T E S T R E P O R T

ebm-papst St. Georgen GmbH & Co. KG
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CONDUCTED EMISSION (VOLTAGE) - EN 55022:2006-09 (DIN EN 55022:2008-05)

1 OPERATOR

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2 BASIC INFORMATION

PPROJECT NUMBER	: EP/640728.00
CLIENT INHOUSE	: 560 Gerald Hogg - 1710
TEST PLAN	:
REQUIREMENT	: siehe Lastenheft EP/640728.00
EQUIPMENT UNDER TEST	: 2218F/2TDHHO
SERIES NUMBER	: 9295420201
SK-STATUS	: BV-Stand
SOFTWARE STATUS	: Version 5.2.1 15.11.2010
HARDWARE MODIFICATION	: Bestückung 024 mit Snubber 2n2 NP0
PCB NUMBER	: 6027654024
WMS STATUS	: 72
DATE CODE	: -
SAMPLE NUMBER	: -
VOLTAGE	: 48Vdc (36-72Vdc)
INPUT	: O-Steuereingang: 10Vdc
RPM	: nmax = 5000rpm
CURRENT	: 1000mA
LOAD	: free air load
CONNECTED TO PE/EARTH	: -
TYPE OF INPUT	: Analog, 0...10V oder PWM (0;12V)
TYPE OF OUTPUT	: Tacho (3xn)/60
LEAD/PIN 1	: red: positive power line
LEAD/PIN 2	: blue: negative power line
LEAD/PIN 3	: white: Tacho output (OC) /2
LEAD/PIN 4	: violet: O input
ADDITIONAL INFORMATION	: -

3 EQUIPMENT UNDER TEST



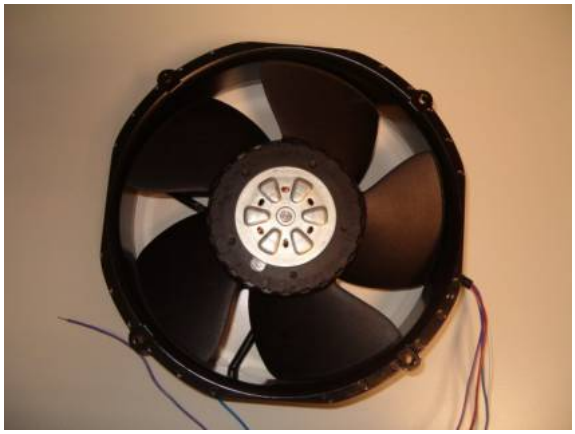
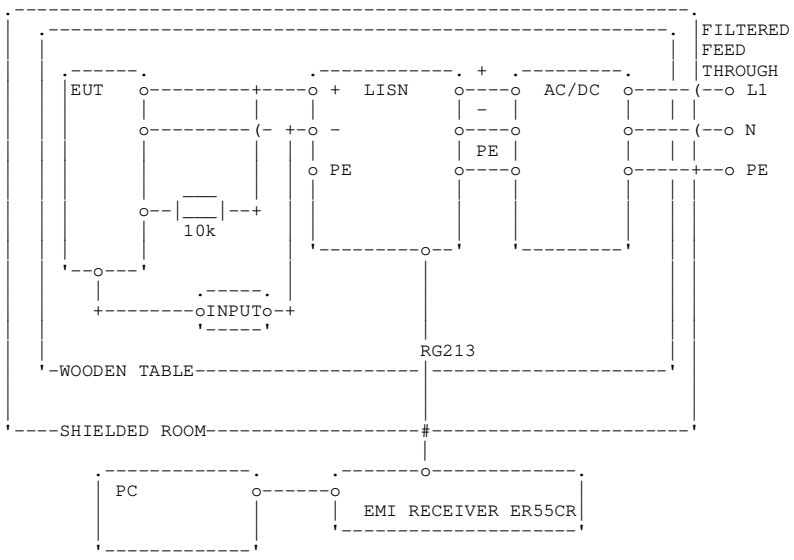


fig.01: EUT first side; fig.02: EUT second side

4 TEST SETUP BLOCK DIAGRAM



5 OPERATING STATE

SUPPLY VOLTAGE	+48Vdc (nominal)
CURRENT CONSUMPTION	according power supply: 1.1 A
ROTATION PER MINUTE	5038 rpm
INPUT	active 12Vdc
OUTPUT	active /2 tacho signal (open collector; 2 pulses per rotation)
EARTH/PE	EUT insulated (not connected to PE/safety earth)
LOAD	free air flow

6 PLOT OF DATA

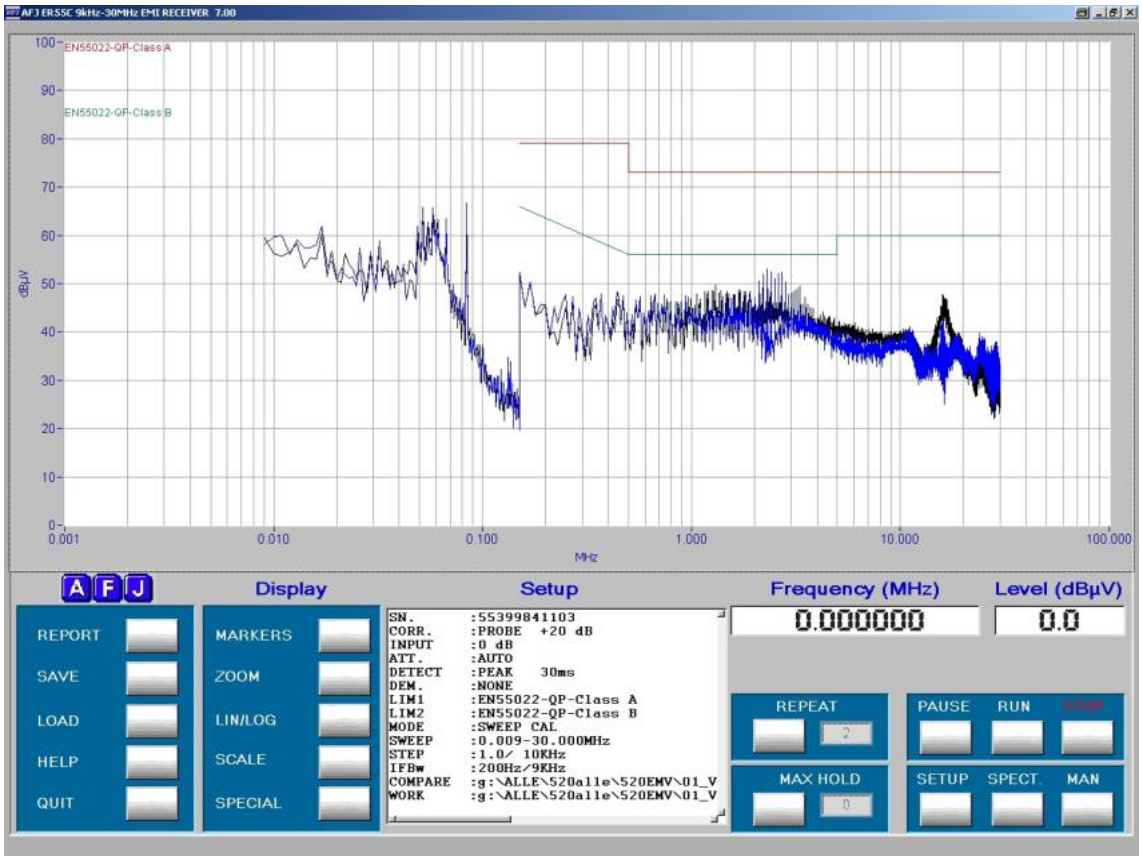


fig.03: Plot of result

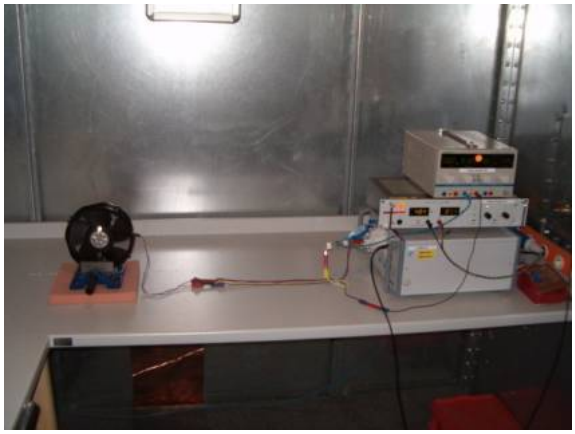
7 MANUAL DATA

black: M01_L_101118-1622.CSW
blue: M01_N_101118-1635.CSW

8 RESULT EVALUATION

PASS

9 PICTURES OF TEST



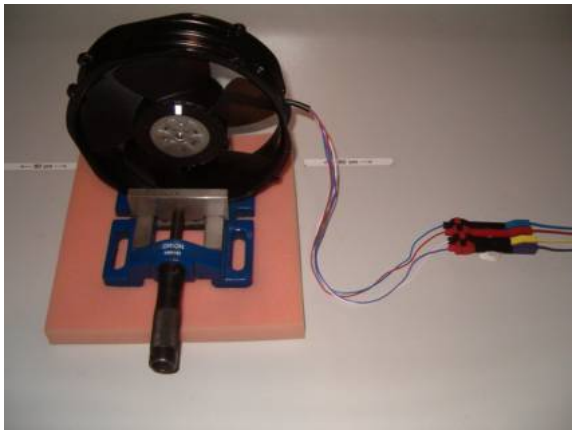


fig.04; fig.05

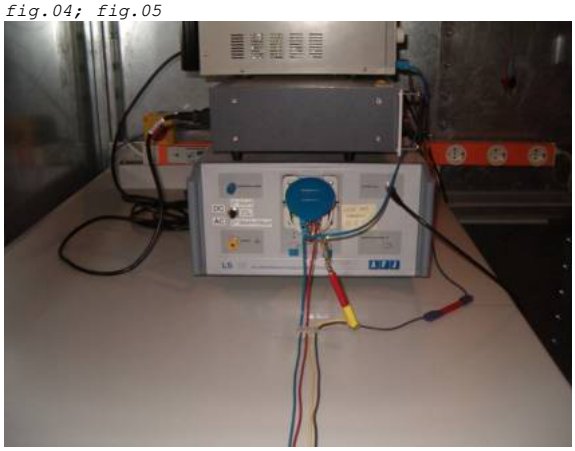




fig.06; fig.07



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picture and is
intentionally white

fig.08; fig.09

10 ADDITIONAL

NO ADDITIONAL INFORMATION INCLUDED

11 TEST EQUIPMENT

TEST SITES ARE NORMALLY EQUIPED WITH THE FOLLOWING HARDWARE

*** TEST SITE 01: BURST
POWER SUPPLY 03; SM7020D; Delta Elektronika; 24357
BURST-GENERATOR 01; CE-Burst; Hilo Test; 24356
COUPLING CLAMP 01; HFK; EM Test
DECOUPLING CLAMP 01; FTC40X15E; Lüthi; 100529

*** TEST SITE 02: SURGE
POWER SUPPLY 03; SM7020D; Delta Elektronika; 24357
SURGE GENERATOR 02; CE-SURGE; HILO TEST; 26909

*** TEST SITE 03: CONDUCTED EMISSION
LISN 01; LS16; AFJ; -; -;
POWER SUPPLY 04; 6010-D; Peak Tech; -; -;
MESSEMPFÄNGER 01; ER55CR EMI-Receiver; AFJ; 15228; 650.0002.0

*** TEST SITE 04: ESD
POWER SUPPLY 02; SM7020D; Delta Elektronika; 24359
ESD GENERATOR 01; Teseq; 1000428
OSCILLOSCOPE 03; 8832;
POWER SUPPLY 13; Voltcraft
ESD SWITCH; ebm-papst St. Georgen

*** TEST SITE 05 CONDUCTED IMMUNITY
POWER SUPPLY 02; SM7020D; Delta Elektronika; 24359
HF GENERATOR 01; CWS 500; EM Test; 20662
CDN M2; EM test
CDN M3; EM Test
CDN AF4; EM Test
CDN AF2; EM Test
CDN T2; EM Test
INJECTION CLAMP 01; EM Test

*** TEST SITE 06: RADIATED EMISSION
POWER SUPPLY 07; SM7020D; Delta Elektronika; 12516
POWER SUPPLY 05; SM7020D; Delta Elektronika; 24358
MESSEMPFÄNGER 01; ER55CR EMI-Receiver; AFJ; 15228; 650.0002.0

*** TEST SITE 07: RADIATED IMMUNITY
POWER SUPPLY 07; SM7020D; Delta Elektronika; 12516
POWER SUPPLY 05; SM7020D; Delta Elektronika; 24358
SIGNAL GENERATOR 01; SML 02; Rohde & Schwarz; 20657; 650.001.0
RF POWER AMPLIFIER 01; FLH-100; Frankonia; 20658

*** TEST SITE 08: ISO 7637
POWER SUPPLY 06; VDS200; EM-Test
COUPLING NETWORK AUTOM; CNA200; EM-Test
BURST GENERATOR 04; EFT200; EM-Test
MICROPULS GENERATOR; MPG200; EM-Test
LOAD DUMP GENERATOR; LD 200; EM-Test

*** ESA-SYSTEM:
CURRENT PROBE; HFW21; LangerEMV
POWER SUPPLY 09; 6010-D; Peak Tech
BASE PLATE; GP21; LangerEMV
SPECTRUM ANALYZER 03; HM5530; Hameg; 27377