

So Small – So Powerful

ABB Mini Contactors



ABB

Reliability, e. g. for air conditioning



ABB Mini Contactors Series B Success story

Energy for motors, machines or other electrical components has to be reliably turned on and off often by remote control. In this case contactors are very important products to turn over the current for motors or other products which need energy.

The work must be done reliably otherwise danger can be imminent – either through unforeseen reactions within the electrical installation or through damage to the electrical equipment.

Reliability and safety are therefore a prerequisite in the choice of the right contactor.

For the switching of applications that consume only small quantities of electrical energy the product program of ABB provides the mini contactors B6/B7.

The Series B from ABB is ideally suited for applications where space is at a premium. The B-contactors are the flattest on market and therefore can be used in special modular and compact applications.

The small dimensions, a wide range of coil supplies and a variety of versions within the model range provide customers with high flexibility in use for applications up to 5.5 kW.



Reliable also in important plants even under extreme operating conditions



The round up

Apart from being so compact, reliable, robust and powerful these cost-efficient contactors are also very flexible in usage.

Available Versions

Mini contactors and auxiliary contactors

- for connection with screws
- for flat pin connection
- with soldering pins
- special version for direct PLC connection
- high temperature versions
- wide range of coil supply

Moreover ABB Minicontactors are also available as compact reversing contactors VB 6, VB 7 and VB 6A, VB 7A. In these cases a mechanical interlock between the two contactors mechanically prevents the switch-on of one contactor as long as that other contactor is still on. This is achieved through normal interlock in the models VB 6 and VB 7 or through an interlock with mechanical safety blocking function in VB 6A, VB 7A that de-energizes both contactor coils for more than 50 ms to avoid a phase to phase short circuit.



The flattest contactor on the market



Reliable mechanical interlocking



Contactor B6: so flat,
saves space



Also for small, modular
starter combinations



The Applications

Typical applications for the series B mini contactors can be found in building installations for the control of the lighting, shades- and air-conditioning-control as well as for example in saunas, car-washes, in sewing machines or electrical saws. Furthermore mini contactors are used for automated doors, the control of greenhouses or in small compressors and pumps.

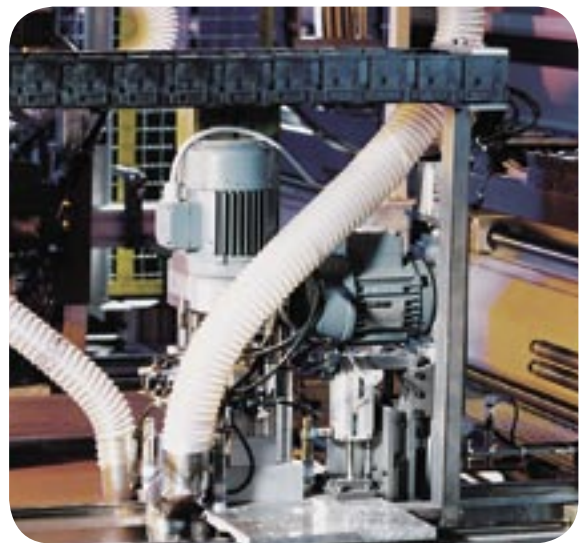
The Benefits

The advantages of ABB minicontactors series B:

- Powerful
- Reliable
- Robust
- Flexible in use
- Safe operation
- Compact size – space saving
- Available in various models – wide area of application



Small, yet powerful: the biggest customer benefit



General technical data

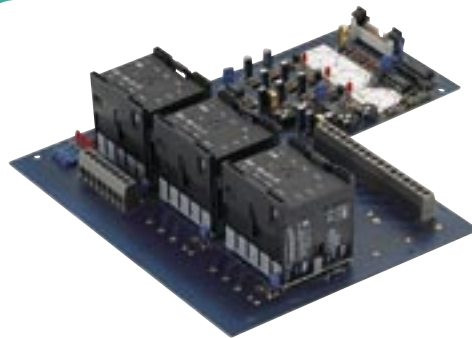
Operating temperature: -25 ... +55° C (up to 80° C on req.)
 Mechanical life time: 10 Mio switches
 Electrical life time: 800.000 up to ... see catalogue
 Rated operating voltage: 12 ... 600 V AC
 Rated operating frequency: 0 ... 400 Hz for coil supply
 Control circuit: 12 V DC ... 240 V DC/AC
 Special version with low coil consumption for direct connection to PLC
 Mounting position: optional
 Shock proved: 10 g
 Mounting for wall and DIN rails

Rated operating current and power

	B6	B7
Switching of heatings (AC-1)		
Rated operational current I_o	16 A	20 A
Rated operational power		
230 V AC 3 ~	6.4 kW	8.0 kW
400 V AC 3 ~	11.0 kW	13.8 kW
Switching of motors (AC-3)		
Rated operational current I_o	9 A	12 A
Rated operational power		
230 V AC 3 ~	2.2 kW	3.0 kW
400 V AC 3 ~	4.0 kW	5.5 kW












Modular solution
in small enclosure



Printed circuit boards with sold B-contactor:

- A compact and totally integrated solution: electronic control circuits and energy flow in 1 module
- A safety and reliable disconnected solution: the electronic board controls the data circuits the B-contactor switches the energy

Approvals

									
	SEV Switzerland	Demko Denmark	Nemko Norway	Semko Sweden	EL.Inspect. Finland	CSA Canada	USA	USA	GL Germany
B6/B7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ¹⁾	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ²⁾	<input type="checkbox"/>	<input type="checkbox"/>
VB6 / VB7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ³⁾	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- i** Normal version approved; rating plates bear the test mark if mandatory
- 1) Some versions submitted for approval, but not yet approved
- 2) Not all versions approved
- 3) Submitted for approval

Trustworthy

ABB mini contactors series B are available with:

- An extended coil range
- An interface that connects the mini contactor directly with the PLC
- An integrated protective circuit with diodes and an additional surge suppressor
- A non-confusable coil connection
- The incorporated possibility to be combined with a thermal or electronic overload relay, like T 7 DU or E 16 DU

Switching and Protecting

The ABB product range consists of numerous components for switching and protecting your drives. Based on the minicontactors presented in this brochure e. g. motor starters in insulating material housings type DRB 6 and DRB 7 for switching up to 5.5 kW AC3 are available. But also for motors of higher wattage the components of ABB are the right choice. Just contact us or ask your local representative about ABB's complete product program in the low voltage range!



ABB

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ABB Global Contact Directory

The ABB Contact Directory (<http://www.abb.com/contacts/>) helps you find local contacts for ABB products in your country. Please select the relevant product group from the dropdown menu to the right or from the page.