



## TYPE APPROVAL CERTIFICATE

No. ELE240318XG

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	<b>Contactors-Motor Starters and Auxiliary Contactors</b>
<i>Type</i>	<b>Contactors: AF09...AF96, AFS09...AFS38, AF09Z...AF38Z</b>
	<b>Auxiliary contactor NF and accessories</b>
<i>Applicant</i>	<b>ABB FRANCE</b>
	<b>3 RUE JEAN PERRIN CS 90009</b>
	<b>69687 CHASSIEU CEDEX</b>
	<b>FRANCE</b>
<i>Manufacturer</i>	<b>ABB FRANCE</b>
<i>Place of manufacture</i>	<b>3 RUE JEAN PERRIN CS 90009</b>
	<b>69687 CHASSIEU CEDEX</b>
	<b>FRANCE</b>
<i>Reference standards</i>	<b>IEC 60947-4-1 (2009) + A1 (2012); IEC 60947-5-1 (2003) + A1 (2009)</b>

Issued in **HAMBURG** on **April 2, 2019**. This Certificate is valid until **April 1, 2024**

RINA Services S.p.A.  
Giuseppe Russo

This certificate consists of this page and 1 enclosure



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Contactors: AF09...AF96, AFS09...AFS38, AF09Z...AF38Z

Auxiliary contactor NF and accessories

### Product description:

The AF09(K)...AF96 series are AC/DC operated contactors. These contactors are available as:

- 3-pole contactors - with screw, spring or push-in (K) terminals or
- 4-pole contactors - with screw terminals.

The AF09Z...AF38Z series are 3-pole contactors with low consumption coil with 24...250V AC or 12...250V DC.

### Main characteristics of AF09(K)...AF96 contactors:

Maximum Rated voltage  $U_e$ : 690V AC  
Rated frequency: 50/60Hz  
Degree of protection: IP 20  
Rated control circuit voltage: 20...500V DC or 24...500V AC

### Technical data of 3-pole contactors:

Contactors type:	AF09(K)	AF12(K)	AF16(K)	AF26(K)	AF30(K)	AF38(K)
<b>Main contacts:</b>						
Rated op. current $I_e$ (AC1, 40°C) for screw or push-in terminal:	25A	28A	30A	45A	50A	50A
for spring terminal:	22A	24A	24A	35A	-	-
<b>Rated operational load</b>	4kW	5,5kW	7,5kW	11kW	15kW	18,5kW
utilization category AC3 (400V)	9A	12A	18A	26A	32A	38A
utilization category AC3 (690V)	7A	9A	10,5A	17A	21A	24A

Contactors type:	AF40	AF52	AF65	AF80	AF96
<b>Main contacts:</b>					
Rated op. current $I_e$ (AC1, 40°C) for screw terminal:	70A	100A	105A	125A	130A
<b>Rated operational load</b>	18,5kW	22kW	30kW	37kW	45kW
utilization category AC3 (400V)	40A	53A	65A	80A	96A
utilization category AC3 (690V)	25A	35A	39A	49A	57A

**Application:** AF09(K) ... AF96 contactors are used for controlling power circuits up to 690V AC and 220V DC. They are mainly used for controlling 3-phase motors.

**Accessories:** as listed in technical data sheet.

### Technical data of 4-pole contactors:

Contactors type:	AF09	AF16	AF26	AF38	AF40	AF52	AF80
<b>Main contacts:</b>							
Rated op. current $I_e$ (AC1, 40°C)	25A	30A	45A	55A	70A	100A	125A
<b>Rated operational load</b>							
utilization category AC3 (400V)	9A	18A	22A	22A	40A	53A	80A
utilization category AC3 (690V)	7A	10,5A	10,5A	10,5A	25A	35A	49A

**Application:** AF09...AF80 4-pole contactors are used for controlling power circuits for 690V AC and 440V DC. They are mainly used for controlling non-inductive loads, or slightly inductive loads.

**Accessories:** as listed in technical data sheet.



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The AFS09...AFS96 series are 3-pole contactors with screw terminals and with front-mounted auxiliary with 2 N.O. + 2 N.C. contacts for safety applications.

### Main characteristics of AFS09...AFS96 contactors:

Maximum Rated voltage  $U_e$ : 690V AC  
 Rated frequency: 50/60Hz  
 Degree of protection: IP 20  
 Rated control circuit voltage: 20...500V DC or 24...500V AC

### Technical data of main contacts:

Contactor type:	AFS09	AFS12	AFS16	AFS26	AFS30	AFS38
<b>Main contacts:</b>						
Rated op. current $I_e$ (AC1, 40°C):	25A	28A	30A	45A	50A	50A
Rated operational load	4kW	5,5kW	7,5kW	11kW	15kW	18,5kW
utilization category AC3 (400V)	9A	12A	18A	26A	32A	38A
utilization category AC3 (690V)	7A	9A	10,5A	17A	21A	24A

Contactor type:	AFS40	AFS52	AFS65	AFS80	AFS96
<b>Main contacts:</b>					
Rated op. current $I_e$ (AC1, 40°C):	70A	100A	105A	125A	130A
Rated operational load	18,5kW	22kW	30kW	37kW	45kW
utilization category AC3 (400V)	40A	53A	65A	80A	96A
utilization category AC3 (690V)	25A	35A	39A	49A	57A

### Technical data auxiliary contacts:

Rated insulation voltage	$U_i$	690V
Rated operational current	$I_e/AC-15$	24-127V: 6A; 220-240V: 4A; 400-440V: 3A; 500V: 2A; 690V: 2A
Rated operational current	$I_e/DC-13$	24V: 6A; 48V: 2.8A; 72V: 1A; 125V: 0.55A; 250V: 0.27A; 400V: 0.15A; 500V: 0.13A; 600V: 0.1A

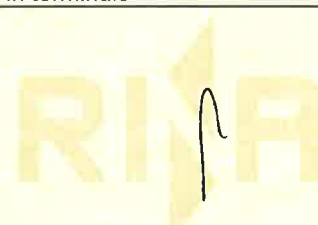
**Accessories:** as listed in technical data sheet.

The NF...(K) series are 4- or 8-poles auxiliary contactors with screw, spring and push-in (K) terminals for switching auxiliary and control circuits.

### Technical data:

Specification/Type		NF...(K)
Rated operational voltage	$U_e$ max.	690V AC
Rated insulation voltage	$U_i$	690V
Rated frequency:		50/60Hz
Conventional free-air thermal current	$I_{th}$ (40°C)	16 A
Rated operational current	$I_e/AC-15$	24-127V: 6A; 220-240V: 4A; 400-440V: 3A; 500V: 2A; 690V: 2A
Rated operational current	$I_e/DC-13$	24V: 6A; 48V: 2.8A; 72V: 1A; 125V: 0.55A; 250V: 0.27A; 400V: 0.15A; 500V: 0.13A; 600V: 0.1A
Short circuit protection gG type fuse:		10A
Degree of protection:		IP 20
Rated Impulse Withstand voltage:	$U_{imp}$	6kV
Connection:	/	Screw, spring or push-in terminals

**Accessories:** as listed in technical data sheet.



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The CA4-...(K), CAT4-...(K), CAL4-...(K) series are auxiliary contact blocks for the operation of auxiliary circuits and control circuits on contactors of AF series. These auxiliary contact blocks are available with screw, spring or push-in (K) terminals.

CA4-...(K): 1 or 4-pole block, front-mounted, instantaneous with N.O, N.C contacts

CAT4-...(K): 2-pole block, front-mounted, instantaneous N.O + N.C contacts with coil connection terminal on front face

CAL4-...(K): 2-pole block instantaneous N.O + N.C contacts clipped onto right and/or left side of the contactors

### Technical data:

Specification/Type		CA...(K)
Rated operational voltage	Ue max.	24...690V
Rated insulation voltage	Ui	690V
Rated frequency limits	/	25...400Hz
Rated operational current	Ie/AC-15	24-127V: 6A; 220-240V: 4A; 400-440V: 3A; 500V: 2A; 690V: 2A
Rated operational current	Ie/DC-13	24V: 6A; 48V: 2.8A; 72V: 1A; 125V: 0.55A; 250V: 0.27A; 400V: 0.15A; 500V: 0.13A; 600V: 0.1A
Degree of protection:		IP 20
Rated Impulse Withstand voltage:	Uimp	6kV
Connection:	/	Screw, spring or push-in terminals

### Documents:

Main Catalogue: - 1SBC100192C0206 dated 07.2017;

Catalogue: - 1SBC100208C0201 dated 11.2017; 1SBC100212C0201 dated 03.2018;

Operating Instruction: - 1SBC101047M6801; 1SBC101052M6801; 1SBC101054M6801;

### Test reports:

Intertek Semko AB: - 1621204STO-001; 1621205STO-001; 1621206STO-001; 1621208STO-001; 1712881STO-001;

- 1712888STO-001; 1713205STO-001; 1713206STO-001; 1718955STO-001; 1718959STO-001; 1719730STO-001;

- 1719777STO-001;

CB Test Certificates Intertek Semko AB: - SE-70921M1 dated 6 February 2018; SE-76635M1 dated 13 February 2018;

- SE-77417M2 dated 19 June 2017; SE-77418M1 dated 19 June 2017; SE-80869M1 dated 20 September 2017;

- SE-80870M1 dated 21 September 2017; SE-80871M3 dated 20 February 2018; SE-80872M3 dated 20 February 2018;

ABB: - 20120546-A; 20120547-A

### Remarks:

- The products fulfill EC-Code: 3a1/41.

- The coil of AF09Z...AF38Z contactor series are to be supplied via a type approved power supply.

- This certificate replaces the certificate no.: ELE084013XG.

HAMBURG April 2, 2019

