

CERTIFICATE

Issued to:

Applicant:

Hager Electro SAS
132 Boulevard d'Europe
67210 Obernai, France

Manufacturer/Licensee:

Hager Electro SAS
132 Boulevard d'Europe
67210 Obernai, France

Product(s) : switch, switch-disconnectors and changeover switches
Trade name(s) : HAGER
Type(s)/model(s) : SBx xxx, SFx xxx

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard EN 60947-3:2009;
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 900186

DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the KEMA-KEUR certification agreement and under the conditions of the KEMA-KEUR certification agreement.

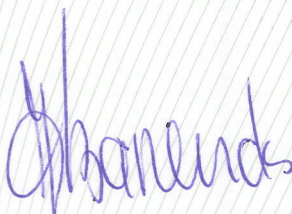
This certificate is issued on: 13 June 2012 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 2143638.01

DEKRA Certification B.V.



drs. G.J. Zoetbrood
Managing Director



H.R.M. Barends
Certification Manager

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ACCREDITED BY
THE DUTCH COUNCIL
FOR ACCREDITATION



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

product	:	switch, switch-disconnectors and changeover switches
trade name(s)	:	HAGER
type(s)	:	SBx xxx, SFx xxx
Utilisation category	:	AC-22A
rated voltage	:	230 Vac or 400 Vac
rated current	:	16 A, 25 A, 32 A, 40 A, 63 A, 80 A, 100 A, 125 A
rated frequency	:	50 / 60 Hz
rated impuls withstand voltage (Uimp)	:	6 kV (1,2/50 µs) for switch and switch disconnectors 4 kV (1,2/50 µs) for changeover switches
rated insulation voltage (Ui)	:	440 V
pattern no.	:	1, 2, 3, 03
numbers of poles	:	1, 2, 3, 4
degree of protection	:	IP 4X with enclosure and IP 2X without enclosure
method of mounting	:	flush type, top hat rail, according to EN50022
terminals	:	cage-type screw terminals
applied types with signal lamps	:	pattern 1 and 2 ; maximum rating 32 A

Additional information

Nomenclature breakdown:

For example: SBN263

SB.....: Modular load break disconnecter switch

- . N.....: toggle color / light indicator
 - N : grey toggle
 - R : red toggle
 - T : light indicator, connection on top
 - B : light indicator, connection on bottom
 - M : light indicator, connection top-bottom

2....: number of poles

- 1 : 1 pole
- 2 : 2 poles
- 3 : 3 poles
- 4 : 4 poles

63.: rated current

- 16 : 16 A
- 25 : 25 A
- 32 : 32 A
- 33 : 32 A in frame size up (based on 40-63 A frame size)
- 40 : 40 A
- 63 : 63 A
- 64 : 63 A in frame size up (based on 80-125 A frame size)
- 80 : 80 A
- 90 : 100 A
- 99 : 125 A

For example: SFT440

SF.....: changeover switch

- T: NO.NC, Top common point with centre off position; I-0-II
- H: NO.NC, Top common point without centre off position; I-II
- B : NO.NC, Bottom common point with centre off position; I-0-II
- L : NO.NC, Bottom common point without centre off position; I-II
- M : NO+NC, No common point without centre off position; I-II

4....: number of pole

- 1 : 1 pole
- 2 : 2 poles

40.: rated current

- 16 : 16 A
- 25 : 25 A
- 32 : 32 A
- 40 : 40 A

For example: SBM216

SB.....: Switch

M...: modular switch, light indicator, connection top-bottom

2...: number of poles

2 : 2-poles

16.: rated current

16 : 16 A

25: 25 A

32: 32 A

Product data - type SBx xxx

rated voltage	:	230 Vac or 400 Vac
rated current	:	16 A, 25 A, 32 A, 40 A, 63 A, 80 A, 100 A, 125 A
rated short-time withstand current and duration (I _{cw})	:	I _n , I _{cw-1s} 16 A, 240 A
	:	25 A, 375 A 32 A, 480 A
	:	40 A, 600 A 63 A, 945 A
	:	80 A, 960 A 100 A, 1200 A
	:	125 A, 1500 A
rated short-circuit making current (I _{cm})	:	I _n , I _p 16 A, 338 A
	:	25 A, 529 A 32 A, 677 A
	:	40 A, 846 A 63 A, 945 A
	:	80 A, 960 A 100 A, 1200 A
	:	125 A, 1500 A
number of poles	:	1-pole, 2-poles, 3-poles, 4-poles
pattern number	:	1, 2, 3, 03
technical details	:	see nomenclature breakdown

Product data - type SBM2xx

rated voltage	:	230 Vac
rated current	:	16 A, 25 A, 32 A
rated short-time withstand current and duration (I _{cw})	:	16 A: 240 A - 1 s
	:	25 A: 375 A - 1 s
	:	32 A: 480 A - 1 s
rated short-circuit making capacity (I _{cm})	:	16 A: I _p = 338 A
	:	25 A: I _p = 529 A
	:	32 A: I _p = 677 A
number of poles	:	2-poles
pattern number	:	2
technical details	:	see nomenclature breakdown

Product data - type SFx xxx

rated voltage	:	230 Vac or 400 Vac
rated current	:	16 A, 25 A, 32 A, 40 A
rated short-time withstand current and duration (Icw)	:	In, Icw - 1 s 16 A, 240 A 25 A, 375 A 32 A, 480 A 40 A, 480 A
rated short-circuit making current (Icm)	:	In, Ip 16 A, 338 A 25 A, 592 A 32 A, 677 A 40 A, 677 A
number of poles	:	1-pole, 2-poles, 3 poles, 4 poles
pattern number	:	6, 1+1, 6/2, 4, 4+4, 4+4+4, 4+4+4+4
technical details	:	see nomenclature breakdown

TESTS**Test requirements**

EN 60947-3:2009

Test result

The test results are laid down in DEKRA test file 2143638.01.

Conclusion

The examination proved that all test requirements were met.

Tested by : M.T.H. van Gemen

Checked by : F.S. Strikwerda

Factory locationsHager Polo Produkcja Sp. zo.o.
Ul. Fabryczna 10, 43-100 Tychy
Poland