## AFS contactors with front-mounted auxiliary contact blocks Dedicated for safety applications

ABB's complete range of safety components make protection systems easier to build. Designed for machine safety applications, AFS contactors come with fixed front auxiliary contact blocks, making them ideal for monitoring and controlling circuits. Mechanically linked and mirror contacts help make your system safer.





## Safety and protection

#### Safety in all things

ABB's AFS contactors can be easily integrated in machine manufacturer's systems complying with main safety standards EN ISO 13849 and EN 62061 guaranteeing the safe use of your machinery and equipment.

The AFS contactor range is an integral part of ABB's comprehensive range of safety products.



### Continuous operation

#### Secure uptime

The AFS contactor secures system uptime. It allows direct control by relay outputs of safety PLCs and safety relays to ensure the safety performance customers require. A low energy auxiliary contact guarantees system status feedback.



## Speed up your projects

#### Simplify design

Perfect design makes integration easier. ABB's distinctive yellow auxiliary contact block makes identifying the right product quicker.

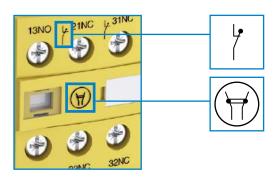
By reducing the contactor coil's power consumption, panels can also be made smaller and transformers more compact. In addition, all the safety data for the contactors are readily available using safety design tools.

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#### Contactors status guaranteed

ABB's permanently fixed front-mounted auxiliary contact blocks guarantee the correct contactor status at all times.

Mechanically linked and mirror contacts get clearly marked symbols on the front and provide the performance required in feedback circuits. This prevents any unexpected state changes of auxiliary contact if main contacts become welded or stuck and ensures an accurate depiction of the safety system status displayed at all times.



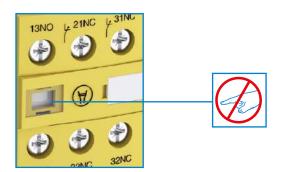
#### Easy safety chain identification

The yellow housing of ABB's AFS contactors makes identifying the safety product in your panel quicker. During routine maintenance work, ABB's intuitive design saves valuable time.



#### Prevent unexpected operations

Front-mounted contact blocks are permanently fixed to protect devices against accidental misuse and operation. A factory-fitted transparent cover shields the contactor status indicator, providing additional protection.



#### Simplify calculation of your installation safety level

All safety values are available in safety design tool such as Sistema and FSDT, dedicated software for determining the Performance Level (PL) and Safety Integrity Level (SIL) of safety functions and generating technical documentations.

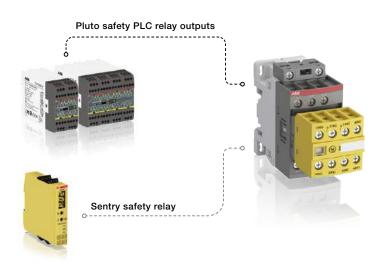


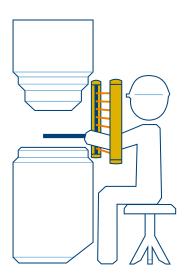
#### Control by safety PLCs or safety relays

ABB's AFS contactors can be controlled directly by relay outputs of safety PLCs and safety relays. The low energy auxiliary contacts feature a minimum switching capacity 12 V, 3 mA. They guarantee system status feedback, making the system safe and reliable.

#### Fast response for increased safety

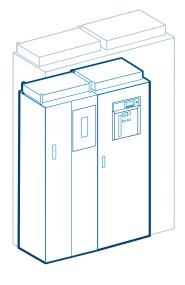
With fast opening times as low as 35 ms, AFS09...AFS38 respond quickly when a dangerous failure is detected. Safety is enhanced and the safety distances of installations can be significantly shorter.





#### Panel size reduction

By reducing coil energy consumption by up to 60%, panels can be built smaller and transformers can be downsized. With reduced power dissipation in the cabinet, installations also need fewer fans. Using AFS contactors saves money and precious space.



### Built-in surge suppression

Unlike conventional contactors, ABB's AFS contactors have built-in surge suppression, preventing surges from ever reaching the control circuit. With no need for the usual external surge suppressor add-ons, ABB's solution means one less device to install and one less complication to manage.



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Products safety data for machine manufacturers following harmonized EN standards:

- EN ISO 13849
- EN 62061

#### AFS09...AFS96 contactors technical data

B <sub>10D</sub> electrical	1.3 millions of cycles
B <sub>10D</sub> mechanical	
AFS09AFS65	20 millions of cycles
AFS80, AFS96	16 millions of cycles





Ordering details

IEC UL/CSA			Potod contro	l circuit voltage	Auvilian		Tuno	Order code	
Rated operational		3-phase	General use	Rated control circuit voltage Uc min Uc max.		contacts		Туре	Order code
power 400 V	Current θ ≤ 40 °C	motor rating 480 V	rating 600 V AC			fitted			
AC-3	AC-1						4		
kW	Α	hp	Α	V 50/60 Hz	V DC		ſ		
4	25	5	25	2460	2060 (1)	2	2	AFS09-30-22-11	1SBL137082R1122
				100250	100250	2	2	AFS09-30-22-13	1SBL137082R1322
5.5 28	28	7.5	28	2460	2060 (1)	2	2	AFS12-30-22-11	1SBL157082R1122
	-			100250	100250	2	2	AFS12-30-22-13	1SBL157082R1322
7.5	30	10	30	2460	2060 (1)	2	2	AFS16-30-22-11	1SBL177082R1122
				100250	100250	2	2	AFS16-30-22-13	1SBL177082R1322
11	45	15	45	2460	2060 (1)	2	2	AFS26-30-22-11	1SBL237082R1122
	•			100250	100250	2	2	AFS26-30-22-13	1SBL237082R1322
15	50	20	50	2460	2060 (1)	2	2	AFS30-30-22-11	1SBL277082R1122
	Ī			100250	100250	2	2	AFS30-30-22-13	1SBL277082R1322
18.5	50	20	50	2460	2060 (1)	2	2	AFS38-30-22-11	1SBL297082R1122
				100250	100250	2	2	AFS38-30-22-13	1SBL297082R1322
18.5 70	70	30	60	2460	2060 (1)	2	2	AFS40-30-22-11	1SBL347082R1122
				100250	100250	2	2	AFS40-30-22-13	1SBL347082R1322
22	100	40	80	2460	2060 (1)	2	2	AFS52-30-22-11	1SBL367082R1122
	•			100250	100250	2	2	AFS52-30-22-13	1SBL367082R1322
30	105	50	90	2460	2060 (1)	2	2	AFS65-30-22-11	1SBL387082R1122
				100250	100250	2	2	AFS65-30-22-13	1SBL387082R1322
37	125	60	105	2460	2060 (1)	2	2	AFS80-30-22-11	1SBL397082R1122
				100250	100250	2	2	AFS80-30-22-13	1SBL397082R1322
45	130	60	115	2460	2060 (1)	2	2	AFS96-30-22-11	1SBL407082R1122
				100250	100250	2	2	AFS96-30-22-13	1SBL407082R1322

 $<sup>(1)</sup> AFS... -30-... -11 \ not \ suitable \ for \ direct \ control \ by \ transistor \ outputs \ of \ safety \ PLCs \ and \ safety \ relays.$ 

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