

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.

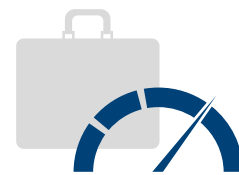
The AFS contactor range is an integral part of ABB's comprehensive range of safety products.



Continuous operation

Secure uptime

The AFS contactor secures system uptime. It allows direct control by safety PLCs or safety relays to ensure the safety performance customers require, for contactors up to 38 A. A low energy auxiliary contact guarantees PLC 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.

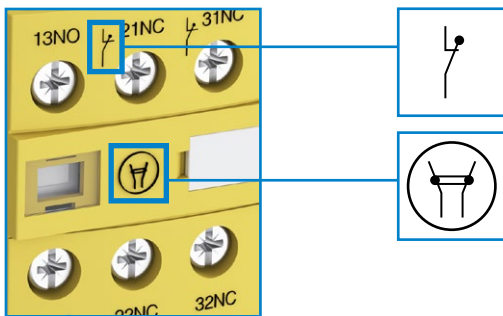
By reducing the contactor coil's power consumption, panels can also be made smaller and transformers more compact. In addition, all the safety data for the contactors are readily available using safety design tools.

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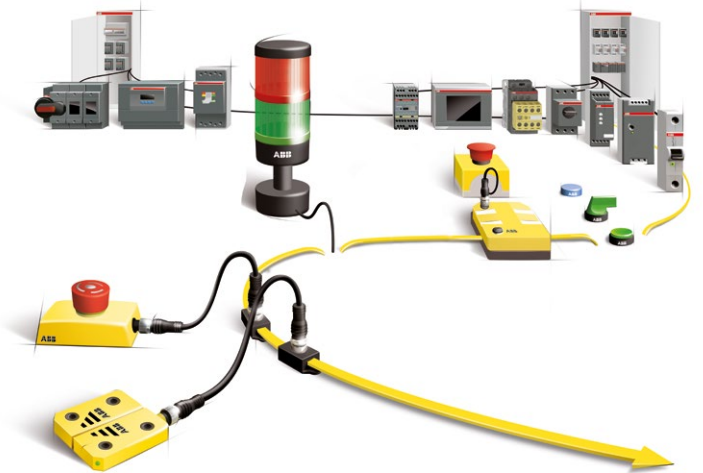
Contactors status guaranteed

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.



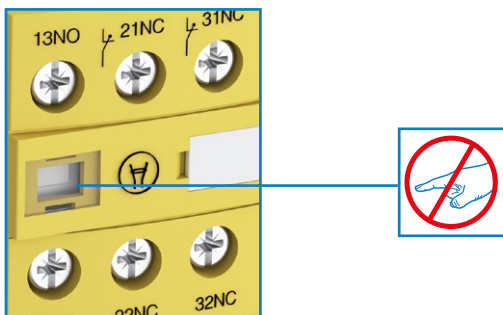
Easy safety chain identification

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.



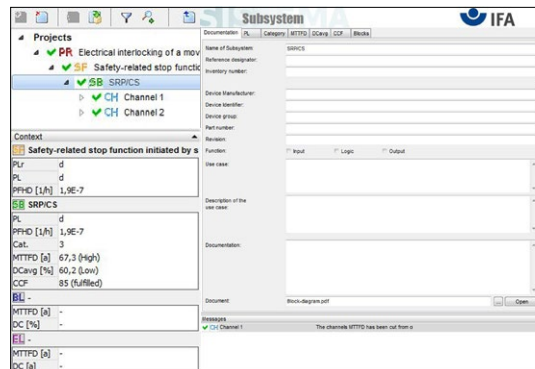
Prevent unexpected operations

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.



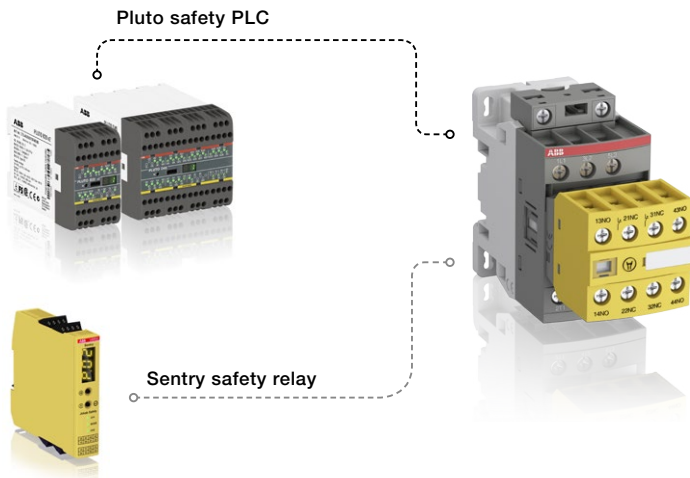
Simplify calculation of your installation safety level

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.



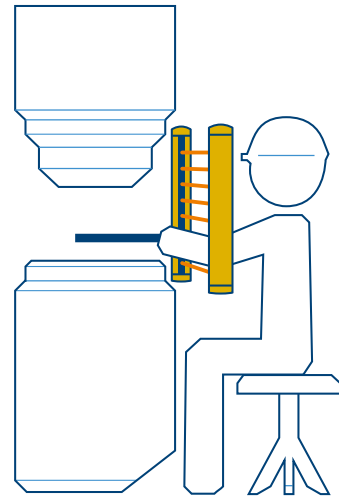
Control by safety PLCs or safety relays

ABB's AFS contactors can be controlled directly by safety PLCs or 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.



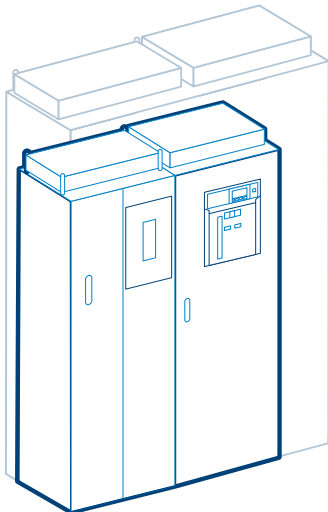
Fast response for increased safety

With fast opening times less than 30 ms for selected variants, AFS09 ... AFS38 respond quickly when a dangerous failure is detected. Safety is enhanced and the safety distances of installations can be significantly shorter.



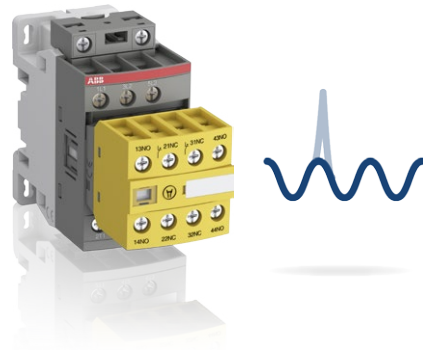
Panel size reduction

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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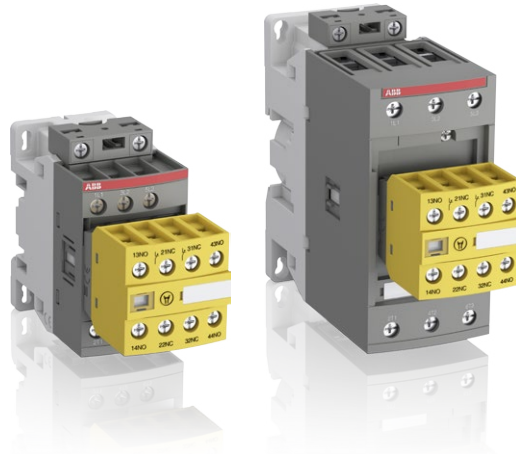
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Products safety data for machine manufacturers following harmonized EN standards:

- EN ISO 13849
- EN 62061

AFS09...AFS96 contactors technical data

B₁₀₀ electrical 1.3 millions of cycles



Ordering details

IEC		UL/CSA		Rated control circuit voltage Uc min. ... Uc max.		Auxiliary contacts fitted	Type	Order code
Rated operational power	Current $\theta \leq 40^\circ\text{C}$	3-phase motor rating 480 V	General use rating 600 V AC	V 50/60 Hz	V DC			
400 V AC-3 kW	AC-1 A	hp	A					
4	25	5	25	-	24	2 2	AFS09Z-30-22-30	1SBL136082R3022
				24...60	20...60 (1)	2 2	AFS09-30-22-11	1SBL137082R1122
				100...250	100...250	2 2	AFS09-30-22-13	1SBL137082R1322
5.5	28	7.5	28	-	24	2 2	AFS12Z-30-22-30	1SBL156082R3022
				24...60	20...60 (1)	2 2	AFS12-30-22-11	1SBL157082R1122
				100...250	100...250	2 2	AFS12-30-22-13	1SBL157082R1322
7.5	30	10	30	-	24	2 2	AFS16Z-30-22-30	1SBL176082R3022
				24...60	20...60 (1)	2 2	AFS16-30-22-11	1SBL177082R1122
				100...250	100...250	2 2	AFS16-30-22-13	1SBL177082R1322
11	45	15	45	-	24	2 2	AFS26Z-30-22-30	1SBL236082R3022
				24...60	20...60 (1)	2 2	AFS26-30-22-11	1SBL237082R1122
				100...250	100...250	2 2	AFS26-30-22-13	1SBL237082R1322
15	50	20	50	-	24	2 2	AFS30Z-30-22-30	1SBL276082R3022
				24...60	20...60 (1)	2 2	AFS30-30-22-11	1SBL277082R1122
				100...250	100...250	2 2	AFS30-30-22-13	1SBL277082R1322
18.5	50	20	50	-	24 (1)	2 2	AFS38Z-30-22-30	1SBL296082R3022
				24...60	20...60 (1)	2 2	AFS38-30-22-11	1SBL297082R1122
				100...250	100...250	2 2	AFS38-30-22-13	1SBL297082R1322
18.5	70	30	60	24...60	20...60 (1)	2 2	AFS40-30-22-11	1SBL347082R1122
				100...250	100...250	2 2	AFS40-30-22-13	1SBL347082R1322
				24...60	20...60 (1)	2 2	AFS52-30-22-11	1SBL367082R1122
22	100	40	80	100...250	100...250	2 2	AFS52-30-22-13	1SBL367082R1322
				24...60	20...60 (1)	2 2	AFS65-30-22-11	1SBL387082R1122
				100...250	100...250	2 2	AFS65-30-22-13	1SBL387082R1322
30	105	50	90	24...60	20...60 (1)	2 2	AFS80-30-22-11	1SBL397082R1122
				100...250	100...250	2 2	AFS80-30-22-13	1SBL397082R1322
				24...60	20...60 (1)	2 2	AFS96-30-22-11	1SBL407082R1122
37	125	60	105	100...250	100...250	2 2	AFS96-30-22-13	1SBL407082R1322
				24...60	20...60 (1)	2 2	AFS96-30-22-11	1SBL407082R1122
				100...250	100...250	2 2	AFS96-30-22-13	1SBL407082R1322
45	130	60	115	24...60	20...60 (1)	2 2	AFS96-30-22-11	1SBL407082R1122
				100...250	100...250	2 2	AFS96-30-22-13	1SBL407082R1322
				24...60	20...60 (1)	2 2	AFS96-30-22-11	1SBL407082R1122

(1) AFS...-30-...-11 for control by transistor outputs of safety PLCs and safety relays use interface relay RA4 1SBN060100R1000.



<http://new.abb.com/low-voltage/contactors-for-safety-applications>

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