

KHNA90F EMI/EMS Test result

June 6, 2014
Design engineering dep.

Approved: Yukihiro Takehashi
Yukihiro Takehashi

Prepared : Seiya Shimada Seiya Shimada

| No. | Test item | Conditions | Conditions of Acceptability | Result |
|-----|---|--|---|----------|
| | | (1) Rated input AC100V,120V,230V | (1)Meets the undermentioned standard. | - TOOUIT |
| 1 | Line conduction | (2) Rated load (3) Ambient temp. 25±10°C | FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B EN55011-B | ok |
| 2 | Radiated emission | (1) Rated input AC100V,120V,230V (2) Rated load (3) Ambient temp. 25±10°C | (1)Meets the undermentioned standard. FCC Part15 classB , VCCI classB CISPR22 classB , EN55022-B EN55011-B | ok |
| 3 | Harmonic current (EN61000-3-2) | (1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10°C | (1)Meets the undermentioned standard. EN61000-3-2 classA | 0< |
| 4 | Static electricity immunity test (EN61000-4-2) | (1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10°C (4) Contact discharge voltage 8[kV] (Level 4) | (1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure. | ok |
| 5 | Radiated, radio-frequency, electromagnetic field immunity test (EN61000-4-3) | (1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10°C (4)Testing field strength (Level 3) ① 10[V/m] (80MHz to 1.0GHz) ② 3[V/m] (1.4GHz to 2.0GHz) ③ 1[V/m] (2.0GHz to 2.7GHz) | (1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure. | ok |
| 6 | Electrical fast transient/ burst immunity test (EN61000-4-4) | (1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10°C (4) Test peak voltage 4[kV] (Level 4) | (1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure. | ok |
| 7 | Surge immunity test (EN61000-4-5) | (1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10°C (4) Test voltage Line to line 2[kV] (Level 3) Line to earth 4[kV] (Level 4) | (1)The power supply is not stop. (2)Circuit does not malfunction. (3)No abnormality of the insulation destruction etc. (4)Parts are no damaged. | ok |
| 8 | Immunity to conducted disturbances, induced by radio-frequency fields. (EN61000-4-6) | (1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10°C (4) Voltage level (e.m.f.) 10[V] (Level 3) | (1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure. | ok |
| 9 | Power frequency magnetic field immunity test (EN61000-4-8) | (1) Rated input AC230V (2) Rated load (3) Ambient temp. 25±10°C (4) Magnetic field strength 30[A/m] (Level 4) | (1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure. | ok |
| 10 | Voltage dips, short interruptions and voltage variations immunity test (EN61000-4-11) | (1) Rated input AC230V •30% reduction at 500ms min. •60% reduction at 200ms min. (2) Rated load (3) Ambient temp. 25±10°C | (1)No protection circuit failure. (2)No output voltage drop with control circuit failure. (3)No any other function failure. | ok |