www.noark-electric.eu

CONTACTORS AND OVERLOAD RELAYS

CATALOGUE OF INDUSTRIAL DEVICES

Valid from 1st September 2011

Noark

New opportunity for you

Contents

NOARK Electric Introduction

NOARK Electric is a global electrical producer and forms a part of an international concern with more than 25 thousands of employees. Regional centers in Shanghai, Prague, and Chicago drive business in each continent. Our mission is to bring a new opportunity and unrivalled customer care to the global low voltage market.

We are determined to go further into the world market and establish and maintain strong relationships with customers. NOARK Electric cares about different areas in a local way to meet the unique requirements of each market. For this reason, our worldwide business activities are coordinated locally in the individual areas.

NOARK Electric has invested millions of Euros in development and it is equipped with the most up-to-date technologies and production facilities. The intelligent low voltage distribution and control product lines with high quality, performance and stability were developed by our highly professional and skilled R&D team.

The first generation Ex9 series of intelligent low voltage electrical products, incorporating the latest design, electronic and simulation technologies, reach even the top industry expectations. This product series not only set multiple functions into ever smaller size, but includes also data acquisition, communications, and intelligent remote control modules, which reward NOARK Electric with up to tens of exclusive patents including invention, practical application and design. We firmly adhere to the concept of „best products are derived from best raw materials“, which is also the principle of our production. It is realized by cooperating with qualified suppliers with a very high selection standard. Besides complying with all compulsory domestic law requirements, full range of products is accredited by CB/CCA organizations based on up-to-date IEC and EN standards. NOARK Electric also takes care of local certifications to meet special requirements and habits of particular markets. Besides concentration on the product related technical issues, NOARK Electric cares about nature and closely follows the environmental policies.

Through global sales network, NOARK Electric has successfully contributed its efforts to provide high-efficient, high-reliable, high-intelligent and energy-saving low voltage products for reasonable prices to sophisticated industry areas, such as power distribution, smart grids, renewable energy, petrochemical industry, machinery manufacturing, real estate and construction.

We Believe,

Remarkable technical innovations bring reliable products!

Advanced technical ideas create intelligent electrical apparatus for the future!

We are new opportunity for you!

NOARK Electric European team

NOARK Electric Introduction

Top-level technological facilities

General Information

NOARK products sales comply with the laws of the respective country and is regulated by general trading conditions, a framework agreement or by other contracts between NOARK Electric Europe s.r.o. or its subsidiary and the customer.

Goods price is defined by the respective valid official price list of the NOARK Electric Company and by the contractual conditions of the respective customer. If not negotiated otherwise, purchase price includes neither expenses for transport, transport wrapping, expanses connected with goods handling, with the installation and implementing into operation, nor expanses connected with disposal or recycling of the goods or the wrapping, if valid laws do not impose different obligation.

The NOARK Electric Company provides its products with a five-year European guarantee. It may be applied outside the country where the product is bought. In this case it is submitted in a local subsidiary of NOARK Electric. Guarantee conditions are described in detail in the NOARK Electric complaint procedure.

Miniature Contactors Ex9CS

- **Miniature Contactors according to IEC / EN 60947-4-1**
- **3 and 4-pole versions**
- **Rated current AC-3 6, 9 and 12 A at 400 V**
- **Coil control voltage 24 — 415 V AC**
- **Rated conditional short circuit current I_q 50 kA**
- **Suitable for industrial as well as domestic applications**
- **Mounting onto device rail (DIN) 35 mm or onto panel**

Rated operational voltage of main contacts 690 V AC, I_{th} 20 A, I_e AC-1 20 A/690 V

Rated frequency 50 Hz

Ex9CS contactors bring excellent electric parameters in the form of very compact device. These contactors can be used for both industrial as well as domestic applications. Thermal current and AC-1 load 20 A at 690 V AC allowes switching of resistive loads with maximum currents usual for domestic applications. Thanks to compact dimensions, Ex9CS contactors are ideal solution for space limited installations.

Contactors are offered as 3 and 4-pole versions and as a 4-pole version with main contacts configuration 2 normally open and 2 normally closed (4P/22).

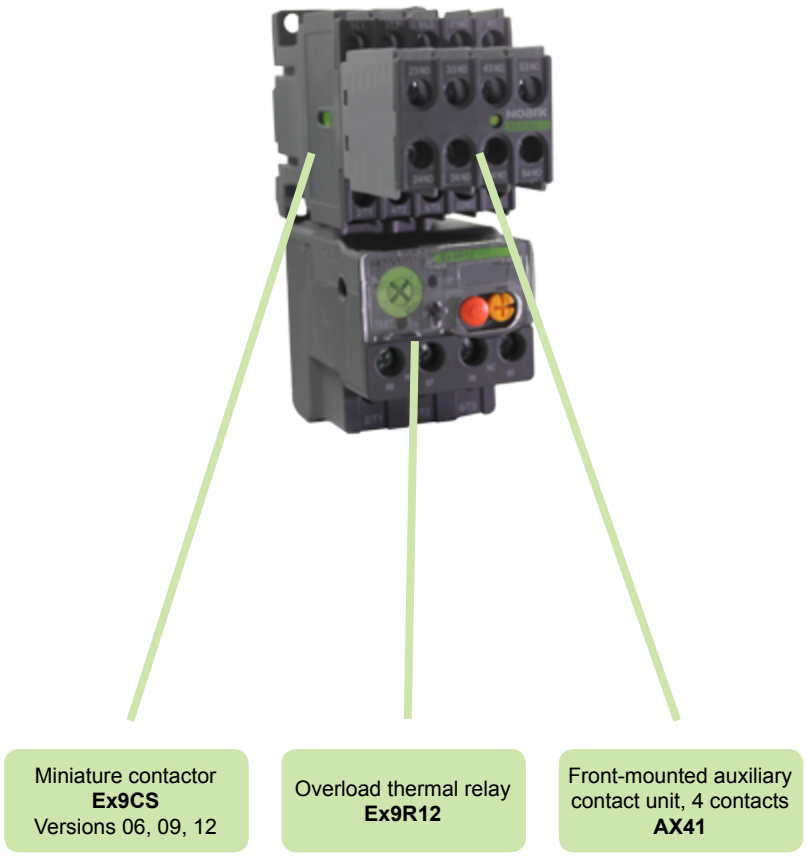
Type Key

Ex9	CS	06	01	3P	230V
Product family	Product	Rated current AC-3 400 V	Built-in auxiliary contacts	Poles (main contacts)	Coil control voltage
Ex9	CS: Miniature contactors	06 : 6 A 09 : 9 A 12 : 12 A	10 : 1 NO 01 : 1 NC _ : without	3, 4, 4/22	24 — 415 V AC

Certification marks

Miniature Contactors Ex9CS

Accessories



Auxiliary contacts AX41 see page 27

Overload thermal relays Ex9R12 see page 31

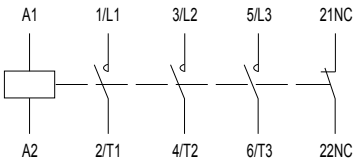
Miniature Contactors Ex9CS

Rated current 6 A, 3-pole

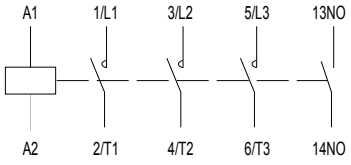
- Miniature version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX41.. can be used
- Can be combined with overload relays Ex9R12

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	6 A	S12	3	1 NC	100956	Ex9CS06 01 3P 415V	1/72
400 V AC	6 A	S12	3	1 NC	100957	Ex9CS06 01 3P 400V	1/72
380 V AC	6 A	S12	3	1 NC	100958	Ex9CS06 01 3P 380V	1/72
240 V AC	6 A	S12	3	1 NC	100959	Ex9CS06 01 3P 240V	1/72
230 V AC	6 A	S12	3	1 NC	100960	Ex9CS06 01 3P 230V	1/72
220 V AC	6 A	S12	3	1 NC	100961	Ex9CS06 01 3P 220V	1/72
127 V AC	6 A	S12	3	1 NC	100962	Ex9CS06 01 3P 127V	1/72
110 V AC	6 A	S12	3	1 NC	100963	Ex9CS06 01 3P 110V	1/72
48 V AC	6 A	S12	3	1 NC	100964	Ex9CS06 01 3P 48V	1/72
42 V AC	6 A	S12	3	1 NC	100965	Ex9CS06 01 3P 42V	1/72
36 V AC	6 A	S12	3	1 NC	100966	Ex9CS06 01 3P 36V	1/72
24 V AC	6 A	S12	3	1 NC	100967	Ex9CS06 01 3P 24V	1/72
415 V AC	6 A	S12	3	1 NO	100968	Ex9CS06 10 3P 415V	1/72
400 V AC	6 A	S12	3	1 NO	100969	Ex9CS06 10 3P 400V	1/72
380 V AC	6 A	S12	3	1 NO	100970	Ex9CS06 10 3P 380V	1/72
240 V AC	6 A	S12	3	1 NO	100971	Ex9CS06 10 3P 240V	1/72
230 V AC	6 A	S12	3	1 NO	100972	Ex9CS06 10 3P 230V	1/72
220 V AC	6 A	S12	3	1 NO	100973	Ex9CS06 10 3P 220V	1/72
127 V AC	6 A	S12	3	1 NO	100974	Ex9CS06 10 3P 127V	1/72
110 V AC	6 A	S12	3	1 NO	100975	Ex9CS06 10 3P 110V	1/72
48 V AC	6 A	S12	3	1 NO	100976	Ex9CS06 10 3P 48V	1/72
42 V AC	6 A	S12	3	1 NO	100977	Ex9CS06 10 3P 42V	1/72
36 V AC	6 A	S12	3	1 NO	100978	Ex9CS06 10 3P 36V	1/72
24 V AC	6 A	S12	3	1 NO	100979	Ex9CS06 10 3P 24V	1/72

Wiring diagrams



Ex9CS06 01 3P



Ex9CS06 10 3P

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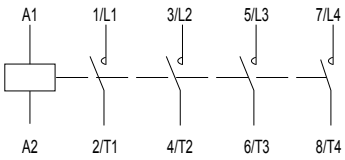
Miniature Contactors Ex9CS

Rated current 6 A, 4-pole

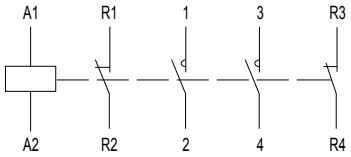
- Miniature version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX41.. can be used

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	6 A	S12	4	-	100980	Ex9CS06 4P 415V	1/72
400 V AC	6 A	S12	4	-	100981	Ex9CS06 4P 400V	1/72
380 V AC	6 A	S12	4	-	100982	Ex9CS06 4P 380V	1/72
240 V AC	6 A	S12	4	-	100983	Ex9CS06 4P 240V	1/72
230 V AC	6 A	S12	4	-	100984	Ex9CS06 4P 230V	1/72
220 V AC	6 A	S12	4	-	100985	Ex9CS06 4P 220V	1/72
127 V AC	6 A	S12	4	-	100986	Ex9CS06 4P 127V	1/72
110 V AC	6 A	S12	4	-	100987	Ex9CS06 4P 110V	1/72
48 V AC	6 A	S12	4	-	100988	Ex9CS06 4P 48V	1/72
42 V AC	6 A	S12	4	-	100989	Ex9CS06 4P 42V	1/72
36 V AC	6 A	S12	4	-	100990	Ex9CS06 4P 36V	1/72
24 V AC	6 A	S12	4	-	100991	Ex9CS06 4P 24V	1/72
415 V AC	6 A	S12	2+2	-	100992	Ex9CS06 4P/22 415V	1/72
400 V AC	6 A	S12	2+2	-	100993	Ex9CS06 4P/22 400V	1/72
380 V AC	6 A	S12	2+2	-	100994	Ex9CS06 4P/22 380V	1/72
240 V AC	6 A	S12	2+2	-	100995	Ex9CS06 4P/22 240V	1/72
230 V AC	6 A	S12	2+2	-	100996	Ex9CS06 4P/22 230V	1/72
220 V AC	6 A	S12	2+2	-	100997	Ex9CS06 4P/22 220V	1/72
127 V AC	6 A	S12	2+2	-	100998	Ex9CS06 4P/22 127V	1/72
110 V AC	6 A	S12	2+2	-	100999	Ex9CS06 4P/22 110V	1/72
48 V AC	6 A	S12	2+2	-	101000	Ex9CS06 4P/22 48V	1/72
42 V AC	6 A	S12	2+2	-	101001	Ex9CS06 4P/22 42V	1/72
36 V AC	6 A	S12	2+2	-	101002	Ex9CS06 4P/22 36V	1/72
24 V AC	6 A	S12	2+2	-	101003	Ex9CS06 4P/22 24V	1/72

Wiring diagrams



Ex9CS06 4P



Ex9CS06 4P/22

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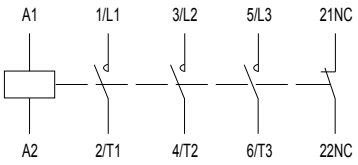
Miniature Contactors Ex9CS

Rated current 9 A, 3-pole

- Miniature version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX41.. can be used
- Can be combined with overload relays Ex9R12

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	9 A	S12	3	1 NC	101004	Ex9CS09 01 3P 415V	1/72
400 V AC	9 A	S12	3	1 NC	101005	Ex9CS09 01 3P 400V	1/72
380 V AC	9 A	S12	3	1 NC	101006	Ex9CS09 01 3P 380V	1/72
240 V AC	9 A	S12	3	1 NC	101007	Ex9CS09 01 3P 240V	1/72
230 V AC	9 A	S12	3	1 NC	101008	Ex9CS09 01 3P 230V	1/72
220 V AC	9 A	S12	3	1 NC	101009	Ex9CS09 01 3P 220V	1/72
127 V AC	9 A	S12	3	1 NC	101010	Ex9CS09 01 3P 127V	1/72
110 V AC	9 A	S12	3	1 NC	101011	Ex9CS09 01 3P 110V	1/72
48 V AC	9 A	S12	3	1 NC	101012	Ex9CS09 01 3P 48V	1/72
42 V AC	9 A	S12	3	1 NC	101013	Ex9CS09 01 3P 42V	1/72
36 V AC	9 A	S12	3	1 NC	101014	Ex9CS09 01 3P 36V	1/72
24 V AC	9 A	S12	3	1 NC	101015	Ex9CS09 01 3P 24V	1/72
415 V AC	9 A	S12	3	1 NO	101016	Ex9CS09 10 3P 415V	1/72
400 V AC	9 A	S12	3	1 NO	101017	Ex9CS09 10 3P 400V	1/72
380 V AC	9 A	S12	3	1 NO	101018	Ex9CS09 10 3P 380V	1/72
240 V AC	9 A	S12	3	1 NO	101019	Ex9CS09 10 3P 240V	1/72
230 V AC	9 A	S12	3	1 NO	101020	Ex9CS09 10 3P 230V	1/72
220 V AC	9 A	S12	3	1 NO	101021	Ex9CS09 10 3P 220V	1/72
127 V AC	9 A	S12	3	1 NO	101022	Ex9CS09 10 3P 127V	1/72
110 V AC	9 A	S12	3	1 NO	101023	Ex9CS09 10 3P 110V	1/72
48 V AC	9 A	S12	3	1 NO	101024	Ex9CS09 10 3P 48V	1/72
42 V AC	9 A	S12	3	1 NO	101025	Ex9CS09 10 3P 42V	1/72
36 V AC	9 A	S12	3	1 NO	101026	Ex9CS09 10 3P 36V	1/72
24 V AC	9 A	S12	3	1 NO	101027	Ex9CS09 10 3P 24V	1/72

Wiring diagrams



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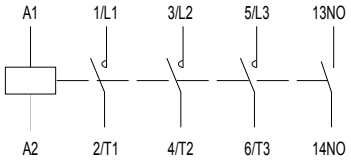


Ex9CS09 10 3P

Technical data p. 39

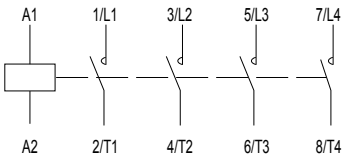
Miniature Contactors Ex9CS

Rated current 9 A, 4-pole

- Miniature version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX41.. can be used

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	9 A	S12	4	-	101028	Ex9CS09 4P 415V	1/72
400 V AC	9 A	S12	4	-	101029	Ex9CS09 4P 400V	1/72
380 V AC	9 A	S12	4	-	101030	Ex9CS09 4P 380V	1/72
240 V AC	9 A	S12	4	-	101031	Ex9CS09 4P 240V	1/72
230 V AC	9 A	S12	4	-	101032	Ex9CS09 4P 230V	1/72
220 V AC	9 A	S12	4	-	101033	Ex9CS09 4P 220V	1/72
127 V AC	9 A	S12	4	-	101034	Ex9CS09 4P 127V	1/72
110 V AC	9 A	S12	4	-	101035	Ex9CS09 4P 110V	1/72
48 V AC	9 A	S12	4	-	101036	Ex9CS09 4P 48V	1/72
42 V AC	9 A	S12	4	-	101037	Ex9CS09 4P 42V	1/72
36 V AC	9 A	S12	4	-	101038	Ex9CS09 4P 36V	1/72
24 V AC	9 A	S12	4	-	101039	Ex9CS09 4P 24V	1/72
415 V AC	9 A	S12	2+2	-	101040	Ex9CS09 4P/22 415V	1/72
400 V AC	9 A	S12	2+2	-	101041	Ex9CS09 4P/22 400V	1/72
380 V AC	9 A	S12	2+2	-	101042	Ex9CS09 4P/22 380V	1/72
240 V AC	9 A	S12	2+2	-	101043	Ex9CS09 4P/22 240V	1/72
230 V AC	9 A	S12	2+2	-	101044	Ex9CS09 4P/22 230V	1/72
220 V AC	9 A	S12	2+2	-	101045	Ex9CS09 4P/22 220V	1/72
127 V AC	9 A	S12	2+2	-	101046	Ex9CS09 4P/22 127V	1/72
110 V AC	9 A	S12	2+2	-	101047	Ex9CS09 4P/22 110V	1/72
48 V AC	9 A	S12	2+2	-	101048	Ex9CS09 4P/22 48V	1/72
42 V AC	9 A	S12	2+2	-	101049	Ex9CS09 4P/22 42V	1/72
36 V AC	9 A	S12	2+2	-	101050	Ex9CS09 4P/22 36V	1/72
24 V AC	9 A	S12	2+2	-	101051	Ex9CS09 4P/22 24V	1/72

Wiring diagrams



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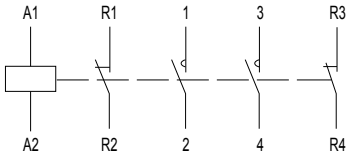


Ex9CS09 4P/22

Technical data p. 39

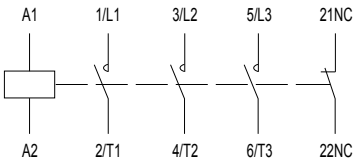
Miniature Contactors Ex9CS

Rated current 12 A, 3-pole

- Miniature version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX41.. can be used
- Can be combined with overload relays Ex9R12

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	12 A	S12	3	1 NC	101052	Ex9CS12 01 3P 415V	1/72
400 V AC	12 A	S12	3	1 NC	101053	Ex9CS12 01 3P 400V	1/72
380 V AC	12 A	S12	3	1 NC	101054	Ex9CS12 01 3P 380V	1/72
240 V AC	12 A	S12	3	1 NC	101055	Ex9CS12 01 3P 240V	1/72
230 V AC	12 A	S12	3	1 NC	101056	Ex9CS12 01 3P 230V	1/72
220 V AC	12 A	S12	3	1 NC	101057	Ex9CS12 01 3P 220V	1/72
127 V AC	12 A	S12	3	1 NC	101058	Ex9CS12 01 3P 127V	1/72
110 V AC	12 A	S12	3	1 NC	101059	Ex9CS12 01 3P 110V	1/72
48 V AC	12 A	S12	3	1 NC	101060	Ex9CS12 01 3P 48V	1/72
42 V AC	12 A	S12	3	1 NC	101061	Ex9CS12 01 3P 42V	1/72
36 V AC	12 A	S12	3	1 NC	101062	Ex9CS12 01 3P 36V	1/72
24 V AC	12 A	S12	3	1 NC	101063	Ex9CS12 01 3P 24V	1/72
415 V AC	12 A	S12	3	1 NO	101064	Ex9CS12 10 3P 415V	1/72
400 V AC	12 A	S12	3	1 NO	101065	Ex9CS12 10 3P 400V	1/72
380 V AC	12 A	S12	3	1 NO	101066	Ex9CS12 10 3P 380V	1/72
240 V AC	12 A	S12	3	1 NO	101067	Ex9CS12 10 3P 240V	1/72
230 V AC	12 A	S12	3	1 NO	101068	Ex9CS12 10 3P 230V	1/72
220 V AC	12 A	S12	3	1 NO	101069	Ex9CS12 10 3P 220V	1/72
127 V AC	12 A	S12	3	1 NO	101070	Ex9CS12 10 3P 127V	1/72
110 V AC	12 A	S12	3	1 NO	101071	Ex9CS12 10 3P 110V	1/72
48 V AC	12 A	S12	3	1 NO	101072	Ex9CS12 10 3P 48V	1/72
42 V AC	12 A	S12	3	1 NO	101073	Ex9CS12 10 3P 42V	1/72
36 V AC	12 A	S12	3	1 NO	101074	Ex9CS12 10 3P 36V	1/72
24 V AC	12 A	S12	3	1 NO	101075	Ex9CS12 10 3P 24V	1/72

Wiring diagrams



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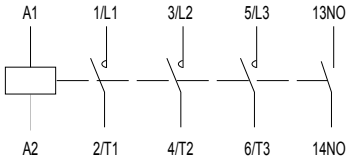

Ex9CS12 10 3P

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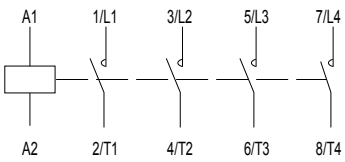
Miniature Contactors Ex9CS

Rated current 12 A, 4-pole

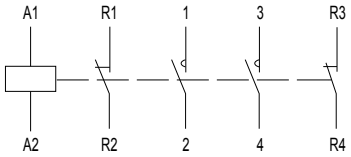
- Miniature version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX41.. can be used

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	12 A	S12	4	-	101076	Ex9CS12 4P 415V	1/72
400 V AC	12 A	S12	4	-	101077	Ex9CS12 4P 400V	1/72
380 V AC	12 A	S12	4	-	101078	Ex9CS12 4P 380V	1/72
240 V AC	12 A	S12	4	-	101079	Ex9CS12 4P 240V	1/72
230 V AC	12 A	S12	4	-	101080	Ex9CS12 4P 230V	1/72
220 V AC	12 A	S12	4	-	101081	Ex9CS12 4P 220V	1/72
127 V AC	12 A	S12	4	-	101082	Ex9CS12 4P 127V	1/72
110 V AC	12 A	S12	4	-	101083	Ex9CS12 4P 110V	1/72
48 V AC	12 A	S12	4	-	101084	Ex9CS12 4P 48V	1/72
42 V AC	12 A	S12	4	-	101085	Ex9CS12 4P 42V	1/72
36 V AC	12 A	S12	4	-	101086	Ex9CS12 4P 36V	1/72
24 V AC	12 A	S12	4	-	101087	Ex9CS12 4P 24V	1/72
415 V AC	12 A	S12	2+2	-	101088	Ex9CS12 4P/22 415V	1/72
400 V AC	12 A	S12	2+2	-	101089	Ex9CS12 4P/22 400V	1/72
380 V AC	12 A	S12	2+2	-	101090	Ex9CS12 4P/22 380V	1/72
240 V AC	12 A	S12	2+2	-	101091	Ex9CS12 4P/22 240V	1/72
230 V AC	12 A	S12	2+2	-	101092	Ex9CS12 4P/22 230V	1/72
220 V AC	12 A	S12	2+2	-	101093	Ex9CS12 4P/22 220V	1/72
127 V AC	12 A	S12	2+2	-	101094	Ex9CS12 4P/22 127V	1/72
110 V AC	12 A	S12	2+2	-	101095	Ex9CS12 4P/22 110V	1/72
48 V AC	12 A	S12	2+2	-	101096	Ex9CS12 4P/22 48V	1/72
42 V AC	12 A	S12	2+2	-	101097	Ex9CS12 4P/22 42V	1/72
36 V AC	12 A	S12	2+2	-	101098	Ex9CS12 4P/22 36V	1/72
24 V AC	12 A	S12	2+2	-	101099	Ex9CS12 4P/22 24V	1/72

Wiring diagrams



Ex9CS12 4P



Ex9CS12 4P/22

Technical data p. 39

Contactors Ex9C

- **Contactors according to IEC / EN 60947-4-1**
- **Four frame sizes with rated current up to 100 A at 400 V AC-3**
- **3-pole versions**
- **Coil control voltage 24 — 415 V AC**
- **Rated conditional short circuit current I_q 50 kA**
- **Suitable mainly for industrial applications, can be used also for domestic ones**
- **Mounting onto device rail (DIN) 35 mm or 75 mm (frame sizes 38, 65, 100) or onto panel**

Rated operational voltage of main contacts 690 V AC

Rated frequency 50 Hz

Ex9C contactors are intended for various applications including heavy industrial ones. Splitting into four frame sizes brings optimization of electrical parameters and mechanical dimensions. All these frame sizes share accessory auxiliary contacts. Overload relays differ with the frame sizes in order to fit respective contactor of given rated current.

Frame size 18 contains contactors with rated currents AC-3 9, 12 and 18 A at 400 V. Size 38 consists of rated currents 25, 32, 38 A. Version 65 is splitted into currents 40, 50 and 65. Finally frame size 100 is covered with rated currents 80 and 100 A.

Type Key

Ex9	C	09	11	3P	230V
Product family	Product	Rated current AC-3 400 V	Built-in auxiliary contacts	Poles (main contacts)	Coil control voltage
Ex9	C: Contactors	9, 12, 18, 25, 32, 38, 40, 50, 65, 80, 100 A	11 : 1 NO + 1 NC 22 : 2 NO + 2 NC	3	24 — 415 V AC

Certification marks

Contactors Ex9C

Frame sizes

Frame size 18
Rated currents 9, 12, 18 A

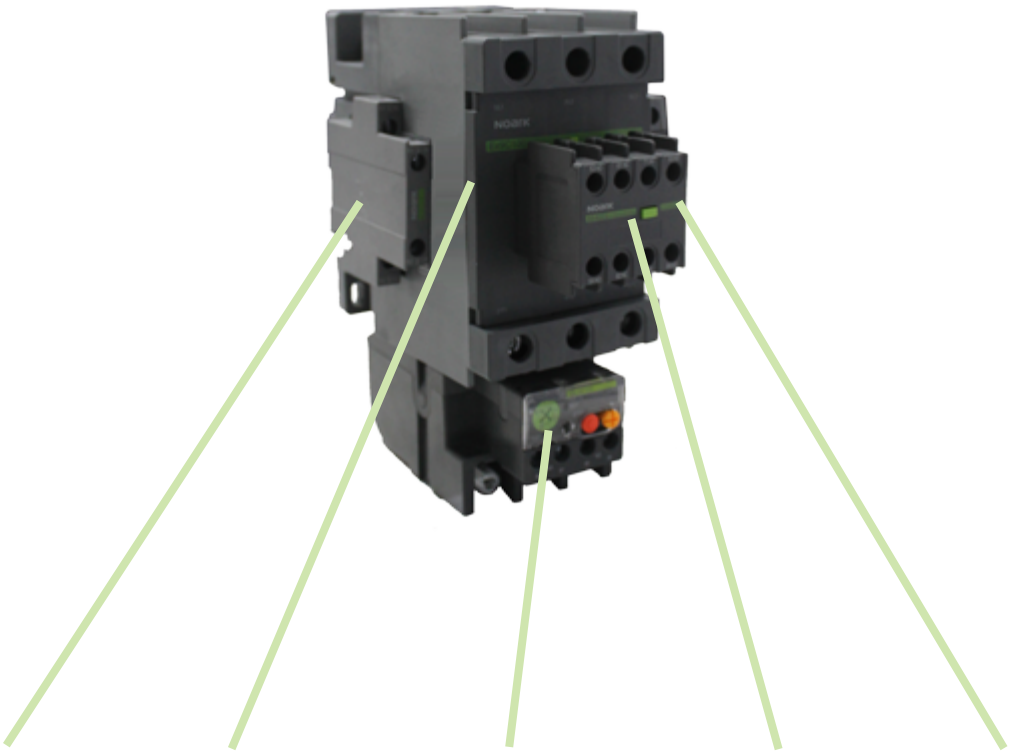
Frame size 38
Rated currents 25, 32, 38 A

Frame size 65
Rated currents 40, 50, 65 A

Frame size 100
Rated currents 80, 100 A

Contactors Ex9C

Accessories



Side-mounted auxiliary contact unit, 1 NO+1 NC **AX4311**	Contactor **Ex9C** Versions 09, 12, 18, 25, 32, 38, 40, 50, 65, 80,100	Overload thermal relay **Ex9R12, Ex9R38, Ex9R100**	Front-mounted auxiliary contact unit, 2/4 contacts **AX42**	Side-mounted auxiliary contact unit, 1 NO+1 NC **AX4311**

Auxiliary contacts AX4311	see page 28
Auxiliary contacts AX42	see page 28
Overload thermal relays Ex9R	see page 32

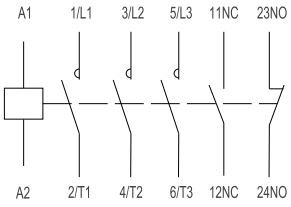
Contactors Ex9C, frame size 18

Rated current 9 A, 3-pole

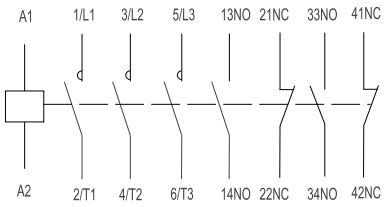
- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	9 A	18	3	1 NO + 1 NC	101100	Ex9C09 11 3P 415V	1/40
400 V AC	9 A	18	3	1 NO + 1 NC	101101	Ex9C09 11 3P 400V	1/40
380 V AC	9 A	18	3	1 NO + 1 NC	101102	Ex9C09 11 3P 380V	1/40
240 V AC	9 A	18	3	1 NO + 1 NC	101103	Ex9C09 11 3P 240V	1/40
230 V AC	9 A	18	3	1 NO + 1 NC	101104	Ex9C09 11 3P 230V	1/40
220 V AC	9 A	18	3	1 NO + 1 NC	101105	Ex9C09 11 3P 220V	1/40
127 V AC	9 A	18	3	1 NO + 1 NC	101106	Ex9C09 11 3P 127V	1/40
110 V AC	9 A	18	3	1 NO + 1 NC	101107	Ex9C09 11 3P 110V	1/40
48 V AC	9 A	18	3	1 NO + 1 NC	101108	Ex9C09 11 3P 48V	1/40
42 V AC	9 A	18	3	1 NO + 1 NC	101109	Ex9C09 11 3P 42V	1/40
36 V AC	9 A	18	3	1 NO + 1 NC	101110	Ex9C09 11 3P 36V	1/40
24 V AC	9 A	18	3	1 NO + 1 NC	101111	Ex9C09 11 3P 24V	1/40
415 V AC	9 A	18	3	2 NO + 2 NC	101112	Ex9C09 22 3P 415V	1/40
400 V AC	9 A	18	3	2 NO + 2 NC	101113	Ex9C09 22 3P 400V	1/40
380 V AC	9 A	18	3	2 NO + 2 NC	101114	Ex9C09 22 3P 380V	1/40
240 V AC	9 A	18	3	2 NO + 2 NC	101115	Ex9C09 22 3P 240V	1/40
230 V AC	9 A	18	3	2 NO + 2 NC	101116	Ex9C09 22 3P 230V	1/40
220 V AC	9 A	18	3	2 NO + 2 NC	101117	Ex9C09 22 3P 220V	1/40
127 V AC	9 A	18	3	2 NO + 2 NC	101118	Ex9C09 22 3P 127V	1/40
110 V AC	9 A	18	3	2 NO + 2 NC	101119	Ex9C09 22 3P 110V	1/40
48 V AC	9 A	18	3	2 NO + 2 NC	101120	Ex9C09 22 3P 48V	1/40
42 V AC	9 A	18	3	2 NO + 2 NC	101121	Ex9C09 22 3P 42V	1/40
36 V AC	9 A	18	3	2 NO + 2 NC	101122	Ex9C09 22 3P 36V	1/40
24 V AC	9 A	18	3	2 NO + 2 NC	101123	Ex9C09 22 3P 24V	1/40

Wiring diagrams



Ex9C09 11 3P



Ex9C09 22 3P

Technical data p. 42

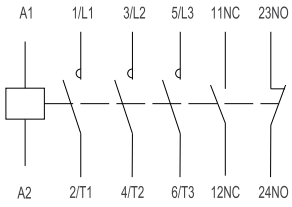
Contactors Ex9C, frame size 18

Rated current 12 A, 3-pole

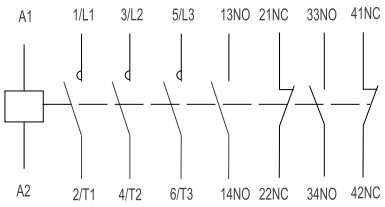
- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	12 A	18	3	1 NO + 1 NC	101124	Ex9C12 11 3P 415V	1/40
400 V AC	12 A	18	3	1 NO + 1 NC	101125	Ex9C12 11 3P 400V	1/40
380 V AC	12 A	18	3	1 NO + 1 NC	101126	Ex9C12 11 3P 380V	1/40
240 V AC	12 A	18	3	1 NO + 1 NC	101127	Ex9C12 11 3P 240V	1/40
230 V AC	12 A	18	3	1 NO + 1 NC	101128	Ex9C12 11 3P 230V	1/40
220 V AC	12 A	18	3	1 NO + 1 NC	101129	Ex9C12 11 3P 220V	1/40
127 V AC	12 A	18	3	1 NO + 1 NC	101130	Ex9C12 11 3P 127V	1/40
110 V AC	12 A	18	3	1 NO + 1 NC	101131	Ex9C12 11 3P 110V	1/40
48 V AC	12 A	18	3	1 NO + 1 NC	101132	Ex9C12 11 3P 48V	1/40
42 V AC	12 A	18	3	1 NO + 1 NC	101133	Ex9C12 11 3P 42V	1/40
36 V AC	12 A	18	3	1 NO + 1 NC	101134	Ex9C12 11 3P 36V	1/40
24 V AC	12 A	18	3	1 NO + 1 NC	101135	Ex9C12 11 3P 24V	1/40
415 V AC	12 A	18	3	2 NO + 2 NC	101136	Ex9C12 22 3P 415V	1/40
400 V AC	12 A	18	3	2 NO + 2 NC	101137	Ex9C12 22 3P 400V	1/40
380 V AC	12 A	18	3	2 NO + 2 NC	101138	Ex9C12 22 3P 380V	1/40
240 V AC	12 A	18	3	2 NO + 2 NC	101139	Ex9C12 22 3P 240V	1/40
230 V AC	12 A	18	3	2 NO + 2 NC	101140	Ex9C12 22 3P 230V	1/40
220 V AC	12 A	18	3	2 NO + 2 NC	101141	Ex9C12 22 3P 220V	1/40
127 V AC	12 A	18	3	2 NO + 2 NC	101142	Ex9C12 22 3P 127V	1/40
110 V AC	12 A	18	3	2 NO + 2 NC	101143	Ex9C12 22 3P 110V	1/40
48 V AC	12 A	18	3	2 NO + 2 NC	101144	Ex9C12 22 3P 48V	1/40
42 V AC	12 A	18	3	2 NO + 2 NC	101145	Ex9C12 22 3P 42V	1/40
36 V AC	12 A	18	3	2 NO + 2 NC	101146	Ex9C12 22 3P 36V	1/40
24 V AC	12 A	18	3	2 NO + 2 NC	101147	Ex9C12 22 3P 24V	1/40

Wiring diagrams



Ex9C12 11 3P



Ex9C12 22 3P

Technical data p. 42

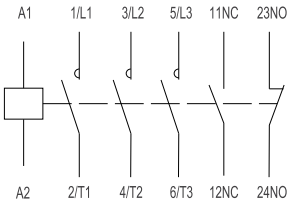
Contactors Ex9C, frame size 18

Rated current 18 A, 3-pole

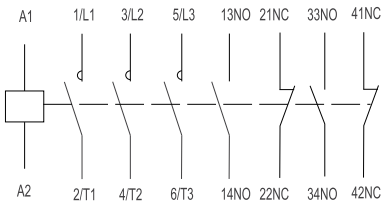
- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	18 A	18	3	1 NO + 1 NC	101148	Ex9C18 11 3P 415V	1/40
400 V AC	18 A	18	3	1 NO + 1 NC	101149	Ex9C18 11 3P 400V	1/40
380 V AC	18 A	18	3	1 NO + 1 NC	101150	Ex9C18 11 3P 380V	1/40
240 V AC	18 A	18	3	1 NO + 1 NC	101151	Ex9C18 11 3P 240V	1/40
230 V AC	18 A	18	3	1 NO + 1 NC	101152	Ex9C18 11 3P 230V	1/40
220 V AC	18 A	18	3	1 NO + 1 NC	101153	Ex9C18 11 3P 220V	1/40
127 V AC	18 A	18	3	1 NO + 1 NC	101154	Ex9C18 11 3P 127V	1/40
110 V AC	18 A	18	3	1 NO + 1 NC	101155	Ex9C18 11 3P 110V	1/40
48 V AC	18 A	18	3	1 NO + 1 NC	101156	Ex9C18 11 3P 48V	1/40
42 V AC	18 A	18	3	1 NO + 1 NC	101157	Ex9C18 11 3P 42V	1/40
36 V AC	18 A	18	3	1 NO + 1 NC	101158	Ex9C18 11 3P 36V	1/40
24 V AC	18 A	18	3	1 NO + 1 NC	101159	Ex9C18 11 3P 24V	1/40
415 V AC	18 A	18	3	2 NO + 2 NC	101160	Ex9C18 22 3P 415V	1/40
400 V AC	18 A	18	3	2 NO + 2 NC	101161	Ex9C18 22 3P 400V	1/40
380 V AC	18 A	18	3	2 NO + 2 NC	101162	Ex9C18 22 3P 380V	1/40
240 V AC	18 A	18	3	2 NO + 2 NC	101163	Ex9C18 22 3P 240V	1/40
230 V AC	18 A	18	3	2 NO + 2 NC	101164	Ex9C18 22 3P 230V	1/40
220 V AC	18 A	18	3	2 NO + 2 NC	101165	Ex9C18 22 3P 220V	1/40
127 V AC	18 A	18	3	2 NO + 2 NC	101166	Ex9C18 22 3P 127V	1/40
110 V AC	18 A	18	3	2 NO + 2 NC	101167	Ex9C18 22 3P 110V	1/40
48 V AC	18 A	18	3	2 NO + 2 NC	101168	Ex9C18 22 3P 48V	1/40
42 V AC	18 A	18	3	2 NO + 2 NC	101169	Ex9C18 22 3P 42V	1/40
36 V AC	18 A	18	3	2 NO + 2 NC	101170	Ex9C18 22 3P 36V	1/40
24 V AC	18 A	18	3	2 NO + 2 NC	101171	Ex9C18 22 3P 24V	1/40

Wiring diagrams



Ex9C18 11 3P



Ex9C18 22 3P

Technical data p. 42

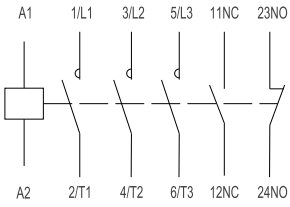
Contactors Ex9C, frame size 38

Rated current 25 A, 3-pole

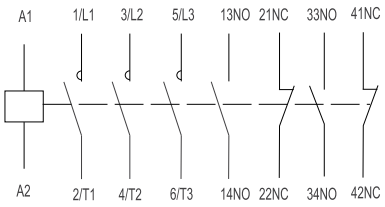
- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	25 A	38	3	1 NO + 1 NC	101172	Ex9C25 11 3P 415V	1/20
400 V AC	25 A	38	3	1 NO + 1 NC	101173	Ex9C25 11 3P 400V	1/20
380 V AC	25 A	38	3	1 NO + 1 NC	101174	Ex9C25 11 3P 380V	1/20
240 V AC	25 A	38	3	1 NO + 1 NC	101175	Ex9C25 11 3P 240V	1/20
230 V AC	25 A	38	3	1 NO + 1 NC	101176	Ex9C25 11 3P 230V	1/20
220 V AC	25 A	38	3	1 NO + 1 NC	101177	Ex9C25 11 3P 220V	1/20
127 V AC	25 A	38	3	1 NO + 1 NC	101178	Ex9C25 11 3P 127V	1/20
110 V AC	25 A	38	3	1 NO + 1 NC	101179	Ex9C25 11 3P 110V	1/20
48 V AC	25 A	38	3	1 NO + 1 NC	101180	Ex9C25 11 3P 48V	1/20
42 V AC	25 A	38	3	1 NO + 1 NC	101181	Ex9C25 11 3P 42V	1/20
36 V AC	25 A	38	3	1 NO + 1 NC	101182	Ex9C25 11 3P 36V	1/20
24 V AC	25 A	38	3	1 NO + 1 NC	101183	Ex9C25 11 3P 24V	1/20
415 V AC	25 A	38	3	2 NO + 2 NC	101184	Ex9C25 22 3P 415V	1/20
400 V AC	25 A	38	3	2 NO + 2 NC	101185	Ex9C25 22 3P 400V	1/20
380 V AC	25 A	38	3	2 NO + 2 NC	101186	Ex9C25 22 3P 380V	1/20
240 V AC	25 A	38	3	2 NO + 2 NC	101187	Ex9C25 22 3P 240V	1/20
230 V AC	25 A	38	3	2 NO + 2 NC	101188	Ex9C25 22 3P 230V	1/20
220 V AC	25 A	38	3	2 NO + 2 NC	101189	Ex9C25 22 3P 220V	1/20
127 V AC	25 A	38	3	2 NO + 2 NC	101190	Ex9C25 22 3P 127V	1/20
110 V AC	25 A	38	3	2 NO + 2 NC	101191	Ex9C25 22 3P 110V	1/20
48 V AC	25 A	38	3	2 NO + 2 NC	101192	Ex9C25 22 3P 48V	1/20
42 V AC	25 A	38	3	2 NO + 2 NC	101193	Ex9C25 22 3P 42V	1/20
36 V AC	25 A	38	3	2 NO + 2 NC	101194	Ex9C25 22 3P 36V	1/20
24 V AC	25 A	38	3	2 NO + 2 NC	101195	Ex9C25 22 3P 24V	1/20

Wiring diagrams



Ex9C25 11 3P



Ex9C25 22 3P

Technical data p. 45

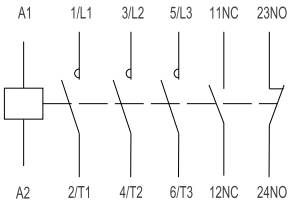
Contactors Ex9C, frame size 38

Rated current 32 A, 3-pole

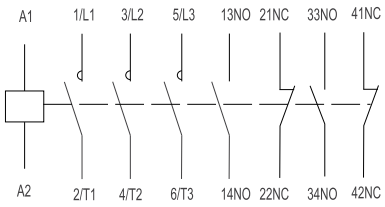
- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	32 A	38	3	1 NO + 1 NC	101196	Ex9C32 11 3P 415V	1/20
400 V AC	32 A	38	3	1 NO + 1 NC	101197	Ex9C32 11 3P 400V	1/20
380 V AC	32 A	38	3	1 NO + 1 NC	101198	Ex9C32 11 3P 380V	1/20
240 V AC	32 A	38	3	1 NO + 1 NC	101199	Ex9C32 11 3P 240V	1/20
230 V AC	32 A	38	3	1 NO + 1 NC	101200	Ex9C32 11 3P 230V	1/20
220 V AC	32 A	38	3	1 NO + 1 NC	101201	Ex9C32 11 3P 220V	1/20
127 V AC	32 A	38	3	1 NO + 1 NC	101202	Ex9C32 11 3P 127V	1/20
110 V AC	32 A	38	3	1 NO + 1 NC	101203	Ex9C32 11 3P 110V	1/20
48 V AC	32 A	38	3	1 NO + 1 NC	101204	Ex9C32 11 3P 48V	1/20
42 V AC	32 A	38	3	1 NO + 1 NC	101205	Ex9C32 11 3P 42V	1/20
36 V AC	32 A	38	3	1 NO + 1 NC	101206	Ex9C32 11 3P 36V	1/20
24 V AC	32 A	38	3	1 NO + 1 NC	101207	Ex9C32 11 3P 24V	1/20
415 V AC	32 A	38	3	2 NO + 2 NC	101208	Ex9C32 22 3P 415V	1/20
400 V AC	32 A	38	3	2 NO + 2 NC	101209	Ex9C32 22 3P 400V	1/20
380 V AC	32 A	38	3	2 NO + 2 NC	101210	Ex9C32 22 3P 380V	1/20
240 V AC	32 A	38	3	2 NO + 2 NC	101211	Ex9C32 22 3P 240V	1/20
230 V AC	32 A	38	3	2 NO + 2 NC	101212	Ex9C32 22 3P 230V	1/20
220 V AC	32 A	38	3	2 NO + 2 NC	101213	Ex9C32 22 3P 220V	1/20
127 V AC	32 A	38	3	2 NO + 2 NC	101214	Ex9C32 22 3P 127V	1/20
110 V AC	32 A	38	3	2 NO + 2 NC	101215	Ex9C32 22 3P 110V	1/20
48 V AC	32 A	38	3	2 NO + 2 NC	101216	Ex9C32 22 3P 48V	1/20
42 V AC	32 A	38	3	2 NO + 2 NC	101217	Ex9C32 22 3P 42V	1/20
36 V AC	32 A	38	3	2 NO + 2 NC	101218	Ex9C32 22 3P 36V	1/20
24 V AC	32 A	38	3	2 NO + 2 NC	101219	Ex9C32 22 3P 24V	1/20

Wiring diagrams



Ex9C32 11 3P



Ex9C32 22 3P

Technical data p. 45

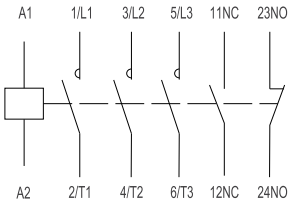
Contactors Ex9C, frame size 38

Rated current 38 A, 3-pole

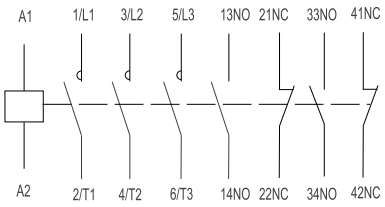
- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R38

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	38 A	38	3	1 NO + 1 NC	101220	Ex9C38 11 3P 415V	1/20
400 V AC	38 A	38	3	1 NO + 1 NC	101221	Ex9C38 11 3P 400V	1/20
380 V AC	38 A	38	3	1 NO + 1 NC	101222	Ex9C38 11 3P 380V	1/20
240 V AC	38 A	38	3	1 NO + 1 NC	101223	Ex9C38 11 3P 240V	1/20
230 V AC	38 A	38	3	1 NO + 1 NC	101224	Ex9C38 11 3P 230V	1/20
220 V AC	38 A	38	3	1 NO + 1 NC	101225	Ex9C38 11 3P 220V	1/20
127 V AC	38 A	38	3	1 NO + 1 NC	101226	Ex9C38 11 3P 127V	1/20
110 V AC	38 A	38	3	1 NO + 1 NC	101227	Ex9C38 11 3P 110V	1/20
48 V AC	38 A	38	3	1 NO + 1 NC	101228	Ex9C38 11 3P 48V	1/20
42 V AC	38 A	38	3	1 NO + 1 NC	101229	Ex9C38 11 3P 42V	1/20
36 V AC	38 A	38	3	1 NO + 1 NC	101230	Ex9C38 11 3P 36V	1/20
24 V AC	38 A	38	3	1 NO + 1 NC	101231	Ex9C38 11 3P 24V	1/20
415 V AC	38 A	38	3	2 NO + 2 NC	101232	Ex9C38 22 3P 415V	1/20
400 V AC	38 A	38	3	2 NO + 2 NC	101233	Ex9C38 22 3P 400V	1/20
380 V AC	38 A	38	3	2 NO + 2 NC	101234	Ex9C38 22 3P 380V	1/20
240 V AC	38 A	38	3	2 NO + 2 NC	101235	Ex9C38 22 3P 240V	1/20
230 V AC	38 A	38	3	2 NO + 2 NC	101236	Ex9C38 22 3P 230V	1/20
220 V AC	38 A	38	3	2 NO + 2 NC	101237	Ex9C38 22 3P 220V	1/20
127 V AC	38 A	38	3	2 NO + 2 NC	101238	Ex9C38 22 3P 127V	1/20
110 V AC	38 A	38	3	2 NO + 2 NC	101239	Ex9C38 22 3P 110V	1/20
48 V AC	38 A	38	3	2 NO + 2 NC	101240	Ex9C38 22 3P 48V	1/20
42 V AC	38 A	38	3	2 NO + 2 NC	101241	Ex9C38 22 3P 42V	1/20
36 V AC	38 A	38	3	2 NO + 2 NC	101242	Ex9C38 22 3P 36V	1/20
24 V AC	38 A	38	3	2 NO + 2 NC	101243	Ex9C38 22 3P 24V	1/20

Wiring diagrams



Ex9C38 11 3P



Ex9C38 22 3P

Technical data p. 45

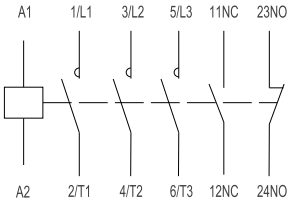
Contactors Ex9C, frame size 65

Rated current 40 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	40 A	65	3	1 NO + 1 NC	101244	Ex9C40 11 3P 415V	1/12
400 V AC	40 A	65	3	1 NO + 1 NC	101245	Ex9C40 11 3P 400V	1/12
380 V AC	40 A	65	3	1 NO + 1 NC	101246	Ex9C40 11 3P 380V	1/12
240 V AC	40 A	65	3	1 NO + 1 NC	101247	Ex9C40 11 3P 240V	1/12
230 V AC	40 A	65	3	1 NO + 1 NC	101248	Ex9C40 11 3P 230V	1/12
220 V AC	40 A	65	3	1 NO + 1 NC	101249	Ex9C40 11 3P 220V	1/12
127 V AC	40 A	65	3	1 NO + 1 NC	101250	Ex9C40 11 3P 127V	1/12
110 V AC	40 A	65	3	1 NO + 1 NC	101251	Ex9C40 11 3P 110V	1/12
48 V AC	40 A	65	3	1 NO + 1 NC	101252	Ex9C40 11 3P 48V	1/12
42 V AC	40 A	65	3	1 NO + 1 NC	101253	Ex9C40 11 3P 42V	1/12
36 V AC	40 A	65	3	1 NO + 1 NC	101254	Ex9C40 11 3P 36V	1/12
24 V AC	40 A	65	3	1 NO + 1 NC	101255	Ex9C40 11 3P 24V	1/12

Wiring diagram



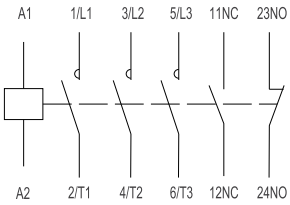
Ex9C40 11 3P

Rated current 50 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	50 A	65	3	1 NO + 1 NC	101256	Ex9C50 11 3P 415V	1/12
400 V AC	50 A	65	3	1 NO + 1 NC	101257	Ex9C50 11 3P 400V	1/12
380 V AC	50 A	65	3	1 NO + 1 NC	101258	Ex9C50 11 3P 380V	1/12
240 V AC	50 A	65	3	1 NO + 1 NC	101259	Ex9C50 11 3P 240V	1/12
230 V AC	50 A	65	3	1 NO + 1 NC	101260	Ex9C50 11 3P 230V	1/12
220 V AC	50 A	65	3	1 NO + 1 NC	101261	Ex9C50 11 3P 220V	1/12
127 V AC	50 A	65	3	1 NO + 1 NC	101262	Ex9C50 11 3P 127V	1/12
110 V AC	50 A	65	3	1 NO + 1 NC	101263	Ex9C50 11 3P 110V	1/12
48 V AC	50 A	65	3	1 NO + 1 NC	101264	Ex9C50 11 3P 48V	1/12
42 V AC	50 A	65	3	1 NO + 1 NC	101265	Ex9C50 11 3P 42V	1/12
36 V AC	50 A	65	3	1 NO + 1 NC	101266	Ex9C50 11 3P 36V	1/12
24 V AC	50 A	65	3	1 NO + 1 NC	101267	Ex9C50 11 3P 24V	1/12

Wiring diagram



Technical data p. 48

Ex9C50 11 3P

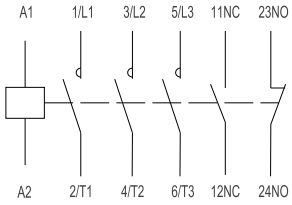
Contactors Ex9C, frame size 65

Rated current 65 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	65 A	65	3	1 NO + 1 NC	101268	Ex9C65 11 3P 415V	1/12
400 V AC	65 A	65	3	1 NO + 1 NC	101269	Ex9C65 11 3P 400V	1/12
380 V AC	65 A	65	3	1 NO + 1 NC	101270	Ex9C65 11 3P 380V	1/12
240 V AC	65 A	65	3	1 NO + 1 NC	101271	Ex9C65 11 3P 240V	1/12
230 V AC	65 A	65	3	1 NO + 1 NC	101272	Ex9C65 11 3P 230V	1/12
220 V AC	65 A	65	3	1 NO + 1 NC	101273	Ex9C65 11 3P 220V	1/12
127 V AC	65 A	65	3	1 NO + 1 NC	101274	Ex9C65 11 3P 127V	1/12
110 V AC	65 A	65	3	1 NO + 1 NC	101275	Ex9C65 11 3P 110V	1/12
48 V AC	65 A	65	3	1 NO + 1 NC	101276	Ex9C65 11 3P 48V	1/12
42 V AC	65 A	65	3	1 NO + 1 NC	101277	Ex9C65 11 3P 42V	1/12
36 V AC	65 A	65	3	1 NO + 1 NC	101278	Ex9C65 11 3P 36V	1/12
24 V AC	65 A	65	3	1 NO + 1 NC	101279	Ex9C65 11 3P 24V	1/12

Wiring diagram



Ex9C65 11 3P

Technical data p. 48

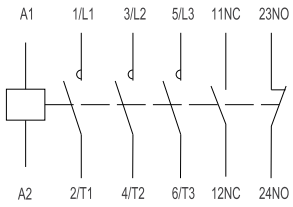
Contactors Ex9C, frame size 100

Rated current 80 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	80 A	100	3	1 NO + 1 NC	101335	Ex9C80 11 3P 415V	1/12
400 V AC	80 A	100	3	1 NO + 1 NC	101336	Ex9C80 11 3P 400V	1/12
380 V AC	80 A	100	3	1 NO + 1 NC	101337	Ex9C80 11 3P 380V	1/12
240 V AC	80 A	100	3	1 NO + 1 NC	101338	Ex9C80 11 3P 240V	1/12
230 V AC	80 A	100	3	1 NO + 1 NC	101339	Ex9C80 11 3P 230V	1/12
220 V AC	80 A	100	3	1 NO + 1 NC	101340	Ex9C80 11 3P 220V	1/12
127 V AC	80 A	100	3	1 NO + 1 NC	101341	Ex9C80 11 3P 127V	1/12
110 V AC	80 A	100	3	1 NO + 1 NC	101342	Ex9C80 11 3P 110V	1/12
48 V AC	80 A	100	3	1 NO + 1 NC	101343	Ex9C80 11 3P 48V	1/12
42 V AC	80 A	100	3	1 NO + 1 NC	101344	Ex9C80 11 3P 42V	1/12
36 V AC	80 A	100	3	1 NO + 1 NC	101345	Ex9C80 11 3P 36V	1/12
24 V AC	80 A	100	3	1 NO + 1 NC	101346	Ex9C80 11 3P 24V	1/12

Wiring diagram



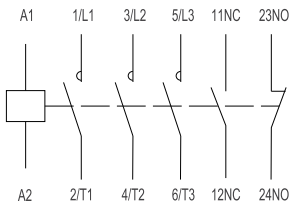
Ex9C80 11 3P

Rated current 100 A, 3-pole

- Standard version of contactor
- Mounting onto device (DIN) rail 35 mm and 75 mm or onto panel
- Front-mounted auxiliary contacts AX42.. as well as side-mounted ones AX43 can be used
- Can be combined with overload relays Ex9R100

Control Voltage	I_e	Frame size	Poles	Aux. cont.	Article No.	Type	Packing
415 V AC	100 A	100	3	1 NO + 1 NC	101347	Ex9C100 11 3P 415V	1/12
400 V AC	100 A	100	3	1 NO + 1 NC	101348	Ex9C100 11 3P 400V	1/12
380 V AC	100 A	100	3	1 NO + 1 NC	101349	Ex9C100 11 3P 380V	1/12
240 V AC	100 A	100	3	1 NO + 1 NC	101350	Ex9C100 11 3P 240V	1/12
230 V AC	100 A	100	3	1 NO + 1 NC	101351	Ex9C100 11 3P 230V	1/12
220 V AC	100 A	100	3	1 NO + 1 NC	101352	Ex9C100 11 3P 220V	1/12
127 V AC	100 A	100	3	1 NO + 1 NC	101353	Ex9C100 11 3P 127V	1/12
110 V AC	100 A	100	3	1 NO + 1 NC	101354	Ex9C100 11 3P 110V	1/12
48 V AC	100 A	100	3	1 NO + 1 NC	101355	Ex9C100 11 3P 48V	1/12
42 V AC	100 A	100	3	1 NO + 1 NC	101356	Ex9C100 11 3P 42V	1/12
36 V AC	100 A	100	3	1 NO + 1 NC	101357	Ex9C100 11 3P 36V	1/12
24 V AC	100 A	100	3	1 NO + 1 NC	101358	Ex9C100 11 3P 24V	1/12

Wiring diagram



Ex9C100 11 3P

Technical data p. 51

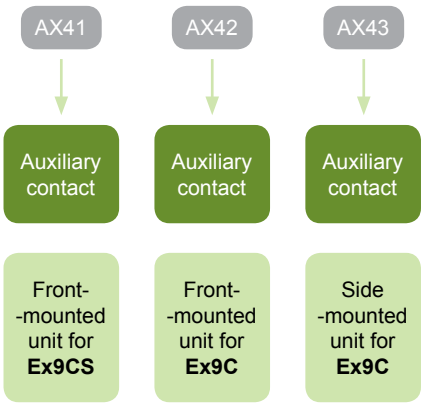
Accessories for Contactors Ex9CS, Ex9C

- **Accessories for Miniature Contactors Ex9CS and Contactors Ex9C**
- **Front-mounted auxiliary contacts for Ex9CS**
- **Front and side-mounted auxiliary contacts for Ex9C**
- **Contactors Ex9C can be simultaneously equipped with one front-mounted contact unit and two side-mounted units**
- **Miniature Contactors Ex9CS can be used with one unit of front-mounted auxiliary contact unit**
- **Installation of an auxiliary contact unit does not affect a possibility to install overload thermal relay Ex9R**

AX41.. auxiliary contact units are designed in order to match Miniature Contactors Ex9CS. With one contactor, one AX41 unit can be used. Auxiliary contact units are available with four contacts with all posible contact combinations.

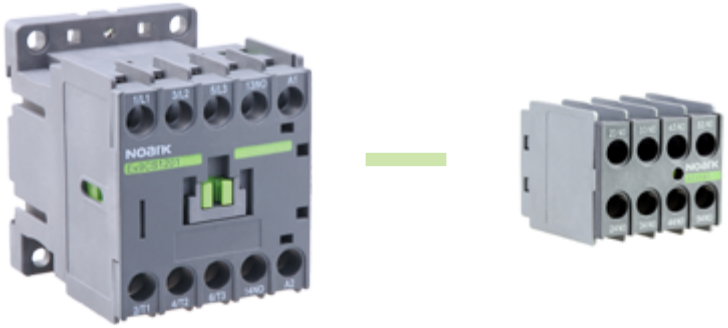
Contactors Ex9C (all frame sizes) share accessories, i.e. available portfolio can be used for all sizes of contactors (except Miniature ones Ex9CS). Every Contactor can be equipped with one unit of front-mounted auxiliary contacts AX42.. and two units of side-mounted ones AX4311 (one from the left, the other from the right).

Type Key



Accessories for Contactors Ex9CS, Ex9C

Miniature Contactors Ex9CS



Ex9CS
Version 06, 09, 12

AX41..
Max. 1 unit

Contactors Ex9C

Ex9C
Version 09, 12, 18, 25, 32, 38, 40, 50, 65, 80, 100

AX4311
Max. 1 unit from the left

AX4311
Max. 1 unit from the right

AX42..
Max. 1 unit

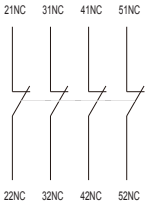
Accessories for Contactors Ex9CS

Auxiliary contacts for Miniature Contactors Ex9CS, front-mounted

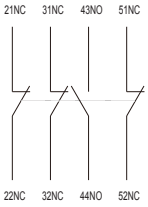
- Auxiliary contacts for Miniature Contactors Ex9CS for subsequent mounting
- Front-mounted version
- 1 unit can be used with a contactor
- Do not limit a possibility to install overload relay Ex9R12

Contacts	Suitable for	Article No.	Type	Packing
4 NC	Ex9CS	101435	AX4104	6/216
1 NO + 3 NC	Ex9CS	101280	AX4113	6/216
2 NO + 2 NC	Ex9CS	101281	AX4122	6/216
3 NO + 1 NC	Ex9CS	101282	AX4131	6/216
4 NO	Ex9CS	101283	AX4140	6/216

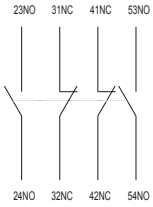
Wiring diagrams



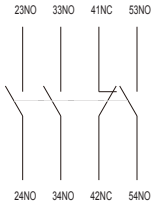
AX4104



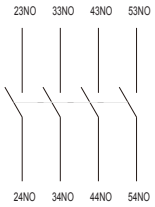
AX4113



AX4122



AX4131



AX4140

Technical data p. 54

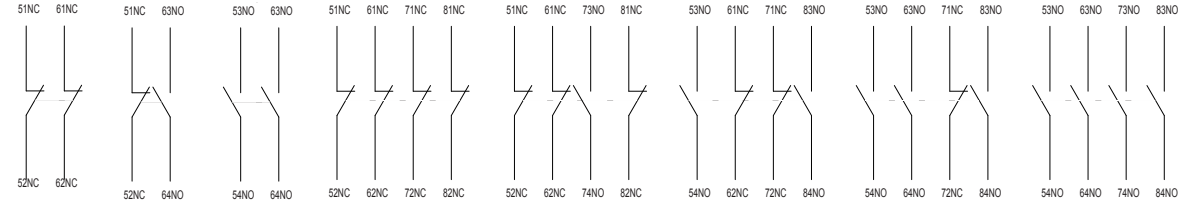
Accessories for Contactors Ex9C

Auxiliary contacts for Contactors Ex9C, front-mounted

- Auxiliary contacts for Contactors Ex9C09, Ex9C12, Ex9C18, Ex9C25, Ex9C32, Ex9C38, Ex9C40, Ex9C50, Ex9C65, Ex9C80, Ex9C100, for subsequent mounting
- Front-mounted version
- 1 unit can be used with a contactor
- Do not limit a possibility to install overload relays Ex9R38, Ex9R100

Contacts	Suitable for	Article No.	Type	Packing
2 NC	Ex9C	101284	AX4202	12/624
1 NO + 1 NC	Ex9C	101285	AX4211	12/624
2 NO	Ex9C	101286	AX4220	12/624
4 NC	Ex9C	101287	AX4204	6/312
1 NO + 3 NC	Ex9C	101288	AX4213	6/312
2 NO + 2 NC	Ex9C	101289	AX4222	6/312
3 NO + 1 NC	Ex9C	101290	AX4231	6/312
4 NO	Ex9C	101291	AX4240	6/312

Wiring diagrams



AX4202 AX4211 AX4220 AX4204 AX4213 AX4222 AX4231 AX4240

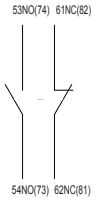
Technical data p. 56

Auxiliary contacts for Contactors Ex9C, side-mounted

- Auxiliary contacts for Contactors Ex9C09, Ex9C12, Ex9C18, Ex9C25, Ex9C32, Ex9C38, Ex9C40, Ex9C50, Ex9C65, Ex9C80, Ex9C100, for subsequent mounting
- Side-mounted version
- 1 unit can be used with a contactor at the left, another unit at the right
- Do not limit a possibility to install overload relays Ex9R38, Ex9R100

Contacts	Suitable for	Article No.	Type	Packing
1 NO + 1 NC	Ex9C	101292	AX4311	10/120

Wiring diagram



AX4311

Technical data p. 58

Overload Relays Ex9R

- **Overload thermal relays according to IEC / EN 60947-4-1**
- **Three frame sizes with rated current up to 100 A at 690 V AC-3**
- **3-pole versions**
- **Tripping class 10A**
- **For direct mounting onto Ex9C(S) contactors series or as a stand-alone device**
- **Suitable mainly for motor protection against overload or phase lost**
- **Mounting onto connected contactor or onto device rail (DIN) 35 mm by means of AD5. adaptor**

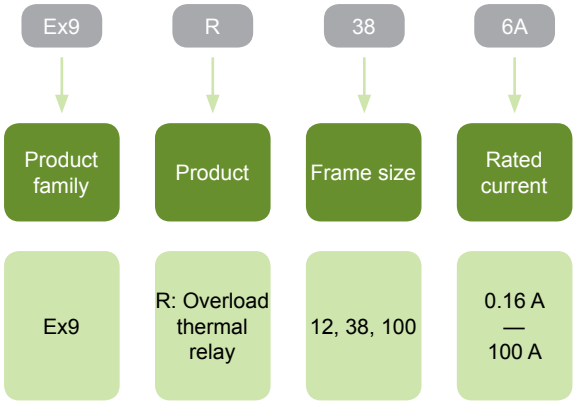
Rated operational voltage 690 V AC, rated frequency 50/60 Hz

Ex9R overload thermal relays contactors are designed for protection of motors mainly. These relays can be either combined directly with Contactors of Ex9CS and Ex9C series or used as a stand-alone device with AD5. adaptor. Relays are available in three frame sizes for rated non-reduced currents from 0.16 — 100 A.

Size Ex9R12 is designed to match Miniature Contactors Ex9CS. Version Ex9R38 can be mounted onto Contactors Ex9C18 and with spacer (in the scope of delivery of the relay) also with size Ex9C38. The last size Ex9R100 can be combined with Ex9C65 and Ex9C100 (with spacer).

Ex9R relays are equipped with 1 NO and 1 NC auxiliary contacts.

Type Key



Certification marks

Overload Relays Ex9R

Design

Ex9R12
Frame size 12

Ex9R38
Frame size 38

Ex9R100
Frame size 100

Mounting

Direct mounting onto Contactor Ex9C..

Adaptor AD5.

Stand-alone device with adaptor AD5.

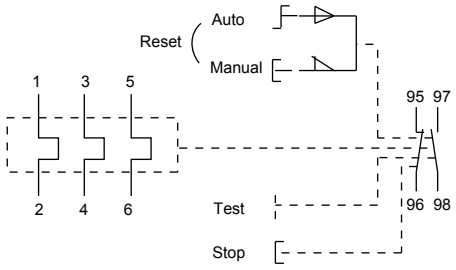
Overload Relays Ex9R

Frame size 12

- Overload thermal relay
- For direct mounting onto Miniature Contactors Ex9CS
- Stand-alone device for mounting onto device (DIN) rail 35 mm by means of combination with adaptor AD51
- Automatic and manual reset function
- Tripping class 10A

Current setting range I_e	For contactor frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
0.1 - 0.16 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101359	Ex9R12 0.16A	1/80
0.16 - 0.25 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101360	Ex9R12 0.25A	1/80
0.25 - 0.4 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101361	Ex9R12 0.4A	1/80
0.4 - 0.63 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101362	Ex9R12 0.63A	1/80
0.63 - 1 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101363	Ex9R12 1A	1/80
1 - 1.6 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101364	Ex9R12 1.6A	1/80
1.6 - 2.5 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101365	Ex9R12 2.5A	1/80
2.5 - 4 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101366	Ex9R12 4A	1/80
4 - 6 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101367	Ex9R12 6A	1/80
5.5 - 8 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101368	Ex9R12 8A	1/80
7 - 10 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101369	Ex9R12 10A	1/80
9 - 12 A	Mini (S06, S09, S12)	3	1 NO + 1 NC	101370	Ex9R12 12A	1/80

Wiring diagram



Ex9R12

Technical data p. 60

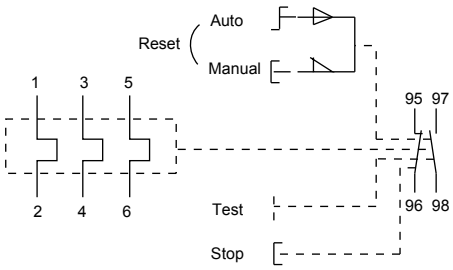
Overload Relays Ex9R

Frame size 38

- Overload thermal relay
- For direct mounting onto Contactors Ex9C18 and Ex9C38 (with included spacer)
- Stand-alone device for mounting onto device (DIN) rail 35 mm by means of combination with adaptor AD52
- Automatic and manual reset function
- Tripping class 10A

Current setting range I_e	For contactor frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
2.5 - 4 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101371	Ex9R38 4A	1/80
4 - 6 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101372	Ex9R38 6A	1/80
5.5 - 8 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101373	Ex9R38 8A	1/80
7 - 10 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101374	Ex9R38 10A	1/80
9 - 13 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101375	Ex9R38 13A	1/80
12 - 18 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101376	Ex9R38 18A	1/80
16 - 24 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101377	Ex9R38 24A	1/80
23 - 32 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101378	Ex9R38 32A	1/80
30 - 38 A	18 (09, 12, 18), 38 (25, 32, 38)	3	1 NO + 1 NC	101379	Ex9R38 38A	1/80

Wiring diagram



Ex9R38

Technical data p. 60

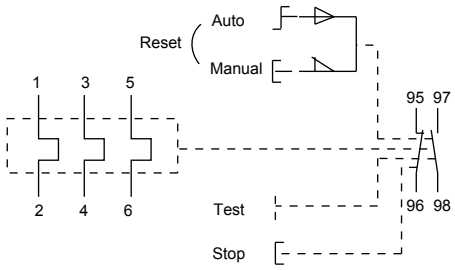
Overload Relays Ex9R

Frame size 100

- Overload thermal relay
- For direct mounting onto Contactors Ex9C65 and Ex9C100 (with included spacer)
- Stand-alone device for mounting onto device (DIN) rail 35 mm by means of combination with adaptor AD53
- Automatic and manual reset function
- Tripping class 10A

Current setting range I_e	For contactor frame size	Poles	Auxiliary contacts	Article No.	Type	Packing
23 - 32 A	65 (40, 50, 65), 100 (80, 100)	3	1 NO + 1 NC	101380	Ex9R100 32A	1/24
30 - 40 A	65 (40, 50, 65), 100 (80, 100)	3	1 NO + 1 NC	101381	Ex9R100 40A	1/24
37 - 50 A	65 (40, 50, 65), 100 (80, 100)	3	1 NO + 1 NC	101382	Ex9R100 50A	1/24
48 - 65 A	65 (40, 50, 65), 100 (80, 100)	3	1 NO + 1 NC	101383	Ex9R100 65A	1/24
55 - 70 A	65 (40, 50, 65), 100 (80, 100)	3	1 NO + 1 NC	101384	Ex9R100 70A	1/24
63 - 80 A	65 (40, 50, 65), 100 (80, 100)	3	1 NO + 1 NC	101385	Ex9R100 80A	1/24
80 - 100 A	65 (40, 50, 65), 100 (80, 100)	3	1 NO + 1 NC	101386	Ex9R100 100A	1/24

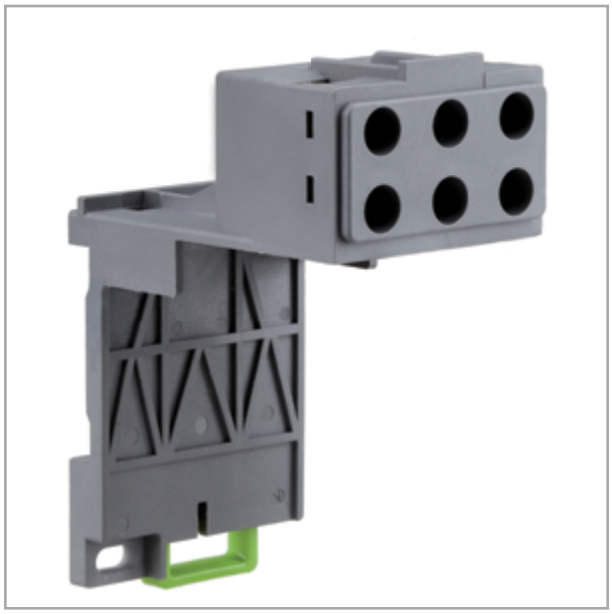
Wiring diagram



Ex9R100

Technical data p. 60

Accessories for Overload Relays Ex9R

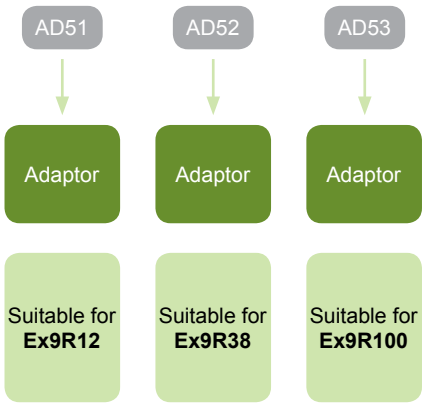


- **Accessories for Overload Relays Ex9R**
- **Adaptors for stand-alone applications of the relays**
- **Enable mounting of the overload relay onto 35 mm device rail**
- **Equipped with a set of terminals for wire connection of the relay at both sides**

AD5. adaptors are designed in order to allow a use of Overload Relays Ex9R separately without a Contactor of Ex9C(S) series.

Adaptor AD51 fits to Overload Relays Ex9R12. For Relays Ex9R38, the Adaptor AD52 is intended. Overload Relays Ex9R100 can be combined with AD53.

Type Key



Accessories for Overload Relays Ex9R

Mounting

Ex9R
Basic relay

AD5.
Adaptor

Ex9R + AD5.
For stand-alone appli-cations

Accessories for Overload Relays Ex9R

Adaptors for stand-alone applications

- Enable use of Overload Relay separatelly without a Contactor
- For direct mounting onto 35 mm device rail

Description	Suitable for	Article No.	Type	Packing
Adaptor	Ex9R12	101436	AD51	2/72
Adaptor	Ex9R38	101437	AD52	2/72
Adaptor	Ex9R100	101438	AD53	2/24

Technical data p. 61

Technical Data Miniature Contactors Ex9CS

Miniature Contactors Ex9CS06, Ex9CS09, Ex9CS12

General parameters

Very compact dimensions		
Contactors rated at AC-3		
Suitable for industrial as well as domestic applications		
3 and 4-pole versions		
Mounting onto device rail (DIN) 35 mm or onto panel		
With or without built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX41	101435, 101280, 101281, 101282, 101283

Electrical parameters - main contacts and general

	Ex9CS06	Ex9CS09	Ex9CS12
Tested according to	IEC/EN 60947-4-1		
Rated op. voltage U_e	690 V AC		
Rated insulating voltage U_i	690 V AC		
Rated impulse withstand voltage U_{imp}	6 kV	6 kV	6 kV
Rated frequency	50/60 Hz		
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current I_{th}	20 A	20 A	20 A
Rated operational current I_e			
AC-1	20 A	20 A	20 A
AC-2/AC-3/AC-4, 380/400 V	6 A	9 A	12 A
AC-2/AC-3/AC-4, 660/690 V	3.8 A	4.9 A	4.9 A
Rated power of 3-phase motor			
AC-3/AC-4, 380/400 V	2.2 kW	4 kW	5.5 kW
AC-3/AC-4, 660/690 V	3 kW	4 kW	4 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	25 A gG/gL	25 A gG/gL	25 A gG/gL
Coordination type 2 at 500 V AC	20 A gG/gL	20 A gG/gL	20 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	400 V AC	400 V AC	400 V AC
Main contact — coil	400 V AC	400 V AC	400 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	36 A	36 A	36 A
Power at 230/240 V	8 kW	8 kW	8 kW
Power at 380/400 V	13 kW	13 kW	13 kW
Power at 660/690 V	23 kW	23 kW	23 kW
Rated current $I_e = I_{th}$	20 A	20 A	20 A
1-phase power AC-1, 3 contacts in parallel			
Maximum back-up fuse gG/gL	63 A	63 A	63 A
Power at 230/240 V	18 kW	18 kW	18 kW
Power at 380/400 V	30 kW	30 kW	30 kW
Power at 660/690 V	51 kW	51 kW	51 kW
Rated current $I_e = I_{th}$	45 A	45 A	45 A

Ordering data p. 7

Technical Data Miniature Contactors Ex9CS

Miniature Contactors Ex9CS06, Ex9CS09, Ex9CS12

Electrical parameters - main contacts and general

	Ex9CS06	Ex9CS09	Ex9CS12
Making capacity			
230/240 V	144 A	144 A	144 A
380/400 V	144 A	144 A	144 A
660/690 V	144 A	144 A	144 A
Breaking capacity			
230/240 V	60 A	90 A	120 A
380/400 V	60 A	90 A	120 A
660/690 V	38 A	49 A	49 A
Mechanical service life	10 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 200 000 operation cycles		
AC-4	50 000 operation cycles	40 000 operation cycles	40 000 operation cycles
Overvoltage category	III		
EMC environment	A		
Comparative Tracking Index	400 V		
Prospective short circuit current I_q	50 kA		

Electrical parameters - coil

	Ex9CS06	Ex9CS09	Ex9CS12
Control Voltage U_c	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC		
Tolerance of Control Voltage U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c
Frequency	50 Hz	50 Hz	50 Hz
Power consumption			
Pick-up	70 VA / 30 W	70 VA / 30 W	70 VA / 30 W
Hold	7.5 VA / 3 W	7.5 VA / 3 W	7.5 VA / 3 W
Duty	100 %	100 %	100 %
Closing delay	10 — 20 ms	10 — 20 ms	10 — 20 ms
Opening delay	4 — 16 ms	4 — 16 ms	4 — 16 ms
Closing delay with front-mounted AX	5 — 15 ms	5 — 15 ms	5 — 15 ms

Electrical parameters - built-in auxiliary contacts

Rated op. voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

Ordering data p. 7

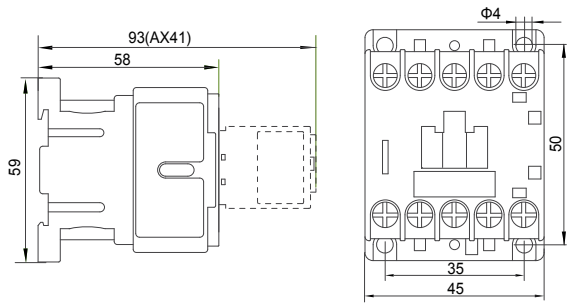
Technical Data Miniature Contactors Ex9CS

Miniature Contactors Ex9CS06, Ex9CS09, Ex9CS12

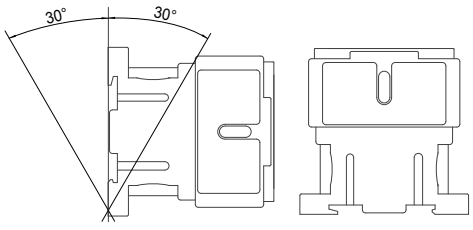
Mechanical parameters

	Ex9CS06	Ex9CS09	Ex9CS12
Device width	45 mm		
Device height	59 mm including rail clip		
Device depth	58 mm (without front-mounted auxiliary contact)		
Mounting	easy fastening onto 35 mm device rail (DIN) or onto panel		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	1 — 2.5 mm^2		
Fastening torque of terminals	0.7 — 0.8 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 95 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	0.18 kg	0.18 kg	0.18 kg
Power loss at I_e	0.2 W	0.2 W	0.2 W

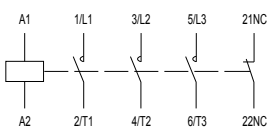
Dimensions



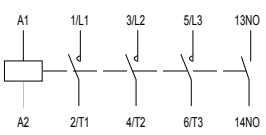
Mounting positions



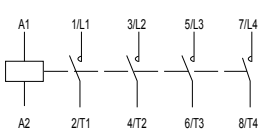
Wiring diagrams



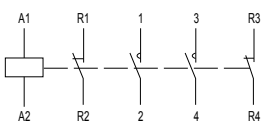
Ex9CS.. 01 3P



Ex9CS.. 10 3P



Ex9CS.. 4P



Ex9CS.. 4P/22

Ordering data p. 7

Technical Data Ex9C, frame size 18

Contactors Ex9C09, Ex9C12, Ex9C18

General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292

Electrical parameters - main contacts and general

	Ex9C09	Ex9C12	Ex9C18
Tested according to		IEC/EN 60947-4-1	
Rated op. voltage U_e		690 V AC	
Rated insulating voltage U_i		690 V AC	
Rated impulse withstand voltage U_{imp}	6 kV	6 kV	6 kV
Rated frequency		50/60 Hz	
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current I_{th}	25 A	25 A	32 A
Rated operational current I_e			
AC-1	25 A	25 A	32 A
AC-2/AC-3/AC-4, 380/400 V	9 A	12 A	18 A
AC-3, 660/690 V	6.7 A	9 A	10.6 A
AC-2/AC-4, 660/690 V	4.9 A	4.9 A	6.7 A
Rated power of 3-phase motor			
AC-3/AC-4, 380/400 V	4 kW	5.5 kW	7.5 kW
AC-3, 660/690 V	5.5 kW	7.5 kW	9 kW
AC-4, 660/690 V	4 kW	4 kW	5.5 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	25 A gG/gL	40 A gG/gL	50 A gG/gL
Coordination type 2 at 500 V AC	20 A gG/gL	25 A gG/gL	36 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	400 V AC	400 V AC	400 V AC
Main contact — coil	400 V AC	400 V AC	400 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	50 A	50 A	63 A
Power at 230/240 V	10 kW	10 kW	13 kW
Power at 380/400 V	17 kW	17 kW	21 kW
Power at 660/690 V	29 kW	29 kW	37 kW
Rated current $I_e = I_{th}$	25 A	25 A	32 A
1-phase power AC-1, 3 contacts in parallel			
Maximum back-up fuse gG/gL	80 A	80 A	100 A
Power at 230/240 V	23 kW	23 kW	29 kW
Power at 380/400 V	37 kW	37 kW	48 kW
Power at 660/690 V	64 kW	64 kW	82 kW
Rated current $I_e = I_{th}$	56 A	56 A	72 A

Ordering data p. 16

Technical Data Ex9C, frame size 18

Contactors Ex9C09, Ex9C12, Ex9C18

Electrical parameters - main contacts and general

	Ex9C09	Ex9C12	Ex9C18
Making capacity			
230/240 V	144 A	144 A	216 A
380/400 V	144 A	144 A	216 A
660/690 V	144 A	144 A	216 A
Breaking capacity			
230/240 V	90 A	120 A	180 A
380/400 V	90 A	120 A	180 A
660/690 V	67 A	90 A	106 A
Mechanical service life	10 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 200 000 operation cycles		
AC-4	50 000 operation cycles	40 000 operation cycles	40 000 operation cycles
Overvoltage category	III		
EMC environment	A		
Comparative Tracking Index	400 V		
Prospective short circuit current I_q	50 kA		

Electrical parameters - coil

	Ex9C09	Ex9C12	Ex9C18
Control Voltage U_c	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC		
Tolerance of Control Voltage U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c
Frequency	50 Hz	50 Hz	50 Hz
Power consumption			
Pick-up	90 VA / 40 W	90 VA / 40 W	90 VA / 40 W
Hold	9.5 VA / 4 W	9.5 VA / 4 W	9.5 VA / 4 W
Duty	100 %	100 %	100 %
Closing delay	12 — 24 ms	12 — 24 ms	12 — 24 ms
Opening delay	6 — 20 ms	6 — 20 ms	6 — 20 ms
Closing delay with front-mounted AX	8 — 18 ms	8 — 18 ms	8 — 18 ms

Electrical parameters - built-in auxiliary contacts

Rated op. voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

Ordering data p. 16

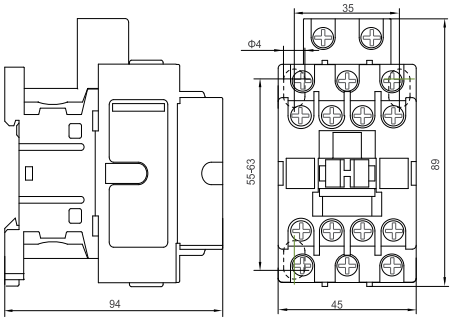
Technical Data Ex9C, frame size 18

Contactors Ex9C09, Ex9C12, Ex9C18

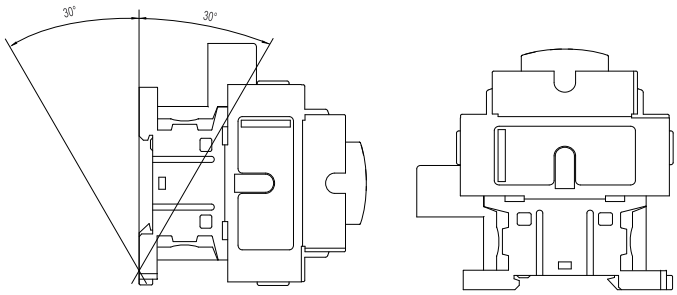
Mechanical parameters

	Ex9C09	Ex9C12	Ex9C18
Device width	45 mm (without side-mounted auxiliary contact)		
Device height	89 mm including rail clip		
Device depth	94 mm (without front-mounted auxiliary contact)		
Mounting	easy fastening onto 35 mm device rail (DIN) or onto panel		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	(1 — 2) x (1.5 — 6 mm²) wired; 1 x (1 — 6 mm²), 2 x (1 — 4 mm²) solid		
Fastening torque of terminals	1.5 — 1.7 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 95 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	0.35 kg	0.35 kg	0.35 kg
Power loss at I_e	0.2 W	0.36 W	0.8 W

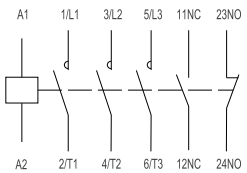
Dimensions



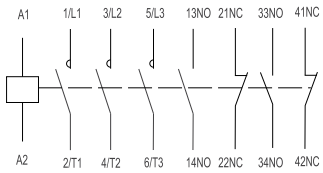
Mounting positions



Wiring diagrams



Ex9C.. 11 3P



Ex9C.. 22 3P

Ordering data p. 16

Technical Data Ex9C, frame size 38

Contactors Ex9C25, Ex9C32, Ex9C38

General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm and 75 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292

Electrical parameters - main contacts and general

	Ex9C25	Ex9C32	Ex9C38
Tested according to		IEC/EN 60947-4-1	
Rated op. voltage U_e		690 V AC	
Rated insulating voltage U_i		690 V AC	
Rated impulse withstand voltage U_{imp}	6 kV	6 kV	6 kV
Rated frequency		50/60 Hz	
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current I_{th}	40 A	50 A	50 A
Rated operational current I_e			
AC-1	40 A	50 A	50 A
AC-2/AC-3/AC-4, 380/400 V	25 A	32 A	38 A
AC-3, 660/690 V	17.3 A	21.9 A	21.9 A
AC-2/AC-4, 660/690 V	14 A	17.3 A	17.3 A
Rated power of 3-phase motor			
AC-3/AC-4, 380/400 V	11 kW	15 kW	18.5 kW
AC-3, 660/690 V	15 kW	18.5 kW	18.5 kW
AC-4, 660/690 V	11 kW	15 kW	15 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	63 A gG/gL	63 A gG/gL	63 A gG/gL
Coordination type 2 at 500 V AC	40 A gG/gL	63 A gG/gL	63 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	400 V AC	400 V AC	400 V AC
Main contact — coil	400 V AC	400 V AC	400 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	80 A	100 A	100 A
Power at 230/240 V	16 kW	20 kW	20 kW
Power at 380/400 V	26 kW	33 kW	33 kW
Power at 660/690 V	46 kW	57 kW	57 kW
Rated current $I_e = I_{th}$	40 A	50 A	50 A
1-phase power AC-1, 3 contacts in parallel			
Maximum back-up fuse gG/gL	160 A	160 A	160 A
Power at 230/240 V	34 kW	42 kW	42 kW
Power at 380/400 V	55 kW	69 kW	69 kW
Power at 660/690 V	96 kW	120 kW	120 kW
Rated current $I_e = I_{th}$	84 A	105 A	105 A

Ordering data p. 19

Technical Data Ex9C, frame size 38

Contactors Ex9C25, Ex9C32, Ex9C38

Electrical parameters - main contacts and general

	Ex9C25	Ex9C32	Ex9C38
Making capacity			
230/240 V	300 A	384 A	456 A
380/400 V	300 A	384 A	456 A
660/690 V	300 A	384 A	456 A
Breaking capacity			
230/240 V	250 A	320 A	320 A
380/400 V	250 A	320 A	320 A
660/690 V	173 A	219 A	219 A
Mechanical service life	10 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 200 000 operation cycles		
AC-4	50 000 operation cycles	40 000 operation cycles	40 000 operation cycles
Overvoltage category	III		
EMC environment	A		
Comparative Tracking Index	400 V		
Prospective short circuit current I_q	50 kA		

Electrical parameters - coil

	Ex9C25	Ex9C32	Ex9C38
Control Voltage U_c	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC		
Tolerance of Control Voltage U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c
Frequency	50 Hz	50 Hz	50 Hz
Power consumption			
Pick-up	100 VA / 50 W	100 VA / 50 W	100 VA / 50 W
Hold	10.5 VA / 5 W	10.5 VA / 5 W	10.5 VA / 5 W
Duty	100 %	100 %	100 %
Closing delay	14 — 27 ms	14 — 27 ms	14 — 27 ms
Opening delay	7 — 22 ms	7 — 22 ms	7 — 22 ms
Closing delay with front-mounted AX	9 — 20 ms	9 — 20 ms	9 — 20 ms

Electrical parameters - built-in auxiliary contacts

Rated op. voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

Ordering data p. 19

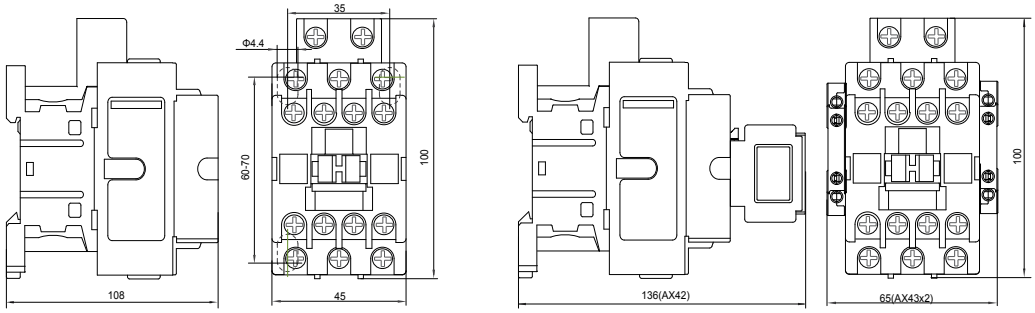
Technical Data Ex9C, frame size 38

Contactors Ex9C25, Ex9C32, Ex9C38

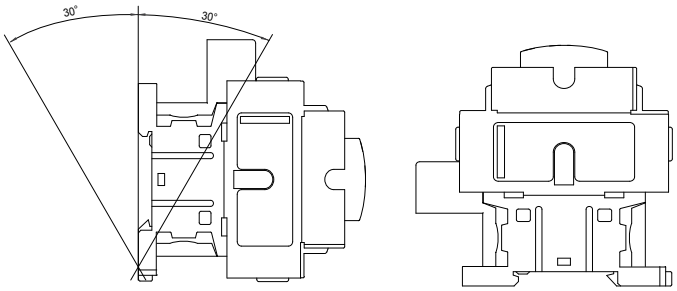
Mechanical parameters

	Ex9C25	Ex9C32	Ex9C38
Device width	45 mm (without side-mounted auxiliary contact)		
Device height	100 mm including rail clip		
Device depth	108 mm (without front-mounted auxiliary contact)		
Mounting	easy fastening onto 35 or 75 mm device rail (DIN) or onto panel		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	(1 — 2) x (2.5 — 10 mm²) wired; 1 x (1 — 10 mm²), 2 x (1.5 — 6 mm²) solid		
Fastening torque of terminals	2 — 2.5 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 95 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	0.4 kg	0.4 kg	0.4 kg
Power loss at I_e	1.25 W	2 W	3 W

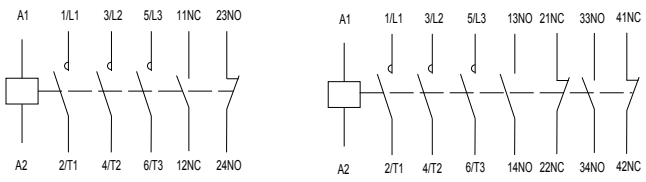
Dimensions



Mounting positions



Wiring diagrams



Ex9C.. 11 3P

Ex9C.. 22 3P

Ordering data p. 19

Technical Data Ex9C, frame size 65

Contactors Ex9C40, Ex9C50, Ex9C65

General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm and 75 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292

Electrical parameters - main contacts and general

	Ex9C40	Ex9C50	Ex9C65
Tested according to		IEC/EN 60947-4-1	
Rated op. voltage U_e		690 V AC	
Rated insulating voltage U_i		1000 V AC	
Rated impulse withstand voltage U_{imp}	6 kV	6 kV	6 kV
Rated frequency		50/60 Hz	
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes	yes
Conventional free air thermal current I_{th}	60 A	80 A	80 A
Rated operational current I_e			
AC-1	60 A	80 A	80 A
AC-2/AC-3/AC-4, 380/400 V	40 A	50 A	65 A
AC-2/AC-3/AC-4, 660/690 V	34 A	39 A	42 A
Rated power of 3-phase motor			
AC-3/AC-4, 380/400 V	18.5 kW	22 kW	30 kW
AC-3/AC-4, 660/690 V	30 kW	33 kW	37 kW
Maximum short circuit protection fuse			
Coordination type 1 at 500 V AC	80 A gG/gL	100 A gG/gL	160 A gG/gL
Coordination type 2 at 500 V AC	80 A gG/gL	100 A gG/gL	125 A gG/gL
Safe isolation (EN 61140)			
Main contact — main contact	690 V AC	690 V AC	690 V AC
Main contact — coil	690 V AC	690 V AC	690 V AC
3-phase power AC-1			
Maximum back-up fuse gG/gL	125 A	160 A	160 A
Power at 230/240 V	24 kW	32 kW	32 kW
Power at 380/400 V	40 kW	53 kW	53 kW
Power at 660/690 V	69 kW	92 kW	92 kW
Rated current $I_e = I_{th}$	60 A	80 A	80 A
1-phase power AC-1, 3 contacts in parallel			
Maximum back-up fuse gG/gL	200 A	250 A	250 A
Power at 230/240 V	50 kW	67 kW	67 kW
Power at 380/400 V	83 kW	110 kW	110 kW
Power at 660/690 V	144 kW	192 kW	192 kW
Rated current $I_e = I_{th}$	126 A	168 A	168 A

Ordering data p. 22

Technical Data Ex9C, frame size 65

Contactors Ex9C40, Ex9C50, Ex9C65

Electrical parameters - main contacts and general

	Ex9C40	Ex9C50	Ex9C65
Making capacity			
230/240 V	480 A	600 A	780 A
380/400 V	480 A	600 A	780 A
660/690 V	480 A	600 A	780 A
Breaking capacity			
230/240 V	400 A	500 A	650 A
380/400 V	400 A	500 A	650 A
660/690 V	340 A	390 A	420 A
Mechanical service life	10 000 000 operation cycles		
Electrical service life 380/400 V			
AC-3	1 200 000 operation cycles		
AC-4	35 000 operation cycles	30 000 operation cycles	30 000 operation cycles
Overvoltage category	III		
EMC environment	A		
Comparative Tracking Index	400 V		
Prospective short circuit current I_q	50 kA		

Electrical parameters - coil

	Ex9C40	Ex9C50	Ex9C65
Control Voltage U_c	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC		
Tolerance of Control Voltage U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c
Frequency	50 Hz	50 Hz	50 Hz
Power consumption			
Pick-up	240 VA / 100 W	240 VA / 100 W	240 VA / 100 W
Hold	25 VA / 10 W	25 VA / 10 W	25 VA / 10 W
Duty	100 %	100 %	100 %
Closing delay	20 — 30 ms	20 — 30 ms	20 — 30 ms
Opening delay	8 — 20 ms	8 — 20 ms	8 — 20 ms
Closing delay with front-mounted AX	12 — 25 ms	12 — 25 ms	12 — 25 ms

Electrical parameters - built-in auxiliary contacts

Rated op. voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

Ordering data p. 22

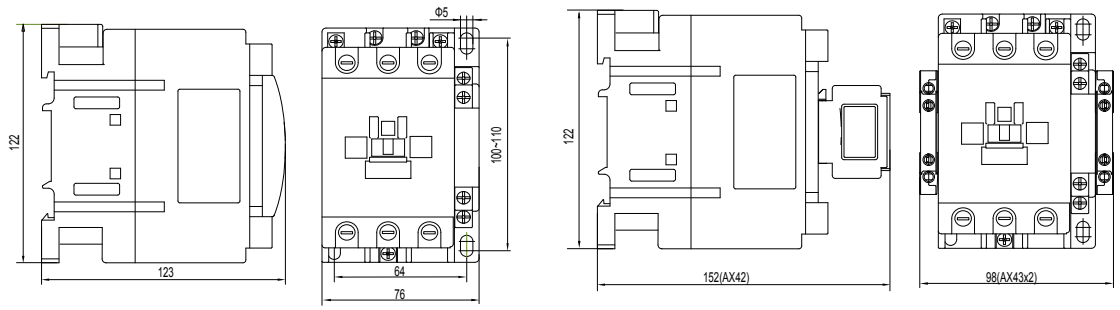
Technical Data Ex9C, frame size 65

Contactors Ex9C40, Ex9C50, Ex9C65

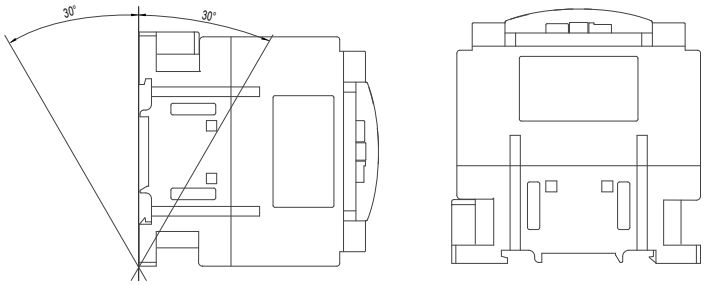
Mechanical parameters

	Ex9C40	Ex9C50	Ex9C65
Device width	76 mm (without side-mounted auxiliary contact)		
Device height	122 mm including rail clip		
Device depth	123 mm (without front-mounted auxiliary contact)		
Mounting	easy fastening onto 35 or 75 mm device rail (DIN) or onto panel		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	(1 — 2) x (2.5 — 25 mm²)		
Fastening torque of terminals	5.5 — 6 Nm		
Ambient temperature	-20 — +60 °C		
Altitude	≤ 2000 m		
Relative humidity	≤ 95 %		
Resistance to humidity and heat	class 2		
Pollution degree	3		
Installation class	III		
Weight	1.23 kg	1.23 kg	1.23 kg
Power loss at I_e	2.4 W	3.7 W	4.2 W

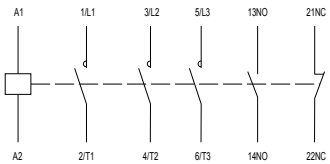
Dimensions



Mounting positions



Wiring diagram



Ex9C.. 11 3P

Ordering data p. 22

Technical Data Ex9C, frame size 100

Contactors Ex9C80, Ex9C100

General parameters

Standard contactors		
Contactors rated at AC-3		
Suitable mainly for industrial applications		
3-pole versions		
Mounting onto device rail (DIN) 35 mm and 75 mm or onto panel		
With built-in auxiliary contacts		
Accessories		
Front-mounted auxiliary contacts	AX42	101284 — 101291
Side-mounted auxiliary contacts	AX4311	101292

Electrical parameters - main contacts and general

	Ex9C80	**Ex9C100**
Tested according to	IEC/EN 60947-4-1	
Rated op. voltage U_e	690 V AC	
Rated insulating voltage U_i	1000 V AC	
Rated impulse withstand voltage U_{imp}	6 kV	6 kV
Rated frequency	50/60 Hz	
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes	yes
Conventional free air thermal current I_{th}	125 A	125 A
Rated operational current I_e		
AC-1	125 A	125 A
AC-2/AC-3/AC-4, 380/400 V	80 A	100 A
AC-2/AC-3/AC-4, 660/690 V	49 A	49 A
Rated power of 3-phase motor		
AC-3/AC-4, 380/400 V	37 kW	45 kW
AC-3/AC-4, 660/690 V	45 kW	45 kW
Maximum short circuit protection fuse		
Coordination type 1 at 500 V AC	200 A gG/gL	200 A gG/gL
Coordination type 2 at 500 V AC	160 A gG/gL	160 A gG/gL
Safe isolation (EN 61140)		
Main contact — main contact	690 V AC	690 V AC
Main contact — coil	690 V AC	690 V AC
3-phase power AC-1		
Maximum back-up fuse gG/gL	250 A	250 A
Power at 230/240 V	50 kW	50 kW
Power at 380/400 V	82 kW	82 kW
Power at 660/690 V	143 kW	143 kW
Rated current $I_e = I_{th}$	125 A	125 A
1-phase power AC-1, 3 contacts in parallel		
Maximum back-up fuse gG/gL	400 A	400 A
Power at 230/240 V	105 kW	105 kW
Power at 380/400 V	172 kW	172 kW
Power at 660/690 V	300 kW	300 kW
Rated current $I_e = I_{th}$	262 A	262 A

Ordering data p. 24

Technical Data Ex9C, frame size 100

Contactors Ex9C80, Ex9C100

Electrical parameters - main contacts and general

	Ex9C80	Ex9C100
Making capacity		
230/240 V	960 A	1200 A
380/400 V	960 A	1200 A
660/690 V	960 A	1200 A
Breaking capacity		
230/240 V	800 A	1000 A
380/400 V	800 A	1000 A
660/690 V	490 A	490 A
Mechanical service life	10 000 000 operation cycles	
Electrical service life 380/400 V		
AC-3	1 200 000 operation cycles	
AC-4	25 000 operation cycles	25 000 operation cycles
Overvoltage category	III	
EMC environment	A	
Comparative Tracking Index	400 V	
Prospective short circuit current I_q	50 kA	

Electrical parameters - coil

	Ex9C80	Ex9C100
Control Voltage U_c	24, 36, 42, 48, 110, 127, 220, 230, 240, 380, 400, 415 V AC	
Tolerance of Control Voltage U_c	0.8 — 1.1 U_c	0.8 — 1.1 U_c
Frequency	50 Hz	50 Hz
Power consumption		
Pick-up	280 VA / 120 W	280 VA / 120 W
Hold	30 VA / 12 W	30 VA / 12 W
Duty	100 %	100 %
Closing delay	20 — 35 ms	20 — 35 ms
Opening delay	6 — 20 ms	6 — 20 ms
Closing delay with front-mounted AX	12 — 30 ms	12 — 30 ms

Electrical parameters - built-in auxiliary contacts

Rated op. voltage U_e	690 V AC
Rated insulating voltage U_i	690 V AC
Rated impulse withstand voltage U_{imp}	6 kV
Rated frequency	50 Hz
Interlocked opposing contacts according to EN 60947-4-1, Annex L	yes
Conventional free air thermal current I_{th}	10 A
Rated operational current I_e	
AC-15	6 A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
DC-13	0.55 A / 125 V, 0.27 A / 250 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

Ordering data p. 24

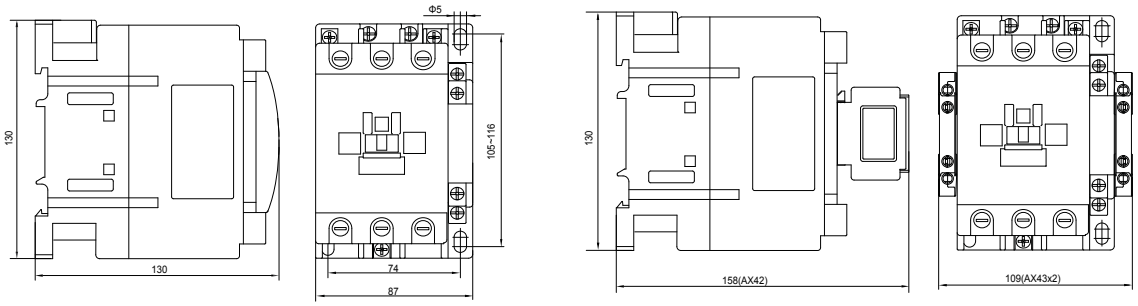
Technical Data Ex9C, frame size 100

Contactors Ex9C80, Ex9C100

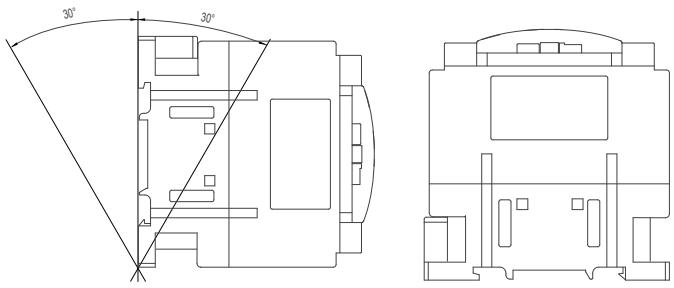
Mechanical parameters

	Ex9C80	Ex9C100
Device width	87 mm (without side-mounted auxiliary contact)	
Device height	130 mm including rail clip	
Device depth	130 mm (without front-mounted auxiliary contact)	
Mounting	easy fastening onto 35 or 75 mm device rail (DIN) or onto panel	
Degree of protection	IP20	
Terminals	lift	
Terminal capacity	(1 — 2) x (4 — 50 mm²)	
Fastening torque of terminals	5.5 — 6 Nm	
Ambient temperature	-20 — +60 °C	
Altitude	≤ 2000 m	
Relative humidity	≤ 95 %	
Resistance to humidity and heat	class 2	
Pollution degree	3	
Installation class	III	
Weight	1.5 kg	1.5 kg
Power loss at I_e	5.1 W	7.5 W

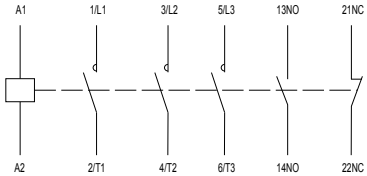
Dimensions



Mounting positions



Wiring diagram



Ex9C.. 11 3P

Ordering data p. 24

Technical Data Accessories Ex9CS

Front-mounted auxiliary contact units AX41

General parameters

Auxiliary contacts for Miniature Contactors Ex9CS for subsequent mounting
Front-mounted version
1 unit can be used with a contactor
Do not limit a possibility to install overload relay Ex9R12

Electrical parameters

	AX4104	AX4113	AX4122	AX4131	AX4140
Contacts	4 NC	1 NO + 3 NC	2 NO + 2 NC	3 NO + 1 NC	4 NO
Tested according to	IEC/EN 60947-5-1				
Rated op. voltage U_e	120 / 240 / 380 / 480 / 600 V AC, 125 / 250 V DC				
Min. op. voltage per contact U_{min}	17 V AC, 3 V DC				
Rated frequency	50 Hz				
Rated thermal current I_{th}	10 A				
Rated op. current I_e, ut. cat. AC-15	6A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V				
Rated op. current I_e, ut. cat. DC-13	0.55 A / 125 V, 0.27 A / 250 V				
Min. operational current I_{min}	5 mA AC, 5 mA DC				
Rated impulse withstand voltage U_{imp}	6 kV (1.2/50 ms)				
Rated insulation voltage U_i	690 V				
Max. back-up fuse	10 A gG/gL				
Conditional short circuit current I_k with max. back-up fuse	1 kA				

Mechanical parameters

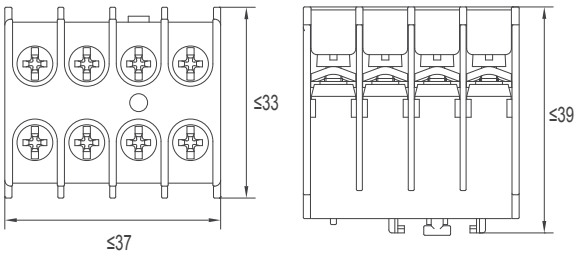
	AX4104	AX4113	AX4122	AX4131	AX4140
Device width	33 mm				
Device height	39 mm				
Frame size	37 mm				
Mounting	front onto Ex9CS				
Degree of protection	IP20				
Terminals	lift				
Terminal capacity	1 — 6 mm^2				
Fastening torque of terminals	1 Nm				

Ordering data p. 27

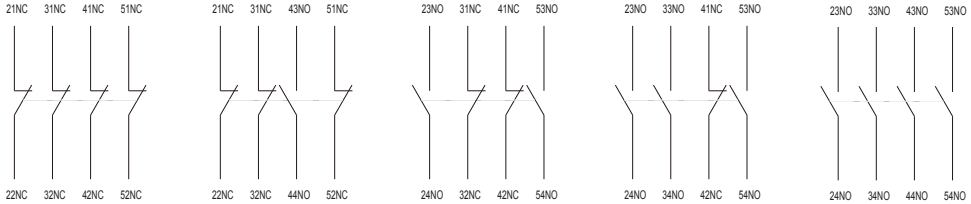
Technical Data Accessories Ex9CS

Front-mounted auxiliary contact units AX41

Dimensions



Wiring diagrams



AX4104 AX4113 AX4122 AX4131 AX4140

Ordering data p. 27

Technical Data Accessories Ex9C

Front-mounted auxiliary contact units AX42

General parameters

Auxiliary contacts for Contactors Ex9C for subsequent mounting
Front-mounted version
1 unit can be used with a contactor
Do not limit a possibility to install overload relay Ex9R38, Ex9R100

Electrical parameters

	AX4202	AX4211	AX4220	AX4204	AX4213	AX4222	AX4231	AX4240
Contacts	2 NC	1NO+1NC	2 NO	4 NC	1NO+3NC	2NO+2NC	3NO+1NC	4 NO
Tested according to	IEC/EN 60947-5-1							
Rated op. voltage U_e	120 / 240 / 380 / 480 / 600 V AC, 125 / 250 V DC							
Min. op. voltage per contact U_{min}	17 V AC, 3 V DC							
Rated frequency	50 Hz							
Rated thermal current I_{th}	10 A							
Rated op. current I_e, ut. cat. AC-15	6 A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V							
Rated op. current I_e, ut. cat. DC-13	0.55 A / 125 V, 0.27 A / 250 V							
Min. operational current I_{min}	5 mA AC, 5 mA DC							
Rated impulse withstand voltage U_{imp}	6 kV (1.2/50 ms)							
Rated insulation voltage U_i	690 V							
Max. back-up fuse	10 A gG/gL							
Conditional short circuit current I_k with max. back-up fuse	1 kA							

Mechanical parameters

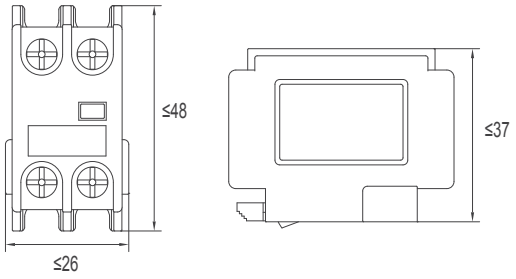
	AX4202	AX4211	AX4220	AX4204	AX4213	AX4222	AX4231	AX4240
Device width	48 mm			48 mm				
Device height	37 mm			37 mm				
Frame size	26 mm			45 mm				
Mounting	front onto Ex9C							
Degree of protection	IP20							
Terminals	lift							
Terminal capacity	1 — 6 mm^2							
Fastening torque of terminals	1 Nm							

Ordering data p. 28

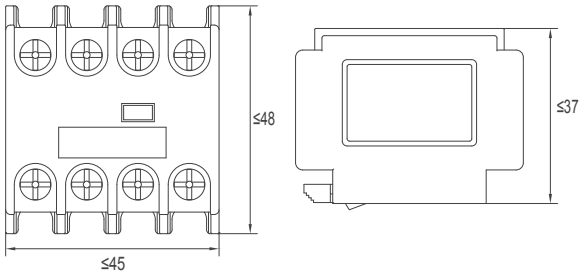
Technical Data Accessories Ex9C

Front-mounted auxiliary contact units AX42

Dimensions

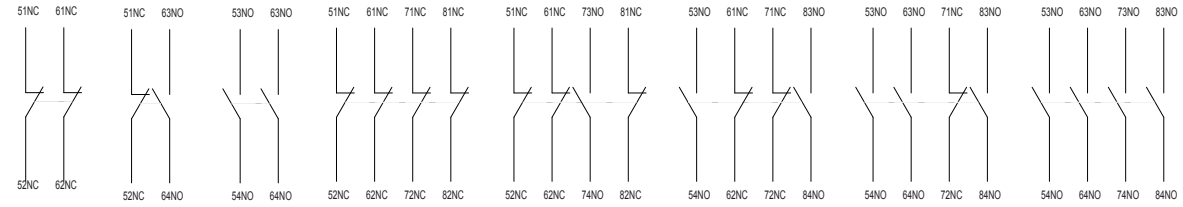


AX4202, AX4211, AX4220



AX4204, AX4213, AX4222, AX4231, AX4240

Wiring diagrams



AX4202 AX4211 AX4220 AX4204 AX4213 AX4222 AX4231 AX4240

Ordering data p. 28

Technical Data Accessories Ex9C

Side-mounted auxiliary contact units AX4311

General parameters

Auxiliary contacts for Contactors Ex9C for subsequent mounting
Side-mounted version
1 unit can be used with a contactor at the left, another unit at the right
Do not limit a possibility to install overload relay Ex9R38, Ex9R100

Electrical parameters

	AX4311
Contacts	1 NO + 1 NC
Tested according to	IEC/EN 60947-5-1
Rated op. voltage U_e	120 / 240 / 380 / 480 / 600 V AC, 125 / 250 V DC
Min. op. voltage per contact U_{min}	17 V AC, 3 V DC
Rated frequency	50 Hz
Rated thermal current I_{th}	10 A
Rated op. current I_e, ut. cat. AC-15	6 A / 120 V, 3 A / 240 V, 1.9 A / 380 V, 1.5 A / 480 V, 1.2 A / 600 V
Rated op. current I_e, ut. cat. DC-13	0.55 A / 125 V, 0.27 A / 250 V
Min. operational current I_{min}	5 mA AC, 5 mA DC
Rated impulse withstand voltage U_{imp}	6 kV (1.2/50 ms)
Rated insulation voltage U_i	690 V
Max. back-up fuse	10 A gG/gL
Conditional short circuit current I_k with max. back-up fuse	1 kA

Mechanical parameters

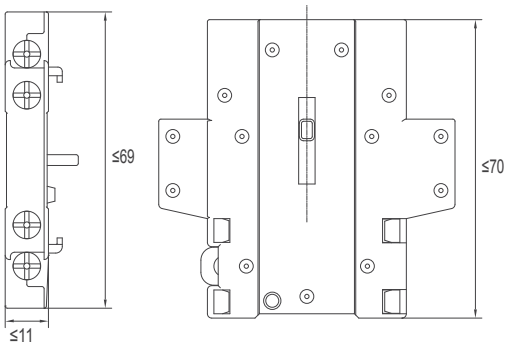
	AX4311
Device width	11 mm
Device height	69 mm
Frame size	70 mm
Mounting	side onto Ex9C
Degree of protection	IP20
Terminals	lift
Terminal capacity	1 — 6 mm^2
Fastening torque of terminals	1 Nm

Ordering data p. 28

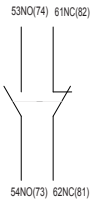
Technical Data Accessories Ex9C

Front-mounted auxiliary contact units AX4311

Dimensions



Wiring diagrams



AX4311

Ordering data p. 28

Technical Data Overload Relays Ex9R

Overload Relays Ex9R12, Ex9R38, Ex9R100

General parameters

Thermal overload relays		
Ex9R12 for direct mounting onto Contactors frame size Ex9CS		
Ex9R38 for direct mounting onto Contactors frame size Ex9C18, Ex9C38 (with spacer)		
Ex9R38 for direct mounting onto Contactors frame size Ex9C65, Ex9C100 (with spacer)		
For stand-alone applications by means of adaptor AD5.		
Suitable mainly for motor protection against overload or phase lost		
With built-in auxiliary contacts 1 NO + 1 NC		
Accessories		
Adaptors for stand-alone use	AD51, AD52, AD53	101436 — 101438

Electrical parameters

	Ex9R12	Ex9R38	Ex9R100
Tested according to		IEC/EN 60947-4-1	
Rated op. voltage U_e		690 V AC	
Rated insulating voltage U_i		690 V AC	
Rated impulse withstand voltage U_{imp}	6 kV	6 kV	6 kV
Rated frequency		50/60 Hz	
Tripping Class	10A	10A	10A
Current setting range (per frame size)	0.1 — 12 A	2.5 — 38 A	23 — 100 A
Tripping treshold		1.14 ± 0.06 x I_n	
Phase failure detection		30 % in a phase	
Maximum short circuit protection fuse	25 A gG/gL	80 A gG/gL	160 A gG/gL
Reset		Manual or Auto	
Min. op. voltage per AX contact U_{min}		17 V AC, 3 V DC	
Rated thermal current I_{th} of AX cont.		5 A	
Rated op. current I_e, AC-15 of AX		1.64 A / 230 V, 0.95 A / 400 V	
Rated op. current I_e, DC-13 of AX		0.13 A / 220 V	
Min. operational current I_{min} of AX		5 mA AC, 5 mA DC	
Max. back-up fuse of AX		6 A gG/gL, 6 A MCB char. B	
Conditional short circuit current I_k with max. back-up fuse of AX		1 kA	

Mechanical parameters

	Ex9R12	Ex9R38	Ex9R100
Tripping indicator	blank-yellow	blank-yellow	blank-yellow
Device width	45 mm	46 mm	72 mm
Device height	72 mm	69 mm	80 mm
Device depth	68 mm	65 mm	117 mm
Mounting onto	Ex9CS, AD51	Ex9C09 — 38, AD52	Ex9C40 — 100, AD53
Degree of protection		IP20	
Terminals		lift	
Terminal capacity	1 — 4 mm²	1 — 10 mm²	4 — 35 mm²
Fastening torque of terminals	1.7 Nm	2.5 Nm	9 Nm
Weight	0.16 kg	0.14 kg	0.51 kg
Vibration resistance IEC 68-2-6		2 g, 5 — 300 Hz	
Shock resistance IEC 68-2-27		15 g, 11 ms	

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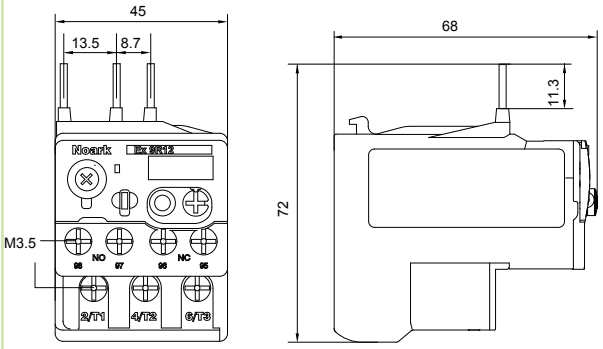
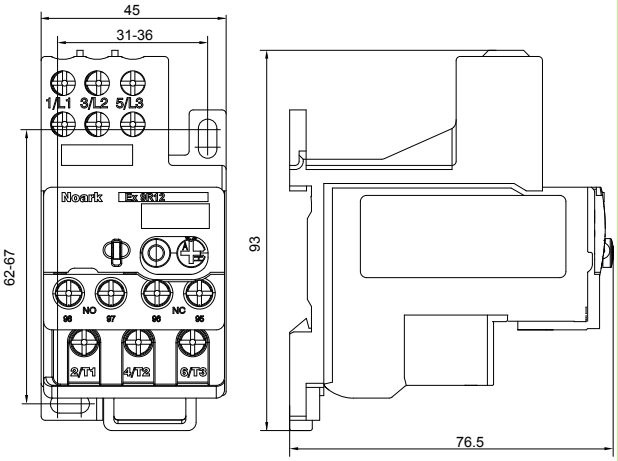
Technical Data Overload Relays Ex9R

Overload Relays Ex9R12, Ex9R38, Ex9R100

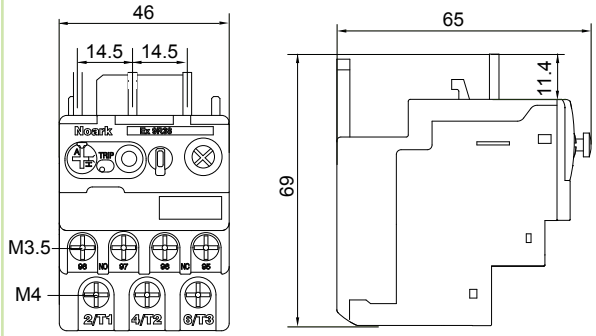
Dimensions



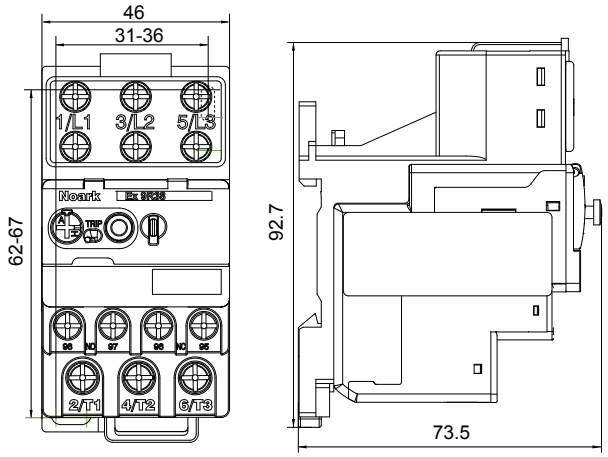
Ex9R12



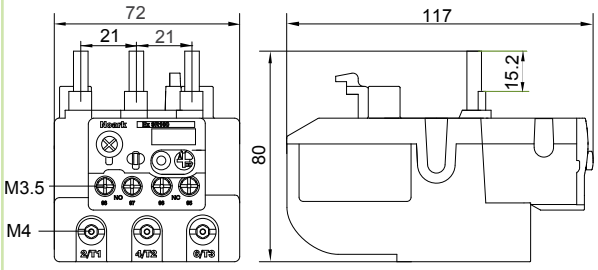
Ex9R12 + AD51



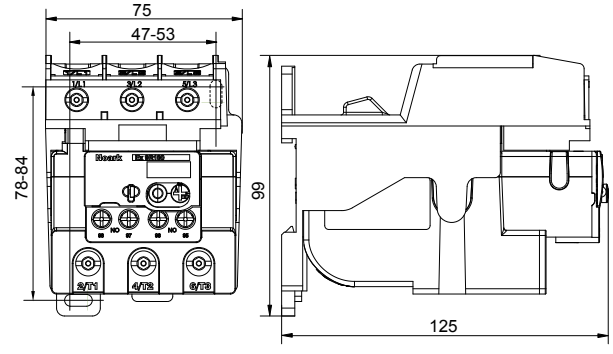
Ex9R38



Ex9R38 + AD52



Ex9R100



Ex9R100 + AD53

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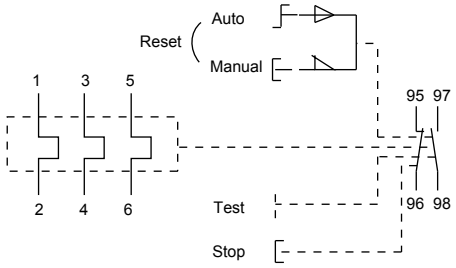
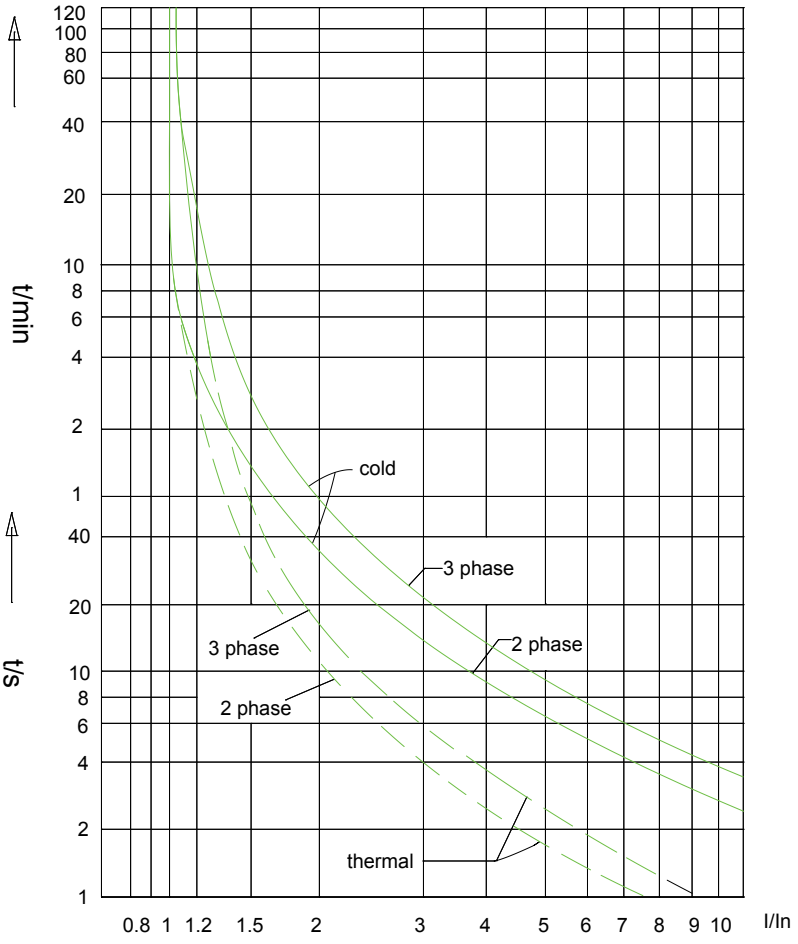
Technical Data Overload Relays Ex9R

Overload Relays Ex9R12, Ex9R38, Ex9R100

Wiring diagrams



Tripping characteristics



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