



America

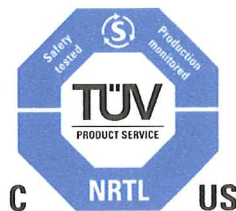
# CERTIFICATE

No. U8 11 07 40676 047

**Holder of Certificate:** **SAMSUNG TECHWIN CO., LTD.**  
 42, Sungju-dong, Changwon-si,  
 Gyeongsangnam-do 641-716  
 REPUBLIC OF KOREA

**Production Facility(ies):** 40676, 70297

**Certification Mark:**



**Product:** **Video recorder  
 NVR (Network Video Recorder)**

**Model(s):** **SRN-1670D, SRN-1670DP, SRN-1670DN  
 ("SAMSUNG")**

**Parameters:**

Rated voltage:	100-240 V~
Rated frequency:	50/60 Hz
Rated current:	4-1.5 A
Protection class:	I

**Tested according to:** UL 60950-1:2007  
 CAN/CSA C22.2 No. 60950-1:2007

The product was voluntarily tested according to the relevant safety requirements and mentioned properties. It can be marked with the certification mark shown above. The certification mark must not be altered in any way. This product certification system operated by TÜV SÜD America Inc. most closely resembles that described by ISO/IEC Guide 67, Conformity assessment - Fundamentals of product certification, System 3. See also notes overleaf.

**Test report no.:** 077-210761-000

**Date,** 2011-07-14

Page 1 of 1



# Aufbauübersicht für Elektrogeräte und Maschinen

## Data form for electrical equipment and machinery

(for NRTL, see working instruction TCSNRTL-CDF001)



Seite von  
Page 1 of 4


**Auftraggeber / Applicant:** SAMSUNG TECHWIN CO., LTD. (40676)  
42, Sungju-dong, Changwon-si, Gyeongsangnam-do, 641-716, Republic of Korea

**Fertigungsstätte / Production facility:**

1. SAMSUNG TECHWIN CO., LTD. (40676)  
42, Sungju-dong, Changwon-si, Gyeongsangnam-do, 641-716, Republic of Korea
2. TIANJIN SAMSUNG TECHWIN OPTO-ELECTRONIC CO., LTD. (70297)  
11 WEILIU RD, MICRO-ELECTRONIC INDUSTRIAL PARK, TEDA, TIANJIN, 300385, People's Republic of China

**Geräteart / Type of equipment:** NVR (Network Video Recorder)

**Typenbezeichnung / Type/model:** SRN-1670D, SRN-1670DP, SRN-1670DN

**Warenzeichen / Trade mark:** 

**Seriennr. / Serial no.:** N/A

**Nennspannung/Nennaufnahme/Nennstrom/Frequenz/Rated voltage/frequency/Rated input power/current:**  
100-240 V~, 50/60 Hz, 4-1.5 A

**Anschlußdaten-Hydraulik: / Connection to hydraulic power:** N/A

**Anschlußdaten-Pneumatik / Connection to pneumatic power:** N/A

**Anschlußdaten-Wasser / Connection to water installation:** N/A

**Gewicht / weight:** 9.4 kg

**Lärmemission / noise emission (dB A):**

**Ausführung / Construction:**

Ortsfest	Stationary	<input checked="" type="checkbox"/>
Ortsveränderlich	Portable	<input type="checkbox"/>
Handgerät	Hand-held	<input type="checkbox"/>
Einbaugerät	Open-frame	<input type="checkbox"/>

**Schutzklasse / Protection class:**

Schutzklasse I:	Schutzleiteranschluß	PE-connection	<input checked="" type="checkbox"/>
Schutzklasse II:	Schutzisoliert	Double insulation	<input type="checkbox"/>
Schutzklasse III:	Schutzkleinspannung/ interne Stromversorgung	SELV/internally powered	<input type="checkbox"/>


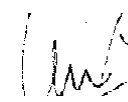
**Schutzart / Degree of protection against liquids:** IPX0

**Anschlußart / Supply connection:**

Feste Anschlußleitung	Non detachable cord	<input type="checkbox"/>
Fester Anschluß	Permanent connection	<input type="checkbox"/>
Gerätesteckvorrichtung	Appliance inlet	<input checked="" type="checkbox"/>

**Netzbetriebsart / Rated operation:**

Dauerbetrieb	Continuous operation	<input checked="" type="checkbox"/>
Aussetzbetrieb	Intermittent operation	<input type="checkbox"/>
Kurzzeitbetrieb	Short time operation	<input type="checkbox"/>

<p><b>Prüfbericht Nr. / Test Report No.:</b> 077-210761-000</p> <p><b>Projektleiter / Project manager:</b> Kevin Park</p> 	<p><b>Ort / place:</b> SAMSUNG TECHWIN CO., LTD. (40676) 42, Sungju-dong, Changwon-si, Gyeongsangnam-do, 641-716, Republic of Korea</p> <p><b>Datum / date:</b> 2011-07-12</p> <p><b>Stempel und Unterschrift / Seal and signature</b> Jeisoon Kang</p> 
---	---

# Aufbauübersicht für Elektrogeräte und Maschinen

## Data form for electrical equipment and machinery

(for NRTL, see working instruction TCSNRTL-CDF001)



Seite von  
Page 1 of 4

**Material:** a) Gehäuse / Enclosure  
b) Leiterplatten / p.c.b

See appended table(Safety relevant components)  
See appended table(Safety relevant components)

### Zusätzliche Angaben für Laser, Klassifizierung nach EN 60825 (bzw. UL für NRTL)

Additional information for Laser equipment, classification according to EN 60825 (UL for NRTL)

**Klasse / Class:** See appended table(Safety relevant components)

**Wellenlänge / Wavelength:** See appended table(Safety relevant components)

**Pulsdauer / Pulse duration:** See appended table(Safety relevant components)

Prüfbericht Nr. / Test Report No.: 077-210761-000

Projektleiter / Project manager:  
Kevin Park

Ort / place: SAMSUNG TECHWIN CO., LTD. (40676)  
42, Sungju-dong, Changwon-si, Gyeongsangnam-do,  
641-716, Republic of Korea

Datum / date: 2011-07-12

Stempel und Unterschrift / Seal and signature  
Jeisoon Kang

# Aufbauübersicht für Elektrogeräte und Maschinen

## Data form for electrical equipment and machinery



(for NRTL, see working instruction TCSNRTL-CDF001)


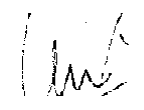
Seite von  
Page 3 of 4

**Sicherheitsrelevante Bauteile: (Schalter, Temperaturregler, Heizkörper, Stecker, Fassungen, Leitungen, Kondensatoren, Motoren und sonstige Wicklungen z.B. Transformatoren, Magnetspulen) (Not-Aus Geräte, 2-Handsteuerungen, Verriegelungsschalter, Sicherheits-Lichtschranken, Sicherheitsventile, Programmierbare Steuerungen-SPS, hydraulische Steuerungen, pneumatische Steuerungen .....**

Safety relevant components: (switch, temperature regulator, heating element, plug, socket, wiring, capacitor, motors and other components with windings e.g. transformers, coils)

(emergency off devices, 2-hand-control-devices, interlock switches, safety light barriers, safety valves, programmable electronic controllers -PLC, hydraulic controllers, pneumatic controllers .....

Bauteil/ Kind of component	Hersteller/ Manufacturer	Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse/ Information about type, current, power, transformer specification number, insulating class		Prüfzeichen von Test mark from (VDE, BSI, UL etc.)	
Power cord set (CA, USA type)	Kuk Je Tong Shin Co., Ltd.	KJP-120 SVT KJC-303	10 A, 125 V~ 3 x 18 AWG 10 A, 125 V~	UL 817/UL 62 CSA C22.2 No.21/CSA C22.2 No.49	cETLus
Alt.	Various	Various	Type SVT or SJT, 18 AWG, 0.75 mm <sup>2</sup> , 125 V, 10 A, Max. 4.5 m long One end with NEMA 5- 15P Other end with appliance coupler.	UL 817/UL 62 CSA C22.2 No.21/CSA C22.2 No.49	UL cUL
Power supply	FSP Group Inc.	FSP250-50GUB	Input: 100-240 V~, 50-60 Hz, 4-1.5 A, Class I DC output: +3.3 V / 17.0 A, +5 V / 18.0 A, +12 V / 17.0 A, -12 V / 0.8 A, +5 Vsb / 2.0 A, +3.3 V and +5 V = 105 W max.	IEC 60950-1 ANSI/UL 60950-1 CAN/CSA-C22.2 No. 60950-1	NEMKO UL cUL
Hard Disk Drive x 5 ea (optional)	Seagate or equivalent	ST31000424CS or equivalent	5 V d.c., Max. 1.5 A 12 V d.c., Max. 1.5 A	IEC 60950-1 ANSI/UL 60950-1 CAN/CSA-C22.2 No. 60950-1	UL(CB) UL cUL
DVD Writer	Toshiba Samsung Storage Technology or equivalent	TS-H663 or equivalent	Class 1 Laser Product 5 V d.c., 1.0 or 1.5 A 12 V d.c., 1.5 or 2.0 A	IEC 60950-1 ANSI/UL 60950-1 CAN/CSA-C22.2 No. 60950-1	NEMKO UL cUL

<b>Prüfbericht Nr. / Test Report No.: 077-210761-000</b>  <b>Projektleiter / Project manager:</b> <b>Kevin Park</b> 	<b>Ort / place: SAMSUNG TECHWIN CO., LTD. (40676)</b> <b>42, Sungju-dong, Changwon-si, Gyeongsangnam-do,</b> <b>641-716, Republic of Korea</b>  <b>Datum / date: 2011-07-12</b> <b>Stempel und Unterschrift / Seal and signature</b> <b>Jeison Kang</b> 
--	---

# Aufbauübersicht für Elektrogeräte und Maschinen

## Data form for electrical equipment and machinery



(for NRTL, see working instruction TCSNRTL-CDF001)


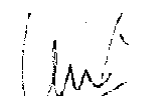
Seite von  
Page 4 of 4

**Sicherheitsrelevante Bauteile: (Schalter, Temperaturregler, Heizkörper, Stecker, Fassungen, Leitungen, Kondensatoren, Motoren und sonstige Wicklungen z.B. Transformatoren, Magnetspulen) (Not-Aus Geräte, 2-Handsteuerungen, Verriegelungsschalter, Sicherheits-Lichtschranken, Sicherheitsventile, Programmierbare Steuerungen-SPS, hydraulische Steuerungen, pneumatische Steuerungen .....**

Safety relevant components: (switch, temperature regulator, heating element, plug, socket, wiring, capacitor, motors and other components with windings e.g. transformers, coils)

(emergency off devices, 2-hand-control-devices, interlock switches, safety light barriers, safety valves, programmable electronic controllers -PLC, hydraulic controllers, pneumatic controllers .....

Bauteil/ Kind of component	Hersteller/ Manufacturer	Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse / Information about type, current, power, transformer specification number, insulating class		Prüfzeichen von Test mark from (VDE, BSI, UL etc.)	
Lithium battery (BAT1)	Hitachi Maxell Ltd	CR2025	3.0 V d.c., Max Abnormal Charging Current 10 mA	UL 1642	UL
Alt.	Vic-Dawn Enterprise Co., Ltd	CR2025	3.0 V d.c., Max Abnormal Charging Current 10 mA	UL 1642	UL
Protection IC (IC31) for Lithium battery	Maxim Integrated Products	DS3232	V <sub>BAT</sub> : 3.0 V Active Supply Current: 200 uA	UL 60950-1 CAN/CSA C22.2 No. 60950-1	UL
Protector IC for Front & rear USB port (U8, U9, U13)	Texas Instruments Inc	TPS2062	2.7-5.5 V d.c., Protection Current: 5 A	UL 2367	UL
Front enclosure	Cheil Industries Inc Chemicals Div	NT-7200(e)(f2)	V-0, 60 °C Min. 2.6 mm thickness	UL 94	UL
Others enclosure	Various	Various	Metal, Min. 0.5 mm thickness	UL/CSA 60950-1	Tested in equipment

Prüfbericht Nr. / Test Report No.: <b>077-210761-000</b>  Projektleiter / Project manager: <b>Kevin Park</b> 	Ort / place: <b>SAMSUNG TECHWIN CO., LTD. (40676)</b> <b>42, Sungju-dong, Changwon-si, Gyeongsangnam-do,</b> <b>641-716, Republic of Korea</b>  Datum / date: <b>2011-07-12</b> Stempel und Unterschrift / Seal and signature <b>Jeison Kang</b> 
---	--