

# Certificate © SEV

Confirmation of testing to provide evidence to legal requirements

CERTIFEL

Certificate ref.no. CH-TMP-03-IK-0233.ZA1.B  
page 1 of 2

Product	Multi Core Control Cables
Applicant	Studer Cable and Wire Manufacturer Ltd., CH - 4658 Däniken, Switzerland
Manufacturer	Studer Cable and Wire Manufacturer Ltd., CH - 4658 Däniken, Switzerland
Manufactured at/Factory	Studer Cable and Wire Manufacturer Ltd., CH - 4658 Däniken, Switzerland
Trade-mark	BETAflam
Type/Model	JE-H(St)H...Bd FE180 E30...E90 (see also page 2) JE-H(St)HRH...Bd FE180 E30...E90
Ratings, characteristics	70/110V, 90°C, (see also page 2) 1...12 x 2 x Ø0.8mm and 1.5mm <sup>2</sup>
Additional information	Test Procedure, Scope of test, (see page 2) Type list, Cable description
Standards safety	---
Standards EMC	---
Other standards	Fire standard EN 50200:2000 (Classification PH90)

The product has been tested according to aforementioned normative documents assumed to be sufficient to provide evidence to legal requirements for authorities in Switzerland (NEV/VEMV) and EU/EWR (directives)

Results of testing are shown in report number:  
03-IK-0233.01

**Swiss Electrotechnical Association**



Hans Roschmann  
Product Certification



SCES 035  
(EN 45011)

Fehraltorf, 2003-11-13

Schweizerischer Elektrotechnischer Verein

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### Appendix to certificate

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**Test Procedure :** Type Approval over the range and constructions as per page 1

**Scope of Test :** EN 50200 describes a method of test for resistance to fire of unprotected small cables for use in emergency circuits.

**Functional requirement PH :**

The ability of electrical cables to maintain a reliable form of power supply or signal from the power source to the safety installation(s) when exposed to fire.

The performance criterion is continuity of power supply. The PH classification refers to a constant temperature attack of a notional 842°C

4 Classifications are defined : PH 15, 30, 60, 90  
Two results in which the measured duration of survival exceeds the stated classification (15, 30, 60 or 90 minutes) are needed to obtain classification.

**Type-List :**

JE-H(St)H Bd FE180 E30...E90  
JE-H(St)HRH Bd FE180 E30...E90 (with armouring), VDE 0815

**Cable description :**

- Outer Sheath : Halogen free compound HM2
- Armouring : Galvanised steel wire braid (only for armoured types)
- Inner Sheath : Halogen free compound HM2 (only for armoured types)
- Screen : Aluminium laminated polyester tape with drain wire Ø 0.8mm
- 2. Covering : Glass fibre tape
- 1. Covering : Tape
- Insulation : crosslinked halogen free compound HI2
- Flame-Barrier : Mica tape
- Conductor : Copper, bare (class 1 according to IEC 60228)
- Cross-section : Ø0.8 mm diameter and 1.5.mm<sup>2</sup> (IEC 60228)

Hans Roschmann  
Product Certification *HR*

Fehraltorf, 2003-11-13

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