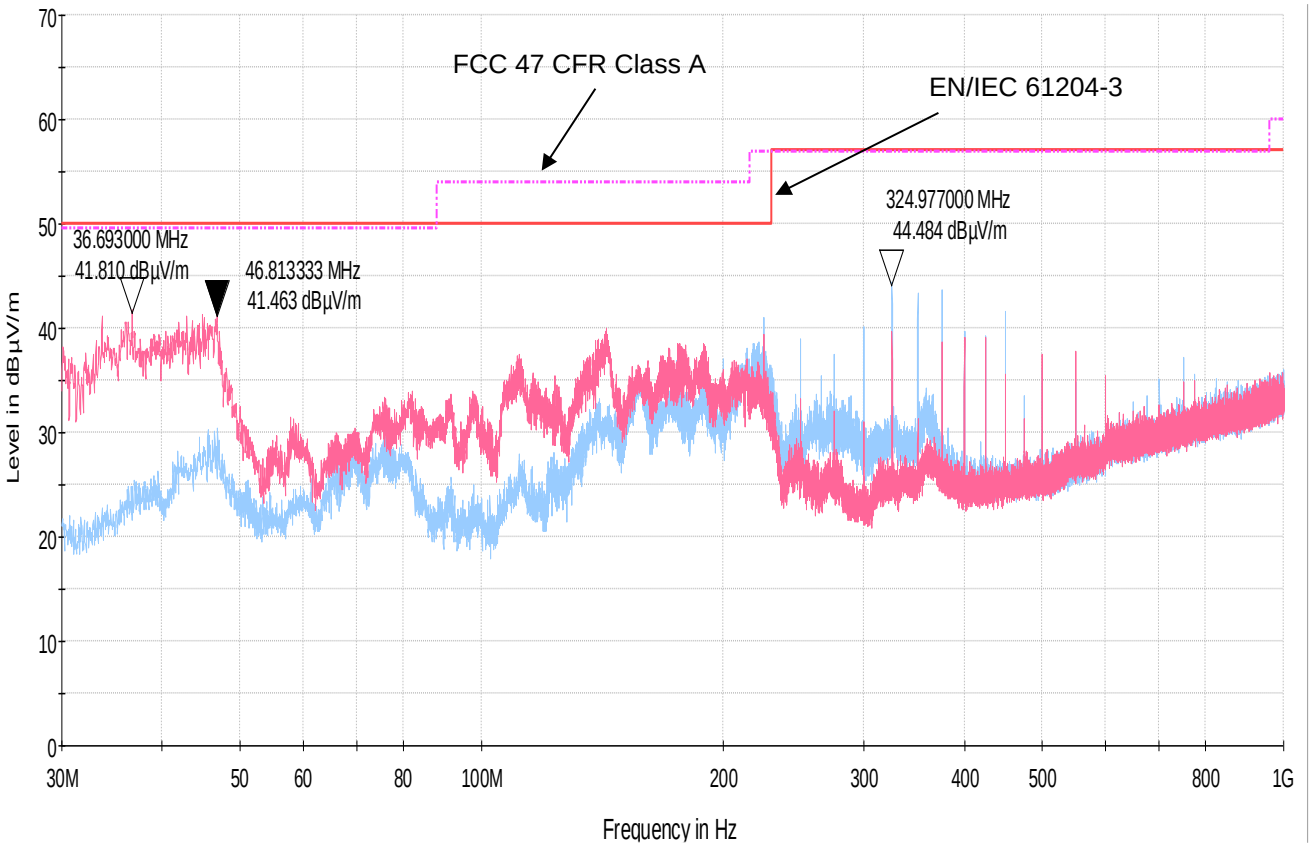
# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G20-375 3P480**

Conditions: Vin: 400Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL and VERTICAL




PINK- VERTICAL
BLUE- HORIZONTAL

| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| FREQ | Quasi Peak | LIMIT | MARGIN | Hight | Pol | Azimuth |
| MHz | dBµV/m | dBµV/m | dB | cm | | deg |
| 36.693000 | 38.210 | 50.00 | 11.79 | 102.0 | V | -156.0 |
| 46.813333 | 38.063 | 50.00 | 11.94 | 102.0 | V | 93.0 |
| 324.977000 | 40.784 | 57.00 | 16.22 | 100.0 | H | 94.0 |

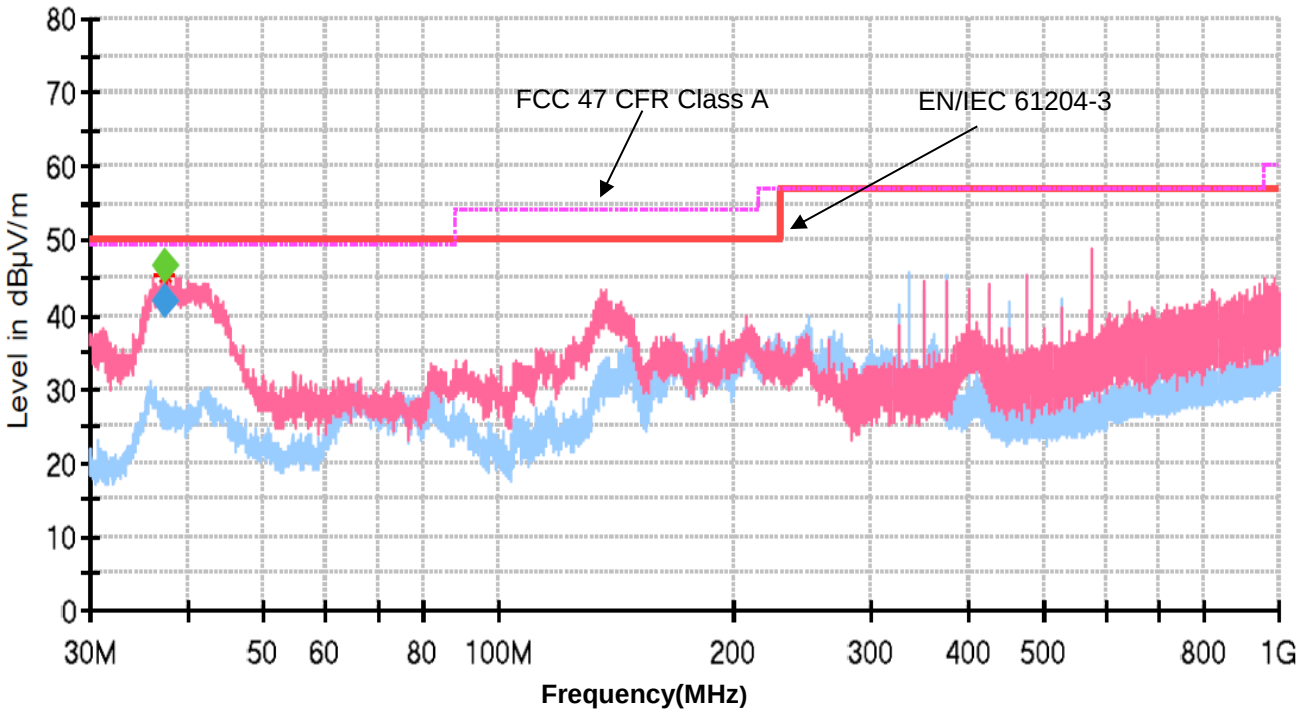
# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G100-75 3P208**

Conditions: Vin: 200Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL and VERTICAL




PINK- VERTICAL
BLUE- HORIZONTAL

| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| FREQ | Quasi Peak | LIMIT | MARGIN | Hight | Pol | Azimuth |
| MHz | dBµV/m | dBµV/m | dB | cm | | deg |
| 37.441631 | 41.84 | 49.50 | 7.66 | 102.0 | V | 161.0 |

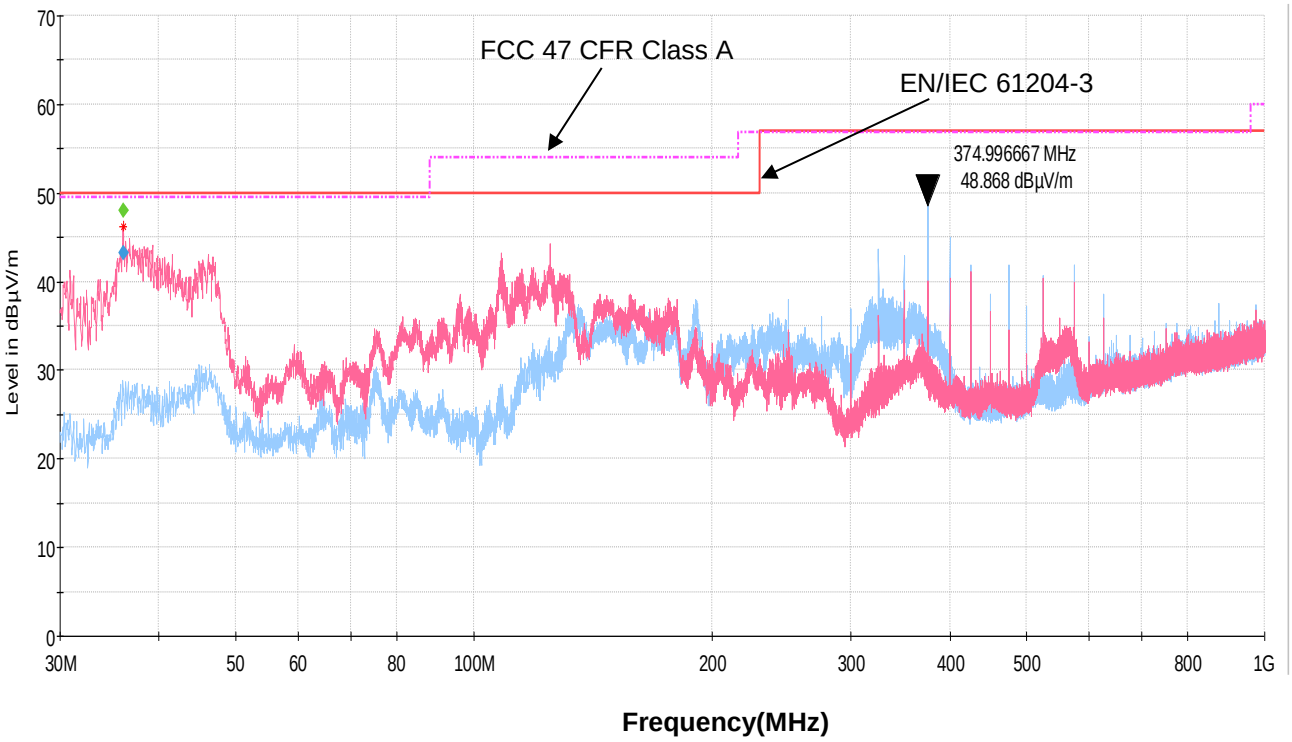
# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G100-75 3P480**

Conditions: Vin: 400Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL and VERTICAL




PINK- VERTICAL
BLUE- HORIZONTAL

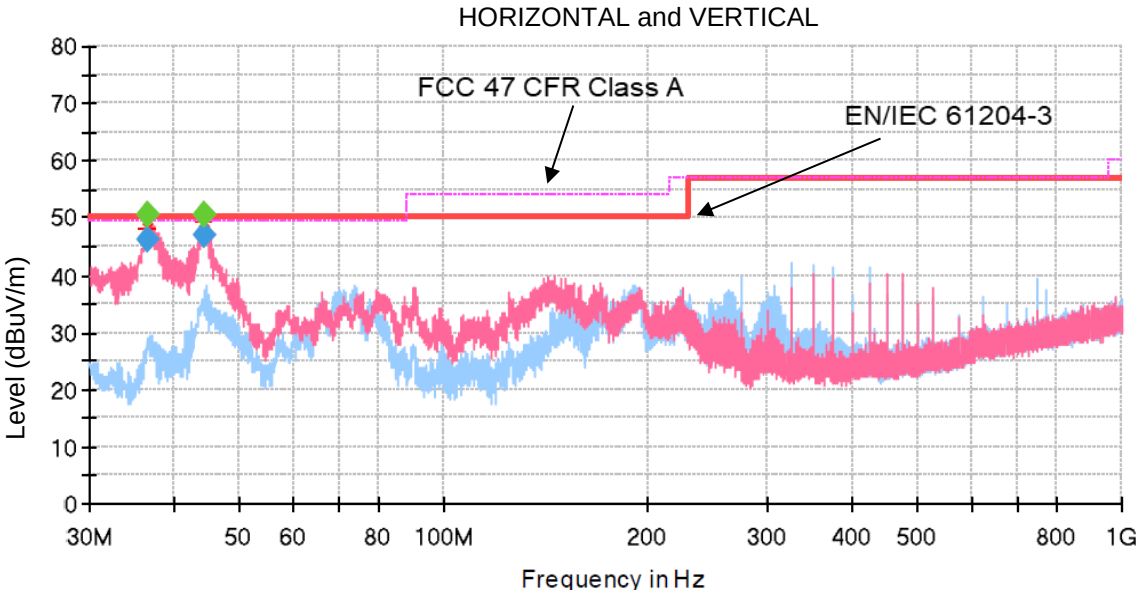
| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| **FREQ** | **Quasi Peak** | **LIMIT** | **MARGIN** | **Hight** | **Pol** | **Azimuth** |
| **MHz** | **dBµV/m** | **dBµV/m** | **dB** | **cm** | | **deg** |
| 36.0 | 43.30 | 50.00 | 6.70 | 100.0 | V | 58.0 |
| 374.9967 | 45.27 | 57.00 | 11.73 | 101.0 | H | 59.0 |

# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G600-12.5 3P208**

Conditions: Vin: 200Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C




PINK- VERTICAL
BLUE- HORIZONTAL

| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| FREQ | Quasi Peak | LIMIT | MARGIN | Hight | Pol | Azimuth |
| MHz | dBµV/m | dBµV/m | dB | cm | | deg |
| 36.529019 | 46.15 | 49.50 | 3.35 | 102.0 | V | -180.0 |
| 44.396204 | 46.96 | 49.50 | 2.54 | 102.0 | V | 104.0 |

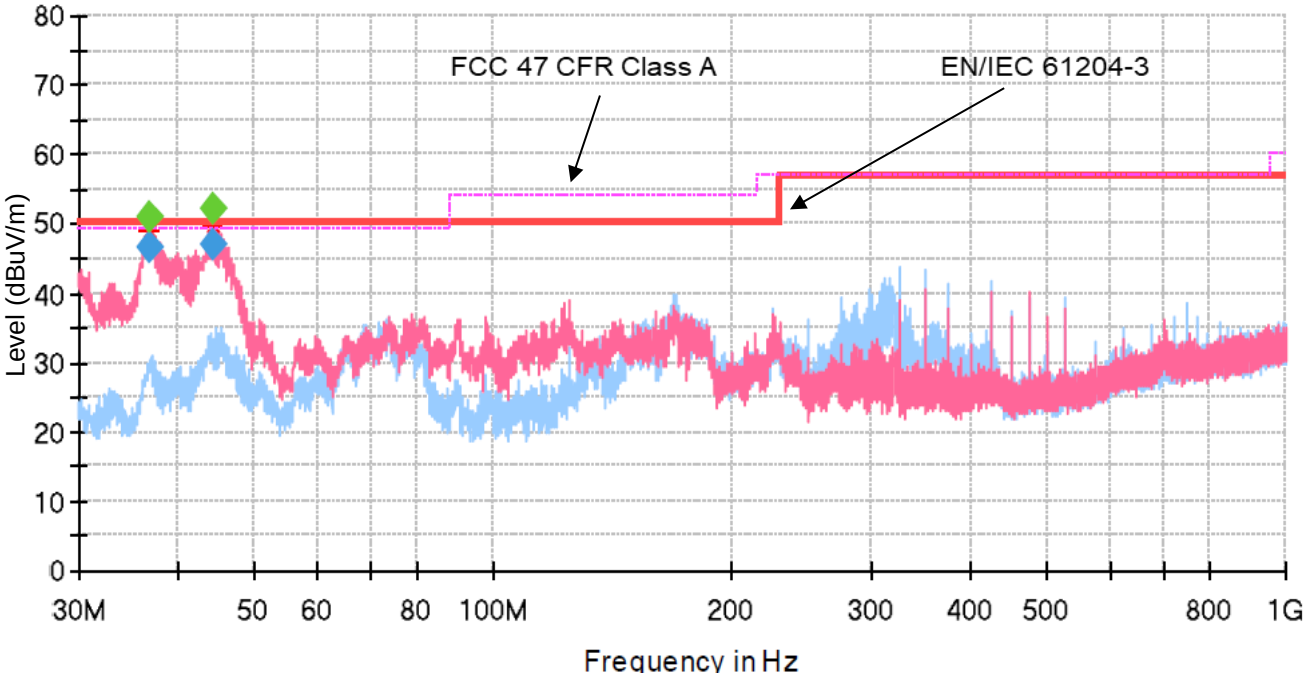
# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G600-12.5 3P480**

Conditions: Vin: 400Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL and VERTICAL




PINK- VERTICAL
BLUE- HORIZONTAL

| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| FREQ | Quasi Peak | LIMIT | MARGIN | Hight | Pol | Azimuth |
| MHz | dBµV/m | dBµV/m | dB | cm | | deg |
| 36.765019 | 46.66 | 50.00 | 3.34 | 104.0 | V | -156.0 |
| 44.424732 | 47.00 | 50.00 | 3.00 | 100.0 | V | 93.0 |

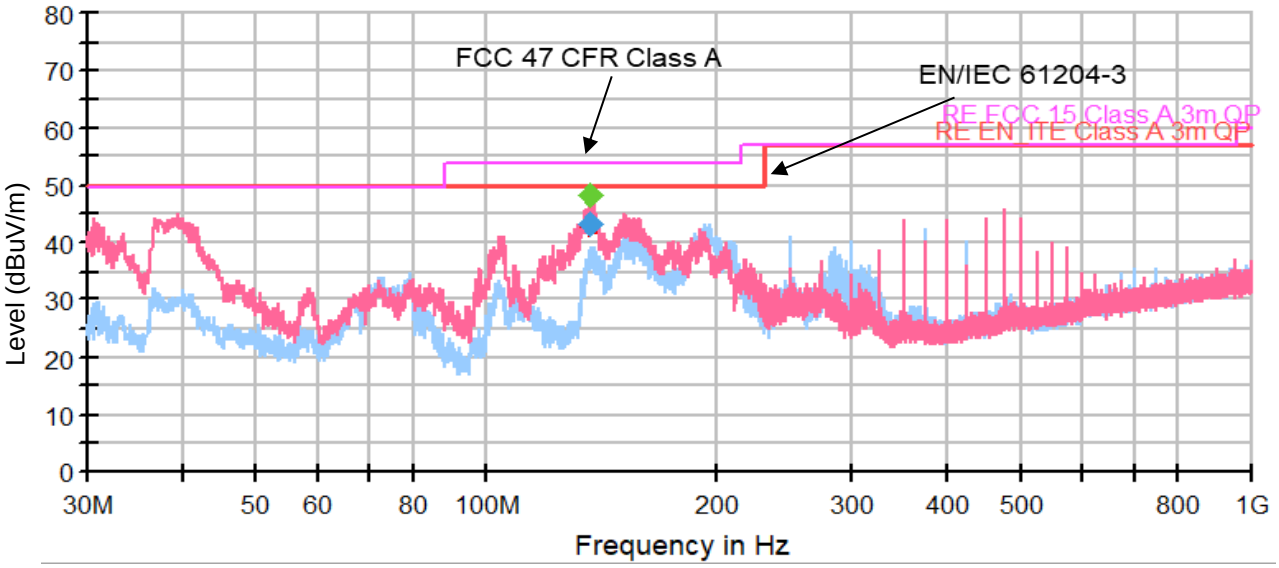
# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G1500-5 3P208**

Conditions: Vin: 200Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL and VERTICAL




PINK- VERTICAL
BLUE- HORIZONTAL

| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| FREQ | Quasi Peak | LIMIT | MARGIN | Hight | Pol | Azimuth |
| MHz | dBµV/m | dBµV/m | dB | cm | | deg |
| 135.9920 | 43.18 | 54.00 | 10.82 | 100.0 | V | 25.0 |

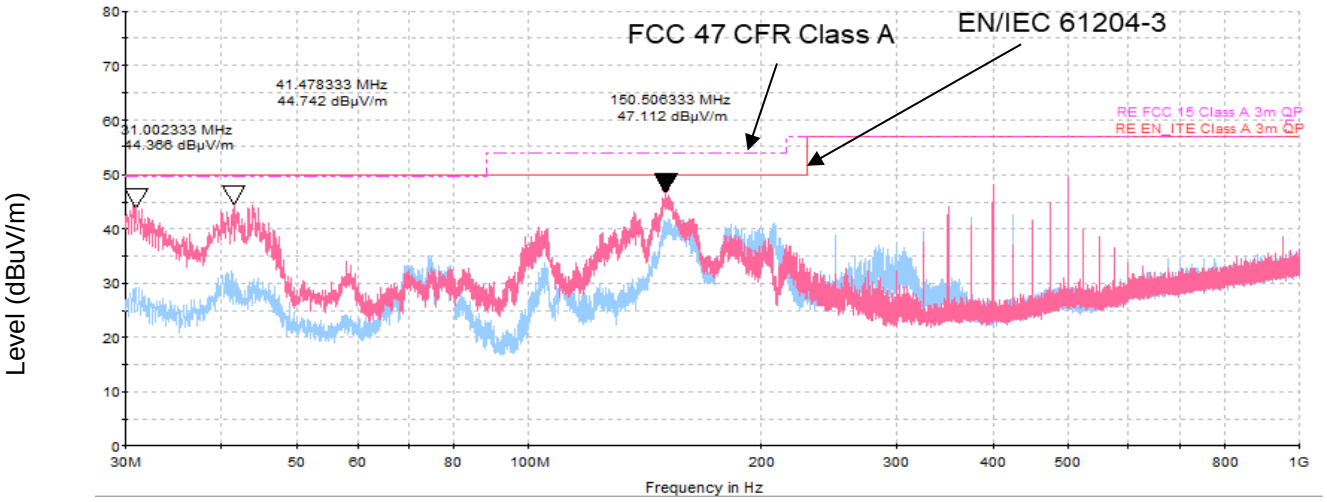
# 2. Test Data

## 2.2 Radiated Emission

**MODEL: G1500-5 3P480**

Conditions: Vin: 400Vac (L-L)
Vout: 100%
Iout: 100%
Ta: 25°C

HORIZONTAL and VERTICAL




PINK- VERTICAL
BLUE- HORIZONTAL

| Final Result | | | | | | |
|---|---|---|---|---|---|---|
| FREQ | Quasi Peak | LIMIT | MARGIN | Hight | Pol | Azimuth |
| MHz | dBµV/m | dBµV/m | dB | cm | | deg |
| 31.002333 | 41.066 | 50.00 | 8.93 | 102.0 | V | 156.0 |
| 41.478333 | 41.142 | 50.00 | 8.86 | 102.0 | V | 67.0 |
| 150.506333 | 44.012 | 50.00 | 5.99 | 100.0 | V | 94.0 |