

NOARK

Catalog

Contactors and Relays Manual Motor Starters

Ex9C, Ex9R, Ex9CD, Ex9RD, Ex9CK and Ex9SN Series

Ex9CK32



Ex9C38 and Ex9R38A



Ex9SN25



Your Industrial Motor Controls Specialist

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NOARK Electric

Electrical Equipment Manufacturer for Distribution and Control



NOARK Electric is a global manufacturer of electrical distribution and control products that address a variety of customer needs, ranging from components to intelligent system solutions. Our global product lines include: circuit breakers, contactors, relays and intelligent control. Based in Shanghai, China, NOARK Electric was established in 2007 and covers the globe with regional headquarters in North America, Europe and Middle East/Africa.

Globally, NOARK Electric serves the industrial, commercial, utility and residential markets. In North America, NOARK Electric focuses primarily on industrial OEMs, users and associated channel partners. Our motto is "Excellent Product...Exceptional Value," which NOARK Electric delivers to our customer by maintaining local inventory, providing local sales, customer service and support and manufacturing quality, aggressively priced products backed by a five-year limited warranty.

Quality Product

- Backed by a five-year limited warranty*



Exceptional Value

- Reduce the cost of products
- Improve profitability
- Increase margins

Local Support and Local Inventory

- Superb customer service
- Knowledgeable technical support
- Dedicated sales force
- Well-stocked inventory
- North American headquarters

*Contact NOARK Electric for complete details.

NOARK Electric

International Headquarter Locations



Global reach. Local resources.

The best of both worlds come together when customers count on NOARK as their electrical product manufacturer.



NOARK Electric

Table of Contents

A Ex9C IEC Contactors

Product Overview.....	A5
National and International Standards	A6
Product Selection Guide	A7
Products	
Ex9CS 6~12 A Mini (Non-Reversing)	A8-10
Ex9C 9~500 A Standard Non-Reversing).....	A11-16
Ex9CSR 6~12 A Mini (Reversing)	A17-19
Ex9CR 9~500 A Standard (Reversing).....	A20-25
Specifications	
Ex9CS/CSR	A26, 28, 30
Ex9C/CR	A26-31
Dimensions	
Ex9CS/C	A32-33
Ex9CSR/CR	A34-35
Wiring Diagrams	
Ex9CS/C	A36
Ex9CSR/CR	A37
Mounting Positions	A38
Accessory Overview	A39
Accessories	
Auxiliary Contact.....	A40
Coil	A41-43
Mechanical Interlock	A44
Power Connection.....	A44
Surge Suppressor Block	A45
Time Delay Relay.....	A46
Accessory Specifications	A47-48
Accessory Dimensions.....	A49-53
Accessory Wiring Diagram.....	A54-55



B Ex9R Thermal Overload Relays

Product Overview.....	B57
National and International Standards	B58
Product Selection Guide	B59
Products	
Ex9R 12~500 A.....	B60-61
Specifications	B62-63
Trip Curve	B64
Dimensions	B65-69
Wiring Diagram	B70
Accessories	
Mounting Base	B71



NOARK Electric

Table of Contents

C Ex9CD/CM IEC Contactors

Product Overview.....	C73
National and International Standards	C74
Product Selection Guide	C75
Products	
Ex9CMS 6~12 A Mini (Non-Reversing)	C76-77
Ex9CDS 9~630 A Standard (Non-Reversing)	C78-89
Ex9CMR 6~12 A Mini (Reversing).....	C90-91
Ex9CDR 9~95 A Standard (Reversing).....	C92-98
Specifications	
Ex9CMS/CMR.....	C99
Ex9CDS/CDR.....	C100-101
Dimensions	
Ex9CMS/CMR.....	C102
Ex9CDS	C103-109
Ex9CDR	C110
Wiring Diagrams	
Ex9CMS/CDS	C111
Ex9CMR/CDR	C112
Mounting Positions	C113
Accessories	
Auxiliary Contact.....	C114
Coil	C115-116
Mechanical Interlock	C117
Time Delay Relay.....	C117
Accessory Specifications	C118
Accessory Dimensions.....	C119-120
Accessory Wiring Diagram	C121



D Ex9RD Thermal Overload Relays

Product Overview.....	D123
National and International Standards	D124
Product Selection Guide	D125
Products	
Ex9RD 11.5~630 A.....	D126-127
Specifications	D128-129
Trip Curves	D130
Dimensions.....	D131-132
Accessories	
Mounting Base	D133



E Ex9CK Definite Purpose Contactors

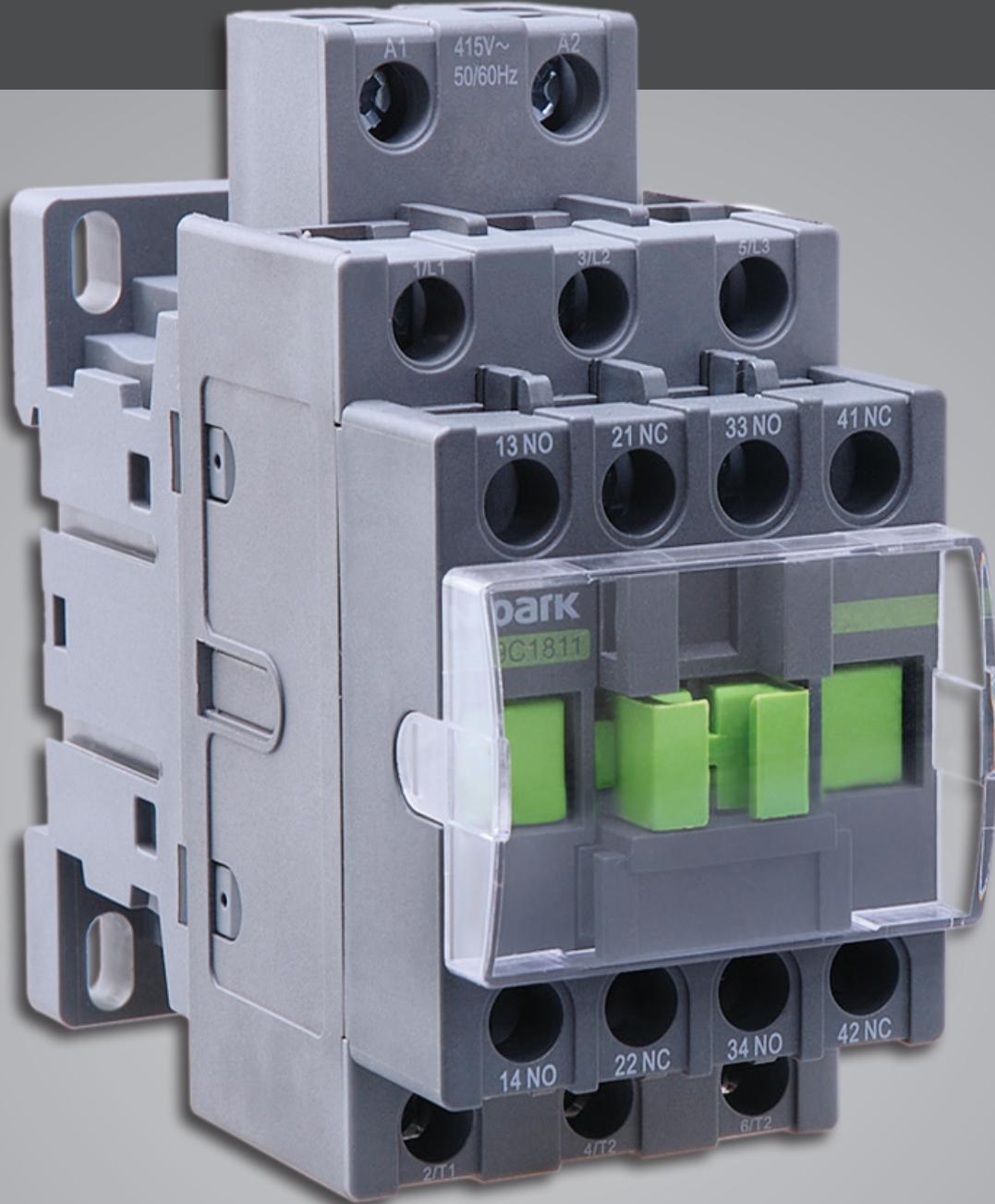
Product Overview.....	E135
National and International Standards	E136
Product Selection Guide	E137
Products	
Ex9CK 20~90 A.....	E138-143
Specifications	E144-145
Dimensions.....	E146-147
Wiring Diagram	E148
Mounting Positions	E149
Accessories	
Auxiliary Contact.....	E150
Accessory Specifications	E150
Accessory Dimensions.....	E151

**F Ex9SN Manual Motor Starters**

Product Overview.....	F153
National and International Standards	F154
Product Selection Guide	F155
Products	
Ex9SN 25 A	F156
Specifications	F157-158
Dimensions.....	F159
Wiring Diagram	F160
Accessories	
Auxiliary Contact.....	F161
Enclosure	F161
Shunt Trip Release.....	F162
Under-Voltage Release.....	F162
Accessory Specifications	F163-164
Accessory Dimensions.....	F165-166



IEC CONTACTORS



Ex9C

Features

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.

- Contactors according to IEC/EN 60947-4-1, IEC/EN 60947-4-1, UL 60947-1 and UL 60947-4-1
- Four frame sizes with rated current up to 500 A at 690 V AC-3
- Coil control voltage 24~600 Vac, 24~250 Vdc; 24~600 Vac/dc (115~300 A); 36~600 Vac/dc (400~500 A)
- Wide range operating coil available for 115~500 A contactor
- Mounts onto DIN rail 35 mm or 75 mm or onto panel (frame sizes 09~38 mount on 35 mm; 40~100 mount on 35 mm or 75 mm; 115~500 cannot be mount on DIN rail, only mount by screw)

IEC Contactors

Ex9C National and International Standards

Certifications

- UL 508 Listed, File Number E353866, UL 60947-1 and 60947-4-1A
- Certified for Canada according to CSA standards 22.2 No. 14
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified
- RoHS Compliant

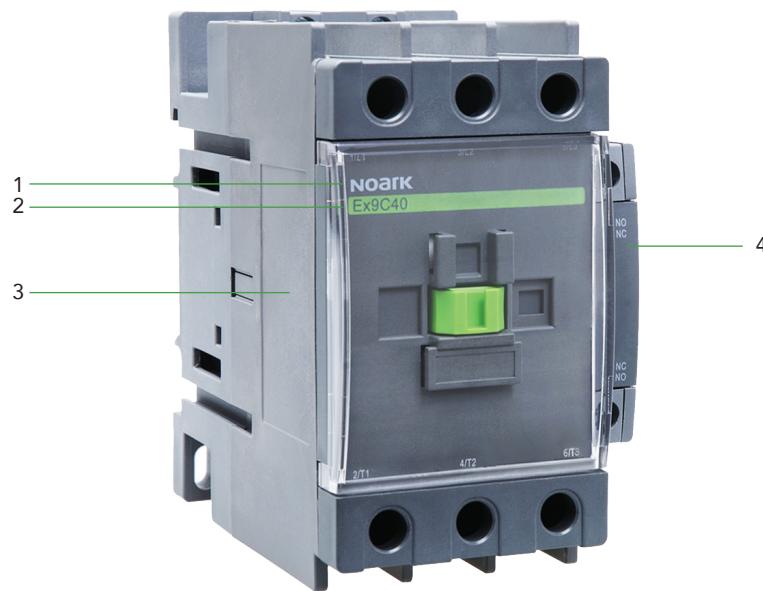


IEC Contactors

Ex9C Product Selection Guide

A

Label



- 1 Brand
- 2 Product Selection
- 3 Label with UL logo, CE logo and data
- 4 Built-In Auxiliary Contact

Product Selection Guide

Ex9C	S	R	9	D	10	A	7	B
NOARK Ex9C Series	Contactor Type	Function	Rated Current (AC-3)	Coil Type	Auxiliary Contacts	Control Voltage	Frequency	Main Power Contacts
Blank: Ex9C Standard (9~600 A)	Blank: Full Voltage Non-Reversing (FVNR)	Blank: AC	06: 6 A 09: 9 A 12: 12 A 18: 18 A 25: 25 A 32: 32 A 38: 38 A 40: 40 A 50: 50 A 65: 65 A 80: 80 A 100: 100 A 115: 115 A 150: 150 A 185: 185 A 225: 225 A 265: 265 A 300: 300 A 400: 400 A 500: 500 A	10: 1NO 01: 1NC 11: 1NO+1NC 22: 2NO+2NC	A: 12 V B: 24 V C: 36 V D: 42 V E: 48 V F: 110 V G: 120 V X: 208 V M: 220 V P: 230 V U: 240 V W: 250 V N: 277 V	Q: 380 V V: 400 V Z: 415 V R: 440 V T: 480 V S: 500 V Y: 600 V H: 48~130 Vac/dc K: 100~250 Vac/dc L: 250~500 Vac/dc	7: 50/60 Hz	Blank: 3NO B: 2NO+2NC C: 4NO
S: Ex9C Miniature (9~12 A)	R: Full Voltage Reversing (FVR)	D: DC	E: Vac/dc	F: Wide Range Operating Coil (115~500 A only)				

IEC Contactors

Ex9CS 6 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	6 A • 3 Poles				6 A • 4 Poles			
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	Ex9CS0610B7	1320001	Ex9CS0601B7	1320055	Ex9CS06B7C	1320109	Ex9CS06B7B	1320415
	Ex9CS0610C7	1320002	Ex9CS0601C7	1320056	Ex9CS06C7C	1320110	Ex9CS06C7B	1320416
	Ex9CS0610D7	1320003	Ex9CS0601D7	1320057	Ex9CS06D7C	1320111	Ex9CS06D7B	1320417
	Ex9CS0610E7	1320004	Ex9CS0601E7	1320058	Ex9CS06E7C	1320112	Ex9CS06E7B	1320418
	Ex9CS0610F7	1320005	Ex9CS0601F7	1320059	Ex9CS06F7C	1320113	Ex9CS06F7B	1320419
	Ex9CS0610G7	1320006	Ex9CS0601G7	1320060	Ex9CS06G7C	1320114	Ex9CS06G7B	1320420
	Ex9CS0610X7	1320018	Ex9CS0601X7	1320072	Ex9CS06X7C	1320126	Ex9CS06X7B	1320432
	Ex9CS0610M7	1320007	Ex9CS0601M7	1320061	Ex9CS06M7C	1320115	Ex9CS06M7B	1320421
	Ex9CS0610P7	1320008	Ex9CS0601P7	1320062	Ex9CS06P7C	1320116	Ex9CS06P7B	1320422
	Ex9CS0610U7	1320010	Ex9CS0601U7	1320064	Ex9CS06U7C	1320118	Ex9CS06U7B	1320424
	Ex9CS0610N7	1320009	Ex9CS0601N7	1320063	Ex9CS06N7C	1320117	Ex9CS06N7B	1320423
	Ex9CS0610Q7	1320011	Ex9CS0601Q7	1320065	Ex9CS06Q7C	1320119	Ex9CS06Q7B	1320425
	Ex9CS0610V7	1320012	Ex9CS0601V7	1320066	Ex9CS06V7C	1320120	Ex9CS06V7B	1320426
	Ex9CS0610Z7	1320013	Ex9CS0601Z7	1320067	Ex9CS06Z7C	1320121	Ex9CS06Z7B	1320427
	Ex9CS0610R7	1320014	Ex9CS0601R7	1320068	Ex9CS06R7C	1320122	Ex9CS06R7B	1320428
	Ex9CS0610T7	1320015	Ex9CS0601T7	1320069	Ex9CS06T7C	1320123	Ex9CS06T7B	1320429
	Ex9CS0610S7	1320016	Ex9CS0601S7	1320070	Ex9CS06S7C	1320124	Ex9CS06S7B	1320430
Vdc	Ex9CS06D10A	1320325	Ex9CS06D01A	1320340	Ex9CS06DAC	1320355	Ex9CS06DAB	1320523
	Ex9CS06D10B	1320326	Ex9CS06D01B	1320341	Ex9CS06DBC	1320356	Ex9CS06DBB	1320524
	Ex9CS06D10E	1320327	Ex9CS06D01E	1320342	Ex9CS06DEC	1320357	Ex9CS06DEB	1320525
	Ex9CS06D10F	1320328	Ex9CS06D01F	1320343	Ex9CS06DFC	1320358	Ex9CS06DFB	1320526
	Ex9CS06D10M	1320329	Ex9CS06D01M	1320344	Ex9CS06DMC	1320359	Ex9CS06DMB	1320527
	Ex9CS06D10W	1320553	Ex9CS06D01W	1320556	Ex9CS06DWC	1320559	Ex9CS06DWB	1320571

Specifications A26 to 30
Dimensions A32
Wiring Diagram A36
Mounting Position A38

Accessories A39 to 55
Matched Relay: Ex9R12A B60
Relay Specifications B62 to 63
Relay Trip Curve B64

Relay Dimensions B65
Relay Wiring Diagram B70
Relay Accessories B71

IEC Contactors

Ex9CS 9 A Miniature

A

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	9 A • 3 Poles				9 A • 4 Poles				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CS0910B7	1320019	Ex9CS0901B7	1320073	Ex9CS09B7C	1320127	Ex9CS09B7B	1320433
	36	Ex9CS0910C7	1320020	Ex9CS0901C7	1320074	Ex9CS09C7C	1320128	Ex9CS09C7B	1320434
	42	Ex9CS0910D7	1320021	Ex9CS0901D7	1320075	Ex9CS09D7C	1320129	Ex9CS09D7B	1320435
	48	Ex9CS0910E7	1320022	Ex9CS0901E7	1320076	Ex9CS09E7C	1320130	Ex9CS09E7B	1320436
	110	Ex9CS0910F7	1320023	Ex9CS0901F7	1320077	Ex9CS09F7C	1320131	Ex9CS09F7B	1320437
	120	Ex9CS0910G7	1320024	Ex9CS0901G7	1320078	Ex9CS09G7C	1320132	Ex9CS09G7B	1320438
	208	Ex9CS0910X7	1320036	Ex9CS0901X7	1320090	Ex9CS09X7C	1320144	Ex9CS09X7B	1320450
	220	Ex9CS0910M7	1320025	Ex9CS0901M7	1320079	Ex9CS09M7C	1320133	Ex9CS09M7B	1320439
	230	Ex9CS0910P7	1320026	Ex9CS0901P7	1320080	Ex9CS09P7C	1320134	Ex9CS09P7B	1320440
	240	Ex9CS0910U7	1320028	Ex9CS0901U7	1320082	Ex9CS09U7C	1320136	Ex9CS09U7B	1320442
	277	Ex9CS0910N7	1320027	Ex9CS0901N7	1320081	Ex9CS09N7C	1320135	Ex9CS09N7B	1320441
	380	Ex9CS0910Q7	1320029	Ex9CS0901Q7	1320083	Ex9CS09Q7C	1320137	Ex9CS09Q7B	1320443
	400	Ex9CS0910V7	1320030	Ex9CS0901V7	1320084	Ex9CS09V7C	1320138	Ex9CS09V7B	1320444
	415	Ex9CS0910Z7	1320031	Ex9CS0901Z7	1320085	Ex9CS09Z7C	1320139	Ex9CS09Z7B	1320445
	440	Ex9CS0910R7	1320032	Ex9CS0901R7	1320086	Ex9CS09R7C	1320140	Ex9CS09R7B	1320446
	480	Ex9CS0910T7	1320033	Ex9CS0901T7	1320087	Ex9CS09T7C	1320141	Ex9CS09T7B	1320447
	500	Ex9CS0910S7	1320034	Ex9CS0901S7	1320088	Ex9CS09S7C	1320142	Ex9CS09S7B	1320448
Vdc	12	Ex9CS09D10A	1320330	Ex9CS09D01A	1320345	Ex9CS09DAC	1320360	Ex9CS09DAB	1320528
	24	Ex9CS09D10B	1320331	Ex9CS09D01B	1320346	Ex9CS09DBC	1320361	Ex9CS09DBB	1320529
	48	Ex9CS09D10E	1320332	Ex9CS09D01E	1320347	Ex9CS09DEC	1320362	Ex9CS09DEB	1320530
	110	Ex9CS09D10F	1320333	Ex9CS09D01F	1320348	Ex9CS09DFC	1320363	Ex9CS09DFB	1320531
	220	Ex9CS09D10M	1320334	Ex9CS09D01M	1320349	Ex9CS09DMC	1320364	Ex9CS09DMB	1320532
	250	Ex9CS09D10W	1320554	Ex9CS09D01W	1320557	Ex9CS09DWC	1320560	Ex9CS09DWB	1320572

Specifications A26 to 30
 Dimensions A32
 Wiring Diagram A36
 Mounting Position A38

Accessories A39 to 55
Matched Relay: Ex9R12A B60
 Relay Specifications B62 to 63
 Relay Trip Curve B64

Relay Dimensions B65
 Relay Wiring Diagram B70
 Relay Accessories B71

IEC Contactors

Ex9CS 12 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	12 A • 3 Poles				12 A • 4 Poles				
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC		
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9CS1210B7	1320037	Ex9CS1201B7	1320091	Ex9CS12B7C	1320145	Ex9CS12B7B	1320451
	36	Ex9CS1210C7	1320038	Ex9CS1201C7	1320092	Ex9CS12C7C	1320146	Ex9CS12C7B	1320452
	42	Ex9CS1210D7	1320039	Ex9CS1201D7	1320093	Ex9CS12D7C	1320147	Ex9CS12D7B	1320453
	48	Ex9CS1210E7	1320040	Ex9CS1201E7	1320094	Ex9CS12E7C	1320148	Ex9CS12E7B	1320454
	110	Ex9CS1210F7	1320041	Ex9CS1201F7	1320095	Ex9CS12F7C	1320149	Ex9CS12F7B	1320455
	120	Ex9CS1210G7	1320042	Ex9CS1201G7	1320096	Ex9CS12G7C	1320150	Ex9CS12G7B	1320456
	208	Ex9CS1210X7	1320054	Ex9CS1201X7	1320108	Ex9CS12X7C	1320162	Ex9CS12X7B	1320468
	220	Ex9CS1210M7	1320043	Ex9CS1201M7	1320097	Ex9CS12M7C	1320151	Ex9CS12M7B	1320457
	230	Ex9CS1210P7	1320044	Ex9CS1201P7	1320098	Ex9CS12P7C	1320152	Ex9CS12P7B	1320458
	240	Ex9CS1210U7	1320046	Ex9CS1201U7	1320100	Ex9CS12U7C	1320154	Ex9CS12U7B	1320460
	277	Ex9CS1210N7	1320045	Ex9CS1201N7	1320099	Ex9CS12N7C	1320153	Ex9CS12N7B	1320459
	380	Ex9CS1210Q7	1320047	Ex9CS1201Q7	1320101	Ex9CS12Q7C	1320155	Ex9CS12Q7B	1320461
	400	Ex9CS1210V7	1320048	Ex9CS1201V7	1320102	Ex9CS12V7C	1320156	Ex9CS12V7B	1320462
	415	Ex9CS1210Z7	1320049	Ex9CS1201Z7	1320103	Ex9CS12Z7C	1320157	Ex9CS12Z7B	1320463
	440	Ex9CS1210R7	1320050	Ex9CS1201R7	1320104	Ex9CS12R7C	1320158	Ex9CS12R7B	1320464
	480	Ex9CS1210T7	1320051	Ex9CS1201T7	1320105	Ex9CS12T7C	1320159	Ex9CS12T7B	1320465
	500	Ex9CS1210S7	1320052	Ex9CS1201S7	1320106	Ex9CS12S7C	1320160	Ex9CS12S7B	1320466
Vdc	12	Ex9CS12D10A	1320335	Ex9CS12D01A	1320350	Ex9CS12DAC	1320365	Ex9CS12DAB	1320533
	24	Ex9CS12D10B	1320336	Ex9CS12D01B	1320351	Ex9CS12DBC	1320366	Ex9CS12DBB	1320534
	48	Ex9CS12D10E	1320337	Ex9CS12D01E	1320352	Ex9CS12DEC	1320367	Ex9CS12DEB	1320535
	110	Ex9CS12D10F	1320338	Ex9CS12D01F	1320353	Ex9CS12DFC	1320368	Ex9CS12DFB	1320536
	220	Ex9CS12D10M	1320339	Ex9CS12D01M	1320354	Ex9CS12DMC	1320369	Ex9CS12DMB	1320537
	250	Ex9CS12D10W	1320555	Ex9CS12D01W	1320558	Ex9CS12DWC	1320561	Ex9CS12DWB	1320573

Specifications	A26 to 30	Accessories	A39 to 55	Relay Dimensions	B65
Dimensions	A32	Matched Relay: Ex9R12A	B60	Relay Wiring Diagram	B70
Wiring Diagram	A36	Relay Specifications	B62 to 63	Relay Accessories	B71
Mounting Position	A38	Relay Trip Curve	B64		

IEC Contactors

Ex9C 9~12 A Standard

A

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	9 A • 3 Poles				12 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number							
Vac • 50/60 Hz	24	Ex9C0911B7	1320576	Ex9C0922B7	1320774	Ex9C1211B7	1320594	Ex9C1222B7	1320792
	36	Ex9C0911C7	1320577	Ex9C0922C7	1320775	Ex9C1211C7	1320595	Ex9C1222C7	1320793
	42	Ex9C0911D7	1320578	Ex9C0922D7	1320776	Ex9C1211D7	1320596	Ex9C1222D7	1320794
	48	Ex9C0911E7	1320579	Ex9C0922E7	1320777	Ex9C1211E7	1320597	Ex9C1222E7	1320795
	110	Ex9C0911F7	1320580	Ex9C0922F7	1320778	Ex9C1211F7	1320598	Ex9C1222F7	1320796
	120	Ex9C0911G7	1320581	Ex9C0922G7	1320779	Ex9C1211G7	1320599	Ex9C1222G7	1320797
	208	Ex9C0911X7	1320593	Ex9C0922X7	1320791	Ex9C1211X7	1320611	Ex9C1222X7	1320809
	220	Ex9C0911M7	1320582	Ex9C0922M7	1320780	Ex9C1211M7	1320600	Ex9C1222M7	1320798
	230	Ex9C0911P7	1320583	Ex9C0922P7	1320781	Ex9C1211P7	1320601	Ex9C1222P7	1320799
	240	Ex9C0911U7	1320585	Ex9C0922U7	1320783	Ex9C1211U7	1320603	Ex9C1222U7	1320801
	277	Ex9C0911N7	1320584	Ex9C0922N7	1320782	Ex9C1211N7	1320602	Ex9C1222N7	1320800
	380	Ex9C0911Q7	1320586	Ex9C0922Q7	1320784	Ex9C1211Q7	1320604	Ex9C1222Q7	1320802
	400	Ex9C0911V7	1320587	Ex9C0922V7	1320785	Ex9C1211V7	1320605	Ex9C1222V7	1320803
	415	Ex9C0911Z7	1320588	Ex9C0922Z7	1320786	Ex9C1211Z7	1320606	Ex9C1222Z7	1320804
	440	Ex9C0911R7	1320589	Ex9C0922R7	1320787	Ex9C1211R7	1320607	Ex9C1222R7	1320805
	480	Ex9C0911T7	1320590	Ex9C0922T7	1320788	Ex9C1211T7	1320608	Ex9C1222T7	1320806
	500	Ex9C0911S7	1320591	Ex9C0922S7	1320789	Ex9C1211S7	1320609	Ex9C1222S7	1320807
	600	Ex9C0911Y7	1320592	Ex9C0922Y7	1320790	Ex9C1211Y7	1320610	Ex9C1222Y7	1320808
Vdc	12	Ex9C09D11A	1321152	Ex9C09D22A	1321207	Ex9C12D11A	1321157	Ex9C12D22A	1321212
	24	Ex9C09D11B	1321153	Ex9C09D22B	1321208	Ex9C12D11B	1321158	Ex9C12D22B	1321213
	48	Ex9C09D11E	1321154	Ex9C09D22E	1321209	Ex9C12D11E	1321159	Ex9C12D22E	1321214
	110	Ex9C09D11F	1321155	Ex9C09D22F	1321210	Ex9C12D11F	1321160	Ex9C12D22F	1321215
	220	Ex9C09D11M	1321156	Ex9C09D22M	1321211	Ex9C12D11M	1321161	Ex9C12D22M	1321216

Specifications	A26 to 30	Accessories	A39 to 55	Relay Dimensions	B66
Dimensions	A32	Matched Relay: Ex9R38A	B60	Relay Wiring Diagram	B70
Wiring Diagram	A36	Relay Specifications	B62 to 63	Relay Accessories	B71
Mounting Position	A38	Relay Trip Curve	B64		

IEC Contactors

Ex9C 18~25 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	18 A • 3 Poles				25 A • 3 Poles				
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9C1811B7	1320612	Ex9C1822B7	1320810	Ex9C2511B7	1320630	Ex9C2522B7	1320828
	36	Ex9C1811C7	1320613	Ex9C1822C7	1320811	Ex9C2511C7	1320631	Ex9C2522C7	1320829
	42	Ex9C1811D7	1320614	Ex9C1822D7	1320812	Ex9C2511D7	1320632	Ex9C2522D7	1320830
	48	Ex9C1811E7	1320615	Ex9C1822E7	1320813	Ex9C2511E7	1320633	Ex9C2522E7	1320831
	110	Ex9C1811F7	1320616	Ex9C1822F7	1320814	Ex9C2511F7	1320634	Ex9C2522F7	1320832
	120	Ex9C1811G7	1320617	Ex9C1822G7	1320815	Ex9C2511G7	1320635	Ex9C2522G7	1320833
	208	Ex9C1811X7	1320629	Ex9C1822X7	1320827	Ex9C2511X7	1320647	Ex9C2522X7	1320845
	220	Ex9C1811M7	1320618	Ex9C1822M7	1320816	Ex9C2511M7	1320636	Ex9C2522M7	1320834
	230	Ex9C1811P7	1320619	Ex9C1822P7	1320817	Ex9C2511P7	1320637	Ex9C2522P7	1320835
	240	Ex9C1811U7	1320621	Ex9C1822U7	1320819	Ex9C2511U7	1320639	Ex9C2522U7	1320837
	277	Ex9C1811N7	1320620	Ex9C1822N7	1320818	Ex9C2511N7	1320638	Ex9C2522N7	1320836
	380	Ex9C1811Q7	1320622	Ex9C1822Q7	1320820	Ex9C2511Q7	1320640	Ex9C2522Q7	1320838
	400	Ex9C1811V7	1320623	Ex9C1822V7	1320821	Ex9C2511V7	1320641	Ex9C2522V7	1320839
	415	Ex9C1811Z7	1320624	Ex9C1822Z7	1320822	Ex9C2511Z7	1320642	Ex9C2522Z7	1320840
	440	Ex9C1811R7	1320625	Ex9C1822R7	1320823	Ex9C2511R7	1320643	Ex9C2522R7	1320841
	480	Ex9C1811T7	1320626	Ex9C1822T7	1320824	Ex9C2511T7	1320644	Ex9C2522T7	1320842
	500	Ex9C1811S7	1320627	Ex9C1822S7	1320825	Ex9C2511S7	1320645	Ex9C2522S7	1320843
	600	Ex9C1811Y7	1320628	Ex9C1822Y7	1320826	Ex9C2511Y7	1320646	Ex9C2522Y7	1320844
Vdc	12	Ex9C18D11A	1321162	Ex9C18D22A	1321217	Ex9C25D11A	1321167	Ex9C25D22A	1321222
	24	Ex9C18D11B	1321163	Ex9C18D22B	1321218	Ex9C25D11B	1321168	Ex9C25D22B	1321223
	48	Ex9C18D11E	1321164	Ex9C18D22E	1321219	Ex9C25D11E	1321169	Ex9C25D22E	1321224
	110	Ex9C18D11F	1321165	Ex9C18D22F	1321220	Ex9C25D11F	1321170	Ex9C25D22F	1321225
	220	Ex9C18D11M	1321166	Ex9C18D22M	1321221	Ex9C25D11M	1321171	Ex9C25D22M	1321226

Specifications	A26 to 30	Accessories	A39 to 55	Relay Dimensions	B66
Dimensions	A32	Matched Relay: Ex9R38A	B60	Relay Wiring Diagram	B70
Wiring Diagram	A36	Relay Specifications	B62 to 63	Relay Accessories	B71
Mounting Position	A38	Relay Trip Curve	B64		

IEC Contactors

Ex9C 32~38 A Standard

A

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



Coil Voltage	32 A • 3 Poles				38 A • 3 Poles				
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	
Vac • 50/60 Hz	24	Ex9C3211B7	1320648	Ex9C3222B7	1320846	Ex9C3811B7	1320666	Ex9C3822B7	1320864
	36	Ex9C3211C7	1320649	Ex9C3222C7	1320847	Ex9C3811C7	1320667	Ex9C3822C7	1320865
	42	Ex9C3211D7	1320650	Ex9C3222D7	1320848	Ex9C3811D7	1320668	Ex9C3822D7	1320866
	48	Ex9C3211E7	1320651	Ex9C3222E7	1320849	Ex9C3811E7	1320669	Ex9C3822E7	1320867
	110	Ex9C3211F7	1320652	Ex9C3222F7	1320850	Ex9C3811F7	1320670	Ex9C3822F7	1320868
	120	Ex9C3211G7	1320653	Ex9C3222G7	1320851	Ex9C3811G7	1320671	Ex9C3822G7	1320869
	208	Ex9C3211X7	1320665	Ex9C3222X7	1320863	Ex9C3811X7	1320683	Ex9C3822X7	1320881
	220	Ex9C3211M7	1320654	Ex9C3222M7	1320852	Ex9C3811M7	1320672	Ex9C3822M7	1320870
	230	Ex9C3211P7	1320655	Ex9C3222P7	1320853	Ex9C3811P7	1320673	Ex9C3822P7	1320871
	240	Ex9C3211U7	1320657	Ex9C3222U7	1320855	Ex9C3811U7	1320675	Ex9C3822U7	1320873
	277	Ex9C3211N7	1320656	Ex9C3222N7	1320854	Ex9C3811N7	1320674	Ex9C3822N7	1320872
	380	Ex9C3211Q7	1320658	Ex9C3222Q7	1320856	Ex9C3811Q7	1320676	Ex9C3822Q7	1320874
	400	Ex9C3211V7	1320659	Ex9C3222V7	1320857	Ex9C3811V7	1320677	Ex9C3822V7	1320875
	415	Ex9C3211Z7	1320660	Ex9C3222Z7	1320858	Ex9C3811Z7	1320678	Ex9C3822Z7	1320876
	440	Ex9C3211R7	1320661	Ex9C3222R7	1320859	Ex9C3811R7	1320679	Ex9C3822R7	1320877
	480	Ex9C3211T7	1320662	Ex9C3222T7	1320860	Ex9C3811T7	1320680	Ex9C3822T7	1320878
	500	Ex9C3211S7	1320663	Ex9C3222S7	1320861	Ex9C3811S7	1320681	Ex9C3822S7	1320879
	600	Ex9C3211Y7	1320664	Ex9C3222Y7	1320862	Ex9C3811Y7	1320682	Ex9C3822Y7	1320880
Vdc	12	Ex9C32D11A	1321172	Ex9C32D22A	1321227	Ex9C38D11A	1321177	Ex9C38D22A	1321232
	24	Ex9C32D11B	1321173	Ex9C32D22B	1321228	Ex9C38D11B	1321178	Ex9C38D22B	1321233
	48	Ex9C32D11E	1321174	Ex9C32D22E	1321229	Ex9C38D11E	1321179	Ex9C38D22E	1321234
	110	Ex9C32D11F	1321175	Ex9C32D22F	1321230	Ex9C38D11F	1321180	Ex9C38D22F	1321235
	220	Ex9C32D11M	1321176	Ex9C32D22M	1321231	Ex9C38D11M	1321181	Ex9C38D22M	1321236

Specifications A26 to 30
 Dimensions A32
 Wiring Diagram A36
 Mounting Position A38

Accessories A39 to 55
Matched Relay: Ex9R38A B60
 Relay Specifications B62 to 63
 Relay Trip Curve B64

Relay Dimensions B66
 Relay Wiring Diagram B70
 Relay Accessories B71

IEC Contactors

Ex9C 40~100 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A26-31



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	40 A • 3 Poles		50 A • 3 Poles		65 A • 3 Poles		80 A • 3 Poles		100 A • 3 Poles		
	Product	Part Number	Product	Part Number							
24	Ex9C4011B7	1320684	Ex9C5011B7	1320702	Ex9C6511B7	1320720	Ex9C8011B7	1320738	Ex9C10011B7	1320756	
36	Ex9C4011C7	1320685	Ex9C5011C7	1320703	Ex9C6511C7	1320721	Ex9C8011C7	1320739	Ex9C10011C7	1320757	
42	Ex9C4011D7	1320686	Ex9C5011D7	1320704	Ex9C6511D7	1320722	Ex9C8011D7	1320740	Ex9C10011D7	1320758	
48	Ex9C4011E7	1320687	Ex9C5011E7	1320705	Ex9C6511E7	1320723	Ex9C8011E7	1320741	Ex9C10011E7	1320759	
110	Ex9C4011F7	1320688	Ex9C5011F7	1320706	Ex9C6511F7	1320724	Ex9C8011F7	1320742	Ex9C10011F7	1320760	
120	Ex9C4011G7	1320689	Ex9C5011G7	1320707	Ex9C6511G7	1320725	Ex9C8011G7	1320743	Ex9C10011G7	1320761	
208	Ex9C4011X7	1320701	Ex9C5011X7	1320719	Ex9C6511X7	1320737	Ex9C8011X7	1320755	Ex9C10011X7	1320773	
220	Ex9C4011M7	1320690	Ex9C5011M7	1320708	Ex9C6511M7	1320726	Ex9C8011M7	1320744	Ex9C10011M7	1320762	
230	Ex9C4011P7	1320691	Ex9C5011P7	1320709	Ex9C6511P7	1320727	Ex9C8011P7	1320745	Ex9C10011P7	1320763	
240	Ex9C4011U7	1320693	Ex9C5011U7	1320711	Ex9C6511U7	1320729	Ex9C8011U7	1320747	Ex9C10011U7	1320765	
277	Ex9C4011N7	1320692	Ex9C5011N7	1320710	Ex9C6511N7	1320728	Ex9C8011N7	1320746	Ex9C10011N7	1320764	
380	Ex9C4011Q7	1320694	Ex9C5011Q7	1320712	Ex9C6511Q7	1320730	Ex9C8011Q7	1320748	Ex9C10011Q7	1320766	
400	Ex9C4011V7	1320695	Ex9C5011V7	1320713	Ex9C6511V7	1320731	Ex9C8011V7	1320749	Ex9C10011V7	1320767	
415	Ex9C4011Z7	1320696	Ex9C5011Z7	1320714	Ex9C6511Z7	1320732	Ex9C8011Z7	1320750	Ex9C10011Z7	1320768	
440	Ex9C4011R7	1320697	Ex9C5011R7	1320715	Ex9C6511R7	1320733	Ex9C8011R7	1320751	Ex9C10011R7	1320769	
480	Ex9C4011T7	1320698	Ex9C5011T7	1320716	Ex9C6511T7	1320734	Ex9C8011T7	1320752	Ex9C10011T7	1320770	
500	Ex9C4011S7	1320699	Ex9C5011S7	1320717	Ex9C6511S7	1320735	Ex9C8011S7	1320753	Ex9C10011S7	1320771	
600	Ex9C4011Y7	1320700	Ex9C5011Y7	1320718	Ex9C6511Y7	1320736	Ex9C8011Y7	1320754	Ex9C10011Y7	1320772	
Vdc	12	Ex9C40D11A	1321182	Ex9C50D11A	1321187	Ex9C65D11A	1321192	Ex9C80D11A	1321197	Ex9C100D11A	1321202
	24	Ex9C40D11B	1321183	Ex9C50D11B	1321188	Ex9C65D11B	1321193	Ex9C80D11B	1321198	Ex9C100D11B	1321203
	48	Ex9C40D11E	1321184	Ex9C50D11E	1321189	Ex9C65D11E	1321194	Ex9C80D11E	1321199	Ex9C100D11E	1321204
	110	Ex9C40D11F	1321185	Ex9C50D11F	1321190	Ex9C65D11F	1321195	Ex9C80D11F	1321200	Ex9C100D11F	1321205
	220	Ex9C40D11M	1321186	Ex9C50D11M	1321191	Ex9C65D11M	1321196	Ex9C80D11M	1321201	Ex9C100D11M	1321206

Specifications	A26 to 31	Accessories	A39 to 55	Relay Dimensions	B67
Dimensions	A32 to 33	Matched Relay: Ex9R100A	B60	Relay Wiring Diagram	B70
Wiring Diagram	A36	Relay Specifications	B62 to 63	Relay Accessories	B71
Mounting Position	A38	Relay Trip Curve	B64		

IEC Contactors

Ex9C 115~225 A Standard

A

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A27-31

**Certifications**IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	115 A • 3 Poles		150 A • 3 Poles		185 A • 3 Poles		225 A • 3 Poles		
	Product	Part Number							
Vac/dc	24	Ex9C115E22B	1321316	Ex9C150E22B	1321331	Ex9C185E22B	1321346	Ex9C225E22B	1321361
	36	Ex9C115E22C	1321317	Ex9C150E22C	1321332	Ex9C185E22C	1321347	Ex9C225E22C	1321362
	42	Ex9C115E22D	1321318	Ex9C150E22D	1321333	Ex9C185E22D	1321348	Ex9C225E22D	1321363
	48	Ex9C115E22E	1321319	Ex9C150E22E	1321334	Ex9C185E22E	1321349	Ex9C225E22E	1321364
	110	Ex9C115E22F	1321320	Ex9C150E22F	1321335	Ex9C185E22F	1321350	Ex9C225E22F	1321365
	120	Ex9C115E22G	1321321	Ex9C150E22G	1321336	Ex9C185E22G	1321351	Ex9C225E22G	1321366
	208	Ex9C115E22X	1321324	Ex9C150E22X	1321339	Ex9C185E22X	1321354	Ex9C225E22X	1321369
	220	Ex9C115E22M	1321322	Ex9C150E22M	1321337	Ex9C185E22M	1321352	Ex9C225E22M	1321367
	230	Ex9C115E22P	1321323	Ex9C150E22P	1321338	Ex9C185E22P	1321353	Ex9C225E22P	1321368
	240	Ex9C115E22U	1321325	Ex9C150E22U	1321340	Ex9C185E22U	1321355	Ex9C225E22U	1321370
	277	Ex9C115E22N	1321328	Ex9C150E22N	1321643	Ex9C185E22N	1321358	Ex9C225E22N	1321644
	380	Ex9C115E22Q	1321326	Ex9C150E22Q	1321341	Ex9C185E22Q	1321356	Ex9C225E22Q	1321371
	400	Ex9C115E22V	1321327	Ex9C150E22V	1321342	Ex9C185E22V	1321357	Ex9C225E22V	1321372
	415	Ex9C115E22Z	1321651	Ex9C150E22Z	1321343	Ex9C185E22Z	1321653	Ex9C225E22Z	1321373
	480	Ex9C115E22T	1321329	Ex9C150E22T	1321344	Ex9C185E22T	1321359	Ex9C225E22T	1321374
	600	Ex9C115E22Y	1321330	Ex9C150E22Y	1321345	Ex9C185E22Y	1321360	Ex9C225E22Y	1321375
Wide Range Operating Coil Vac/dc	48~130	Ex9C115F22H	1321434	Ex9C150F22H	1321437	Ex9C185F22H	1321440	Ex9C225F22H	1321443
	100~250	Ex9C115F22K	1321435	Ex9C150F22K	1321438	Ex9C185F22K	1321441	Ex9C225F22K	1321444
	250~500	Ex9C115F22L	1321436	Ex9C150F22L	1321439	Ex9C185F22L	1321442	Ex9C225F22L	1321445

Specifications	A27 to 31
Dimensions	A33
Wiring Diagram	A36
Mounting Position	A38
Accessories	A39 to 55

Matched Relay:	
Ex9R185A (115~185 A)	B61
Ex9R500A (225 A)	B61
Relay Specifications	B62 to 63
Relay Trip Curve	B64

Relay Dimensions (Ex9R185A)	B68
Relay Dimensions (Ex9R500A)	B69
Relay Wiring Diagram	B70
Relay Accessories	B71

IEC Contactors

Ex9C 265~500 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A27-31



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



Coil Voltage	265 A • 3 Poles		300 A • 3 Poles		400 A • 3 Poles		500 A • 3 Poles		
	Product	Part Number							
Vac/dc	24	Ex9C265E22B	1321376	Ex9C300E22B	1321391	-	-	-	
	36	Ex9C265E22C	1321377	Ex9C300E22C	1321392	Ex9C400E22C	1321406	Ex9C500E22C	1321420
	42	Ex9C265E22D	1321378	Ex9C300E22D	1321393	Ex9C400E22D	1321407	Ex9C500E22D	1321421
	48	Ex9C265E22E	1321379	Ex9C300E22E	1321394	Ex9C400E22E	1321408	Ex9C500E22E	1321422
	110	Ex9C265E22F	1321380	Ex9C300E22F	1321395	Ex9C400E22F	1321409	Ex9C500E22F	1321423
	120	Ex9C265E22G	1321381	Ex9C300E22G	1321396	Ex9C400E22G	1321410	Ex9C500E22G	1321424
	208	Ex9C265E22X	1321384	Ex9C300E22X	1321399	Ex9C400E22X	1321413	Ex9C500E22X	1321427
	220	Ex9C265E22M	1321382	Ex9C300E22M	1321397	Ex9C400E22M	1321411	Ex9C500E22M	1321425
	230	Ex9C265E22P	1321383	Ex9C300E22P	1321398	Ex9C400E22P	1321412	Ex9C500E22P	1321426
	240	Ex9C265E22U	1321385	Ex9C300E22U	1321400	Ex9C400E22U	1321414	Ex9C500E22U	1321428
	277	Ex9C265E22N	1321388	Ex9C300E22N	1321645	Ex9C400E22N	1321417	Ex9C500E22N	1321646
	380	Ex9C265E22Q	1321386	Ex9C300E22Q	1321401	Ex9C400E22Q	1321415	Ex9C500E22Q	1321429
	400	Ex9C265E22V	1321387	Ex9C300E22V	1321402	Ex9C400E22V	1321416	Ex9C500E22V	1321430
	415	Ex9C265E22Z	Call for Info	Ex9C300E22Z	1321403	Ex9C400E22Z	Call for Info	Ex9C500E22Z	1321431
	480	Ex9C265E22T	1321389	Ex9C300E22T	1321404	Ex9C400E22T	1321418	Ex9C500E22T	1321432
	600	Ex9C265E22Y	1321390	Ex9C300E22Y	1321405	Ex9C400E22Y	1321419	Ex9C500E22Y	1321433
Wide Range Operating Coil Vac/dc	48~130	Ex9C265F22H	1321446	Ex9C300F22H	1321449	Ex9C400F22H	1321452	Ex9C500F22H	1321455
	100~250	Ex9C265F22K	1321447	Ex9C300F22K	1321450	Ex9C400F22K	1321453	Ex9C500F22K	1321456
	250~500	Ex9C265F22L	1321448	Ex9C300F22L	1321451	Ex9C400F22L	1321454	Ex9C500F22L	1321457

Specifications	A27 to 31	Accessories	A39 to 55	Relay Dimensions	B69
Dimensions	A33	Matched Relay: Ex9R500A	B61	Relay Wiring Diagram	B70
Wiring Diagram	A36	Relay Specifications	B62 to 63	Relay Accessories	B71
Mounting Position	A38	Relay Trip Curve	B64		

IEC Contactors

Ex9CSR 6 A Miniature

A

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	6 A • 3 Poles				6 A • 4 Poles		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		Product	Part Number	
Vac • 50/60 Hz	24	Ex9CSR0610B7	1320163	Ex9CSR0601B7	1320217	Ex9CSR06B7C	1320271
	36	Ex9CSR0610C7	1320164	Ex9CSR0601C7	1320218	Ex9CSR06C7C	1320272
	42	Ex9CSR0610D7	1320165	Ex9CSR0601D7	1320219	Ex9CSR06D7C	1320273
	48	Ex9CSR0610E7	1320166	Ex9CSR0601E7	1320220	Ex9CSR06E7C	1320274
	110	Ex9CSR0610F7	1320167	Ex9CSR0601F7	1320221	Ex9CSR06F7C	1320275
	120	Ex9CSR0610G7	1320168	Ex9CSR0601G7	1320222	Ex9CSR06G7C	1320276
	208	Ex9CSR0610X7	1320180	Ex9CSR0601X7	1320234	Ex9CSR06X7C	1320288
	220	Ex9CSR0610M7	1320169	Ex9CSR0601M7	1320223	Ex9CSR06M7C	1320277
	230	Ex9CSR0610P7	1320170	Ex9CSR0601P7	1320224	Ex9CSR06P7C	1320278
	240	Ex9CSR0610U7	1320172	Ex9CSR0601U7	1320226	Ex9CSR06U7C	1320280
	277	Ex9CSR0610N7	1320171	Ex9CSR0601N7	1320225	Ex9CSR06N7C	1320279
	380	Ex9CSR0610Q7	1320173	Ex9CSR0601Q7	1320227	Ex9CSR06Q7C	1320281
	400	Ex9CSR0610V7	1320174	Ex9CSR0601V7	1320228	Ex9CSR06V7C	1320282
	415	Ex9CSR0610Z7	1320175	Ex9CSR0601Z7	1320229	Ex9CSR06Z7C	1320283
Vdc	440	Ex9CSR0610R7	1320176	Ex9CSR0601R7	1320230	Ex9CSR06R7C	1320284
	480	Ex9CSR0610T7	1320177	Ex9CSR0601T7	1320231	Ex9CSR06T7C	1320285
	500	Ex9CSR0610S7	1320178	Ex9CSR0601S7	1320232	Ex9CSR06S7C	1320286
	12	Ex9CSR06D10A	1320370	Ex9CSR06D01A	1320385	Ex9CSR06DAC	1320400
	24	Ex9CSR06D10B	1320371	Ex9CSR06D01B	1320386	Ex9CSR06DBC	1320401
	48	Ex9CSR06D10E	1320372	Ex9CSR06D01E	1320387	Ex9CSR06DEC	1320402
	110	Ex9CSR06D10F	1320373	Ex9CSR06D01F	1320388	Ex9CSR06DFC	1320403
	220	Ex9CSR06D10M	1320374	Ex9CSR06D01M	1320389	Ex9CSR06DMC	1320404
	250	Ex9CSR06D10W	1320562	Ex9CSR06D01W	1320565	Ex9CSR06DWC	1320568

Specifications A26 to 30
Dimensions A34Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CSR 9 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	9 A • 3 Poles				9 A • 4 Poles	
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO	
Vac • 50/60 Hz	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CSR0910B7	1320181	Ex9CSR0901B7	1320235	Ex9CSR09B7C	1320289
36	Ex9CSR0910C7	1320182	Ex9CSR0901C7	1320236	Ex9CSR09C7C	1320290
42	Ex9CSR0910D7	1320183	Ex9CSR0901D7	1320237	Ex9CSR09D7C	1320291
48	Ex9CSR0910E7	1320184	Ex9CSR0901E7	1320238	Ex9CSR09E7C	1320292
110	Ex9CSR0910F7	1320185	Ex9CSR0901F7	1320239	Ex9CSR09F7C	1320293
120	Ex9CSR0910G7	1320186	Ex9CSR0901G7	1320240	Ex9CSR09G7C	1320294
208	Ex9CSR0910X7	1320198	Ex9CSR0901X7	1320252	Ex9CSR09X7C	1320306
220	Ex9CSR0910M7	1320187	Ex9CSR0901M7	1320241	Ex9CSR09M7C	1320295
230	Ex9CSR0910P7	1320188	Ex9CSR0901P7	1320242	Ex9CSR09P7C	1320296
240	Ex9CSR0910U7	1320190	Ex9CSR0901U7	1320244	Ex9CSR09U7C	1320298
277	Ex9CSR0910N7	1320189	Ex9CSR0901N7	1320243	Ex9CSR09N7C	1320297
380	Ex9CSR0910Q7	1320191	Ex9CSR0901Q7	1320245	Ex9CSR09Q7C	1320299
400	Ex9CSR0910V7	1320192	Ex9CSR0901V7	1320246	Ex9CSR09V7C	1320300
415	Ex9CSR0910Z7	1320193	Ex9CSR0901Z7	1320247	Ex9CSR09Z7C	1320301
440	Ex9CSR0910R7	1320194	Ex9CSR0901R7	1320248	Ex9CSR09R7C	1320302
480	Ex9CSR0910T7	1320195	Ex9CSR0901T7	1320249	Ex9CSR09T7C	1320303
500	Ex9CSR0910S7	1320196	Ex9CSR0901S7	1320250	Ex9CSR09S7C	1320304
Vdc	Product	Part Number	Product	Part Number	Product	Part Number
12	Ex9CSR09D10A	1320375	Ex9CSR09D01A	1320390	Ex9CSR09DAC	1320405
24	Ex9CSR09D10B	1320376	Ex9CSR09D01B	1320391	Ex9CSR09DBC	1320406
48	Ex9CSR09D10E	1320377	Ex9CSR09D01E	1320392	Ex9CSR09DEC	1320407
110	Ex9CSR09D10F	1320378	Ex9CSR09D01F	1320393	Ex9CSR09DFC	1320408
220	Ex9CSR09D10M	1320379	Ex9CSR09D01M	1320394	Ex9CSR09DMC	1320409
250	Ex9CSR09D10W	1320563	Ex9CSR09D01W	1320566	Ex9CSR09DW	1320569

Specifications A26 to 30
Dimensions A34Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CSR 12 A Miniature

A

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	12 A • 3 Poles				12 A • 4 Poles		
	3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO	Part Number	
Vac • 50/60 Hz	24	Ex9CSR1210B7	1320199	Ex9CSR1201B7	1320253	Ex9CSR12B7C	1320307
	36	Ex9CSR1210C7	1320200	Ex9CSR1201C7	1320254	Ex9CSR12C7C	1320308
	42	Ex9CSR1210D7	1320201	Ex9CSR1201D7	1320255	Ex9CSR12D7C	1320309
	48	Ex9CSR1210E7	1320202	Ex9CSR1201E7	1320256	Ex9CSR12E7C	1320310
	110	Ex9CSR1210F7	1320203	Ex9CSR1201F7	1320257	Ex9CSR12F7C	1320311
	120	Ex9CSR1210G7	1320204	Ex9CSR1201G7	1320258	Ex9CSR12G7C	1320312
	208	Ex9CSR1210X7	1320216	Ex9CSR1201X7	1320270	Ex9CSR12X7C	1320324
	220	Ex9CSR1210M7	1320205	Ex9CSR1201M7	1320259	Ex9CSR12M7C	1320313
	230	Ex9CSR1210P7	1320206	Ex9CSR1201P7	1320260	Ex9CSR12P7C	1320314
	240	Ex9CSR1210U7	1320208	Ex9CSR1201U7	1320262	Ex9CSR12U7C	1320316
	277	Ex9CSR1210N7	1320207	Ex9CSR1201N7	1320261	Ex9CSR12N7C	1320315
	380	Ex9CSR1210Q7	1320209	Ex9CSR1201Q7	1320263	Ex9CSR12Q7C	1320317
	400	Ex9CSR1210V7	1320210	Ex9CSR1201V7	1320264	Ex9CSR12V7C	1320318
	415	Ex9CSR1210Z7	1320211	Ex9CSR1201Z7	1320265	Ex9CSR12Z7C	1320319
Vdc	440	Ex9CSR1210R7	1320212	Ex9CSR1201R7	1320266	Ex9CSR12R7C	1320320
	480	Ex9CSR1210T7	1320213	Ex9CSR1201T7	1320267	Ex9CSR12T7C	1320321
	500	Ex9CSR1210S7	1320214	Ex9CSR1201S7	1320268	Ex9CSR12S7C	1320322
	12	Ex9CSR12D10A	1320380	Ex9CSR12D01A	1320395	Ex9CSR12DAC	1320410
	24	Ex9CSR12D10B	1320381	Ex9CSR12D01B	1320396	Ex9CSR12DBC	1320411
	48	Ex9CSR12D10E	1320382	Ex9CSR12D01E	1320397	Ex9CSR12DEC	1320412
	110	Ex9CSR12D10F	1320383	Ex9CSR12D01F	1320398	Ex9CSR12DFC	1320413
	220	Ex9CSR12D10M	1320384	Ex9CSR12D01M	1320399	Ex9CSR12DMC	1320414
	250	Ex9CSR12D10W	1320564	Ex9CSR12D01W	1320567	Ex9CSR12DWC	1320570

Specifications A26 to 30
Dimensions A34Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CR 9~12 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A26-30

**Certifications**IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	9 A • 3 Poles				12 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number							
Vac • 50/60 Hz	24	Ex9CR0911B7	1320882	Ex9CR0922B7	1321062	Ex9CR1211B7	1320900	Ex9CR1222B7	1321080
	36	Ex9CR0911C7	1320883	Ex9CR0922C7	1321063	Ex9CR1211C7	1320901	Ex9CR1222C7	1321081
	42	Ex9CR0911D7	1320884	Ex9CR0922D7	1321064	Ex9CR1211D7	1320902	Ex9CR1222D7	1321082
	48	Ex9CR0911E7	1320885	Ex9CR0922E7	1321065	Ex9CR1211E7	1320903	Ex9CR1222E7	1321083
	110	Ex9CR0911F7	1320886	Ex9CR0922F7	1321066	Ex9CR1211F7	1320904	Ex9CR1222F7	1321084
	120	Ex9CR0911G7	1320887	Ex9CR0922G7	1321067	Ex9CR1211G7	1320905	Ex9CR1222G7	1321085
	208	Ex9CR0911X7	1320899	Ex9CR0922X7	1321079	Ex9CR1211X7	1320917	Ex9CR1222X7	1321097
	220	Ex9CR0911M7	1320888	Ex9CR0922M7	1321068	Ex9CR1211M7	1320906	Ex9CR1222M7	1321086
	230	Ex9CR0911P7	1320889	Ex9CR0922P7	1321069	Ex9CR1211P7	1320907	Ex9CR1222P7	1321087
	240	Ex9CR0911U7	1320891	Ex9CR0922U7	1321071	Ex9CR1211U7	1320909	Ex9CR1222U7	1321089
	277	Ex9CR0911N7	1320890	Ex9CR0922N7	1321070	Ex9CR1211N7	1320908	Ex9CR1222N7	1321088
	380	Ex9CR0911Q7	1320892	Ex9CR0922Q7	1321072	Ex9CR1211Q7	1320910	Ex9CR1222Q7	1321090
	400	Ex9CR0911V7	1320893	Ex9CR0922V7	1321073	Ex9CR1211V7	1320911	Ex9CR1222V7	1321091
	415	Ex9CR0911Z7	1320894	Ex9CR0922Z7	1321074	Ex9CR1211Z7	1320912	Ex9CR1222Z7	1321092
	440	Ex9CR0911R7	1320895	Ex9CR0922R7	1321075	Ex9CR1211R7	1320913	Ex9CR1222R7	1321093
	480	Ex9CR0911T7	1320896	Ex9CR0922T7	1321076	Ex9CR1211T7	1320914	Ex9CR1222T7	1321094
	500	Ex9CR0911S7	1320897	Ex9CR0922S7	1321077	Ex9CR1211S7	1320915	Ex9CR1222S7	1321095
	600	Ex9CR0911Y7	1320898	Ex9CR0922Y7	1321078	Ex9CR1211Y7	1320916	Ex9CR1222Y7	1321096
Vdc	12	Ex9CR09D11A	1321237	Ex9CR09D22A	1321292	Ex9CR12D11A	1321242	Ex9CR12D22A	1321297
	24	Ex9CR09D11B	1321238	Ex9CR09D22B	1321293	Ex9CR12D11B	1321243	Ex9CR12D22B	1321298
	48	Ex9CR09D11E	1321239	Ex9CR09D22E	1321294	Ex9CR12D11E	1321244	Ex9CR12D22E	1321299
	110	Ex9CR09D11F	1321240	Ex9CR09D22F	1321295	Ex9CR12D11F	1321245	Ex9CR12D22F	1321300
	220	Ex9CR09D11M	1321241	Ex9CR09D22M	1321296	Ex9CR12D11M	1321246	Ex9CR12D22M	1321301

Specifications A26 to 30
Dimensions A34Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CR 18~25 A Standard

A

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A26-30



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1



Coil Voltage	18 A • 3 Poles				25 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number							
Vac • 50/60 Hz	24	Ex9CR1811B7	1321607	Ex9CR1822B7	1321625	Ex9CR2511B7	1320918	Ex9CR2522B7	1321098
	36	Ex9CR1811C7	1321608	Ex9CR1822C7	1321626	Ex9CR2511C7	1320919	Ex9CR2522C7	1321099
	42	Ex9CR1811D7	1321609	Ex9CR1822D7	1321627	Ex9CR2511D7	1320920	Ex9CR2522D7	1321100
	48	Ex9CR1811E7	1321610	Ex9CR1822E7	1321628	Ex9CR2511E7	1320921	Ex9CR2522E7	1321101
	110	Ex9CR1811F7	1321611	Ex9CR1822F7	1321629	Ex9CR2511F7	1320922	Ex9CR2522F7	1321102
	120	Ex9CR1811G7	1321612	Ex9CR1822G7	1321630	Ex9CR2511G7	1320923	Ex9CR2522G7	1321103
	208	Ex9CR1811X7	1321624	Ex9CR1822X7	1321642	Ex9CR2511X7	1320935	Ex9CR2522X7	1321115
	220	Ex9CR1811M7	1321613	Ex9CR1822M7	1321631	Ex9CR2511M7	1320924	Ex9CR2522M7	1321104
	230	Ex9CR1811P7	1321614	Ex9CR1822P7	1321632	Ex9CR2511P7	1320925	Ex9CR2522P7	1321105
	240	Ex9CR1811U7	1321616	Ex9CR1822U7	1321634	Ex9CR2511U7	1320927	Ex9CR2522U7	1321107
	277	Ex9CR1811N7	1321615	Ex9CR1822N7	1321633	Ex9CR2511N7	1320926	Ex9CR2522N7	1321106
	380	Ex9CR1811Q7	1321617	Ex9CR1822Q7	1321635	Ex9CR2511Q7	1320928	Ex9CR2522Q7	1321108
	400	Ex9CR1811V7	1321618	Ex9CR1822V7	1321636	Ex9CR2511V7	1320929	Ex9CR2522V7	1321109
	415	Ex9CR1811Z7	1321619	Ex9CR1822Z7	1321637	Ex9CR2511Z7	1320930	Ex9CR2522Z7	1321110
	440	Ex9CR1811R7	1321620	Ex9CR1822R7	1321638	Ex9CR2511R7	1320931	Ex9CR2522R7	1321111
	480	Ex9CR1811T7	1321621	Ex9CR1822T7	1321639	Ex9CR2511T7	1320932	Ex9CR2522T7	1321112
	500	Ex9CR1811S7	1321622	Ex9CR1822S7	1321640	Ex9CR2511S7	1320933	Ex9CR2522S7	1321113
	600	Ex9CR1811Y7	1321623	Ex9CR1822Y7	1321641	Ex9CR2511Y7	1320934	Ex9CR2522Y7	1321114
Vdc	12	Ex9CR18D11A	1321247	Ex9CR18D22A	1321302	Ex9CR25D11A	1321252	Ex9CR25D22A	1321307
	24	Ex9CR18D11B	1321248	Ex9CR18D22B	1321303	Ex9CR25D11B	1321253	Ex9CR25D22B	1321308
	48	Ex9CR18D11E	1321249	Ex9CR18D22E	1321304	Ex9CR25D11E	1321254	Ex9CR25D22E	1321309
	110	Ex9CR18D11F	1321250	Ex9CR18D22F	1321305	Ex9CR25D11F	1321255	Ex9CR25D22F	1321310
	220	Ex9CR18D11M	1321251	Ex9CR18D22M	1321306	Ex9CR25D11M	1321256	Ex9CR25D22M	1321311

Specifications A26 to 30
Dimensions A34

Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CR 32~38 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A26-30

**Certifications**IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	32 A • 3 Poles				38 A • 3 Poles				
	3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		
	Product	Part Number							
Vac • 50/60 Hz	24	Ex9CR3211B7	1320936	Ex9CR3222B7	1321116	Ex9CR3811B7	1320954	Ex9CR3822B7	1321134
	36	Ex9CR3211C7	1320937	Ex9CR3222C7	1321117	Ex9CR3811C7	1320955	Ex9CR3822C7	1321135
	42	Ex9CR3211D7	1320938	Ex9CR3222D7	1321118	Ex9CR3811D7	1320956	Ex9CR3822D7	1321136
	48	Ex9CR3211E7	1320939	Ex9CR3222E7	1321119	Ex9CR3811E7	1320957	Ex9CR3822E7	1321137
	110	Ex9CR3211F7	1320940	Ex9CR3222F7	1321120	Ex9CR3811F7	1320958	Ex9CR3822F7	1321138
	120	Ex9CR3211G7	1320941	Ex9CR3222G7	1321121	Ex9CR3811G7	1320959	Ex9CR3822G7	1321139
	208	Ex9CR3211X7	1320953	Ex9CR3222X7	1321133	Ex9CR3811X7	1320971	Ex9CR3822X7	1321151
	220	Ex9CR3211M7	1320942	Ex9CR3222M7	1321122	Ex9CR3811M7	1320960	Ex9CR3822M7	1321140
	230	Ex9CR3211P7	1320943	Ex9CR3222P7	1321123	Ex9CR3811P7	1320961	Ex9CR3822P7	1321141
	240	Ex9CR3211U7	1320945	Ex9CR3222U7	1321125	Ex9CR3811U7	1320963	Ex9CR3822U7	1321143
	277	Ex9CR3211N7	1320944	Ex9CR3222N7	1321124	Ex9CR3811N7	1320962	Ex9CR3822N7	1321142
	380	Ex9CR3211Q7	1320946	Ex9CR3222Q7	1321126	Ex9CR3811Q7	1320964	Ex9CR3822Q7	1321144
	400	Ex9CR3211V7	1320947	Ex9CR3222V7	1321127	Ex9CR3811V7	1320965	Ex9CR3822V7	1321145
	415	Ex9CR3211Z7	1320948	Ex9CR3222Z7	1321128	Ex9CR3811Z7	1320966	Ex9CR3822Z7	1321146
	440	Ex9CR3211R7	1320949	Ex9CR3222R7	1321129	Ex9CR3811R7	1320967	Ex9CR3822R7	1321147
	480	Ex9CR3211T7	1320950	Ex9CR3222T7	1321130	Ex9CR3811T7	1320968	Ex9CR3822T7	1321148
	500	Ex9CR3211S7	1320951	Ex9CR3222S7	1321131	Ex9CR3811S7	1320969	Ex9CR3822S7	1321149
	600	Ex9CR3211Y7	1320952	Ex9CR3222Y7	1321132	Ex9CR3811Y7	1320970	Ex9CR3822Y7	1321150
Vdc	12	Ex9CR32D11A	1321257	Ex9CR32D22A	1321312	Ex9CR38D11A	1321262	Ex9CR38D22A	1321317
	24	Ex9CR32D11B	1321258	Ex9CR32D22B	1321313	Ex9CR38D11B	1321263	Ex9CR38D22B	1321318
	48	Ex9CR32D11E	1321259	Ex9CR32D22E	1321314	Ex9CR38D11E	1321264	Ex9CR38D22E	1321319
	110	Ex9CR32D11F	1321260	Ex9CR32D22F	1321315	Ex9CR38D11F	1321265	Ex9CR38D22F	1321320
	220	Ex9CR32D11M	1321261	Ex9CR32D22M	1321316	Ex9CR38D11M	1321266	Ex9CR38D22M	1321321

Specifications A26 to 30
Dimensions A34Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CR 40~100 A Standard

A

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A26-31

**Certifications**IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	40 A • 3 Poles		50 A • 3 Poles		65 A • 3 Poles		80 A • 3 Poles		100 A • 3 Poles		
	Product	Part Number									
Vac • 50/60 Hz	3NO • 1NO+1NC Auxiliary Contact										
24	Ex9CR4011B7	1320972	Ex9CR5011B7	1320990	Ex9CR6511B7	1321008	Ex9CR8011B7	1321026	Ex9CR10011B7	1321044	
36	Ex9CR4011C7	1320973	Ex9CR5011C7	1320991	Ex9CR6511C7	1321009	Ex9CR8011C7	1321027	Ex9CR10011C7	1321045	
42	Ex9CR4011D7	1320974	Ex9CR5011D7	1320992	Ex9CR6511D7	1321010	Ex9CR8011D7	1321028	Ex9CR10011D7	1321046	
48	Ex9CR4011E7	1320975	Ex9CR5011E7	1320993	Ex9CR6511E7	1321011	Ex9CR8011E7	1321029	Ex9CR10011E7	1321047	
110	Ex9CR4011F7	1320976	Ex9CR5011F7	1320994	Ex9CR6511F7	1321012	Ex9CR8011F7	1321030	Ex9CR10011F7	1321048	
120	Ex9CR4011G7	1320977	Ex9CR5011G7	1320995	Ex9CR6511G7	1321013	Ex9CR8011G7	1321031	Ex9CR10011G7	1321049	
208	Ex9CR4011X7	1320989	Ex9CR5011X7	1321007	Ex9CR6511X7	1321025	Ex9CR8011X7	1321043	Ex9CR10011X7	1321061	
220	Ex9CR4011M7	1320978	Ex9CR5011M7	1320996	Ex9CR6511M7	1321014	Ex9CR8011M7	1321032	Ex9CR10011M7	1321050	
230	Ex9CR4011P7	1320979	Ex9CR5011P7	1320997	Ex9CR6511P7	1321015	Ex9CR8011P7	1321033	Ex9CR10011P7	1321051	
240	Ex9CR4011U7	1320981	Ex9CR5011U7	1320999	Ex9CR6511U7	1321017	Ex9CR8011U7	1321035	Ex9CR10011U7	1321053	
277	Ex9CR4011N7	1320980	Ex9CR5011N7	1320998	Ex9CR6511N7	1321016	Ex9CR8011N7	1321034	Ex9CR10011N7	1321052	
380	Ex9CR4011Q7	1320982	Ex9CR5011Q7	1321000	Ex9CR6511Q7	1321018	Ex9CR8011Q7	1321036	Ex9CR10011Q7	1321054	
400	Ex9CR4011V7	1320983	Ex9CR5011V7	1321001	Ex9CR6511V7	1321019	Ex9CR8011V7	1321037	Ex9CR10011V7	1321055	
415	Ex9CR4011Z7	1320984	Ex9CR5011Z7	1321002	Ex9CR6511Z7	1321020	Ex9CR8011Z7	1321038	Ex9CR10011Z7	1321056	
440	Ex9CR4011R7	1320985	Ex9CR5011R7	1321003	Ex9CR6511R7	1321021	Ex9CR8011R7	1321039	Ex9CR10011R7	1321057	
480	Ex9CR4011T7	1320986	Ex9CR5011T7	1321004	Ex9CR6511T7	1321022	Ex9CR8011T7	1321040	Ex9CR10011T7	1321058	
500	Ex9CR4011S7	1320987	Ex9CR5011S7	1321005	Ex9CR6511S7	1321023	Ex9CR8011S7	1321041	Ex9CR10011S7	1321059	
600	Ex9CR4011Y7	1320988	Ex9CR5011Y7	1321006	Ex9CR6511Y7	1321024	Ex9CR8011Y7	1321042	Ex9CR10011Y7	1321060	
Vdc	12	Ex9CR40D11A	1321267	Ex9CR50D11A	1321272	Ex9CR65D11A	1321277	Ex9CR80D11A	1321282	Ex9CR100D11A	1321287
	24	Ex9CR40D11B	1321268	Ex9CR50D11B	1321273	Ex9CR65D11B	1321278	Ex9CR80D11B	1321283	Ex9CR100D11B	1321288
	48	Ex9CR40D11E	1321269	Ex9CR50D11E	1321274	Ex9CR65D11E	1321279	Ex9CR80D11E	1321284	Ex9CR100D11E	1321289
	110	Ex9CR40D11F	1321270	Ex9CR50D11F	1321275	Ex9CR65D11F	1321280	Ex9CR80D11F	1321285	Ex9CR100D11F	1321290
	220	Ex9CR40D11M	1321271	Ex9CR50D11M	1321276	Ex9CR65D11M	1321281	Ex9CR80D11M	1321286	Ex9CR100D11M	1321291

Specifications A26 to 31
Dimensions A34 to 35Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CR 115~225 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A27-31

**Certifications**IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	115 A • 3 Poles		150 A • 3 Poles		185 A • 3 Poles		225 A • 3 Poles		
	Product	Part Number							
Vac/dc	24	Ex9CR115E22B	1321458	Ex9CR150E22B	1321473	Ex9CR185E22B	1321488	Ex9CR225E22B	1321503
	36	Ex9CR115E22C	1321459	Ex9CR150E22C	1321474	Ex9CR185E22C	1321489	Ex9CR225E22C	1321504
	42	Ex9CR115E22D	1321460	Ex9CR150E22D	1321475	Ex9CR185E22D	1321490	Ex9CR225E22D	1321505
	48	Ex9CR115E22E	1321461	Ex9CR150E22E	1321476	Ex9CR185E22E	1321491	Ex9CR225E22E	1321506
	110	Ex9CR115E22F	1321462	Ex9CR150E22F	1321477	Ex9CR185E22F	1321492	Ex9CR225E22F	1321507
	120	Ex9CR115E22G	1321463	Ex9CR150E22G	1321478	Ex9CR185E22G	1321493	Ex9CR225E22G	1321508
	208	Ex9CR115E22X	1321466	Ex9CR150E22X	1321481	Ex9CR185E22X	1321496	Ex9CR225E22X	1321511
	220	Ex9CR115E22M	1321464	Ex9CR150E22M	1321479	Ex9CR185E22M	1321494	Ex9CR225E22M	1321509
	230	Ex9CR115E22P	1321465	Ex9CR150E22P	1321480	Ex9CR185E22P	1321495	Ex9CR225E22P	1321510
	240	Ex9CR115E22U	1321467	Ex9CR150E22U	1321482	Ex9CR185E22U	1321497	Ex9CR225E22U	1321512
	277	Ex9CR115E22N	1321470	Ex9CR150E22N	1321647	Ex9CR185E22N	1321500	Ex9CR225E22N	1321648
	380	Ex9CR115E22Q	1321468	Ex9CR150E22Q	1321483	Ex9CR185E22Q	1321498	Ex9CR225E22Q	1321513
	400	Ex9CR115E22V	1321469	Ex9CR150E22V	1321484	Ex9CR185E22V	1321499	Ex9CR225E22V	1321514
	415	Ex9CR115E22Z	1321652	Ex9CR150E22Z	1321485	Ex9CR185E22Z	1321656	Ex9CR225E22Z	1321515
	480	Ex9CR115E22T	1321471	Ex9CR150E22T	1321486	Ex9CR185E22T	1321501	Ex9CR225E22T	1321516
	600	Ex9CR115E22Y	1321472	Ex9CR150E22Y	1321487	Ex9CR185E22Y	1321502	Ex9CR225E22Y	1321517
Wide Range Operating Coil Vac/dc	48~130	Ex9CR115F22H	1321576	Ex9CR150F22H	1321579	Ex9CR185F22H	1321582	Ex9CR225F22H	1321585
	100~250	Ex9CR115F22K	1321577	Ex9CR150F22K	1321580	Ex9CR185F22K	1321583	Ex9CR225F22K	1321586
	250~500	Ex9CR115F22L	1321578	Ex9CR150F22L	1321581	Ex9CR185F22L	1321584	Ex9CR225F22L	1321587

Specifications A27 to 31
Dimensions A35Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CR 265~500 A Standard

A

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A27-31

**Certifications**IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage	265 A • 3 Poles		300 A • 3 Poles		400 A • 3 Poles		500 A • 3 Poles		
	Product	Part Number							
Vac/dc	24	Ex9CR265E22B	1321518	Ex9CR300E22B	1321533	-	-	-	
	36	Ex9CR265E22C	1321519	Ex9CR300E22C	1321534	Ex9CR400E22C	1321548	Ex9CR500E22C	1321562
	42	Ex9CR265E22D	1321520	Ex9CR300E22D	1321535	Ex9CR400E22D	1321549	Ex9CR500E22D	1321563
	48	Ex9CR265E22E	1321521	Ex9CR300E22E	1321536	Ex9CR400E22E	1321550	Ex9CR500E22E	1321564
	110	Ex9CR265E22F	1321522	Ex9CR300E22F	1321537	Ex9CR400E22F	1321551	Ex9CR500E22F	1321565
	120	Ex9CR265E22G	1321523	Ex9CR300E22G	1321538	Ex9CR400E22G	1321552	Ex9CR500E22G	1321566
	208	Ex9CR265E22X	1321526	Ex9CR300E22X	1321541	Ex9CR400E22X	1321555	Ex9CR500E22X	1321569
	220	Ex9CR265E22M	1321524	Ex9CR300E22M	1321539	Ex9CR400E22M	1321553	Ex9CR500E22M	1321567
	230	Ex9CR265E22P	1321525	Ex9CR300E22P	1321540	Ex9CR400E22P	1321554	Ex9CR500E22P	1321568
	240	Ex9CR265E22U	1321527	Ex9CR300E22U	1321542	Ex9CR400E22U	1321556	Ex9CR500E22U	1321570
	277	Ex9CR265E22N	1321530	Ex9CR300E22N	1321649	Ex9CR400E22N	1321559	Ex9CR500E22N	1321650
	380	Ex9CR265E22Q	1321528	Ex9CR300E22Q	1321543	Ex9CR400E22Q	1321557	Ex9CR500E22Q	1321571
	400	Ex9CR265E22V	1321529	Ex9CR300E22V	1321544	Ex9CR400E22V	1321558	Ex9CR500E22V	1321572
	415	Ex9CR265E22Z	Call of Info	Ex9CR300E22Z	1321545	Ex9CR400E22Z	Call of Info	Ex9CR500E22Z	1321573
	480	Ex9CR265E22T	1321531	Ex9CR300E22T	1321546	Ex9CR400E22T	1321560	Ex9CR500E22T	1321574
	600	Ex9CR265E22Y	1321532	Ex9CR300E22Y	1321547	Ex9CR400E22Y	1321561	Ex9CR500E22Y	1321575
Wide Range Operating Coil Vac/dc	48~130	Ex9CR265F22H	1321588	Ex9CR300F22H	1321591	Ex9CR400F22H	1321594	Ex9CR500F22H	1321597
	100~250	Ex9CR265F22K	1321589	Ex9CR300F22K	1321592	Ex9CR400F22K	1321595	Ex9CR500F22K	1321598
	250~500	Ex9CR265F22L	1321590	Ex9CR300F22L	1321593	Ex9CR400F22L	1321596	Ex9CR500F22L	1321599

Specifications A27 to 31
Dimensions A35Wiring Diagram A37
Mounting Position A38

Accessories A39 to 55

IEC Contactors

Ex9CS/C Specifications

	Ex9CS/CSR			Ex9C/CR																
	6	9	12	9	12	18	25	32	38	40	50									
General Information																				
Pole	3, 4			3																
Production Standard	IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1																			
Environmental Testing According to	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30																			
Rated Frequency (Hz)	50/60																			
Conventional	0≤104 °F (0≤40 °C)		20		25		32	40	50	60	80									
Free Air Thermal	0≤140 °F (0≤60 °C)		16		17		22	28	35	42	56									
Current Ith (A)	0≤158 °F (0≤70 °C)																			
Rated Insulating Voltage Ui (V)	690										1,000									
Rated Impulse Withstand Voltage Uimp (kV)	6										8									
Electrical Life (x10 ⁴ cycles)	AC-3	380 V/ 400 V		120																
	AC-4			5	4	5	4	5	4	3.5	3									
Mechanical Life (x10 ⁴ cycles)	1,000																			
Operating Cycles Per Hour (cycles/h)	AC-3	1,200				1,000														
	AC-4	300				150		120												
Environmental Temperature																				
Transportation or Storage	-76 to 176 °F (-60 to +80 °C)																			
Working At	-4 to 140 °F (-20 to +60 °C)																			
Maximum	-40 to 158 °F (-40 to +70 °C)																			
Altitude ft (m)	6,562 (2,000)																			
Pollution Degree	Class III																			
Rated Operational Current Ie (A)																				
	AC-1	690 V		20		25		32	40	50	60	80								
At -82 to 131 °F (-25 to 40 °C)	AC-3	380/400 V		6	9	12	9	12	18	25	32	38								
	AC-3	660/690 V		3.8	4.9		6.7	9	10.6	17.3	21.9									
	AC-4	380/400 V		6	9	12	9	12	18	25	32	38								
	AC-4	660/690 V		3.8	4.9		6.7	14	17.3		34	39								
Rated Power of 3-Phase Motor																				
	AC-3	230 Vac																		
	AC-4	-																		
For IEC (kW)	AC-3	380/400 Vac		2.2	4	5.5	4	5.5	7.5	11	15	18.5								
	AC-4	660/690 Vac		3	4		5.5	7.5	9	15	30									
	AC-3			4		5.5		11	15	33										
	AC-4			4		5.5		11	15	37										
	AC-3	1,000 Vac																		
	AC-4	-																		
UL Rating																				
Ith (A)																				
	110-120 Vac	0.5		0.75	0.5	1	1.5	2	3		5									
Single-Phase	220-240 Vac	1	1.5	2	1.5	2	3		5		7.5	10								
	200-208 Vac	1.5	3				5	7.5	10		15									
	220-240 Vac	2					4		5		15	20								
Three-Phase	440-480 Vac	3	5	7.5	5	7.5	10	15	20		30	40								
	550-600 Vac	5	7.5	10	7.5	10	15	20	25											
Coil Voltage (V)	24~600 Vac/dc				24~600 Vac															

IEC Contactors

Ex9C Specifications

A

	Ex9C/CR																					
	65	80	100	115	150	185	225	265	300	400	500											
General Information																						
Pole	3																					
Production Standard	IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1																					
Environmental Testing According to	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30																					
Rated Frequency (Hz)	50/60																					
Conventional	0≤104 °F (0≤40 °C)																					
Free Air Thermal	80 125 160 185 215 275 330 400 430 610																					
Current Ith (A)	0≤140 °F (0≤60 °C)																					
	56 80 140 160 180 200 260 290 330 430																					
Rated Insulating Voltage Ui (V)	1,000																					
Rated Impulse Withstand Voltage Uimp (kV)	8																					
Electrical Life (x10 ⁴ cycles)	AC-3	380 V/ 400 V		120		100																
	AC-4			3	4	20																
Mechanical Life (x10 ⁴ cycles)	1,000																					
Operating Cycles Per Hour (cycles/h)	AC-3	1,000				750		500														
	AC-4	120				130																
Environmental Temperature	Transportation or Storage Working At Maximum																					
	-76 to 176 °F (-60 to +80 °C)																					
	-4 to 140 °F (-20 to +60 °C)																					
	-40 to 158 °F (-40 to +70 °C)																					
Altitude ft (m)	6,562 (2,000)																					
Pollution Degree	Class III																					
Rated Operational Current Ie (A)																						
	AC-1	690 V		80	125		160	185	215	275												
At -82 to 131 °F (-25 to 40 °C)	AC-3	380/400 V		65	80	100	115	150	185	225												
	AC-3	660/690 V		42	49		170	265														
	AC-4	380/400 V		65	80	100	54	68	81	96												
	AC-4	660/690 V		42	49		48	57	65	85												
	120 130 140 150 160 170 180 190 200 210 220																					
Rated Power of 3-Phase Motor																						
	AC-3	230 Vac					37	45	55													
For IEC (kW)	AC-4						18.5	22	30													
	AC-3	380/400 Vac		30	37	45	55	75	110													
	AC-4			30	37	45	45	55	63													
	AC-3	660/690 Vac		37	45		110	132	160													
	AC-4			50	55	63	80	100	110													
	AC-3	1,000 Vac					75	90	90													
	AC-4						50	55	63													
	120 130 140 150 160 170 180 190 200 210 220																					
UL Rating																						
Ith (A)	80		125		160	185	215	275	330	400												
Single-Phase	110-120 Vac		5	7.5	10	15	-															
	220-240 Vac		15	20		25	30	40														
Three-Phase	200-208 Vac		20			30	40	60			75											
	220-240 Vac		25			40	50	60	75													
	440-480 Vac		50			60	100	125	150													
	550-600 Vac					125	150	200			250											
Coil Voltage (V)	24~600 Vac				24~600 Vac/dc					36~600 Vac/dc												

IEC Contactors

Ex9CS/C Specifications

		Ex9CS/CSR					Ex9C/CR					
		6	9	12	9	12	18	25	32	38	40	50
Coil Electrical Parameters												
Tolerance of Control Voltage 50/60 Hz	Operation (Uc)											0.85~1.10
	Drop-Off (Uc)											0.20~0.70
Coil Power Consumption												
AC	In Rush (VA)	70			90			100			240	
	Power Factor							-				
	Sealed (VA)	7.5			9.5			10.5			25	
	Power Factor							-				
DC	Pick-Up (W)	30			40			50			100	
	Hold (W)	3			4			5			10	
Operating Time (ms)	Operation	10-20			12-24			14-27			20-30	
	Drop-Off	4-16			6-20			7-22			8-20	
IEC AC Contactor Working at DC Power Data												
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)									
Working Type: DC-1, Resistive Load	24	1										
		2										
		3										
		1	15		20		25	32		40	50	65
Time Data: L/R≤1ms	48/75	2										
		3										
Environmental Temperature: ≤140 °F (≤60 °C)	125	1			4						7	
		2										
		3										
		1										1.5
225		2			4						7	
		3	15		20		25	32		40	50	65
IEC AC Contactor Working at DC Power Data												
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)									
Working Type: DC-2 to DC-5, Inductive Load	24	1										
		2	15		20		25					
		3										
		1	5		8							
Time Data: L/R≤15ms	48/75	2										
		3	15		20		25					
Environmental Temperature: ≤140 °F (≤60 °C)	125	1	1.5		2				3		4	
		2	11		15							
		3	15		20		25					
		1	0.5						1		1.5	
225		2	1.5		2				3		4	
		3	5		8			32	40		50	65

IEC Contactors

Ex9C Specifications

A

		Ex9C/CR																	
		65	80	100	115	150	185	225	265	300	400	500							
Coil Electrical Parameters																			
Tolerance of Control Voltage 50/60 Hz	Operation (Uc)										0.85~1.10								
	Drop-Off (Uc)			0.20~0.70							0.20~0.65								
Power Consumption																			
AC	In Rush (VA)	240	280		400		590		600										
	Power Factor		-				0.90-0.95												
	Sealed (VA)	25	30				10												
DC	Power Factor		-				0.90-0.95												
	Pick-Up (W)	100	120		400		590		600										
	Hold (W)	10	12				10												
Operating Time (ms)	Operation	20-30	20-35		31-64		45-100		58-95										
	Drop-Off	8-20	6-20		44-68		47-67		85-120										
IEC AC Contactor Working at DC Power Data																			
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)																
Working Type: DC-1, Resistive Load	24	1	65	100	160	200	300	400											
		2																	
		3																	
Time Data: L/R≤1ms	48/75	1	65	100	160	200	300	400											
		2																	
		3																	
Environmental Temperature: ≤140 °F (≤60 °C)	125	2	65	100	160	200	300	400											
		3																	
		1																	
225		2	65	100	160	200	300	400											
		3																	
		1.5																	
IEC AC Contactor Working at DC Power Data																			
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)																
Working Type: DC-2 to DC-5, Inductive Load	24	1	65	100	160	200	300	400											
		2																	
		3																	
Time Data: L/R≤15ms	48/75	1	65	100	160	200	300	400											
		2																	
		3																	
Environmental Temperature: ≤140 °F (≤60 °C)	125	2	65	100	160	200	300	400											
		3																	
		1.5																	
225		2	65	100	160	200	300	400											
		3																	
		4																	
IEC AC Contactor Working at DC Power Data																			
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)																
Working Type: DC-2 to DC-5, Inductive Load	24	1	65	100	160	200	300	400											
		2																	
		3																	
Time Data: L/R≤15ms	48/75	1	65	100	160	200	300	400											
		2																	
		3																	
Environmental Temperature: ≤140 °F (≤60 °C)	125	2	65	100	160	200	300	400											
		3																	
		4																	
225		2	65	100	160	200	300	400											
		3																	
		5																	
IEC AC Contactor Working at DC Power Data																			
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)																
Working Type: DC-2 to DC-5, Inductive Load	24	1	65	100	160	200	300	400											
		2																	
		3																	
Time Data: L/R≤15ms	48/75	1	65	100	160	200	300	400											
		2																	
		3																	
Environmental Temperature: ≤140 °F (≤60 °C)	125	2	65	100	160	200	300	400											
		3																	
		4																	
225		2	65	100	160	200	300	400											
		3																	
		5																	

IEC Contactors

Ex9CS/C Specifications

	Ex9CS/CSR			Ex9C/CR							
	6	9	12	9	12	18	25	32	38	40	50
Built-In Auxiliary Contacts											
Auxiliary Contacts	1NO/1NC (3P), None (4P)			1NO+1NC, 2NO+2NC			1NO+1NC				
Rated Operation Voltage Ue (V)							690				
Rated Insulating Voltage Ui (V)							6				
Rated Impulse Withstand Voltage Uimp (kV)											
Rated Frequency (Hz)							50/60				
Conventional Free Air Thermal Current Ith (A)							10				
Rated Operational Current Ie (A)											
AC-15	24 V						-				
	120 V						6				
	230 V						-				
	240 V						3				
	380 V						1.9				
	400 V						-				
	600 V						1.2				
	690 V						-				
DC-13	125 V						0.55				
	220 V						0.31				
	250 V							0.27			
Mounting	Screw (mm)						ø4				ø5
	DIN rail (mm)						35/7.5				35/7.5 or 75/7.5
Dimension LxWxH in (mm)	1.93x2.32x2.28 (49x59x58)			3.50x1.77x3.70 (89x45x94)			3.94x1.77x4.25 (100x45x108)				4.80x2.99x4.84 (122x76x123)
Weight lb (kg)	0.40 (0.18)			0.77 (0.35)			0.88 (0.40)				2.71 (1.23)
Degree of Protection							IP 20				
Main Power Terminal Connection											
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable										
	Dual Cable			18-12 (1-2.5)				14-8 (2-8)			14-4 (2-21)
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable										
	Dual Cable										
Screw Size ø (mm)		M3		M3.5			M4				M8
Torque of Terminals in-lb (N.m)		7 (0.80)		15 (1.70)			22 (2.50)				53 (6)
Bus Bar Terminal Connection											
Bus Bar Size											
Screw Size ø (mm)								-			
Torque of Terminals (N.m)											
Auxiliary Contact Terminal Connection											
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable										
	Dual Cable										
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Single Cable						18-12 (1-2.5)				
	Dual Cable										
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable										
	Dual Cable										
Screw Size ø (mm)		M3					M3.5				
Torque of Terminals in-lb (N.m)		7 (0.80)					15 (1.70)				

IEC Contactors

Ex9C Specifications

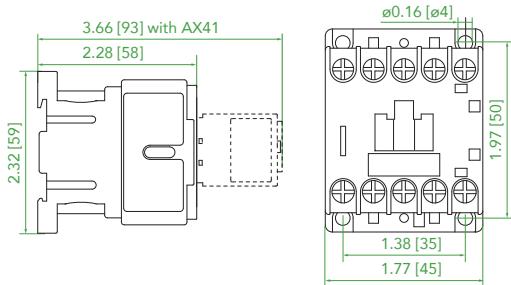
	Ex9C/CR										
	65	80	100	115	150	185	225	265	300	400	500
Built-In Auxiliary Contacts											
Auxiliary Contacts		1NO+1NC							2NO+2NC		
Rated Operation Voltage Ue (V)								690			
Rated Insulating Voltage Ui (V)											
Rated Impulse Withstand Voltage Uimp (kV)								6			
Rated Frequency (Hz)								50/60			
Conventional Free Air Thermal Current Ith (A)								10			
Rated Operational Current Ie (A)											
AC-15	24 V	-						6			
	120 V	6						-			
	230 V	-						3.13			
	240 V						3				
	380 V	1.9						-			
	400 V	-						1.8			
	600 V	1.2						-			
	690 V	-						1.04			
	125 V					0.55					
DC-13	220 V					0.31					
	250 V					0.27					
	Screw (mm)	ø5		ø8		ø9					
Mounting	DIN rail (mm)	35/7.5 or 75/7.5						-			
Dimension LxWxH in (mm)		4.80x2.99 x4.84 (122x76x123)	5.12x3.43x5.12 (130x87x130)		6.81x4.72x6.85 (173x120x174)		8.39x5.71x8.19 (213x145x208)		8.50x6.30x9.02 (216x160x229)		
Weight lb (kg)		2.71 (1.23)	3.31 (1.50)		6.61 (3)		13.23 (6)		20.94 (9.5)		
Degree of Protection					IP 20						
Main Power Terminal Connection											
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable	14-4 (2-21)	12-1/0 (2.5-53.5)		(1x) 4 - (2x) 250 MCM ((1x) 25 - (2x) 120)		(1x) 1/0 - (2x) 500 MCM ((1x) 50 - (2x) 240)		(1x) 1/0 - (2x) 500 MCM ((1x) 50 - (2x) 240)		
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Dual Cable		12-1 (2.5-42.5)								
	Single Cable		12-1/0 (2.5-53.5)								
	Dual Cable		12-1 (2.5-42.5)								
Screw Size ø (mm)		M8	M10		M8		M10		M10		
Torque of Terminals in-lb (N.m)		53 (6)	79 (9)		159 (18)				310 (35)		
Bus Bar Terminal Connection											
Bus Bar Size		-			2x0.75x0.25 (2x20x5)		2x1x0.25 (2x30x5)		2x1.25x0.25 (2x40x5)		
Screw Size ø (mm)					M8		M10		M10		
Torque of Terminals in-lb (N.m)					159 (18)				310 (35)		
Auxiliary Contact Terminal Connection											
Flexible Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable				18-12 (1-2.5)		18-12 (1-2.5)		18-12 (1-2.5)		
Stiff Cable With Cold-Press Terminal AWG (mm ²)	Dual Cable										
Stiff Cable Without Cold-Press Terminal AWG (mm ²)	Single Cable										
	Dual Cable										
Screw Size ø (mm)						M3.5					
Torque of Terminals in-lb (N.m)						15 (1.70)					

IEC Contactors

Ex9CS/C Dimensions

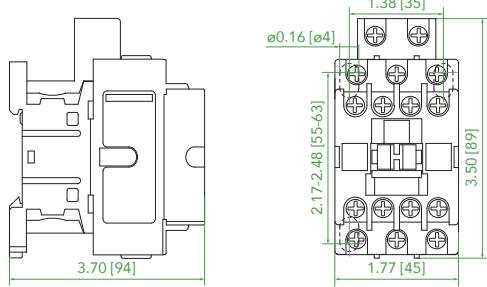
Ex9CS06~12

Unit: in [mm]



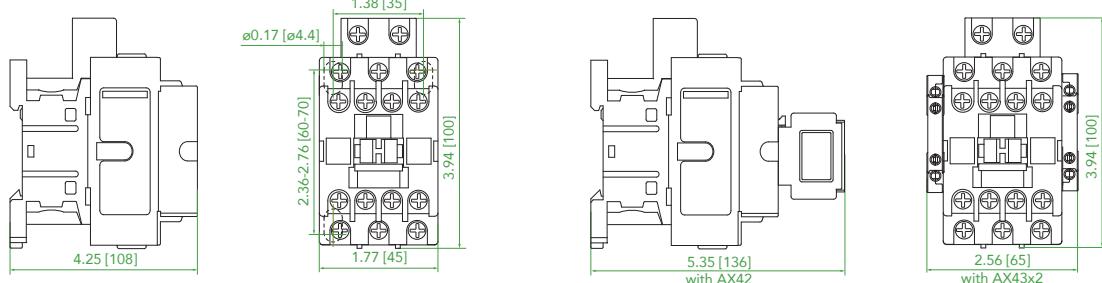
Ex9C09~18

Unit: in [mm]



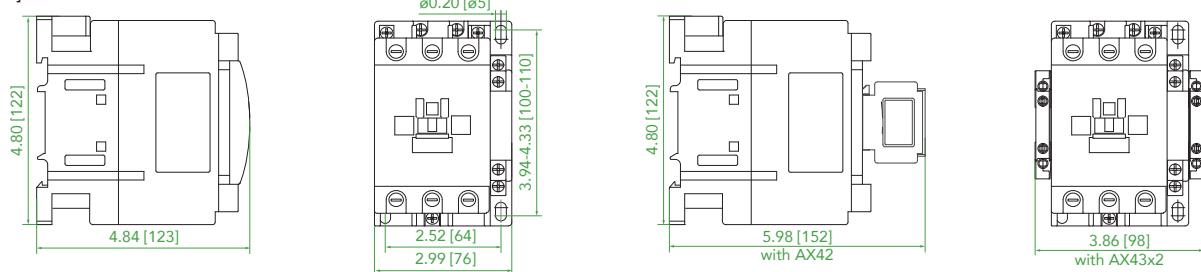
Ex9C25~38

Unit: in [mm]



Ex9C40~65

Unit: in [mm]



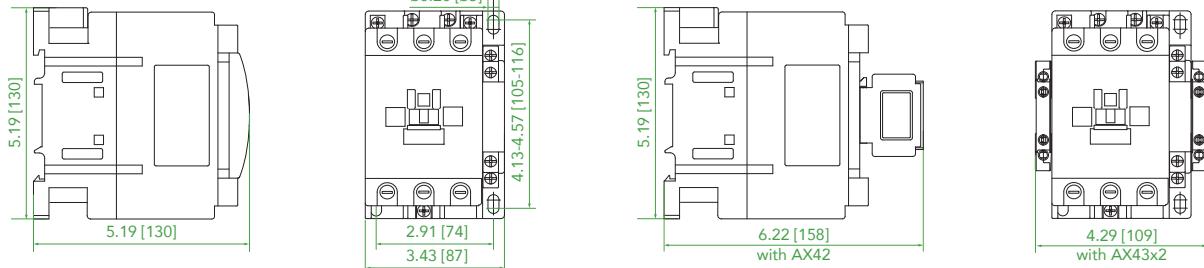
IEC Contactors

Ex9C Dimensions

A

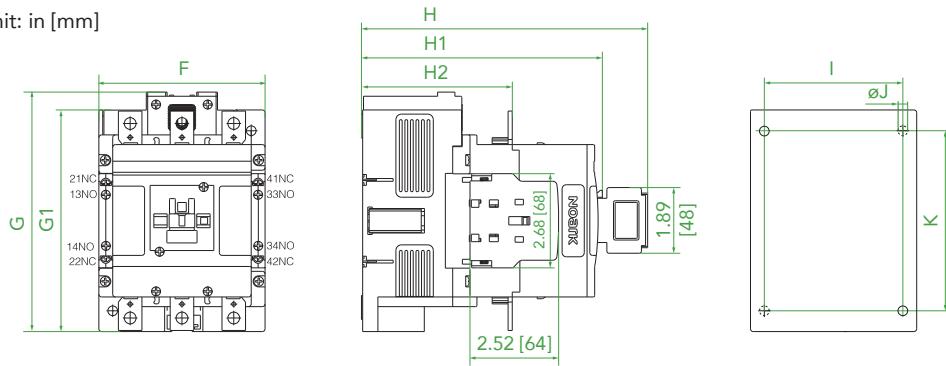
Ex9C80~100

Unit: in [mm]



Ex9C115~500

Unit: in [mm]



Contactor	F	G	G1	H	H1	H2	I	J*	K
Ex9C115~185	4.75 [120]	6.81 [173]	6.30 [160]	8.07 [205]	6.85 [174]	4.25 [108]	3.94 [100]	Ø0.28 [Ø7]	5.12 [130]
Ex9C225~300	5.71 [145]	8.35 [212]	7.87 [200]	9.41 [239]	8.15 [207]	5.28 [134]	4.72 [120]	Ø0.35 [Ø9]	7.09 [180]
Ex9C400~500	6.30 [160]	8.58 [218]	7.87 [200]	10.28 [261]	9.02 [229]	5.94 [151]	5.12 [130]	Ø0.35 [Ø9]	7.09 [180]

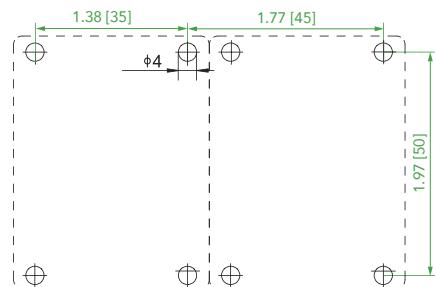
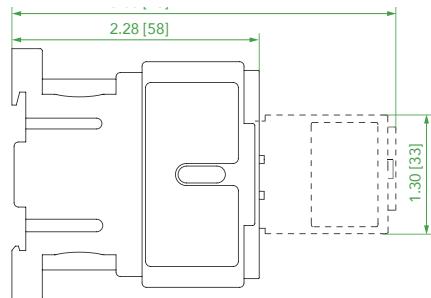
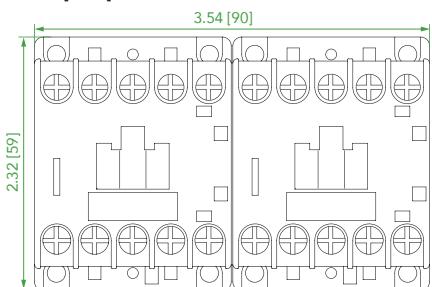
*Note: Ex9C115~185 has only two mounting holes as broken circles and the other types have four mounting holes.

IEC Contactors

Ex9CSR/CR Dimensions

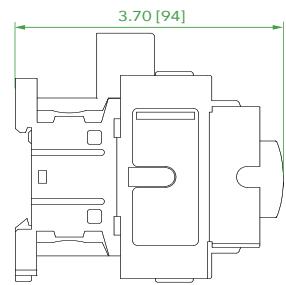
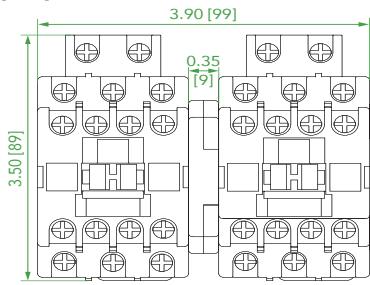
Ex9CSR06~12

Unit: in [mm]



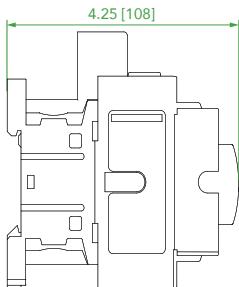
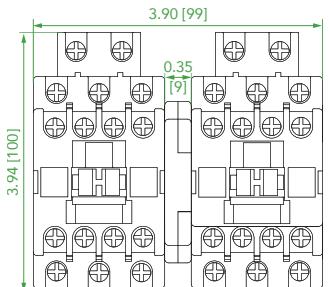
Ex9CR09~18

Unit: in [mm]



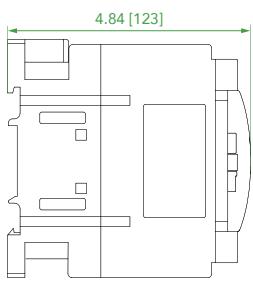
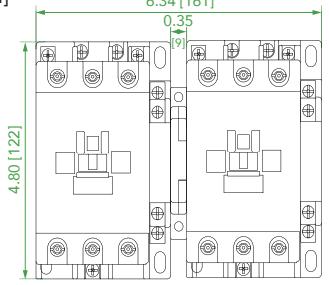
Ex9CR25~38

Unit: in [mm]



Ex9CR40~65

Unit: in [mm]



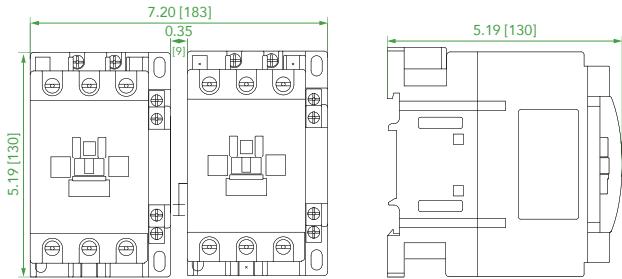
IEC Contactors

Ex9CR Dimensions

A

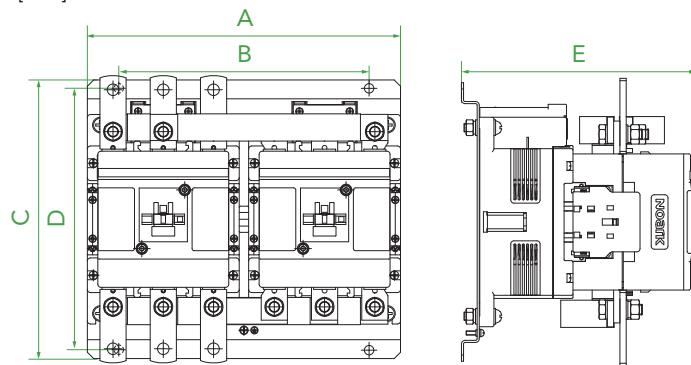
Ex9CR80~100

Unit: in [mm]



Ex9CR115~500

Unit: in [mm]

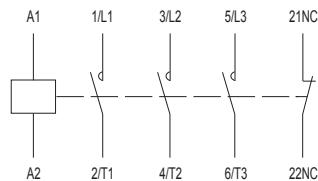


Contactor	A	B	C	D	E
Ex9C115~185	9.80 [249]	7.44 [189]	9.06 [230]	8.43 [214]	7.64 [194]
Ex9C225~300	11.77 [299]	9.41 [239]	10.47 [266]	9.84 [250]	8.86 [225]
Ex9C400~500	12.95 [329]	10.59 [269]	10.55 [268]	9.96 [253]	9.69 [246]

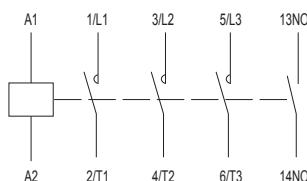
IEC Contactors

Ex9CS/C Wiring Diagrams

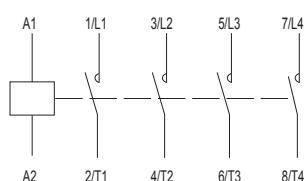
Ex9CS06~12



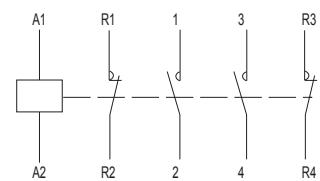
Ex9CS... 3P 1NC



Ex9CS... 3P 1NO

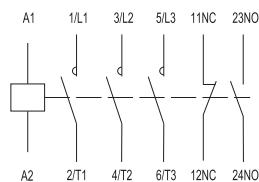


Ex9CS... 4P No Auxiliary

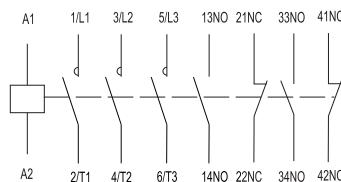


Ex9CS... 4P 2NO+2NC

Ex9C09~38

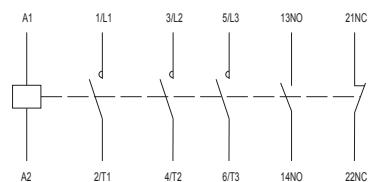


Ex9C... 3P 1NO+1NC



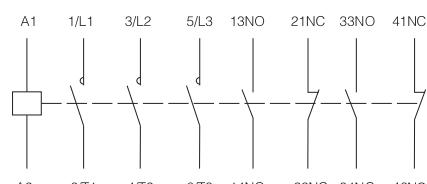
Ex9C... 3P 2NO+2NC

Ex9C40~100



Ex9C... 3P 1NO+1NC

Ex9C115~500



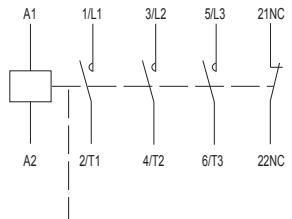
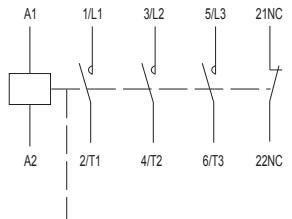
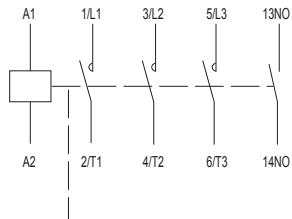
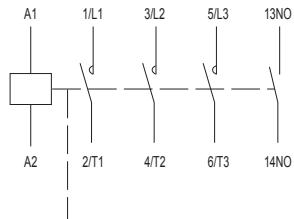
Ex9C... 3P 2NO+2NC

IEC Contactors

Ex9CSR/CR Wiring Diagrams

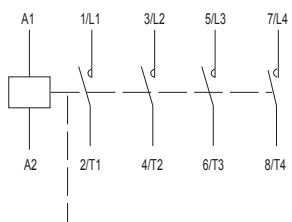
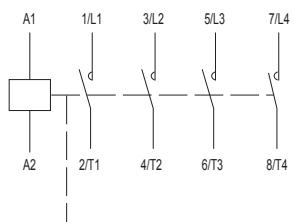
A

Ex9CSR06~12



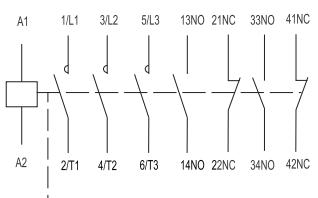
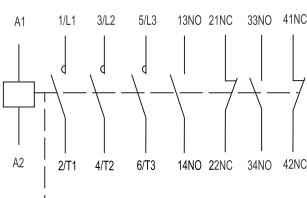
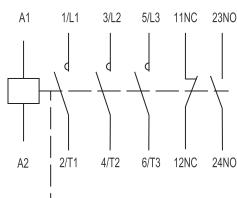
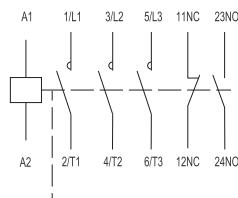
Ex9CSR... 3P 1NC

Ex9CSR... 3P 1NO



Ex9CSR... 4P No Auxiliary

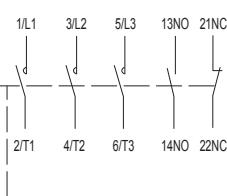
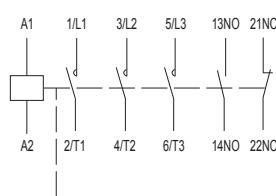
Ex9CR09~38



Ex9CR... 3P 1NO+1NC

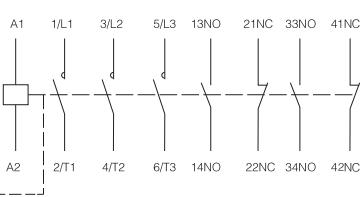
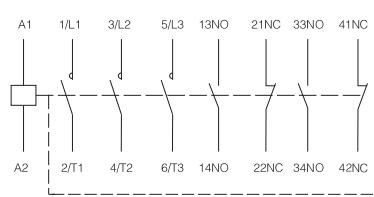
Ex9CR... 3P 2NO+2NC

Ex9CR40~100



Ex9CR... 3P 1NO+1NC

Ex9CR115~500

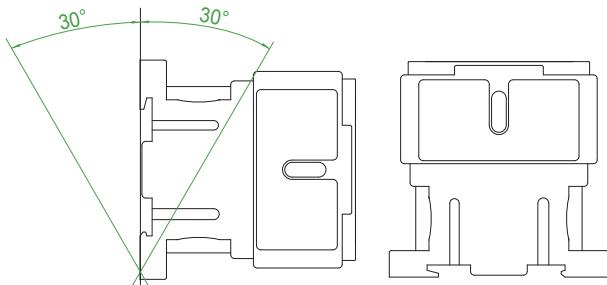


Ex9CR... 3P 2NO+2NC

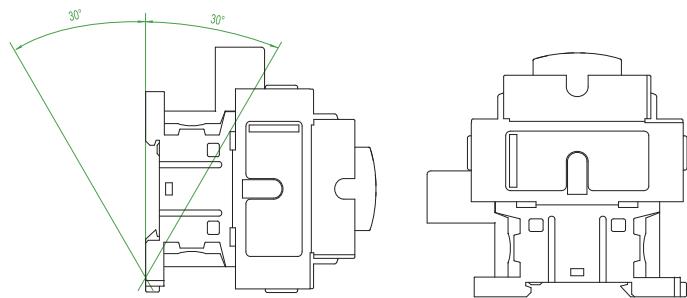
IEC Contactors

Ex9CS/C Mounting Positions

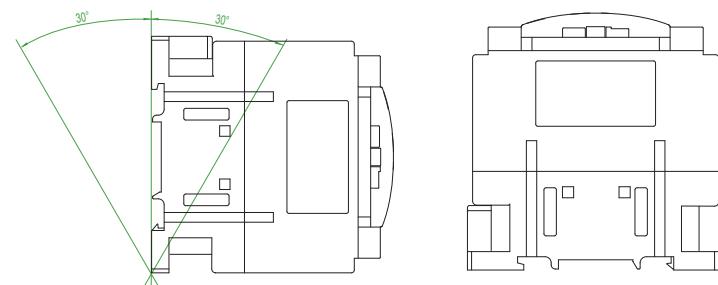
Ex9CS/CSR06~12



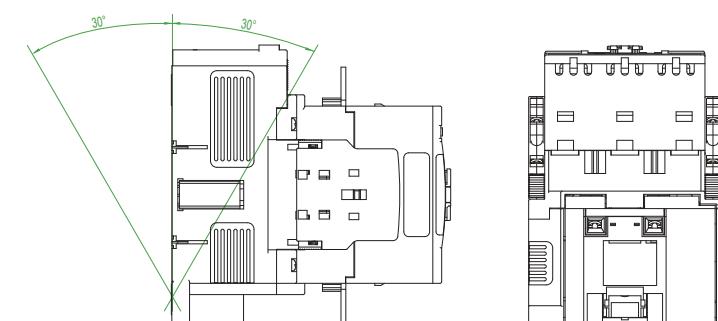
Ex9C/CR09~38



Ex9C/CR40~100



Ex9C/CR115~500

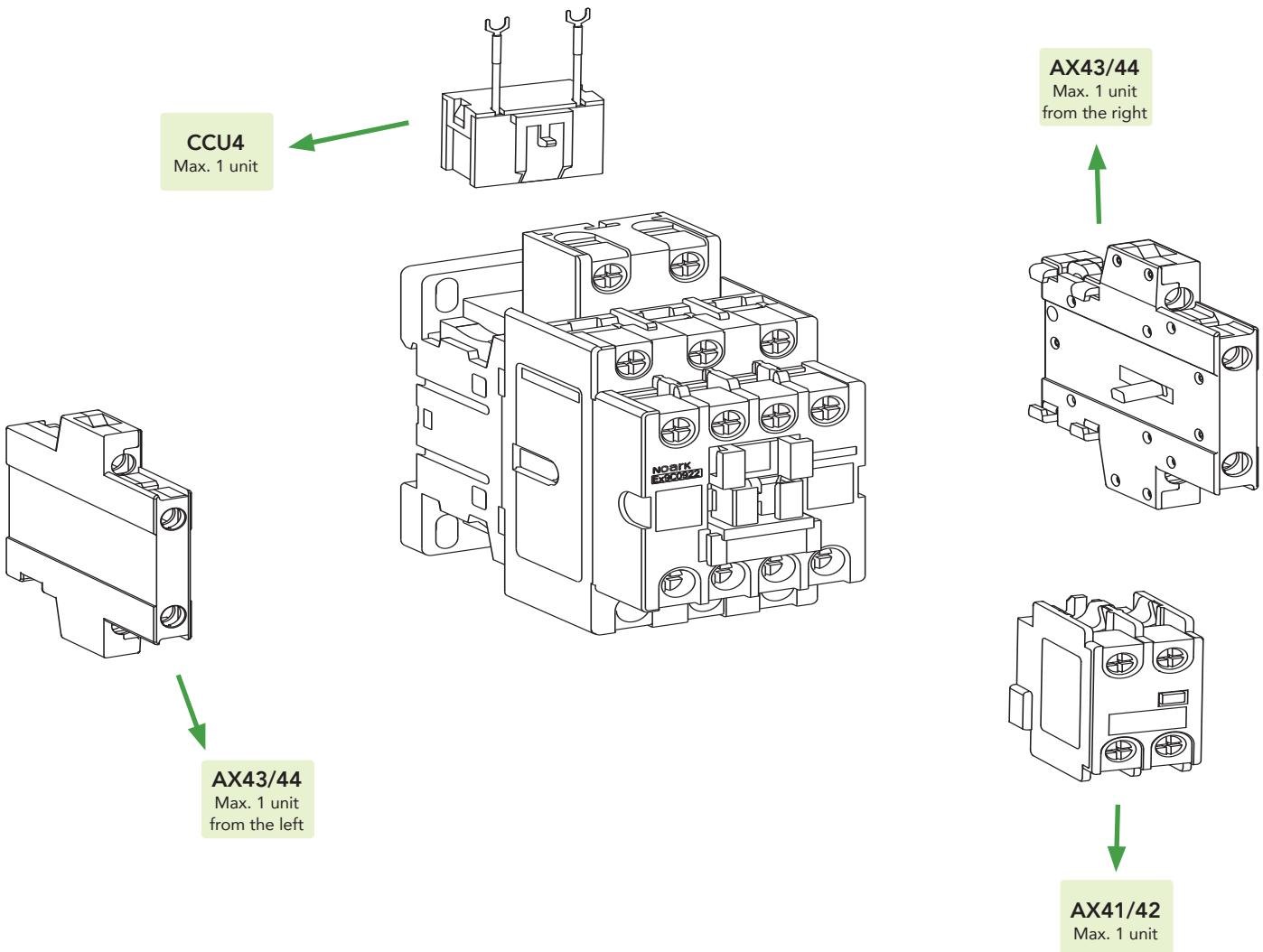


IEC Contactors

Ex9CS/C Accessories Overview

A

The Ex9CS/C line shares accessories and every contactor can be equipped with one front-mounted unit, two units of side-mounted contact (one from the left, the other from the right) and surge suppressor block.



Front-Mounted Auxiliary Contacts (AX41/42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX43/44)

- For subsequent mounting
- One unit used with a contactor on the left side, another unit on the right side

Surge Suppressor Blocks (CCU4)

- Reduces voltage peaks in control circuit
- Versions with varistor and RC circuit technology
- Includes cable lugs for connecting to contactor terminals

IEC Contactors

Ex9CS/C Accessories: Auxiliary Contact



Front Mount

- For contactors Ex9CS, Ex9CSR, Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor



Side Mount

- For contactors Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

Specifications A47
Dimensions A49
Wiring Diagram A54

AX4	1	04	UL
Description	Contactor Type and Rated Current	Auxiliary Contact	Device Category
Auxiliary Contact	1: Ex9CS Mini Front Mount 06~12 A 2: Ex9C Standard Front Mount 09~500 A 3: Ex9C Standard Side Mount 09~100 A 4: Ex9C Standard Side Mount 115~500 A	02: 2NC 04: 4NC 11: 1NO+1NC 13: 1NO+3NC 20: 2NO 22: 2NO+2NC 31: 3NO+1NC 40: 4NO	UL: UL Listed

Accessory Description	Matched Contactor	Product	Part Number
Auxiliary Contact	Ex9CS06~12 Ex9CSR06~12 (Front Mount)	AX4104UL	1330001
		AX4113UL	1330002
		AX4122UL	1330003
		AX4131UL	1330004
		AX4140UL	1330005
	Ex9C09~500 Ex9CR09~500 (Front Mount)	AX4202UL	1330006
		AX4204UL	1330009
		AX4211UL	1330007
		AX4213UL	1330010
		AX4220UL	1330008
		AX4222UL	1330011
	Ex9C09~100 Ex9CR09~100 (Side Mount)	AX4231UL	1330012
		AX4240UL	1330013
		AX4311UL	1330014
	Ex9C115~500 Ex9CR115~500 (Side Mount)	AX4402UL	1330016
		AX4411UL	1330015
		AX4420UL	1330209

IEC Contactors

Ex9CS/C Accessories: Coil

A



COU41	A	12	A	UL
Description	Coil Type	Contactor Type and Rated Current	Control Voltage	Device Category
Coil	A: AC, 50/60 Hz E: AC/DC F: Wide Operating Range AC/DC	12: Ex9CS Mini 06~12 A 18: Ex9C Standard 09~18 A 38: Ex9C Standard 25~38 A 65: Ex9C Standard 40~65 A 100: Ex9C Standard 80~100 A 185: Ex9C Standard 115~185 A 300: Ex9C Standard 225~300 A 500: Ex9C Standard 400~500 A	B: 24 V C: 36 V D: 42 V E: 48 V H: 48~130 Vac/dc K: 100~250 Vac/dc F: 110 V G: 120 V X: 208 V M: 220 V P: 230 V U: 240 V W: 250 V L: 250~500 Vac/dc N: 277 V Q: 380 V V: 400 V Z: 415 V R: 440 V T: 480 V S: 500 V Y: 600 V	UL: UL Listed

- Field interchangeable

Specifications A28 to 29

IEC Contactors**Ex9CS/C Accessories: Coil**

Accessory Description	Coil Voltage	AC Coil					
		06~12 A		25~38 A		80~100 A	
		Product	Part Number	Product	Part Number	Product	Part Number
	24	COU41A12BUL	1330036	COU41A38BUL	1330084	COU41A100BUL	1330132
	36	COU41A12CUL	1330037	COU41A38CUL	1330085	COU41A100CUL	1330133
	42	COU41A12DUL	1330038	COU41A38DUL	1330086	COU41A100DUL	1330134
	48	COU41A12EUL	1330039	COU41A38EUL	1330087	COU41A100EUL	1330135
	110	COU41A12FUL	1330040	COU41A38FUL	1330088	COU41A100FUL	1330136
	120	COU41A12GUL	1330041	COU41A38GUL	1330089	COU41A100GUL	1330137
	208	COU41D12XUL	1330053	COU41A38XUL	1330101	COU41A100XUL	1330149
	220	COU41A12MUL	1330042	COU41A38MUL	1330090	COU41A100MUL	1330138
	230	COU41A12PUL	1330043	COU41A38PUL	1330091	COU41A100PUL	1330139
	240	COU41A12UUL	1330045	COU41A38UUUL	1330093	COU41A100UUUL	1330141
	277	COU41A12NUL	1330044	COU41A38NUL	1330092	COU41A100NUL	1330140
	380	COU41A12QUL	1330046	COU41A38QUL	1330094	COU41A100QUL	1330142
	400	COU41A12VUL	1330047	COU41A38VUL	1330095	COU41A100VUL	1330143
	415	COU41A12ZUL	1330048	COU41A38ZUL	1330096	COU41A100ZUL	1330144
	440	COU41A12RUL	1330049	COU41A38RUL	1330097	COU41A100RUL	1330145
	480	COU41A12TUL	1330050	COU41A38TUL	1330098	COU41A100TUL	1330146
	500	COU41A12SUL	1330051	COU41A38SUL	1330099	COU41A100SUL	1330147
	600	COU41A12YUL	1330052	COU41A38YUL	1330100	COU41A100YUL	1330148
Coil (See page A41 for description)	09~18 A		40~65 A				
	24	COU41A18BUL	1330060	COU41A65BUL	1330108		
	36	COU41A18CUL	1330061	COU41A65CUL	1330109		
	42	COU41A18DUL	1330062	COU41A65DUL	1330110		
	48	COU41A18EUL	1330063	COU41A65EUL	1330111		
	110	COU41A18FUL	1330064	COU41A65FUL	1330112		
	120	COU41A18GUL	1330065	COU41A65GUL	1330113		
	208	COU41A18XUL	1330077	COU41A65XUL	1330125		
	220	COU41A18MUL	1330066	COU41A65MUL	1330114		
	230	COU41A18PUL	1330067	COU41A65PUL	1330115		
	240	COU41A18UUL	1330069	COU41A65UUUL	1330117		
	277	COU41A18NUL	1330068	COU41A65NUL	1330116		
	380	COU41A18QUL	1330070	COU41A65QUL	1330118		
	400	COU41A18VUL	1330071	COU41A65VUL	1330119		
	415	COU41A18ZUL	1330072	COU41A65ZUL	1330120		
	440	COU41A18RUL	1330073	COU41A65RUL	1330121		
	480	COU41A18TUL	1330074	COU41A65TUL	1330122		
	500	COU41A18SUL	1330075	COU41A65SUL	1330123		
	600	COU41A18YUL	1330076	COU41A65YUL	1330124		

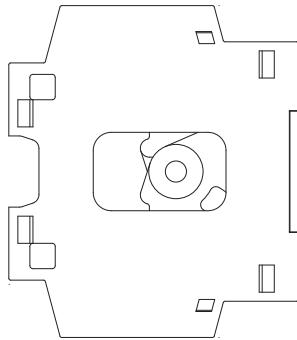
IEC Contactors**Ex9CS/C Accessories: Coil**

A

Accessory Description	Coil Voltage	AC/DC Coil					
		Product	Part Number	Product	Part Number	Product	Part Number
		115~185 A		225~300 A		400~500 A	
Coil (See page A41 for description)	24	COU41E185BUL	1330155	COU41E300BUL	1330173	-	-
	36	COU41E185CUL	1330156	COU41E300CUL	1330174	COU41E500CUL	1330192
	42	COU41E185DUL	1330157	COU41E300DUL	1330175	COU41E500DUL	1330193
	48	COU41E185EUL	1330158	COU41E300EUL	1330176	COU41E500EUL	1330194
	110	COU41E185FUL	1330159	COU41E300FUL	1330177	COU41E500FUL	1330195
	120	COU41E185GUL	1330160	COU41E300GUL	1330178	COU41E500GUL	1330196
	208	COU41E185XUL	1330163	COU41E300XUL	1330181	COU41E500XUL	1330199
	220	COU41E185MUL	1330161	COU41E300MUL	1330179	COU41E500MUL	1330197
	230	COU41E185PUL	1330162	COU41E300PUL	1330180	COU41E500PUL	1330198
	240	COU41E185UUL	1330164	COU41E300UUL	1330182	COU41E500UUL	1330200
	277	COU41E185NUL	1330167	COU41E300NUL	1330185	COU41E500NUL	1330203
	380	COU41E185QUL	1330165	COU41E300QUL	1330183	COU41E500QUL	1330201
	400	COU41E185VUL	1330166	COU41E300VUL	1330184	COU41E500VUL	1330202
	480	COU41E185TUL	1330168	COU41E300TUL	1330186	COU41E500TUL	1330204
	600	COU41E185YUL	1330169	COU41E300YUL	1330187	COU41E500YUL	1330205
Wide Range Operating AC/DC Coil							
		115~185 A		225~300 A		400~500 A	
		COU41F185HUL	1330170	COU41F300HUL	1330188	COU41F500HUL	1330206
		COU41F185KUL	1330171	COU41F300KUL	1330189	COU41F500KUL	1330207
		COU41F185LUL	1330172	COU41F300LUL	1330190	COU41F500LUL	1330208

IEC Contactors

Ex9CS/C Accessories: Mechanical Interlock and Power

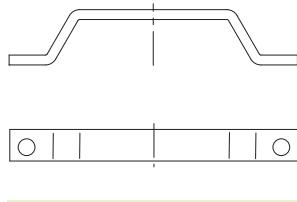


Dimensions..... A50 to 51

*NOTE: MIT41 cannot be installed by end user

MIT4	1	UL
Description	Contactor Type and Rated Current	Device Category
Mechanical Interlock	1: Ex9CS Mini 06~12 A*	UL: UL Listed
	2: Ex9C Standard 09~38 A	
	3: Ex9C Standard 40~100 A	
	4: Ex9C Standard 115~185 A	
	5: Ex9C Standard 225~300 A	
	6: Ex9C Standard 400~500 A	

Accessory Description	Product	Part Number
Mechanical Interlock	MIT41UL	1330026
	MIT42UL	1330027
	MIT43UL	1330028
	MIT44UL	1330029
	MIT45UL	1330030
	MIT46UL	1330031



Dimensions..... A52

PCL	185	UL
Description	Contactor Type and Rated Current	Device Category
Power Connection	185: Ex9C Standard 115~185 A	UL: UL Listed
	300: Ex9C Standard 225~300 A	
	500: Ex9C Standard 400~500 A	

Accessory Description	Product	Part Number
Power Connection	PCL185UL	1330032
	PCL300UL	1330033
	PCL500UL	1330034

IEC Contactors

Ex9CS/C Accessories: Surge Suppressor Block

A



CCU4	1	A	UL
Description	Contactor Type and Rated Current	Voltage Protection Scope	Device Category
Surge Suppressor Block	1: Ex9CS Mini 06~12 A 2: Ex9C Standard 09~38 A 3: Ex9C Standard 40~100 A	A: 24~48 Vac B: 110~240 Vac C: 380~415 Vac	UL: UL Listed

Accessory Description	Matched Contactor	Product	Part Number
Surge Suppressor Block	Ex9CS06~12	CCU41AUL	1330017
		CCU41BUL	1330018
		CCU41CUL	1330019
	Ex9C09~38	CCU42AUL	1330020
		CCU42BUL	1330021
		CCU42CUL	1330022
	Ex9C40~100	CCU43AUL	1330023
		CCU43BUL	1330024
		CCU43CUL	1330025

- Reduces voltage peaks in control circuit
- Versions with varistor (CCU41) and RC circuit technology (CCU42 and CCU43)
- Includes cable lugs for connecting to contactor terminals

Specifications A48
 Dimensions A53
 Wiring Diagram A55

IEC Contactors

Ex9CS/C Accessories: Time Delay Relay



AXC	T	0	UL
Description	Relay Type	Timing Range	Device Category
Time Delay Relay	D: Off Delay T: On Delay	0: 0.1~3 s 2: 0.1~30 s 4: 10~180 s	UL: UL Listed

Dimensions..... A53
Wiring Diagram A55

Accessory Description	Matched Contactor	Product	Part Number
Time Delay Relay (Pneumatic Timer)	Ex9C09~500	AXCD0UL	1311730
		AXCD2UL	1311729
		AXCD4UL	1311731
		AXCT0UL	1311726
		AXCT2UL	1311727
		AXCT4UL	1311728

IEC Contactors

Ex9CS/C Accessory Specifications

A

	Auxiliary Contact																							
	CS/CSR Front Mount AX41						C/CR Front Mount AX42						C/CR Side Mount AX43 AX44											
	04	13	22	31	40	02	04	11	13	20	22	31	40	11	02	11	20							
UL Standard File Number	E353866																							
IEC Standard File Number	IEC/EN 60947-5-1																							
Certifications	UL Listed, CSA, CCC, RoHS																							
Electrical Parameters																								
Contacts	4NC	1NO+ 3NC	2NO+ 2NC	3NO+ 1NC	4NO	2NC	4NC	1NO+ 1NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	1NO+ 1NC	2NC	1NO+ 1NC	2NO							
Rated Frequency (Hz)	50/60																							
Rated Working Voltage Ue	AC-15 (V)	380/400/415										24/230/400/690												
DC-13 (V)	220/250												125/250											
Rated Working Current Ie	AC-15 (A)	0.19										6.00 (24 V) 3.13 (230 V) 1.80 (400 V) 1.04 (690 V)												
DC-13 (A)	0.31												0.55 (125 V) 0.27 (250 V)											
Rated Capacity	AC-15 (VA)	720																						
DC-13 (W)	69																							
Rated Thermal Current Ith (A)	10																							
Rated Impulse Withstand Voltage Uimp (kV)	6 (1.2/50 ms)																							
Rated Insulation Voltage Ui (V)	690																							
Mechanical Parameters																								
Device Width in (mm)	1.30 (33)				1.89 (48)				0.43 (11)				0.39 (10)											
Device Height in (mm)	1.54 (39)				1.46 (37)				2.72 (69)				2.52 (64)											
Device Depth in (mm)	1.46 (37)				1.02 (26)		1.77 (45)				2.76 (70)		2.68 (68)											
Degree of Protection	IP 20																							
Terminals	Lift																							
Terminal Capacity AWG (mm²)	18-12 (1-2.5)																							
Torque of Terminals in-lb (N.m)	7 (0.80)				15 (1.70)																			

IEC Contactors

Ex9CS/C Accessory Specifications

	CCU41	Surge Suppressor Block CCU42	CCU43
Electrical Parameters			
Internal Technology	Varistor		Resistance
Control Coil Voltage Uc (Protection Range)		24~48 Vac/dc 110~240 Vac/dc 380~415 Vac/dc	
Maximum Peak Voltage Up (Uc)	2		3
Mechanical Parameters			
Matched Contactor Type	Ex9CS06~12	Ex9C09~38	Ex9C40~100
Mounting	Screws on to Contactor Control Coil Terminals		
Weight lb (kg)	0.04 (0.02)		

IEC Contactors

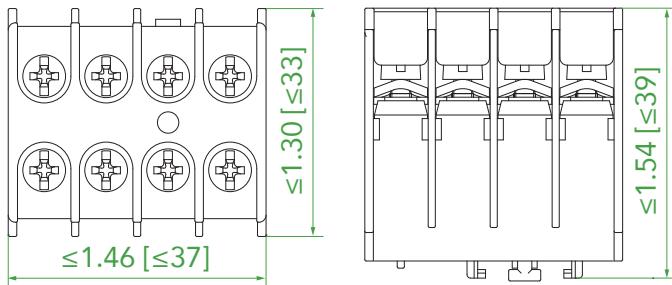
Ex9CS/C Accessory Dimensions

A

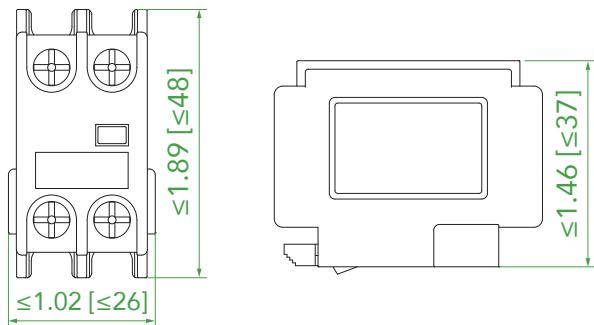
AX41/42

Front Mount Auxiliary Contact

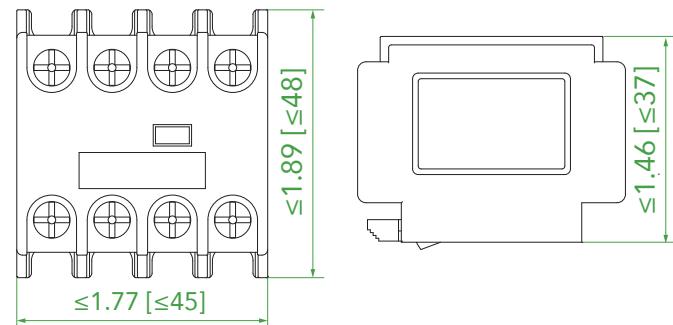
Unit: in [mm]



AX41



AX42 2P

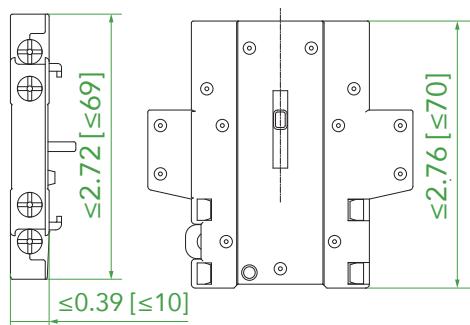


AX42 4P

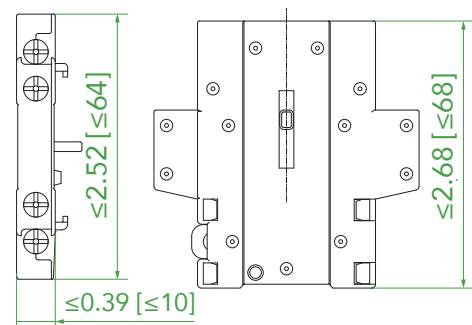
AX43/44

Side Mount Auxiliary Contact

Unit: in [mm]



AX43



AX44

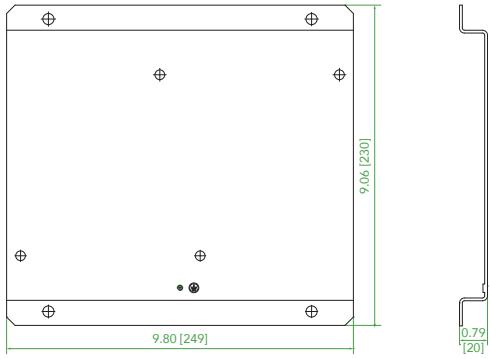
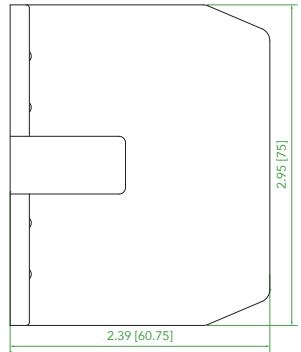
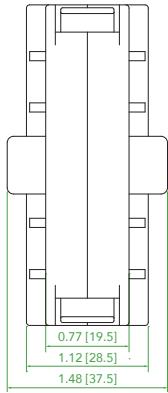
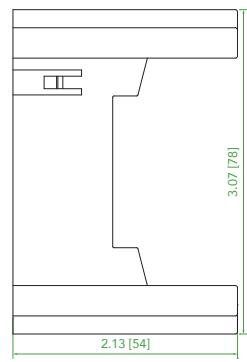
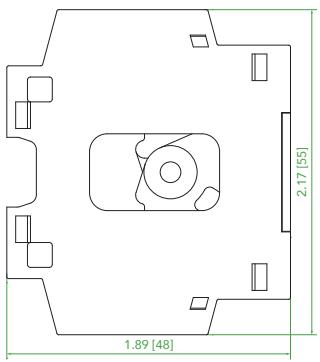
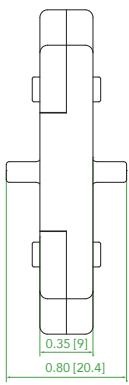
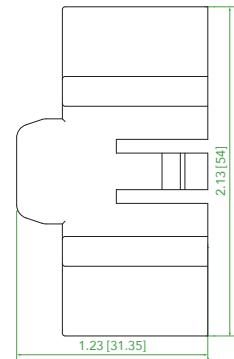
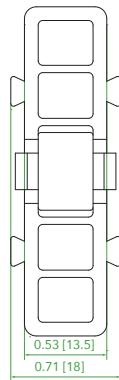
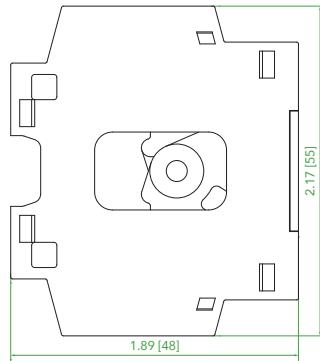
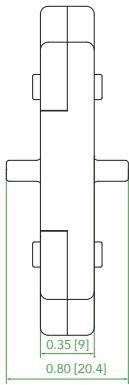
IEC Contactors

Ex9CS/C Accessory Dimensions

MIT42

Mechanical Interlock Kit

Unit: in [mm]



IEC Contactors

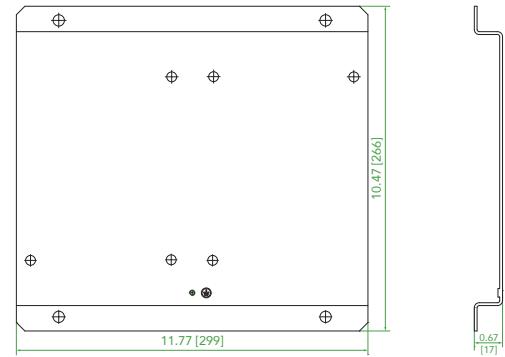
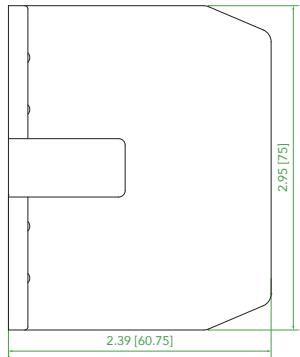
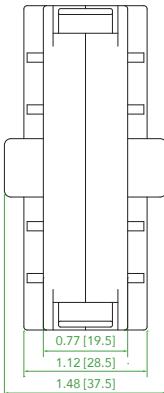
Ex9CS/C Accessory Dimensions

A

MIT45

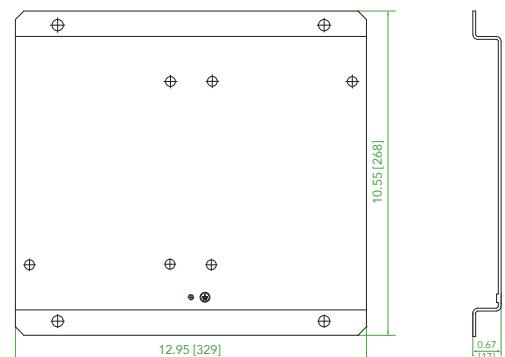
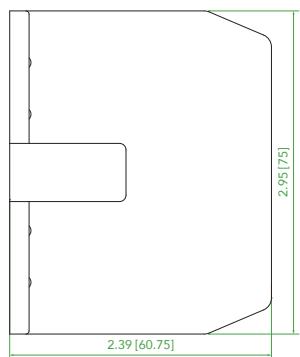
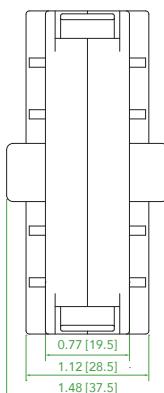
Mechanical Interlock Kit

Unit: in [mm]

**MIT46**

Mechanical Interlock Kit

Unit: in [mm]



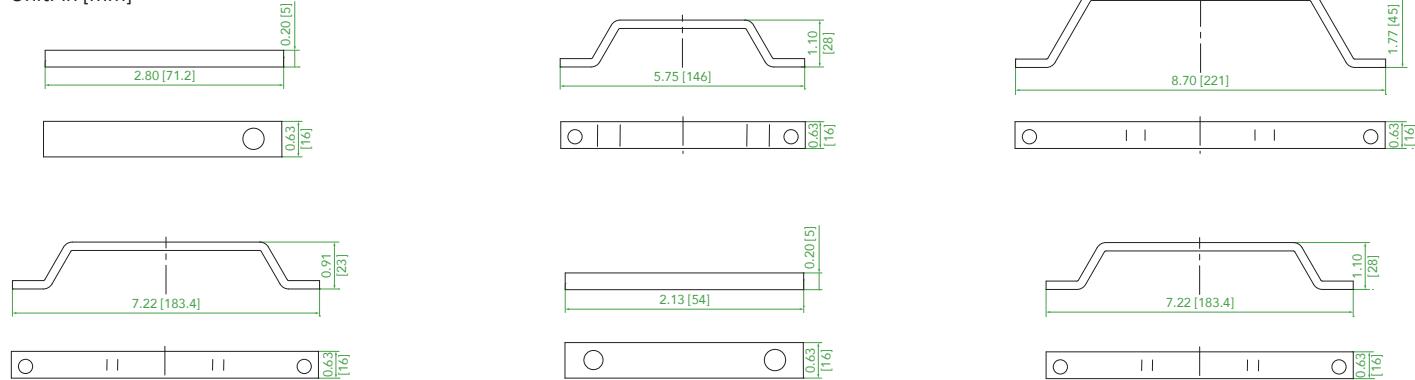
IEC Contactors

Ex9CS/C Accessory Dimensions

PCL185

Power Connection Kit

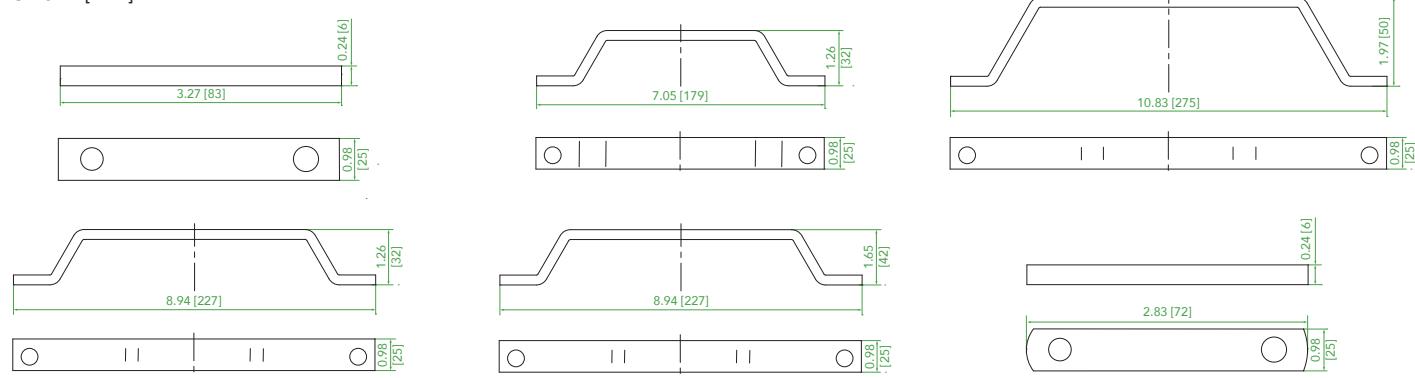
Unit: in [mm]



PCL300

Power Connection Kit

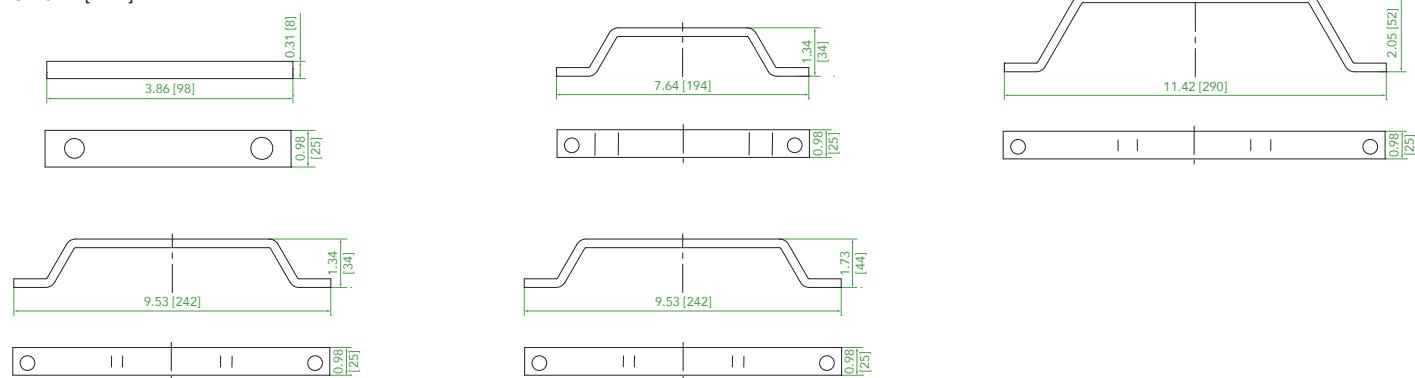
Unit: in [mm]



PCL500

Power Connection Kit

Unit: in [mm]



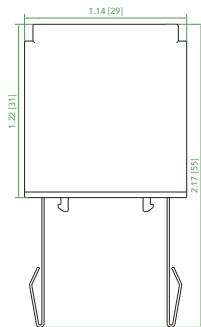
IEC Contactors

Ex9CS/C Accessory Dimensions

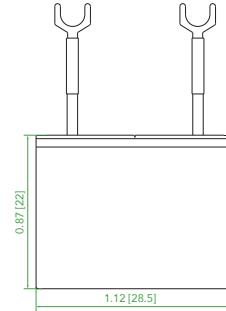
A

CCU4**Surge Suppressor Block**

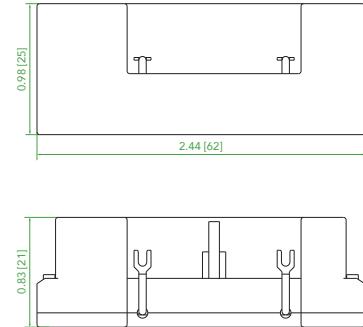
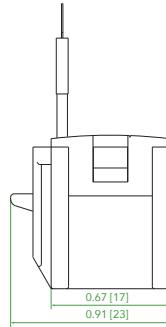
Unit: in [mm]



CCU41



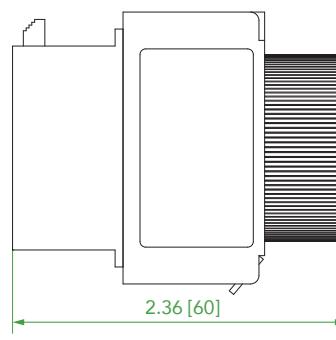
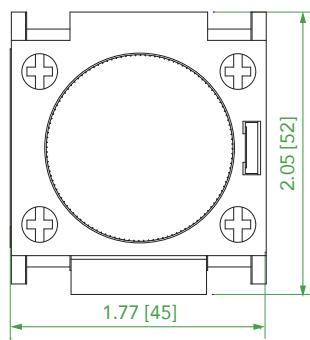
CCU42



CCU43

AXC**Time Delay Relay**

Unit: in [mm]

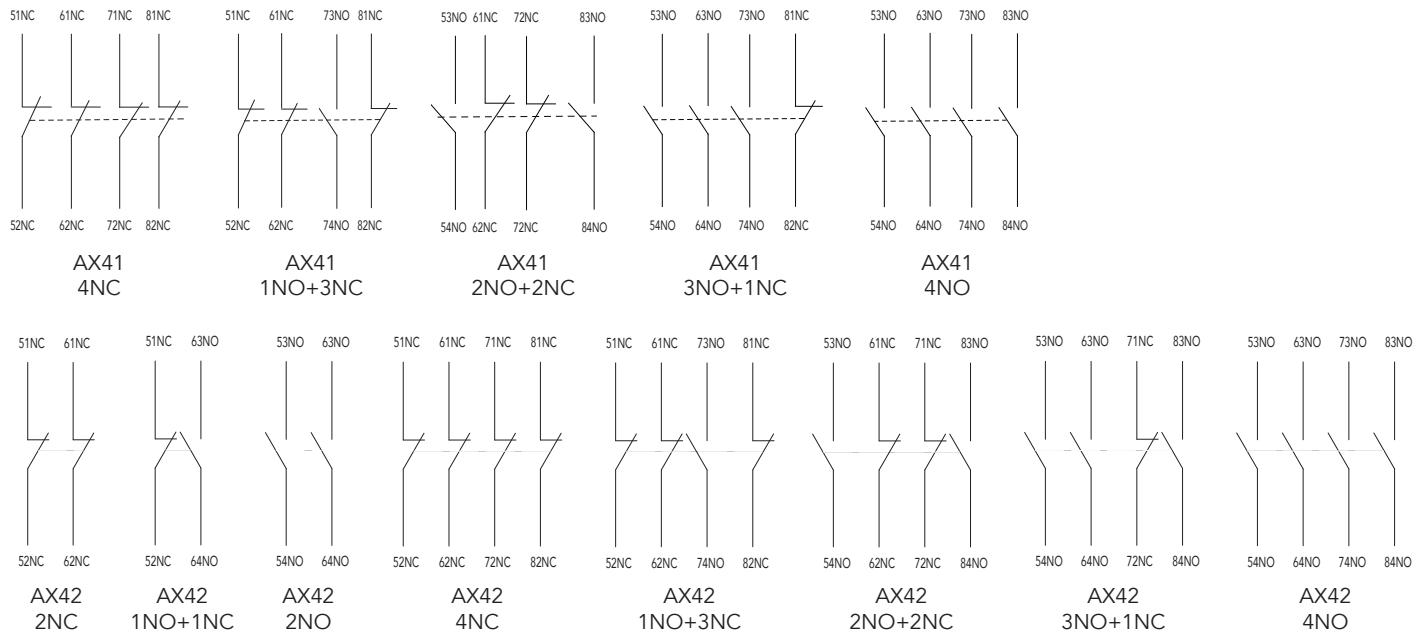


IEC Contactors

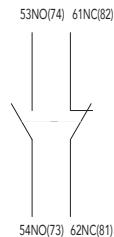
Ex9CS/C Accessory Wiring Diagrams

AX41/42

Front Mount Auxiliary Contact

**AX43**

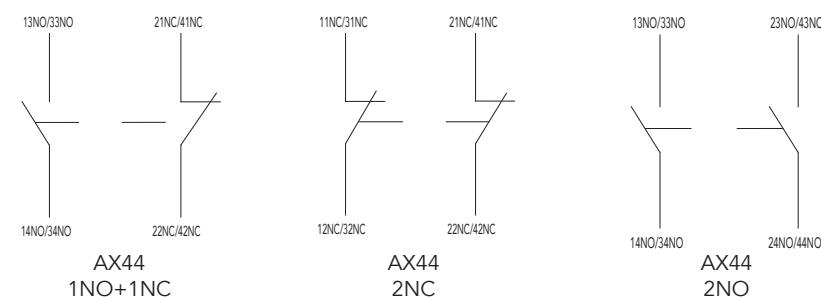
Side Mount Auxiliary Contact



AX43
1NO+1NC

AX44

Side Mount Auxiliary Contact



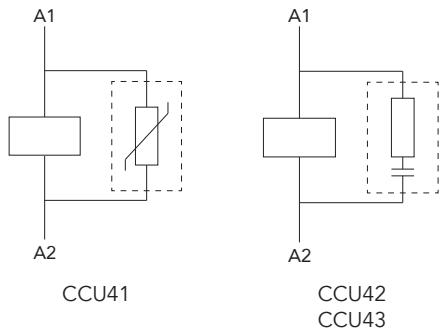
IEC Contactors

Ex9CS/C Accessory Wiring Diagrams

A

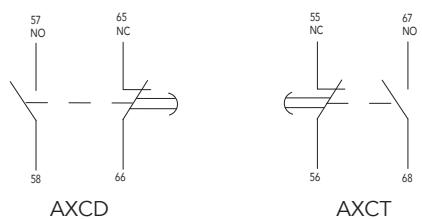
CCU4

Surge Suppressor Block



AXC

Time Delay Relay



THERMAL OVERLOAD RELAYS



Ex9R

Thermal Overload Relays

Ex9R Product Overview

Features

B

- Compatible with Ex9C, Ex9CR, Ex9CS and Ex9CSR
- Rated current up to 500 A @ 600 Vac, 50/60 Hz
- Overload protection trip Class 10 and Class 10 A
- Phase loss sensitivity
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Trip-free mechanism
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35 mm DIN rail mounting base option

Thermal Overload Relays

Ex9R National and International Standards

Certifications

- UL Listed, File Number E353865, UL 60947-1 and 60947-4-1A
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified
- RoHS Compliant



Thermal Overload Relays

Ex9R Product Selection Guide

Label

B



Product Selection Guide

Ex9R	12	B	0.16A	Setting Amperage
NOARK Ex9R Series	Frame Size	Trip Class*		
12: 12 A	38: 38 A	B: Class 10		0.16A: 0.1~0.16 A 32A: 23~32 A 0.25A: 0.16~0.25 A 38A: 30~38 A 0.4A: 0.25~0.4 A 40A: 30~40 A 0.63A: 0.4~0.63 A 50A: 37~50 A 1A: 0.63~1 A 65A: 48~65 A 1.6A: 1~1.6 A 70A: 55~70 A 2.5A: 1.6~2.5 A 80A: 63~80 A 4A: 2.5~4 A 100A: 80~100 A 6A: 4~6 A 115A: 80~115 A 8A: 5.5~8 A 150A: 110~150 A 10A: 7~10 A 185A: 140~185 A 12A: 9~12 A 225A: 160~225 A 13A: 9~13 A 300A: 210~300 A 18A: 12~18 A 400A: 280~400 A 24A: 16~24 A 500A: 380~500 A
100: 100 A	185: 185 A			
500: 500 A				

Note: Consult NOARK for information on Tripping Class 10 A

Thermal Overload Relays

Ex9R 12~100 A

Certifications

IEC/EN 60947-4-1

**12 A****38 A****100 A**

Current Range Amp (Min-Max)	Use with Contactors: Ex9CS06~12		Use with Contactors: Ex9C09~38		Use with Contactors: Ex9C40~100	
	Product	Part Number	Product	Part Number	Product	Part Number
0.1~0.16	Ex9R12B0.16A	1420001	-	-	-	-
0.16~0.25	Ex9R12B0.25A	1420002	-	-	-	-
0.25~0.4	Ex9R12B0.4A	1420003	-	-	-	-
0.4~0.63	Ex9R12B0.63A	1420004	-	-	-	-
0.63~1	Ex9R12B1A	1420005	Ex9R38B1A	1420013	-	-
1~1.6	Ex9R12B1.6A	1420006	Ex9R38B1.6A	1420014	-	-
1.6~2.5	Ex9R12B2.5A	1420007	Ex9R38B2.5A	1420015	-	-
2.5~4	Ex9R12B4A	1420008	Ex9R38B4A	1420016	-	-
4~6	Ex9R12B6A	1420009	Ex9R38B6A	1420017	-	-
5.5~8	Ex9R12B8A	1420010	Ex9R38B8A	1420018	-	-
7~10	Ex9R12B10A	1420011	Ex9R38B10A	1420019	-	-
9~12	Ex9R12B12A	1420012	-	-	-	-
9~13	-	-	Ex9R38B13A	1420020	-	-
12~18	-	-	Ex9R38B18A	1420021	-	-
16~24	-	-	Ex9R38B24A	1420022	-	-
23~32	-	-	Ex9R38B32A	1420023	Ex9R100B32A	1420025
30~38	-	-	Ex9R38B38A	1420024	-	-
30~40	-	-	-	-	Ex9R100B40A	1420026
37~50	-	-	-	-	Ex9R100B50A	1420027
48~65	-	-	-	-	Ex9R100B65A	1420028
55~70	-	-	-	-	Ex9R100B70A	1420029
63~80	-	-	-	-	Ex9R100B80A	1420030
80~100	-	-	-	-	Ex9R100B100A	1420031

Specifications B62 to 63
Trip Curve B64Dimensions B65 to 67
Wiring Diagram B70

Accessories B71

Thermal Overload Relays

Ex9R 185~500 A



B



185 A



500 A

Current Range Amp (Min-Max)	Use with Contactors: Ex9C115~185		Use with Contactors: Ex9C225~500	
	Product	Part Number	Product	Part Number
80~115	Ex9R185B115A	1420032	-	-
110~150	Ex9R185B150A	1420033	-	-
140~185	Ex9R185B185A	1420034	-	-
160~225	-	-	Ex9R500B225A	1420035
210~300	-	-	Ex9R500B300A	1420036
280~400	-	-	Ex9R500B400A	1420037
380~500	-	-	Ex9R500B500A	1420038

Specifications B62 to 63
Trip Curve B64

Dimensions B68 to 69
Wiring Diagram B70

Accessories B71

Thermal Overload Relays

Ex9R Specifications

		Ex9R
Tripping Class		Class 10/10 A
Operating Frequency (Hz)		50/60
Phase Failure Protection Function		
Automatic and Manual Reset		
Temperature Compensation		Yes
Tripping Indicator		
Test and Stop Pushbutton		
Environmental Conditions	Altitude ft (m) Pollution Degree	6,562 (2,000) Class III
Rated Tripping Current (In)		1.2
Sensitivity to Phase Failure (In)		30%
Rated Working Voltage (V)		600
Rated Impulse Withstand Voltage Uimp		6 kV
Auxiliary Contacts	Number of Contacts	1NO+1NC
	Rated Operating Voltage Ue (V)	AC-15 DC-13
	Rated Operating Current Ie (A)	AC-15 DC-13
	Circuit Continuous Current	1.64 / 0.95
	Contact Rating	0.13
	Terminal Wire Range AWG (mm ²)	5 A 600 Vac, 1 A 300 Vdc
	Terminal Torque in-lb (N.m)	B600, R300
	Terminal Wire Strip Length in (mm)	#18-12 (1-3)
		15 (1.70)
		0.43 (11)

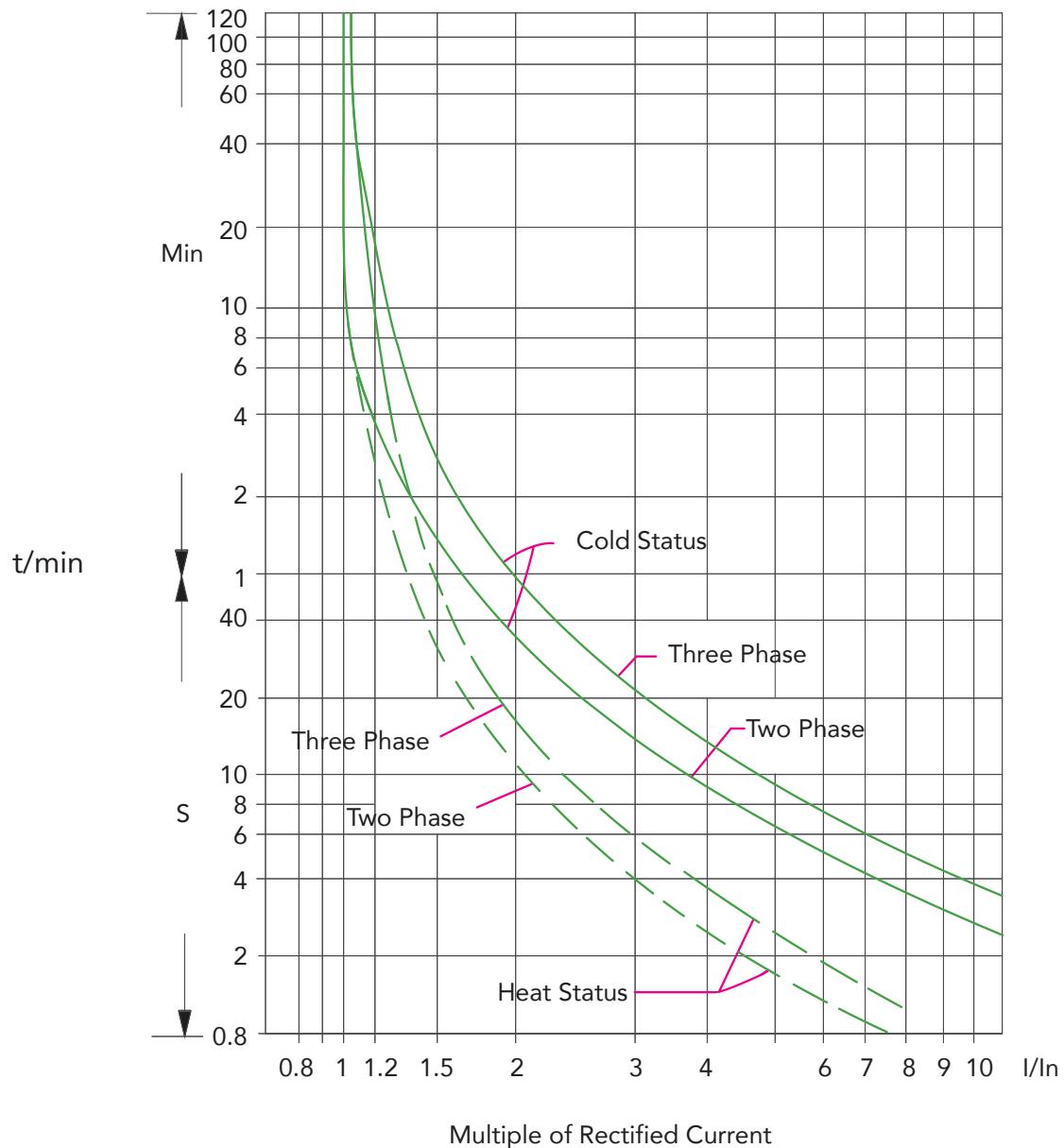
Thermal Overload Relays

Ex9R Specifications

Ex9R	12 A										B	
Current Rated (A)	0.16~1.6										2.5~12	
Current Setting Range (A)	0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~12
Short Circuit Rating, 3 Phase at 600 Vac (kA)	1										5	
Power Terminal	#18-10 AWG											
Power Terminal Torque in-lb (N.m)	15 (1.7)											
Power Terminal Wire Strip Length in (mm)	0.43 (11)											
Matched Contactor Type	Ex9CS06~12											
Matched Adapter	AD51											
38 A												
Current Rated (A)	1~1.6										2.5~38	
Current Setting Range (A)	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13	12~18	16~24	23~32	30~38
Short Circuit Rating, 3 Phase at 600 Vac (kA)	1										5	
Power Terminal	#18-10 AWG / #8 AWG Str											
Power Terminal Torque in-lb (N.m)	22 (2.5)											
Power Terminal Wire Strip Length in (mm)	0.51 (13)											
Matched Contactor Type	Ex9C09~38											
Matched Adapter	AD56											
100 A												
Current Rated (A)	32~50										65~100	
Current Setting Range (A)	23~32	30~40	37~50	48~65	55~70	63~80	80~100					
Short Circuit Rating, 3 Phase at 600 Vac (kA)	5										10	
Power Terminal	#12-10 AWG / #8-1 AWG Str											
Power Terminal Torque in-lb (N.m)	80 (9)											
Power Terminal Wire Strip Length in (mm)	0.71 (18)											
Matched Contactor Type	Ex9C40~100											
Matched Adapter	AD53											
185 A												
Current Rated (A)	115~185											
Current Setting Range (A)	80~115		110~150		140~185							
Short Circuit Rating, 3 Phase at 600 Vac (kA)	10											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	159 (18)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9CS115~185											
Matched Adapter	AD54											
500 A												
Current Rated (A)	225~500											
Current Setting Range (A)	160~225	210~300	280~400	380~500								
Short Circuit Rating, 3 Phase at 600 Vac (kA)	30											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	310 (35)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9CS225~500											
Matched Adapter	AD55											

Thermal Overload Relays

Ex9R Trip Curves

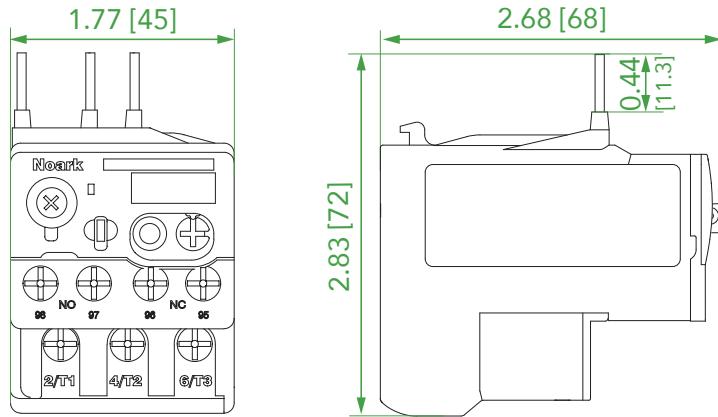


Thermal Overload Relays

Ex9R12 Dimensions

Ex9R12

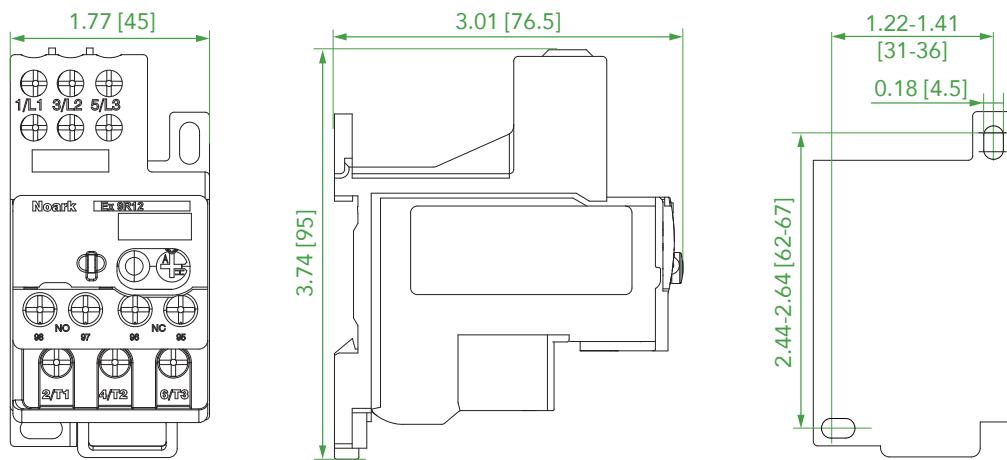
Unit: in [mm]



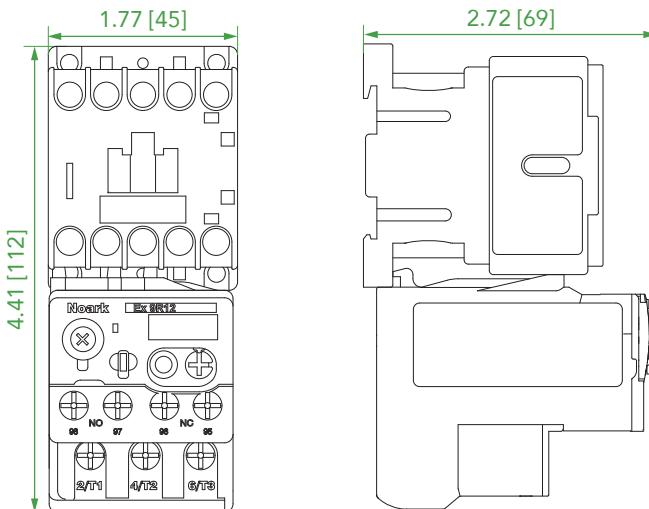
B

Ex9R12+AD51

Unit: in [mm]

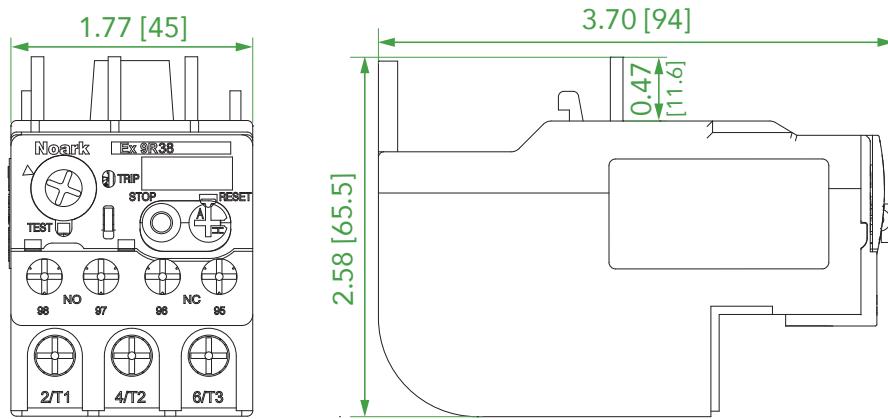
**Ex9R12+Ex9CS06~12**

Unit: in [mm]

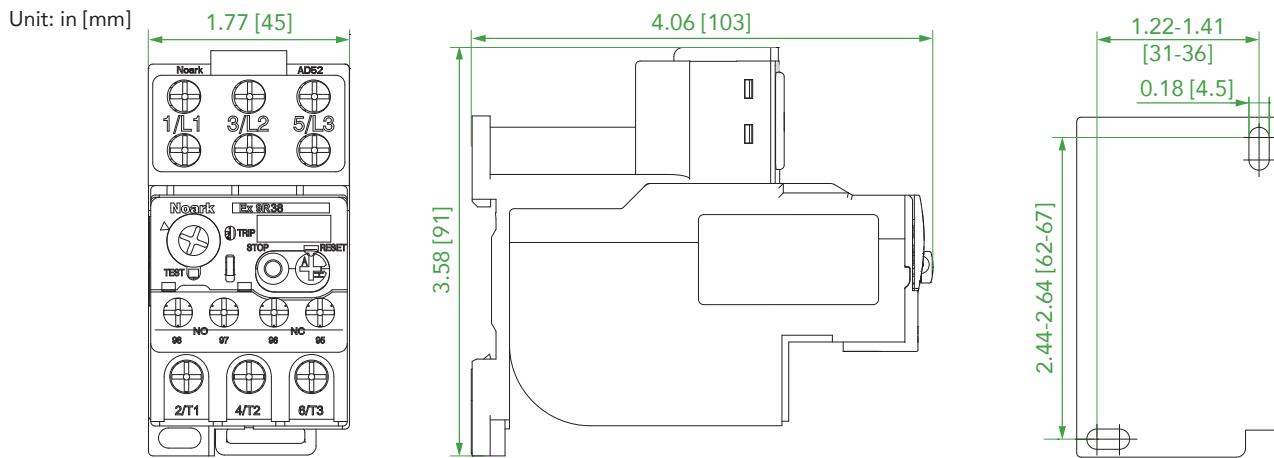


Thermal Overload Relays

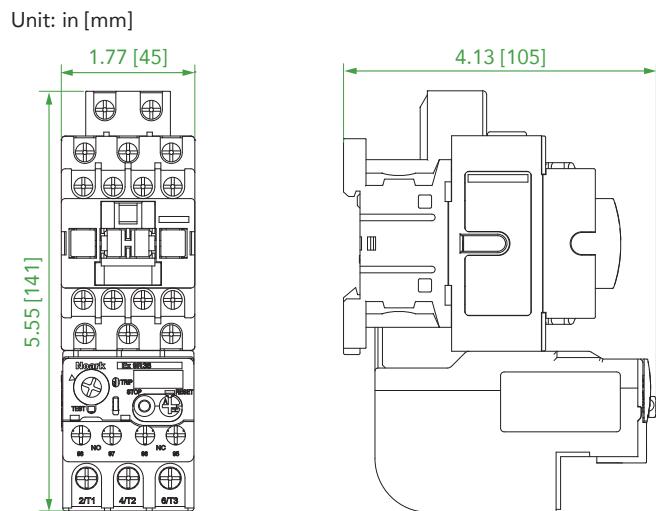
Ex9R38 Dimensions



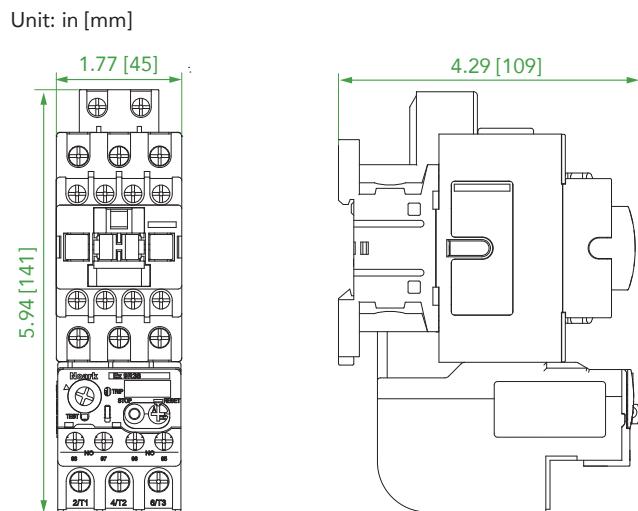
Ex9R38+AD56



Ex9R38+Ex9C09~18



Ex9R38+Ex9C25~38

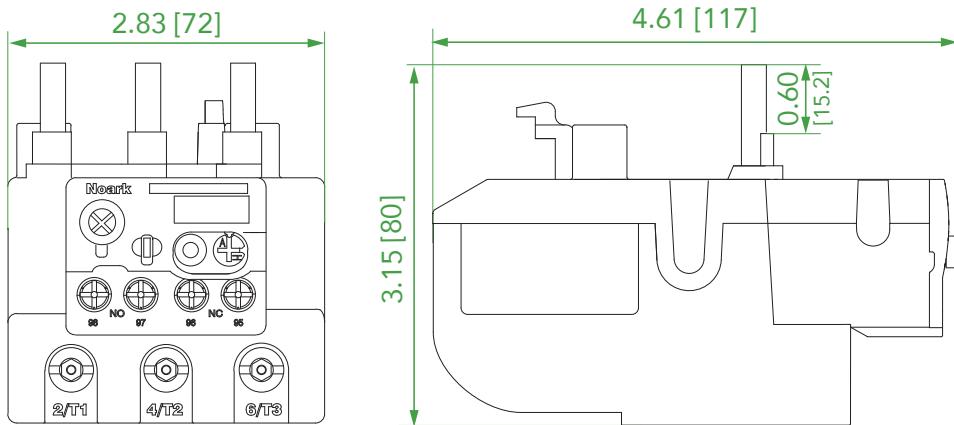


Thermal Overload Relays

Ex9R100 Dimensions

Ex9R100

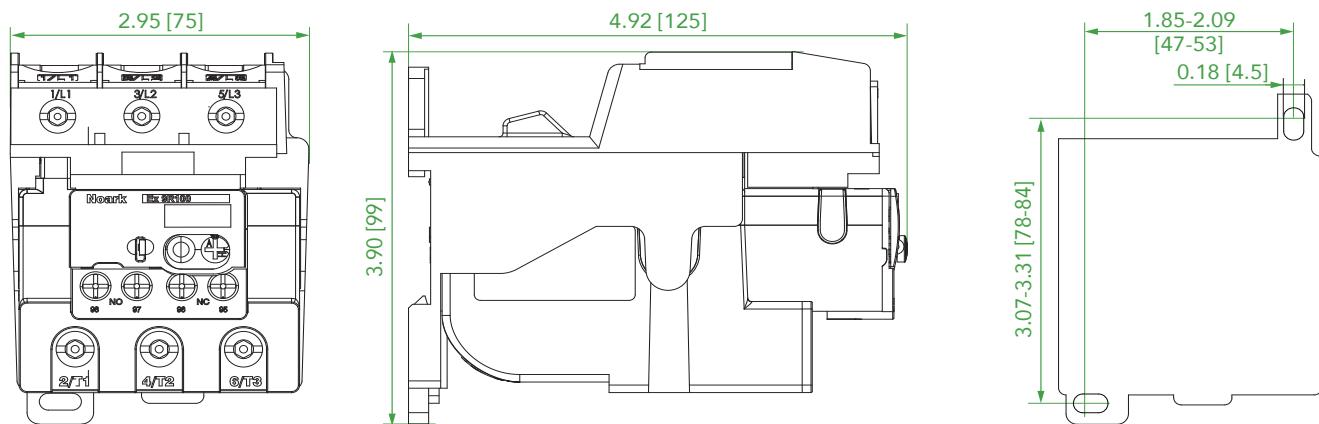
Unit: in [mm]



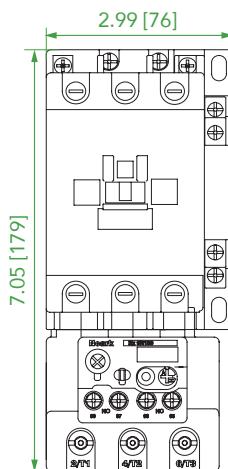
B

Ex9R100+AD53

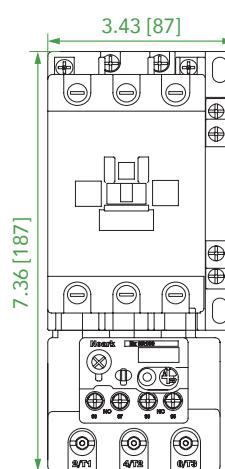
Unit: in [mm]

**Ex9R100+Ex9C40~65**

Unit: in [mm]

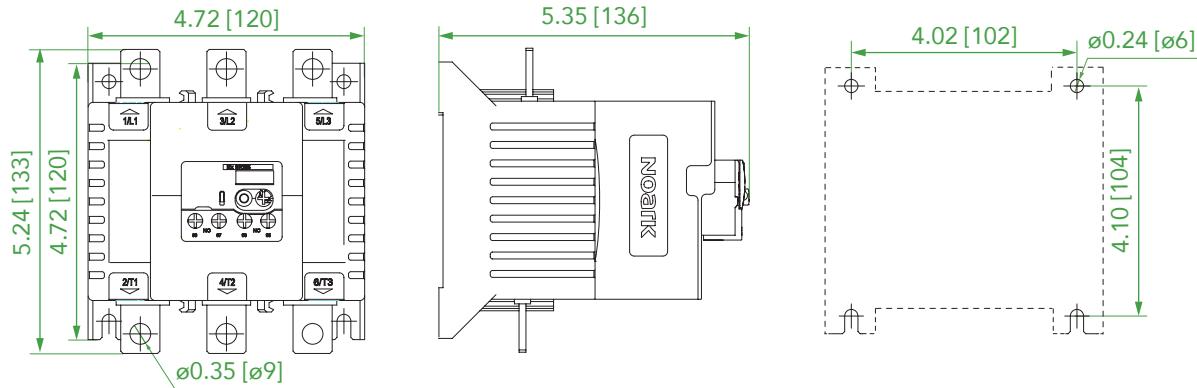
**Ex9R100+Ex9C80~100**

Unit: in [mm]



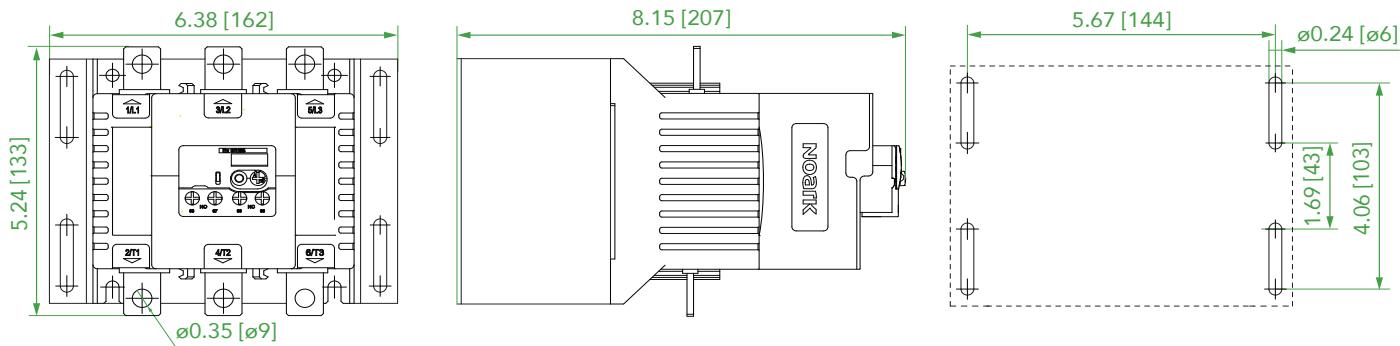
Thermal Overload Relays

Ex9R185 Dimensions



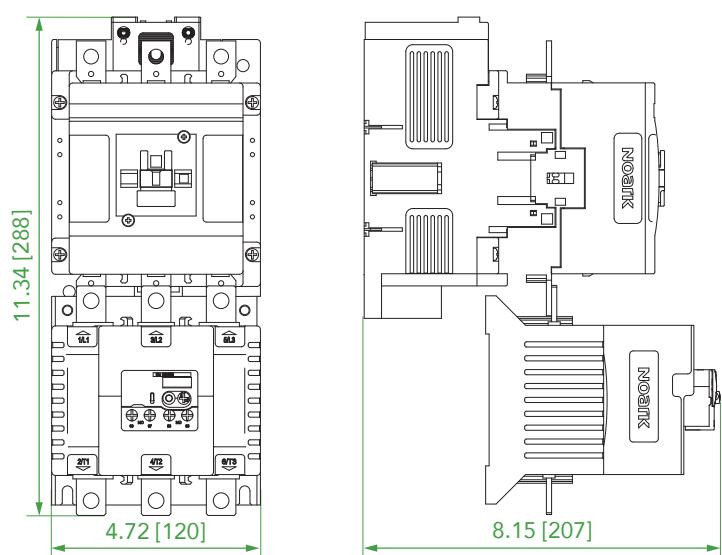
Ex9R185+AD54

Unit: in [mm]



Ex9R185+Ex9C115~185

Unit: in [mm]

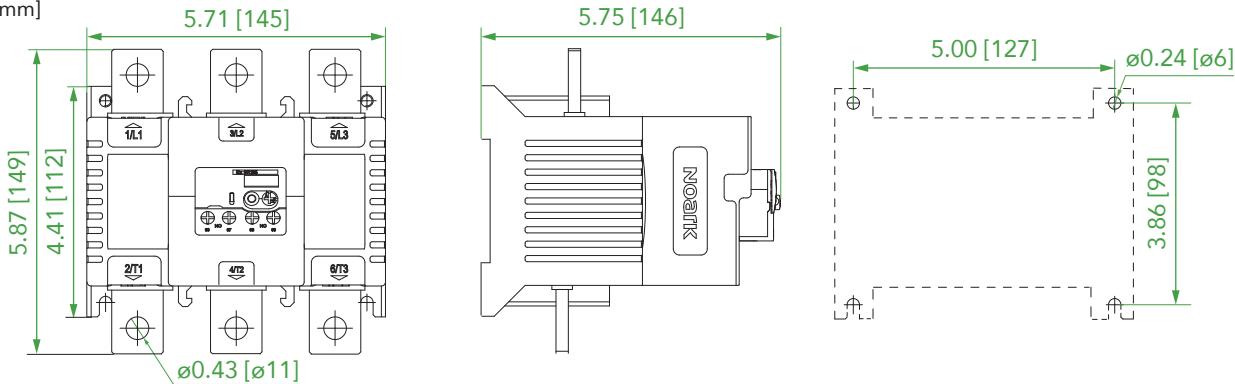


Thermal Overload Relays

Ex9R500 Dimensions

Ex9R500

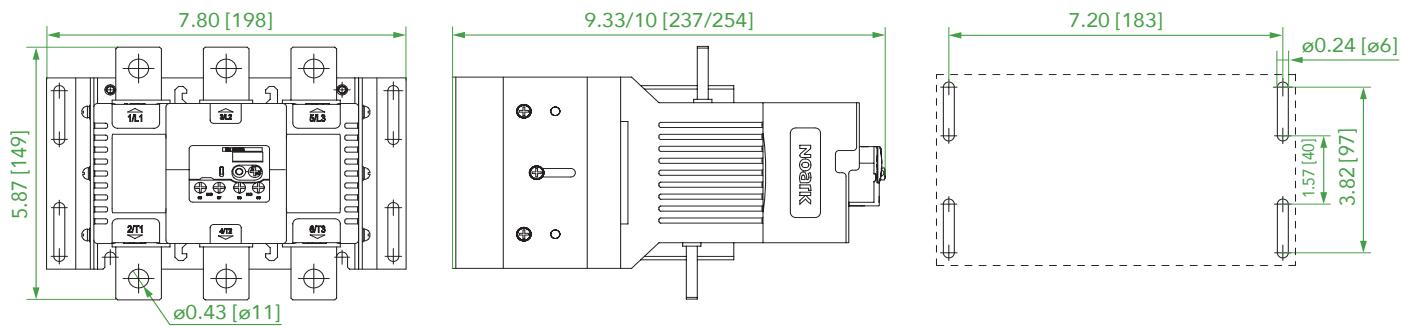
Unit: in [mm]



B

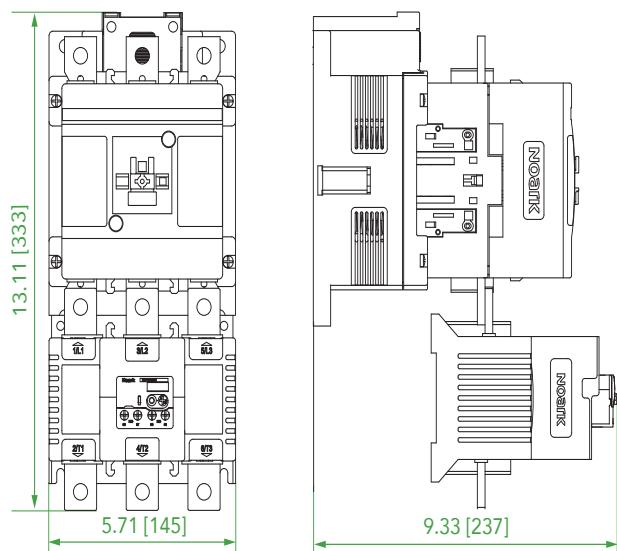
Ex9R500+AD55

Unit: in [mm]



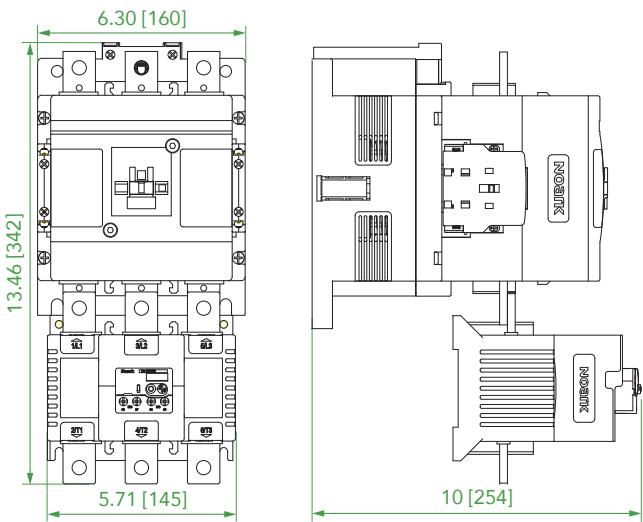
Ex9R500+Ex9C225~300

Unit: in [mm]



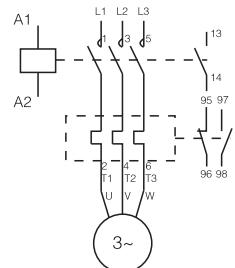
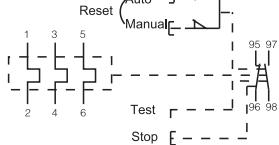
Ex9R500+Ex9C400~500

Unit: in [mm]

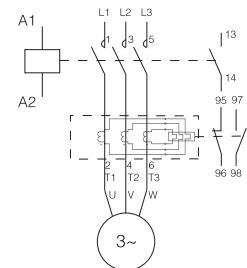
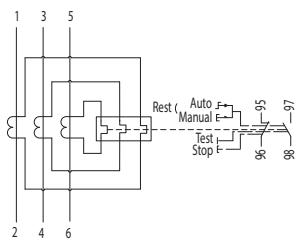
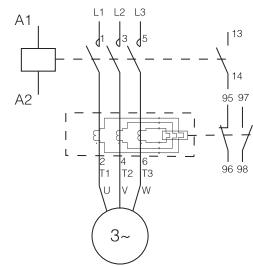
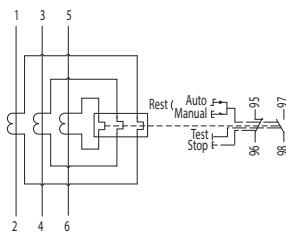
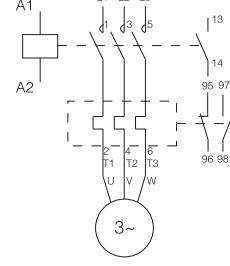
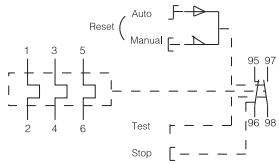
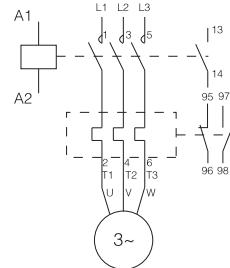
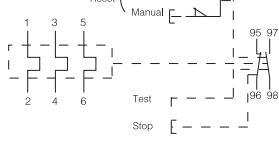


Thermal Overload Relays

Ex9R Wiring Diagrams



Ex9R38



Thermal Overload Relays

Ex9R Accessories: Mounting Base



AD	51
Description	Relay Type
Mounting Base	51: Ex9R12
	56: Ex9R38
	53: Ex9R100
	54: Ex9R185
	55: Ex9R500

Dimensions..... B65 to B69

B

Accessory Description	Product	Part Number
	AD51	1420039
	AD56	1420040
Mounting Base	AD53	1420041
	AD54	1420042
	AD55	1420043

Mounting Base	AD51	AD56	AD53	AD54	AD55
Current Rating (A)	12	38	100	185	500
Voltage (Vac)			600		
Terminal Wire Range	#18-12 AWG	#18-10 AWG / #8 AWG Str	#12-10 AWG / #8-1 AWG, Str		
Terminal Torque in-lb (N.m)	7 (0.80)	22 (2.50)	80 (9)		
Wire Strip Length in (mm)	0.39 (10)	0.51 (13)	0.71 (18)		
Matched Contactor Type	Ex9CS6~12	Ex9C09~38	Ex9C40~100	Ex9C115~185	Ex9C225~500

IEC CONTACTORS



Ex9CD/CM

IEC Contactors

Ex9CD/CM Product Overview

Features

- AC-3 contactor ratings from 630 A and AC-1 contactor ratings to 800 A
- Coil voltages from 24~600 Vac, 50/60 Hz
- Full Voltage Non-Reversing (FVNR) and Full Voltage Reversing (FVR)
- 5 kA @ 600 Vac
- Built-on NO or NC auxiliary contacts to 32 A
- IP20 finger and back-of hand safe
- 3 and 4 pole versions including 2NO+2NC and 4NO configurations
- 95 A mounts on standard 35mm DIN rail (40~95 can also mount on 75 mm DIN rail)
- Compatible with Ex9RD thermal overload relays
- Plug-on accessories for reduced installation time
- Coil replacement on standard contactor from 9~630 A

C

IEC Contactors

Ex9CD/CM National and International Standards

Certifications

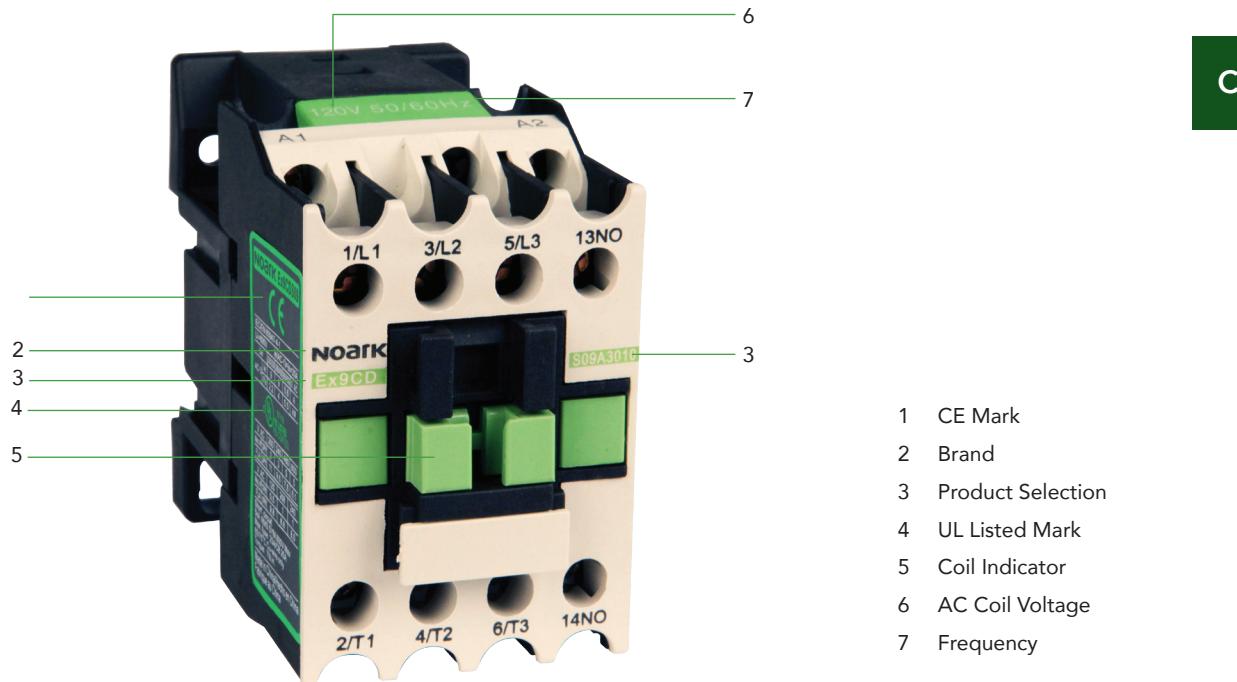
- UL Listed, File Number E353866
- Certified for Canada according to CSA standards
- IEC/EN 60947
- CE Approved
- RoHS Compliant



IEC Contactors

Ex9CD/CM Product Selection Guide

Label



Product Selection Guide

Ex9C	D	S	09	A	30	G	7	A
NOARK Ex9C Series	Contactor Type	Function	Rated Current AC-3	Terminal	Pole	AC Coil Voltage	Frequency	Auxiliary Contacts (Side Mounting)
D: Ex9CD Standard (9~630 A)	S: Full Voltage Non-Reversing (FVNR)	06: 6 A 09: 9 A 12: 12 A 18: 18 A 25: 25 A 32: 32 A 40: 40 A 50: 50 A 65: 65 A 80: 80 A 95: 95 A 115: 115 A 150: 150 A 185: 185 A 225: 225 A 265: 265 A 330: 330 A 400: 400 A 500: 500 A 630: 630 A	A: Screw Terminals	30: 3NO 40: 4NO 22: 2NO+2NC	B: 24 V E: 48 V F: 110 V G: 120 V M: 220 V P: 230 V U: 240 V N: 277 V Q: 380 V R: 440 V T: 480 V Y: 600 V	7: 50/60 Hz	A: 1NO Mini Type (6~12 A) B: 1NC (9~32 A) C: 1NO+ Standard Type 1NC (40~95 A) Blank Standard Type None (115~630 A)	
M: Ex9CM Miniature (9~12 A)	R: Full Voltage Reversing (FVR)							

IEC Contactors

Ex9CMS 6~9 A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz
- Ratings page C77



Certifications
IEC/EN 60947-4-1

6 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number						
24	Ex9CMS06A30B7A	1311137	Ex9CMS06A30B7B	1311113	Ex9CMS09A30B7A	1311233	Ex9CMS09A30B7B	1311209
48	Ex9CMS06A30E7A	1313334	Ex9CMS06A30E7B	1313310	Ex9CMS09A30E7A	1313430	Ex9CMS09A30E7B	1313406
110	Ex9CMS06A30F7A	1311129	Ex9CMS06A30F7B	1311105	Ex9CMS09A30F7A	1311225	Ex9CMS09A30F7B	1311201
120	Ex9CMS06A30G7A	1311131	Ex9CMS06A30G7B	1311107	Ex9CMS09A30G7A	1311227	Ex9CMS09A30G7B	1311203
220	Ex9CMS06A30M7A	1313328	Ex9CMS06A30M7B	1313304	Ex9CMS09A30M7A	1313424	Ex9CMS09A30M7B	1313400
230	Ex9CMS06A30P7A	1311133	Ex9CMS06A30P7B	1311109	Ex9CMS09A30P7A	1311229	Ex9CMS09A30P7B	1311205
240	Ex9CMS06A30U7A	1311135	Ex9CMS06A30U7B	1311111	Ex9CMS09A30U7A	1311231	Ex9CMS09A30U7B	1311207
277	Ex9CMS06A30N7A	1313336	Ex9CMS06A30N7B	1313312	Ex9CMS09A30N7A	1313432	Ex9CMS09A30N7B	1313408
380	Ex9CMS06A30Q7A	1313330	Ex9CMS06A30Q7B	1313306	Ex9CMS09A30Q7A	1313426	Ex9CMS09A30Q7B	1313402
440	Ex9CMS06A30R7A	1313332	Ex9CMS06A30R7B	1313308	Ex9CMS09A30R7A	1313428	Ex9CMS09A30R7B	1313404
480	Ex9CMS06A30T7A	1311139	Ex9CMS06A30T7B	1311115	Ex9CMS09A30T7A	1311235	Ex9CMS09A30T7B	1311211
600	Ex9CMS06A30Y7A	1313326	Ex9CMS06A30Y7B	1313302	Ex9CMS09A30Y7A	1313422	Ex9CMS09A30Y7B	1313398

9 A

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CMS06A40B7	1311065	Ex9CMS06A22B7	1311089	Ex9CMS09A40B7	1311161	Ex9CMS09A22B7	1311185
48	Ex9CMS06A40E7	1313262	Ex9CMS06A22E7	1313286	Ex9CMS09A40E7	1313358	Ex9CMS09A22E7	1313382
110	Ex9CMS06A40F7	1311057	Ex9CMS06A22F7	1311081	Ex9CMS09A40F7	1311153	Ex9CMS09A22F7	1311177
120	Ex9CMS06A40G7	1311059	Ex9CMS06A22G7	1311083	Ex9CMS09A40G7	1311155	Ex9CMS09A22G7	1311179
220	Ex9CMS06A40M7	1313256	Ex9CMS06A22M7	1313280	Ex9CMS09A40M7	1313352	Ex9CMS09A22M7	1313376
230	Ex9CMS06A40P7	1311061	Ex9CMS06A22P7	1311085	Ex9CMS09A40P7	1311157	Ex9CMS09A22P7	1311181
240	Ex9CMS06A40U7	1311063	Ex9CMS06A22U7	1311087	Ex9CMS09A40U7	1311159	Ex9CMS09A22U7	1311183
277	Ex9CMS06A40N7	1313264	Ex9CMS06A22N7	1313288	Ex9CMS09A40N7	1313360	Ex9CMS09A22N7	1313384
380	Ex9CMS06A40Q7	1313258	Ex9CMS06A22Q7	1313282	Ex9CMS09A40Q7	1313354	Ex9CMS09A22Q7	1313378
440	Ex9CMS06A40R7	1313260	Ex9CMS06A22R7	1313284	Ex9CMS09A40R7	1313356	Ex9CMS09A22R7	1313380
480	Ex9CMS06A40T7	1311067	Ex9CMS06A22T7	1311091	Ex9CMS09A40T7	1311163	Ex9CMS09A22T7	1311187
600	Ex9CMS06A40Y7	1313254	Ex9CMS06A22Y7	1313278	Ex9CMS09A40Y7	1313350	Ex9CMS09A22Y7	1313374

Specifications C99
Dimensions C102
Wiring Diagram C111
Mounting Position C113

Accessories C114 to 121
Matched Relay: Ex9RD11.5 D126
Relay Specifications D128
Relay Trip Curve D130

Relay Dimensions D131
Relay Accessories D133

IEC Contactors

Ex9CMS 12 A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
CE cULus

C

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		Ratings		6 A	9 A	12 A
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose			
24	Ex9CMS12A30B7A	1311329	Ex9CMS12A30B7B	1311305	Single-Phase (hp)	110/120 V	0.3	0.5	0.75
48	Ex9CMS12A30E7A	1313526	Ex9CMS12A30E7B	1313502		230/240 V	0.75	1.5	2
110	Ex9CMS12A30F7A	1311321	Ex9CMS12A30F7B	1311297		200/208 V	1.5	3	
120	Ex9CMS12A30G7A	1311323	Ex9CMS12A30G7B	1311299		230/240 V		3	
220	Ex9CMS12A30M7A	1313520	Ex9CMS12A30M7B	1313496		460/480 V	3	5	7.5
230	Ex9CMS12A30P7A	1311325	Ex9CMS12A30P7B	1311301		575/600 V		10	
240	Ex9CMS12A30U7A	1311327	Ex9CMS12A30U7B	1311303	IEC (A)	AC-3 le	6	9	12
277	Ex9CMS12A30N7A	1313528	Ex9CMS12A30N7B	1313504		AC-1 le	20		
380	Ex9CMS12A30Q7A	1313522	Ex9CMS12A30Q7B	1313498		220/230/240 V	1.5	2.2	3
440	Ex9CMS12A30R7A	1313524	Ex9CMS12A30R7B	1313500		380/400 V	2.2	4	5.5
480	Ex9CMS12A30T7A	1311331	Ex9CMS12A30T7B	1311307		415 V			
600	Ex9CMS12A30Y7A	1313518	Ex9CMS12A30Y7B	1313494		600/690 V	3	4	

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMS12A40B7	1311257	Ex9CMS12A22B7	1311281
48	Ex9CMS12A40E7	1313454	Ex9CMS12A22E7	1313478
110	Ex9CMS12A40F7	1311249	Ex9CMS12A22F7	1311273
120	Ex9CMS12A40G7	1311251	Ex9CMS12A22G7	1311275
220	Ex9CMS12A40M7	1313448	Ex9CMS12A22M7	1313472
230	Ex9CMS12A40P7	1311253	Ex9CMS12A22P7	1311277
240	Ex9CMS12A40U7	1311255	Ex9CMS12A22U7	1311279
277	Ex9CMS12A40N7	1313456	Ex9CMS12A22N7	1313480
380	Ex9CMS12A40Q7	1313450	Ex9CMS12A22Q7	1313474
440	Ex9CMS12A40R7	1313452	Ex9CMS12A22R7	1313476
480	Ex9CMS12A40T7	1311259	Ex9CMS12A22T7	1311283
600	Ex9CMS12A40Y7	1313446	Ex9CMS12A22Y7	1313470

Specifications	C99	Accessories.....	C114 to 121	Relay Dimensions	D131
Dimensions.....	C102	Matched Relay: Ex9RD11.5	D126	Relay Accessories.....	D133
Wiring Diagram.....	C111	Relay Specifications.....	D128		
Mounting Position.....	C113	Relay Trip Curve	D130		

IEC Contactors**Ex9CDS 9~12 A Standard**

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz
- Ratings page C79



Certifications
IEC/EN 60947-4-1
CE LISTED

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number						
24	Ex9CDS09A30B7A	1310069	Ex9CDS09A30B7B	1310009	Ex9CDS12A30B7A	1310153	Ex9CDS12A30B7B	1310093
48	Ex9CDS09A30E7A	1312266	Ex9CDS09A30E7B	1312206	Ex9CDS12A30E7A	1312350	Ex9CDS12A30E7B	1312290
110	Ex9CDS09A30F7A	1310061	Ex9CDS09A30F7B	1310001	Ex9CDS12A30F7A	1310145	Ex9CDS12A30F7B	1310085
120	Ex9CDS09A30G7A	1310063	Ex9CDS09A30G7B	1310003	Ex9CDS12A30G7A	1310147	Ex9CDS12A30G7B	1310087
220	Ex9CDS09A30M7A	1312260	Ex9CDS09A30M7B	1312200	Ex9CDS12A30M7A	1312344	Ex9CDS12A30M7B	1312284
230	Ex9CDS09A30P7A	1310065	Ex9CDS09A30P7B	1310005	Ex9CDS12A30P7A	1310149	Ex9CDS12A30P7B	1310089
240	Ex9CDS09A30U7A	1310067	Ex9CDS09A30U7B	1310007	Ex9CDS12A30U7A	1310151	Ex9CDS12A30U7B	1310091
277	Ex9CDS09A30N7A	1312268	Ex9CDS09A30N7B	1312208	Ex9CDS12A30N7A	1312352	Ex9CDS12A30N7B	1312292
380	Ex9CDS09A30Q7A	1312262	Ex9CDS09A30Q7B	1312202	Ex9CDS12A30Q7A	1312346	Ex9CDS12A30Q7B	1312286
440	Ex9CDS09A30R7A	1312264	Ex9CDS09A30R7B	1312204	Ex9CDS12A30R7A	1312348	Ex9CDS12A30R7B	1312288
480	Ex9CDS09A30T7A	1310071	Ex9CDS09A30T7B	1310011	Ex9CDS12A30T7A	1310155	Ex9CDS12A30T7B	1310095
600	Ex9CDS09A30Y7A	1312258	Ex9CDS09A30Y7B	1312198	Ex9CDS12A30Y7A	1312342	Ex9CDS12A30Y7B	1312282

12 A

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDS09A40B7	1310033	Ex9CDS09A22B7	1310057	Ex9CDS12A40B7	1310117	Ex9CDS12A22B7	1310141
48	Ex9CDS09A40E7	1312230	Ex9CDS09A22E7	1312254	Ex9CDS12A40E7	1312314	Ex9CDS12A22E7	1312338
110	Ex9CDS09A40F7	1310025	Ex9CDS09A22F7	1310049	Ex9CDS12A40F7	1310109	Ex9CDS12A22F7	1310133
120	Ex9CDS09A40G7	1310027	Ex9CDS09A22G7	1310051	Ex9CDS12A40G7	1310111	Ex9CDS12A22G7	1310135
220	Ex9CDS09A40M7	1312224	Ex9CDS09A22M7	1312248	Ex9CDS12A40M7	1312308	Ex9CDS12A22M7	1312332
230	Ex9CDS09A40P7	1310029	Ex9CDS09A22P7	1310053	Ex9CDS12A40P7	1310113	Ex9CDS12A22P7	1310137
240	Ex9CDS09A40U7	1310031	Ex9CDS09A22U7	1310055	Ex9CDS12A40U7	1310115	Ex9CDS12A22U7	1310139
277	Ex9CDS09A40N7	1312232	Ex9CDS09A22N7	1312256	Ex9CDS12A40N7	1312316	Ex9CDS12A22N7	1312340
380	Ex9CDS09A40Q7	1312226	Ex9CDS09A22Q7	1312250	Ex9CDS12A40Q7	1312310	Ex9CDS12A22Q7	1312334
440	Ex9CDS09A40R7	1312228	Ex9CDS09A22R7	1312252	Ex9CDS12A40R7	1312312	Ex9CDS12A22R7	1312336
480	Ex9CDS09A40T7	1310035	Ex9CDS09A22T7	1310059	Ex9CDS12A40T7	1310119	Ex9CDS12A22T7	1310143
600	Ex9CDS09A40Y7	1312222	Ex9CDS09A22Y7	1312246	Ex9CDS12A40Y7	1312306	Ex9CDS12A22Y7	1312330

Specifications	C100	Accessories	C114 to 121	Relay Dimensions	D131
Dimensions	C103	Matched Relay: Ex9RD25	D126	Relay Accessories	D133
Wiring Diagram	C111	Relay Specifications	D128		
Mounting Position	C113	Relay Trip Curve	D130		

IEC Contactors

Ex9CDS 18 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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C

18 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		Ratings	9 A	12 A	18 A	
	Product	Part Number	Product	Part Number		UL/CSA (A)	General Purpose	20	32
24	Ex9CDS18A30B7A	1310201	Ex9CDS18A30B7B	1310177	Single-Phase (hp)	120 V	0.5	0.75	1
48	Ex9CDS18A30E7A	1312398	Ex9CDS18A30E7B	1312374		208 V	1	2	3
110	Ex9CDS18A30F7A	1310193	Ex9CDS18A30F7B	1310169		240 V			
120	Ex9CDS18A30G7A	1310195	Ex9CDS18A30G7B	1310171		200 V	3	5	7.5
220	Ex9CDS18A30M7A	1312392	Ex9CDS18A30M7B	1312368	Three-Phase (hp)	240 V			
230	Ex9CDS18A30P7A	1310197	Ex9CDS18A30P7B	1310173		460 V	5	7.5	10
240	Ex9CDS18A30U7A	1310199	Ex9CDS18A30U7B	1310175		600 V			
277	Ex9CDS18A30N7A	1312400	Ex9CDS18A30N7B	1312376		AC-3 le	9	12	18
380	Ex9CDS18A30Q7A	1312394	Ex9CDS18A30Q7B	1312370	IEC (A)	AC-1 le	20		32
440	Ex9CDS18A30R7A	1312396	Ex9CDS18A30R7B	1312372		220/230 V	2.2	3	4
480	Ex9CDS18A30T7A	1310203	Ex9CDS18A30T7B	1310179		380/400 V	4	5.5	7.5
600	Ex9CDS18A30Y7A	1312390	Ex9CDS18A30Y7B	1312366		600/690 V	5.5	7.5	10

Specifications C100
 Dimensions C103
 Wiring Diagram C111
 Mounting Position C113

Accessories C114 to 121
Matched Relay: Ex9RD25 D126
 Relay Specifications D128
 Relay Trip Curve D130

Relay Dimensions D131
 Relay Accessories D133

IEC Contactors

Ex9CDS 25~32 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz
- Ratings page C81



Certifications
IEC/EN 60947-4-1
CE cULus LISTED

25 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number						
24	Ex9CDS25A30B7A	1310285	Ex9CDS25A30B7B	1310225	Ex9CDS32A30B7A	1310333	Ex9CDS32A30B7B	1310309
48	Ex9CDS25A30E7A	1312482	Ex9CDS25A30E7B	1312422	Ex9CDS32A30E7A	1312530	Ex9CDS32A30E7B	1312506
110	Ex9CDS25A30F7A	1310277	Ex9CDS25A30F7B	1310217	Ex9CDS32A30F7A	1310325	Ex9CDS32A30F7B	1310301
120	Ex9CDS25A30G7A	1310279	Ex9CDS25A30G7B	1310219	Ex9CDS32A30G7A	1310327	Ex9CDS32A30G7B	1310303
220	Ex9CDS25A30M7A	1312476	Ex9CDS25A30M7B	1312416	Ex9CDS32A30M7A	1312524	Ex9CDS32A30M7B	1312500
230	Ex9CDS25A30P7A	1310281	Ex9CDS25A30P7B	1310221	Ex9CDS32A30P7A	1310329	Ex9CDS32A30P7B	1310305
240	Ex9CDS25A30U7A	1310283	Ex9CDS25A30U7B	1310223	Ex9CDS32A30U7A	1310331	Ex9CDS32A30U7B	1310307
277	Ex9CDS25A30N7A	1312484	Ex9CDS25A30N7B	1312424	Ex9CDS32A30N7A	1312532	Ex9CDS32A30N7B	1312508
380	Ex9CDS25A30Q7A	1312478	Ex9CDS25A30Q7B	1312418	Ex9CDS32A30Q7A	1312526	Ex9CDS32A30Q7B	1312502
440	Ex9CDS25A30R7A	1312480	Ex9CDS25A30R7B	1312420	Ex9CDS32A30R7A	1312528	Ex9CDS32A30R7B	1312504
480	Ex9CDS25A30T7A	1310287	Ex9CDS25A30T7B	1310227	Ex9CDS32A30T7A	1310335	Ex9CDS32A30T7B	1310311
600	Ex9CDS25A30Y7A	1312474	Ex9CDS25A30Y7B	1312414	Ex9CDS32A30Y7A	1312522	Ex9CDS32A30Y7B	1312498

32 A

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS25A40B7	1310249	Ex9CDS25A22B7	1310273
48	Ex9CDS25A40E7	1312446	Ex9CDS25A22E7	1312470
110	Ex9CDS25A40F7	1310241	Ex9CDS25A22F7	1310265
120	Ex9CDS25A40G7	1310243	Ex9CDS25A22G7	1310267
220	Ex9CDS25A40M7	1312440	Ex9CDS25A22M7	1312464
230	Ex9CDS25A40P7	1310245	Ex9CDS25A22P7	1310269
240	Ex9CDS25A40U7	1310247	Ex9CDS25A22U7	1310271
277	Ex9CDS25A40N7	1312448	Ex9CDS25A22N7	1312472
380	Ex9CDS25A40Q7	1312442	Ex9CDS25A22Q7	1312466
440	Ex9CDS25A40R7	1312444	Ex9CDS25A22R7	1312468
480	Ex9CDS25A40T7	1310251	Ex9CDS25A22T7	1310275
600	Ex9CDS25A40Y7	1312438	Ex9CDS25A22Y7	1312462

Specifications	C100	Accessories	C114 to 121	Relay Specifications	D128
Dimensions	C103	Matched Relay:		Relay Trip Curve	D130
Wiring Diagram	C111	Ex9RD25 (25~32 A).....	D126	Relay Dimensions	D131
Mounting Position	C113	Ex9RD36 (32 A).....	D126	Relay Accessories	D133

IEC Contactors

Ex9CDS 40 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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C

40 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		25 A	32 A	40 A	
	Product	Part Number	UL/CSA (A)	General Purpose	40	50	60	
24	Ex9CDS40A30B7C	1310393	Single-Phase (hp)	120 V	2		3	
48	Ex9CDS40A30E7C	1312590		208 V				
110	Ex9CDS40A30F7C	1310385		240 V		5	7.5	
120	Ex9CDS40A30G7C	1310387	Three-Phase (hp)	200 V	7.5	10	15	
220	Ex9CDS40A30M7C	1312584		240 V	10	15	20	
230	Ex9CDS40A30P7C	1310389		460 V	15	20	25	
240	Ex9CDS40A30U7C	1310391	IEC (A)	600 V	AC-3 le	25	32	40
277	Ex9CDS40A30N7C	1312592		AC-1 le	40	50	60	
380	Ex9CDS40A30Q7C	1312586		220/230 V	220/230 V	5.5	7.5	11
440	Ex9CDS40A30R7C	1312588		380/400 V	11	15	18.5	
480	Ex9CDS40A30T7C	1310395	AC-3 (kw)	600/690 V	1310395	15	18.5	30
600	Ex9CDS40A30Y7C	1312582						

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS40A40B7	1310357	Ex9CDS40A22B7	1310381
48	Ex9CDS40A40E7	1312554	Ex9CDS40A22E7	1312578
110	Ex9CDS40A40F7	1310349	Ex9CDS40A22F7	1310373
120	Ex9CDS40A40G7	1310351	Ex9CDS40A22G7	1310375
220	Ex9CDS40A40M7	1312548	Ex9CDS40A22M7	1312572
230	Ex9CDS40A40P7	1310353	Ex9CDS40A22P7	1310377
240	Ex9CDS40A40U7	1310355	Ex9CDS40A22U7	1310379
277	Ex9CDS40A40N7	1312556	Ex9CDS40A22N7	1312580
380	Ex9CDS40A40Q7	1312550	Ex9CDS40A22Q7	1312574
440	Ex9CDS40A40R7	1312552	Ex9CDS40A22R7	1312576
480	Ex9CDS40A40T7	1310359	Ex9CDS40A22T7	1310383
600	Ex9CDS40A40Y7	1312546	Ex9CDS40A22Y7	1312570

Specifications	C100	Accessories.....	C114 to 121	Relay Dimensions	D132
Dimensions.....	C103	Matched Relay: Ex9RD93	D127	Relay Accessories.....	D133
Wiring Diagram.....	C111	Relay Specifications.....	D129		
Mounting Position.....	C113	Relay Trip Curve	D130		

IEC Contactors

Ex9CDS 50~65 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz
- Ratings page C83



Certifications
IEC/EN 60947-4-1
CE cULus LISTED

50 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact			3 Poles 3NO+1NO/1NC • Auxiliary Contact		
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDS50A30B7C	1310453	Ex9CDS65A30B7C	1310513		
48	Ex9CDS50A30E7C	1312650	Ex9CDS65A30E7C	1312710		
110	Ex9CDS50A30F7C	1310445	Ex9CDS65A30F7C	1310505		
120	Ex9CDS50A30G7C	1310447	Ex9CDS65A30G7C	1310507		
220	Ex9CDS50A30M7C	1312644	Ex9CDS65A30M7C	1312704		
230	Ex9CDS50A30P7C	1310449	Ex9CDS65A30P7C	1310509		
240	Ex9CDS50A30U7C	1310451	Ex9CDS65A30U7C	1310511		
277	Ex9CDS50A30N7C	1312652	Ex9CDS65A30N7C	1312712		
380	Ex9CDS50A30Q7C	1312646	Ex9CDS65A30Q7C	1312706		
440	Ex9CDS50A30R7C	1312648	Ex9CDS65A30R7C	1312708		
480	Ex9CDS50A30T7C	1310455	Ex9CDS65A30T7C	1310515		
600	Ex9CDS50A30Y7C	1312642	Ex9CDS65A30Y7C	1312702		

65 A

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDS50A40B7	1310417	Ex9CDS50A22B7	1310441	Ex9CDS65A40B7	1310477	Ex9CDS65A22B7	1310501
48	Ex9CDS50A40E7	1312614	Ex9CDS50A22E7	1312638	Ex9CDS65A40E7	1312674	Ex9CDS65A22E7	1312698
110	Ex9CDS50A40F7	1310409	Ex9CDS50A22F7	1310433	Ex9CDS65A40F7	1310469	Ex9CDS65A22F7	1310493
120	Ex9CDS50A40G7	1310411	Ex9CDS50A22G7	1310435	Ex9CDS65A40G7	1310471	Ex9CDS65A22G7	1310495
220	Ex9CDS50A40M7	1312608	Ex9CDS50A22M7	1312632	Ex9CDS65A40M7	1312668	Ex9CDS65A22M7	1312692
230	Ex9CDS50A40P7	1310413	Ex9CDS50A22P7	1310437	Ex9CDS65A40P7	1310473	Ex9CDS65A22P7	1310497
240	Ex9CDS50A40U7	1310415	Ex9CDS50A22U7	1310439	Ex9CDS65A40U7	1310475	Ex9CDS65A22U7	1310499
277	Ex9CDS50A40N7	1312616	Ex9CDS50A22N7	1312640	Ex9CDS65A40N7	1312676	Ex9CDS65A22N7	1312700
380	Ex9CDS50A40Q7	1312610	Ex9CDS50A22Q7	1312634	Ex9CDS65A40Q7	1312670	Ex9CDS65A22Q7	1312694
440	Ex9CDS50A40R7	1312612	Ex9CDS50A22R7	1312636	Ex9CDS65A40R7	1312672	Ex9CDS65A22R7	1312696
480	Ex9CDS50A40T7	1310419	Ex9CDS50A22T7	1310443	Ex9CDS65A40T7	1310479	Ex9CDS65A22T7	1310503
600	Ex9CDS50A40Y7	1312606	Ex9CDS50A22Y7	1312630	Ex9CDS65A40Y7	1312666	Ex9CDS65A22Y7	1312690

Specifications	C100	Accessories	C114 to 121	Relay Dimensions	D132
Dimensions	C103	Matched Relay: Ex9RD93	D127	Relay Accessories	D133
Wiring Diagram	C111	Relay Specifications	D129		
Mounting Position	C113	Relay Trip Curve	D130		

IEC Contactors

Ex9CDS 80 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications	
IEC/EN 60947-4-1	
CE	cULus LISTED

C

80 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		50 A	65 A	80 A
	Product	Part Number	UL/CSA (A)	General Purpose	80	95	
24	Ex9CDS80A30B7C	1310573	Single-Phase (hp)	120 V	5		7.5
48	Ex9CDS80A30E7C	1312770		208 V		-	
110	Ex9CDS80A30F7C	1310565		240 V	10	15	20
120	Ex9CDS80A30G7C	1310567		200 V	15	20	25
220	Ex9CDS80A30M7C	1312764		240 V	20	25	30
230	Ex9CDS80A30P7C	1310569		460 V	30		40
240	Ex9CDS80A30U7C	1310571	Three-Phase (hp)	600 V			
277	Ex9CDS80A30N7C	1312772		AC-3 le	50	65	80
380	Ex9CDS80A30Q7C	1312766		AC-1 le	80		95
440	Ex9CDS80A30R7C	1312768		220/230 V	15	18.5	22
480	Ex9CDS80A30T7C	1310575		380/400 V	22	30	37
600	Ex9CDS80A30Y7C	1312762		600/690 V	37		45

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS80A40B7	1310537	Ex9CDS80A22B7	1310561
48	Ex9CDS80A40E7	1312734	Ex9CDS80A22E7	1312758
110	Ex9CDS80A40F7	1310529	Ex9CDS80A22F7	1310553
120	Ex9CDS80A40G7	1310531	Ex9CDS80A22G7	1310555
220	Ex9CDS80A40M7	1312728	Ex9CDS80A22M7	1312752
230	Ex9CDS80A40P7	1310533	Ex9CDS80A22P7	1310557
240	Ex9CDS80A40U7	1310535	Ex9CDS80A22U7	1310559
277	Ex9CDS80A40N7	1312736	Ex9CDS80A22N7	1312760
380	Ex9CDS80A40Q7	1312730	Ex9CDS80A22Q7	1312754
440	Ex9CDS80A40R7	1312732	Ex9CDS80A22R7	1312756
480	Ex9CDS80A40T7	1310539	Ex9CDS80A22T7	1310563
600	Ex9CDS80A40Y7	1312726	Ex9CDS80A22Y7	1312750

Specifications	C100	Accessories.....	C114 to 121	Relay Dimensions	D132
Dimensions.....	C103	Matched Relay: Ex9RD93	D127	Relay Accessories.....	D133
Wiring Diagram.....	C111	Relay Specifications.....	D129		
Mounting Position.....	C113	Relay Trip Curve	D130		

IEC Contactors

Ex9CDS 95 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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95 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		95 A
	Product	Part Number	UL/CSA (A)	General Purpose	
24	Ex9CDS95A30B7C	1310633		95	
48	Ex9CDS95A30E7C	1312830	120 V	7.5	
110	Ex9CDS95A30F7C	1310625	Single-Phase (hp)	208 V	-
120	Ex9CDS95A30G7C	1310627		240 V	20
220	Ex9CDS95A30M7C	1312824		200 V	
230	Ex9CDS95A30P7C	1310629	Three-Phase (hp)	240 V	30
240	Ex9CDS95A30U7C	1310631		460 V	
277	Ex9CDS95A30N7C	1312832		600 V	50
380	Ex9CDS95A30Q7C	1312826	IEC (A)	AC-3 le	95
440	Ex9CDS95A30R7C	1312828		AC-1 le	
480	Ex9CDS95A30T7C	1310635		220/230 V	25
600	Ex9CDS95A30Y7C	1312822	AC-3 (kw)	380/400 V	
				600/690 V	45

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS95A40B7	1310597	Ex9CDS95A22B7	1310621
48	Ex9CDS95A40E7	1312794	Ex9CDS95A22E7	1312818
110	Ex9CDS95A40F7	1310589	Ex9CDS95A22F7	1310613
120	Ex9CDS95A40G7	1310591	Ex9CDS95A22G7	1310615
220	Ex9CDS95A40M7	1312788	Ex9CDS95A22M7	1312812
230	Ex9CDS95A40P7	1310593	Ex9CDS95A22P7	1310617
240	Ex9CDS95A40U7	1310595	Ex9CDS95A22U7	1310619
277	Ex9CDS95A40N7	1312796	Ex9CDS95A22N7	1312820
380	Ex9CDS95A40Q7	1312790	Ex9CDS95A22Q7	1312814
440	Ex9CDS95A40R7	1312792	Ex9CDS95A22R7	1312816
480	Ex9CDS95A40T7	1310599	Ex9CDS95A22T7	1310623
600	Ex9CDS95A40Y7	1312786	Ex9CDS95A22Y7	1312810

Specifications	C100	Accessories.....	C114 to 121	Relay Dimensions	D132
Dimensions	C103	Matched Relay: Ex9RD93	D127	Relay Accessories	D133
Wiring Diagram	C111	Relay Specifications.....	D129		
Mounting Position.....	C113	Relay Trip Curve	D130		

IEC Contactors

Ex9CDS 115~150 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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115 A**150 A**

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		Ratings		115 A	150 A
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose		
110	Ex9CDS115A30F7	1310649	Ex9CDS150A30F7	1310697			200	
120	Ex9CDS115A30G7	1310651	Ex9CDS150A30G7	1310699			40	50
220	Ex9CDS115A30M7	1312848	Ex9CDS150A30M7	1312896	Three-Phase (hp)	240 V	60	75
230	Ex9CDS115A30P7	1310653	Ex9CDS150A30P7	1310701		460 V		
240	Ex9CDS115A30U7	1310655	Ex9CDS150A30U7	1310703		600 V	75	100
277	Ex9CDS115A30N7	1312856	Ex9CDS150A30N7	1312904			115	150
380	Ex9CDS115A30Q7	1312850	Ex9CDS150A30Q7	1312898			AC-1 le	200
440	Ex9CDS115A30R7	1312852	Ex9CDS150A30R7	1312900	IEC (A)	AC-3 le		
480	Ex9CDS115A30T7	1310659	Ex9CDS150A30T7	1310707		AC-1 le	55	75
600	Ex9CDS115A30Y7	1312846	Ex9CDS150A30Y7	1312894	AC-3 (kw)	380/400 V	80	100
						600/690 V		

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS115A40F7	1310661	Ex9CDS150A40F7	1310709
120	Ex9CDS115A40G7	1310663	Ex9CDS150A40G7	1310711
220	Ex9CDS115A40M7	1312860	Ex9CDS150A40M7	1312908
230	Ex9CDS115A40P7	1310665	Ex9CDS150A40P7	1310713
240	Ex9CDS115A40U7	1310667	Ex9CDS150A40U7	1310715
277	Ex9CDS115A40N7	1312868	Ex9CDS150A40N7	1312916
380	Ex9CDS115A40Q7	1312862	Ex9CDS150A40Q7	1312910
440	Ex9CDS115A40R7	1312864	Ex9CDS150A40R7	1312912
480	Ex9CDS115A40T7	1310671	Ex9CDS150A40T7	1310719
600	Ex9CDS115A40Y7	1312858	Ex9CDS150A40Y7	1312906

Specifications	C101	Accessories.....	C114 to 121	Relay Dimensions	D132
Dimensions.....	C104 to 105	Matched Relay: Ex9RD200.....	D127	Relay Accessories.....	D133
Wiring Diagram.....	C111	Relay Specifications.....	D129		
Mounting Position.....	C113	Relay Trip Curve	D130		

IEC Contactors

Ex9CDS 185~225 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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185 A**225 A**

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		Ratings	185 A	225 A
	Product	Part Number	Product	Part Number			
110	Ex9CDS185A30F7	1310745	Ex9CDS225A30F7	1310793	UL/CSA (A)	General Purpose	275
120	Ex9CDS185A30G7	1310747	Ex9CDS225A30G7	1310795	Three-Phase (hp)	200 V	60
220	Ex9CDS185A30M7	1312944	Ex9CDS225A30M7	1312992		240 V	75
230	Ex9CDS185A30P7	1310749	Ex9CDS225A30P7	1310797		460 V	100
240	Ex9CDS185A30U7	1310751	Ex9CDS225A30U7	1310799		600 V	125
277	Ex9CDS185A30N7	1312952	Ex9CDS225A30N7	1313000	IEC (A)	AC-3 le	185
380	Ex9CDS185A30Q7	1312946	Ex9CDS225A30Q7	1312994		AC-1 le	225
440	Ex9CDS185A30R7	1312948	Ex9CDS225A30R7	1312996	AC-3 (kw)	275	
480	Ex9CDS185A30T7	1310755	Ex9CDS225A30T7	1310803		380/400 V	90
600	Ex9CDS185A30Y7	1312942	Ex9CDS225A30Y7	1312990	AC-3 (kw)	600/690 V	110
							129

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS185A40F7	1310757	Ex9CDS225A40F7	1310805
120	Ex9CDS185A40G7	1310759	Ex9CDS225A40G7	1310807
220	Ex9CDS185A40M7	1312956	Ex9CDS225A40M7	1313004
230	Ex9CDS185A40P7	1310761	Ex9CDS225A40P7	1310809
240	Ex9CDS185A40U7	1310763	Ex9CDS225A40U7	1310811
277	Ex9CDS185A40N7	1312964	Ex9CDS225A40N7	1313012
380	Ex9CDS185A40Q7	1312958	Ex9CDS225A40Q7	1313006
440	Ex9CDS185A40R7	1312960	Ex9CDS225A40R7	1313008
480	Ex9CDS185A40T7	1310767	Ex9CDS225A40T7	1310815
600	Ex9CDS185A40Y7	1312954	Ex9CDS225A40Y7	1313002

Specifications C101
 Dimensions C105 to 106
 Wiring Diagram C111
 Mounting Position C113

Accessories C114 to 121
Matched Relay:
Ex9RD200 D127
Ex9RD630 D127

Relay Specifications D129
 Relay Trip Curve D130
 Relay Dimensions D132
 Relay Accessories D133

IEC Contactors

Ex9CDS 265~330 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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265 A**330 A**

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		Ratings		265 A	330 A
	Product	Part Number	Product	Part Number	UL/CSA (A)	General Purpose		
110	Ex9CDS265A30F7	1310841	Ex9CDS330A30F7	1310889			315	380
120	Ex9CDS265A30G7	1310843	Ex9CDS330A30G7	1310891			200 V	125
220	Ex9CDS265A30M7	1313040	Ex9CDS330A30M7	1313088	Three-Phase (hp)		100	150
230	Ex9CDS265A30P7	1310845	Ex9CDS330A30P7	1310893			460 V	200
240	Ex9CDS265A30U7	1310847	Ex9CDS330A30U7	1310895			600 V	
277	Ex9CDS265A30N7	1313048	Ex9CDS330A30N7	1313096			AC-3 le	330
380	Ex9CDS265A30Q7	1313042	Ex9CDS330A30Q7	1313090			AC-1 le	380
440	Ex9CDS265A30R7	1313044	-		IEC (A)		380/400 V	160
480	Ex9CDS265A30T7	1310851	-				600/690 V	220
600	Ex9CDS265A30Y7	1313038	-				132	

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS265A40F7	1310853	Ex9CDS330A40F7	1310901
120	Ex9CDS265A40G7	1310855	Ex9CDS330A40G7	1310903
220	Ex9CDS265A40M7	1313052	Ex9CDS330A40M7	1313100
230	Ex9CDS265A40P7	1310857	Ex9CDS330A40P7	1310905
240	Ex9CDS265A40U7	1310859	Ex9CDS330A40U7	1310907
277	Ex9CDS265A40N7	1313060	Ex9CDS330A40N7	1313108
380	Ex9CDS265A40Q7	1313054	Ex9CDS330A40Q7	1313102
440	Ex9CDS265A40R7	1313056	-	
480	Ex9CDS265A40T7	1310863	-	
600	Ex9CDS265A40Y7	1313050	-	

Specifications C101
 Dimensions C106 to 107
 Wiring Diagram C111
 Mounting Position C113

Accessories C114 to 121
Matched Relay: Ex9RD630 D127
 Relay Specifications D129
 Relay Trip Curve D130

Relay Dimensions D132
 Relay Accessories D133

IEC Contactors

Ex9CDS 400~500 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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400 A

500 A

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)		Ratings	400 A	500 A	
	Product	Part Number	Product	Part Number				
110	Ex9CDS400A30F7	1310937	Ex9CDS500A30F7	1310985	UL/CSA (A)	General Purpose	450	630
120	Ex9CDS400A30G7	1310939	Ex9CDS500A30G7	1310987		200 V	150	200
220	Ex9CDS400A30M7	1313136	Ex9CDS500A30M7	1313184	Three-Phase (hp)	240 V	200	250
230	Ex9CDS400A30P7	1310941	Ex9CDS500A30P7	1310989		460 V	250	
240	Ex9CDS400A30U7	1310943	Ex9CDS500A30U7	1310991		600 V	300	350
277	Ex9CDS400A30N7	1313144	Ex9CDS500A30N7	1313192		AC-3 le	400	500
380	Ex9CDS400A30Q7	1313138	Ex9CDS500A30Q7	1313186		AC-1 le	450	630

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
110	Ex9CDS400A40F7	1310949
120	Ex9CDS400A40G7	1310951
220	Ex9CDS400A40M7	1313148
230	Ex9CDS400A40P7	1310953
240	Ex9CDS400A40U7	1310955
277	Ex9CDS400A40N7	1313156
380	Ex9CDS400A40Q7	1313150

Specifications C101
Dimensions C108
Wiring Diagram C111
Mounting Position C113

Accessories C114 to 121
Matched Relay: Ex9RD630 D127
Relay Specifications D129
Relay Trip Curve D130

Relay Dimensions D132
Relay Accessories D133

IEC Contactors

Ex9CDS 630 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
CE
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630 A

Coil Voltage (Vac)	3 Poles (3NO)		Ratings	630 A
	Product	Part Number		
110	Ex9CDS630A30F7	1311009	UL/CSA (A) Three-Phase (hp)	General Purpose
120	Ex9CDS630A30G7	1311011		200 V
220	Ex9CDS630A30M7	1313208		240 V
230	Ex9CDS630A30P7	1311013		350
240	Ex9CDS630A30U7	1311015		460 V
277	Ex9CDS630A30N7	1313216		600 V
380	Ex9CDS630A30Q7	1313210		500
Coil Voltage (Vac)	4 Poles (4NO)		IEC (A)	AC-3 le
	Product	Part Number		AC-1 le
110	Ex9CDS630A40F7	1311021	AC-3 (kw)	630
120	Ex9CDS630A40G7	1311023		800
220	Ex9CDS630A40M7	1313220	380/400 V	335
230	Ex9CDS630A40P7	1311025		450
240	Ex9CDS630A40U7	1311027	600/690 V	
277	Ex9CDS630A40N7	1313228		
380	Ex9CDS630A40Q7	1313222		

Specifications C101
 Dimensions C109
 Wiring Diagram C111
 Mounting Position C113

Accessories C114 to 121
Matched Relay: Ex9RD630 D127
 Relay Specifications D129
 Relay Trip Curve D130

Relay Dimensions D132
 Relay Accessories D133

IEC Contactors

Ex9CMR 6~9 A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60 Hz
- Ratings page C91



Certifications
IEC/EN 60947-4-1

6 A

Coil Voltage (Vac)	3 Poles		3 Poles		3 Poles		3 Poles	
	3NO+1NO • Auxiliary Contact	Product	Part Number	3NO+1NC • Auxiliary Contact	Product	Part Number	3NO+1NO • Auxiliary Contact	Product
24	Ex9CMR06A30B7A	1311149	Ex9CMR06A30B7B	1311125	Ex9CMR09A30B7A	1311245	Ex9CMR09A30B7B	1311221
48	Ex9CMR06A30E7A	1313346	Ex9CMR06A30E7B	1313322	Ex9CMR09A30E7A	1313442	Ex9CMR09A30E7B	1313418
110	Ex9CMR06A30F7A	1311141	Ex9CMR06A30F7B	1311117	Ex9CMR09A30F7A	1311237	Ex9CMR09A30F7B	1311213
120	Ex9CMR06A30G7A	1311143	Ex9CMR06A30G7B	1311119	Ex9CMR09A30G7A	1311239	Ex9CMR09A30G7B	1311215
220	Ex9CMR06A30M7A	1313340	Ex9CMR06A30M7B	1313316	Ex9CMR09A30M7A	1313436	Ex9CMR09A30M7B	1313412
230	Ex9CMR06A30P7A	1311145	Ex9CMR06A30P7B	1311121	Ex9CMR09A30P7A	1311241	Ex9CMR09A30P7B	1311217
240	Ex9CMR06A30U7A	1311147	Ex9CMR06A30U7B	1311123	Ex9CMR09A30U7A	1311243	Ex9CMR09A30U7B	1311219
277	Ex9CMR06A30N7A	1313348	Ex9CMR06A30N7B	1313324	Ex9CMR09A30N7A	1313444	Ex9CMR09A30N7B	1313420
380	Ex9CMR06A30Q7A	1313342	Ex9CMR06A30Q7B	1313318	Ex9CMR09A30Q7A	1313438	Ex9CMR09A30Q7B	1313414
440	Ex9CMR06A30R7A	1313344	Ex9CMR06A30R7B	1313320	Ex9CMR09A30R7A	1313440	Ex9CMR09A30R7B	1313416
480	Ex9CMR06A30T7A	1311151	Ex9CMR06A30T7B	1311127	Ex9CMR09A30T7A	1311247	Ex9CMR09A30T7B	1311223
600	Ex9CMR06A30Y7A	1313338	Ex9CMR06A30Y7B	1313314	Ex9CMR09A30Y7A	1313434	Ex9CMR09A30Y7B	1313410

9 A

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)		4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CMR06A40B7	1311077	Ex9CMR06A22B7	1311101	Ex9CMR09A40B7	1311173	Ex9CMR09A22B7	1311197
48	Ex9CMR06A40E7	1313274	Ex9CMR06A22E7	1313298	Ex9CMR09A40E7	1313370	Ex9CMR09A22E7	1313394
110	Ex9CMR06A40F7	1311069	Ex9CMR06A22F7	1311093	Ex9CMR09A40F7	1311165	Ex9CMR09A22F7	1311189
120	Ex9CMR06A40G7	1311071	Ex9CMR06A22G7	1311095	Ex9CMR09A40G7	1311167	Ex9CMR09A22G7	1311191
220	Ex9CMR06A40M7	1313268	Ex9CMR06A22M7	1313292	Ex9CMR09A40M7	1313364	Ex9CMR09A22M7	1313388
230	Ex9CMR06A40P7	1311073	Ex9CMR06A22P7	1311097	Ex9CMR09A40P7	1311169	Ex9CMR09A22P7	1311193
240	Ex9CMR06A40U7	1311075	Ex9CMR06A22U7	1311099	Ex9CMR09A40U7	1311171	Ex9CMR09A22U7	1311195
277	Ex9CMR06A40N7	1313276	Ex9CMR06A22N7	1313300	Ex9CMR09A40N7	1313372	Ex9CMR09A22N7	1313396
380	Ex9CMR06A40Q7	1313270	Ex9CMR06A22Q7	1313294	Ex9CMR09A40Q7	1313366	Ex9CMR09A22Q7	1313390
440	Ex9CMR06A40R7	1313272	Ex9CMR06A22R7	1313296	Ex9CMR09A40R7	1313368	Ex9CMR09A22R7	1313392
480	Ex9CMR06A40T7	1311079	Ex9CMR06A22T7	1311103	Ex9CMR09A40T7	1311175	Ex9CMR09A22T7	1311199
600	Ex9CMR06A40Y7	1313266	Ex9CMR06A22Y7	1313290	Ex9CMR09A40Y7	1313362	Ex9CMR09A22Y7	1313386

Specifications C99
Dimensions C102

Wiring Diagram C112
Mounting Position C113

Accessories C114 to 121

IEC Contactors

Ex9CMR 12 A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60 Hz



Certifications
IEC/EN 60947-4-1
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12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		Ratings	6 A	9 A	12 A
	Product	Part Number	Product	Part Number				
24	Ex9CMR12A30B7A	1311341	Ex9CMR12A30B7B	1311317			20	
48	Ex9CMR12A30E7A	1313538	Ex9CMR12A30E7B	1313514		0.3	0.5	0.75
110	Ex9CMR12A30F7A	1311333	Ex9CMR12A30F7B	1311309		0.75	1.5	2
120	Ex9CMR12A30G7A	1311335	Ex9CMR12A30G7B	1311311				
220	Ex9CMR12A30M7A	1313532	Ex9CMR12A30M7B	1313508		200/208 V	1.5	3
230	Ex9CMR12A30P7A	1311337	Ex9CMR12A30P7B	1311313		230/240 V		
240	Ex9CMR12A30U7A	1311339	Ex9CMR12A30U7B	1311315		460/480 V		
277	Ex9CMR12A30N7A	1313540	Ex9CMR12A30N7B	1313516		575/600 V	3	7.5
380	Ex9CMR12A30Q7A	1313534	Ex9CMR12A30Q7B	1313510			5	10
440	Ex9CMR12A30R7A	1313536	Ex9CMR12A30R7B	1313512		AC-3 le	6	12
480	Ex9CMR12A30T7A	1311343	Ex9CMR12A30T7B	1311319		AC-1 le		
600	Ex9CMR12A30Y7A	1313530	Ex9CMR12A30Y7B	1313506		220/230/240 V	2.2	3
						380/400 V	2.2	5.5
						415 V	4	
						600/690 V	3	4

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMR12A40B7	1311269	Ex9CMR12A22B7	1311293
48	Ex9CMR12A40E7	1313466	Ex9CMR12A22E7	1313490
110	Ex9CMR12A40F7	1311261	Ex9CMR12A22F7	1311285
120	Ex9CMR12A40G7	1311263	Ex9CMR12A22G7	1311287
220	Ex9CMR12A40M7	1313460	Ex9CMR12A22M7	1313484
230	Ex9CMR12A40P7	1311265	Ex9CMR12A22P7	1311289
240	Ex9CMR12A40U7	1311267	Ex9CMR12A22U7	1311291
277	Ex9CMR12A40N7	1313468	Ex9CMR12A22N7	1313492
380	Ex9CMR12A40Q7	1313462	Ex9CMR12A22Q7	1313486
440	Ex9CMR12A40R7	1313464	Ex9CMR12A22R7	1313488
480	Ex9CMR12A40T7	1311271	Ex9CMR12A22T7	1311295
600	Ex9CMR12A40Y7	1313458	Ex9CMR12A22Y7	1313482

Specifications	C99	Wiring Diagram	C112	Accessories.....	C114 to 121
Dimensions	C102	Mounting Position	C113		

IEC Contactors

Ex9CDR 9~12 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz
- Ratings page C93



Certifications
IEC/EN 60947-4-1

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number						
24	Ex9CDR09A30B7A	1310081	Ex9CDR09A30B7B	1310021	Ex9CDR12A30B7A	1310165	Ex9CDR12A30B7B	1310105
48	Ex9CDR09A30E7A	1312278	Ex9CDR09A30E7B	1312218	Ex9CDR12A30E7A	1312362	Ex9CDR12A30E7B	1312302
110	Ex9CDR09A30F7A	1310073	Ex9CDR09A30F7B	1310013	Ex9CDR12A30F7A	1310157	Ex9CDR12A30F7B	1310097
120	Ex9CDR09A30G7A	1310075	Ex9CDR09A30G7B	1310015	Ex9CDR12A30G7A	1310159	Ex9CDR12A30G7B	1310099
220	Ex9CDR09A30M7A	1312272	Ex9CDR09A30M7B	1312212	Ex9CDR12A30M7A	1312356	Ex9CDR12A30M7B	1312296
230	Ex9CDR09A30P7A	1310077	Ex9CDR09A30P7B	1310017	Ex9CDR12A30P7A	1310161	Ex9CDR12A30P7B	1310101
240	Ex9CDR09A30U7A	1310079	Ex9CDR09A30U7B	1310019	Ex9CDR12A30U7A	1310163	Ex9CDR12A30U7B	1310103
277	Ex9CDR09A30N7A	1312280	Ex9CDR09A30N7B	1312220	Ex9CDR12A30N7A	1312364	Ex9CDR12A30N7B	1312304
380	Ex9CDR09A30Q7A	1312274	Ex9CDR09A30Q7B	1312214	Ex9CDR12A30Q7A	1312358	Ex9CDR12A30Q7B	1312298
440	Ex9CDR09A30R7A	1312276	Ex9CDR09A30R7B	1312216	Ex9CDR12A30R7A	1312360	Ex9CDR12A30R7B	1312300
480	Ex9CDR09A30T7A	1310083	Ex9CDR09A30T7B	1310023	Ex9CDR12A30T7A	1310167	Ex9CDR12A30T7B	1310107
600	Ex9CDR09A30Y7A	1312270	Ex9CDR09A30Y7B	1312210	Ex9CDR12A30Y7A	1312354	Ex9CDR12A30Y7B	1312294

12 A

Coil Voltage (Vac)	4 Poles (4NO)			4 Poles (4NO)		
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CDR09A40B7	1310045	Ex9CDR12A40B7	1310129		
48	Ex9CDR09A40E7	1312242	Ex9CDR12A40E7	1312326		
110	Ex9CDR09A40F7	1310037	Ex9CDR12A40F7	1310121		
120	Ex9CDR09A40G7	1310039	Ex9CDR12A40G7	1310123		
220	Ex9CDR09A40M7	1312236	Ex9CDR12A40M7	1312320		
230	Ex9CDR09A40P7	1310041	Ex9CDR12A40P7	1310125		
240	Ex9CDR09A40U7	1310043	Ex9CDR12A40U7	1310127		
277	Ex9CDR09A40N7	1312244	Ex9CDR12A40N7	1312328		
380	Ex9CDR09A40Q7	1312238	Ex9CDR12A40Q7	1312322		
440	Ex9CDR09A40R7	1312240	Ex9CDR12A40R7	1312324		
480	Ex9CDR09A40T7	1310047	Ex9CDR12A40T7	1310131		
600	Ex9CDR09A40Y7	1312234	Ex9CDR12A40Y7	1312318		

Specifications C100
Dimensions C110

Wiring Diagram C112
Mounting Position C113

Accessories C114 to 121

IEC Contactors

Ex9CDR 18 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
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18 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		UL/CSA (A)	General Purpose	Ratings		
	Product	Part Number	Product	Part Number			9 A	12 A	18 A
24	Ex9CDR18A30B7A	1310213	Ex9CDR18A30B7B	1310189	Single-Phase (hp)	120 V	0.5	0.75	1
48	Ex9CDR18A30E7A	1312410	Ex9CDR18A30E7B	1312386		208 V	1	2	3
110	Ex9CDR18A30F7A	1310205	Ex9CDR18A30F7B	1310181		240 V			
120	Ex9CDR18A30G7A	1310207	Ex9CDR18A30G7B	1310183		200 V	3	5	7.5
220	Ex9CDR18A30M7A	1312404	Ex9CDR18A30M7B	1312380	Three-Phase (hp)	240 V			
230	Ex9CDR18A30P7A	1310209	Ex9CDR18A30P7B	1310185		460 V	5	7.5	10
240	Ex9CDR18A30U7A	1310211	Ex9CDR18A30U7B	1310187		600 V			
277	Ex9CDR18A30N7A	1312412	Ex9CDR18A30N7B	1312388		AC-3 le	9	12	18
380	Ex9CDR18A30Q7A	1312406	Ex9CDR18A30Q7B	1312382	IEC (A)	AC-1 le	20		32
440	Ex9CDR18A30R7A	1312408	Ex9CDR18A30R7B	1312384		220/230 V	2.2	3	4
480	Ex9CDR18A30T7A	1310215	Ex9CDR18A30T7B	1310191	AC-3 (kw)	380/400 V	4	5.5	7.5
600	Ex9CDR18A30Y7A	1312402	Ex9CDR18A30Y7B	1312378		600/690 V	5.5	7.5	10

Specifications C100
 Dimensions C110

Wiring Diagram C112
 Mounting Position C113

Accessories C114 to 121

IEC Contactors

Ex9CDR 25~32 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz
- Ratings page C95



Certifications
IEC/EN 60947-4-1



25 A

32 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact		3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number						
24	Ex9CDR25A30B7A	1310297	Ex9CDR25A30B7B	1310237	Ex9CDR32A30B7A	1310345	Ex9CDR32A30B7B	1310321
48	Ex9CDR25A30E7A	1312494	Ex9CDR25A30E7B	1312434	Ex9CDR32A30E7A	1312542	Ex9CDR32A30E7B	1312518
110	Ex9CDR25A30F7A	1310289	Ex9CDR25A30F7B	1310229	Ex9CDR32A30F7A	1310337	Ex9CDR32A30F7B	1310313
120	Ex9CDR25A30G7A	1310291	Ex9CDR25A30G7B	1310231	Ex9CDR32A30G7A	1310339	Ex9CDR32A30G7B	1310315
220	Ex9CDR25A30M7A	1312488	Ex9CDR25A30M7B	1312428	Ex9CDR32A30M7A	1312536	Ex9CDR32A30M7B	1312512
230	Ex9CDR25A30P7A	1310293	Ex9CDR25A30P7B	1310233	Ex9CDR32A30P7A	1310341	Ex9CDR32A30P7B	1310317
240	Ex9CDR25A30U7A	1310295	Ex9CDR25A30U7B	1310235	Ex9CDR32A30U7A	1310343	Ex9CDR32A30U7B	1310319
277	Ex9CDR25A30N7A	1312496	Ex9CDR25A30N7B	1312436	Ex9CDR32A30N7A	1312544	Ex9CDR32A30N7B	1312520
380	Ex9CDR25A30Q7A	1312490	Ex9CDR25A30Q7B	1312430	Ex9CDR32A30Q7A	1312538	Ex9CDR32A30Q7B	1312514
440	Ex9CDR25A30R7A	1312492	Ex9CDR25A30R7B	1312432	Ex9CDR32A30R7A	1312540	Ex9CDR32A30R7B	1312516
480	Ex9CDR25A30T7A	1310299	Ex9CDR25A30T7B	1310239	Ex9CDR32A30T7A	1310347	Ex9CDR32A30T7B	1310323
600	Ex9CDR25A30Y7A	1312486	Ex9CDR25A30Y7B	1312426	Ex9CDR32A30Y7A	1312534	Ex9CDR32A30Y7B	1312510

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR25A40B7	1310261
48	Ex9CDR25A40E7	1312458
110	Ex9CDR25A40F7	1310253
120	Ex9CDR25A40G7	1310255
220	Ex9CDR25A40M7	1312452
230	Ex9CDR25A40P7	1310257
240	Ex9CDR25A40U7	1310259
277	Ex9CDR25A40N7	1312460
380	Ex9CDR25A40Q7	1312454
440	Ex9CDR25A40R7	1312456
480	Ex9CDR25A40T7	1310263
600	Ex9CDR25A40Y7	1312450

Specifications C100
Dimensions C110

Wiring Diagram C112
Mounting Position C113

Accessories C114 to 121

IEC Contactors

Ex9CDR 40 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
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40 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		25 A	32 A	40 A
	Product	Part Number	UL/CSA (A)	General Purpose	40	50	60
24	Ex9CDR40A30B7C	1310405	Single-Phase (hp)	120 V	2	3	
48	Ex9CDR40A30E7C	1312602		208 V			
110	Ex9CDR40A30F7C	1310397		240 V	5	7.5	
120	Ex9CDR40A30G7C	1310399	Three-Phase (hp)	200 V	7.5	10	15
220	Ex9CDR40A30M7C	1312596		240 V	10	15	20
230	Ex9CDR40A30P7C	1310401		460 V	15	20	25
240	Ex9CDR40A30U7C	1310403		600 V			
277	Ex9CDR40A30N7C	1312604	IEC (A)	AC-3 1e	25	32	40
380	Ex9CDR40A30Q7C	1312598		AC-1 1e	40	50	60
440	Ex9CDR40A30R7C	1312600		220/230 V	5.5	7.5	11
480	Ex9CDR40A30T7C	1310407		380/400 V	11	15	18.5
600	Ex9CDR40A30Y7C	1312594	AC-3 (kw)	600/690 V	15	18.5	30

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR40A40B7	1310369
48	Ex9CDR40A40E7	1312566
110	Ex9CDR40A40F7	1310361
120	Ex9CDR40A40G7	1310363
220	Ex9CDR40A40M7	1312560
230	Ex9CDR40A40P7	1310365
240	Ex9CDR40A40U7	1310367
277	Ex9CDR40A40N7	1312568
380	Ex9CDR40A40Q7	1312562
440	Ex9CDR40A40R7	1312564
480	Ex9CDR40A40T7	1310371
600	Ex9CDR40A40Y7	1312558

Specifications C100
 Dimensions C110

Wiring Diagram C112
 Mounting Position C113

Accessories C114 to 121

Note: 40~95 A are not pre-wired in the factory.

IEC Contactors

Ex9CDR 50~65 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz
- Ratings page C97



Certifications
IEC/EN 60947-4-1

50 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR50A30B7C	1310465	Ex9CDR65A30B7C	1310525
48	Ex9CDR50A30E7C	1312662	Ex9CDR65A30E7C	1312722
110	Ex9CDR50A30F7C	1310457	Ex9CDR65A30F7C	1310517
120	Ex9CDR50A30G7C	1310459	Ex9CDR65A30G7C	1310519
220	Ex9CDR50A30M7C	1312656	Ex9CDR65A30M7C	1312716
230	Ex9CDR50A30P7C	1310461	Ex9CDR65A30P7C	1310521
240	Ex9CDR50A30U7C	1310463	Ex9CDR65A30U7C	1310523
277	Ex9CDR50A30N7C	1312664	Ex9CDR65A30N7C	1312724
380	Ex9CDR50A30Q7C	1312658	Ex9CDR65A30Q7C	1312718
440	Ex9CDR50A30R7C	1312660	Ex9CDR65A30R7C	1312720
480	Ex9CDR50A30T7C	1310467	Ex9CDR65A30T7C	1310527
600	Ex9CDR50A30Y7C	1312654	Ex9CDR65A30Y7C	1312714

65 A

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
24	Ex9CDR50A40B7	1310429	Ex9CDR65A40B7	1310489
48	Ex9CDR50A40E7	1312626	Ex9CDR65A40E7	1312686
110	Ex9CDR50A40F7	1310421	Ex9CDR65A40F7	1310481
120	Ex9CDR50A40G7	1310423	Ex9CDR65A40G7	1310483
220	Ex9CDR50A40M7	1312620	Ex9CDR65A40M7	1312680
230	Ex9CDR50A40P7	1310425	Ex9CDR65A40P7	1310485
240	Ex9CDR50A40U7	1310427	Ex9CDR65A40U7	1310487
277	Ex9CDR50A40N7	1312628	Ex9CDR65A40N7	1312688
380	Ex9CDR50A40Q7	1312622	Ex9CDR65A40Q7	1312682
440	Ex9CDR50A40R7	1312624	Ex9CDR65A40R7	1312684
480	Ex9CDR50A40T7	1310431	Ex9CDR65A40T7	1310491
600	Ex9CDR50A40Y7	1312618	Ex9CDR65A40Y7	1312678

Specifications C100
 Dimensions C110

Wiring Diagram C112
 Mounting Position C113

Accessories C114 to 121

Note: 40~95 A are not pre-wired in the factory.

IEC Contactors

Ex9CDR 80 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
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80 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings		50 A	65 A	80 A
	Product	Part Number	UL/CSA (A)	General Purpose	80	95	
24	Ex9CDR80A30B7C	1310585	Single-Phase (hp)	120 V	5		7.5
48	Ex9CDR80A30E7C	1312782		208 V			-
110	Ex9CDR80A30F7C	1310577		240 V	10	15	20
120	Ex9CDR80A30G7C	1310579		200 V	15	20	25
220	Ex9CDR80A30M7C	1312776	Three-Phase (hp)	240 V	20	25	30
230	Ex9CDR80A30P7C	1310581		460 V			
240	Ex9CDR80A30U7C	1310583		600 V	30		40
277	Ex9CDR80A30N7C	1312784	IEC (A)	AC-3 1e	50	65	80
380	Ex9CDR80A30Q7C	1312778		AC-1 1e		80	95
440	Ex9CDR80A30R7C	1312780		220/230 V	15	18.5	22
480	Ex9CDR80A30T7C	1310587		380/400 V	22	30	37
600	Ex9CDR80A30Y7C	1312774	AC-3 (kw)	600/690 V		37	45

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR80A40B7	1310549
48	Ex9CDR80A40E7	1312746
110	Ex9CDR80A40F7	1310541
120	Ex9CDR80A40G7	1310543
220	Ex9CDR80A40M7	1312740
230	Ex9CDR80A40P7	1310545
240	Ex9CDR80A40U7	1310547
277	Ex9CDR80A40N7	1312748
380	Ex9CDR80A40Q7	1312742
440	Ex9CDR80A40R7	1312744
480	Ex9CDR80A40T7	1310551
600	Ex9CDR80A40Y7	1312738

Specifications C100
 Dimensions C110

Wiring Diagram C112
 Mounting Position C113

Accessories C114 to 121

Note: 40~95 A are not pre-wired in the factory.

IEC Contactors

Ex9CDR 95 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications
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95 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact		Ratings	95 A
	Product	Part Number		
24	Ex9CDR95A30B7C	1310645	UL/CSA (A)	General Purpose
48	Ex9CDR95A30E7C	1312842	Single-Phase (hp)	120 V
110	Ex9CDR95A30F7C	1310637		240 V
120	Ex9CDR95A30G7C	1310639	Three-Phase (hp)	200 V
220	Ex9CDR95A30M7C	1312836		240 V
230	Ex9CDR95A30P7C	1310641		460 V
240	Ex9CDR95A30U7C	1310643		600 V
277	Ex9CDR95A30N7C	1312844	IEC (A)	AC-3 le
380	Ex9CDR95A30Q7C	1312838		95
440	Ex9CDR95A30R7C	1312840	AC-1 le	
480	Ex9CDR95A30T7C	1310647		25
600	Ex9CDR95A30Y7C	1312834	AC-3 (kw)	380/400 V
				45
				600/690 V

Coil Voltage Vac	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR95A40B7	1310609
48	Ex9CDR95A40E7	1312806
110	Ex9CDR95A40F7	1310601
120	Ex9CDR95A40G7	1310603
220	Ex9CDR95A40M7	1312800
230	Ex9CDR95A40P7	1310605
240	Ex9CDR95A40U7	1310607
277	Ex9CDR95A40N7	1312808
380	Ex9CDR95A40Q7	1312802
440	Ex9CDR95A40R7	1312804
480	Ex9CDR95A40T7	1310611
600	Ex9CDR95A40Y7	1312798

Specifications C100
 Dimensions C110

Wiring Diagram C112
 Mounting Position C113

Accessories C114 to 121

Note: 40–95 A are not pre-wired in the factory.

IEC Contactors

Ex9CMS/CMR Specifications

Ex9CMS/CMR	06	09	12
Operating Frequency (415 V)	AC-3 AC-4	1,200 operations/h 300 operations/h	
Electrical Life (x10 ³ Operations)	AC-3 AC-4	1,000 200	
Mechanical Life (x10 ⁶ Operations)		10	
Matched Overload Relay Type		Ex9RD11.5	C
Terminal Connection			
Flexible Cable (with Cold-Press Terminal) AWG (mm ²)	Single Cable Dual Cable	16~14 (1~2.50) 16 (1~1.50)	
Stiff Cable AWG (mm ²)	Single Cable Dual Cable	16~14 (1~2.50)	
Screw Size		M3	
Tightening Torque in-lb (N.m)		7 (0.80)	

IEC Contactors

Ex9CDS/CDR Specifications

Ex9CDS - FVNR		09	12	18	25	32	40	50	65	80	95
Frame		Frame 1 (3 & 4 Poles)	Frame 2 (3 Poles)	Frame 3 (3 & 4 Poles)	Frame 4 (3 Poles)		Frame 5 (3 & 4 Poles)		Frame 6 (3 & 4 Poles)		
Rated Insulation Voltage (Vac)						690					
Operating Frequency (Operations/h)	Electrical	AC-3 AC-4		1,200			600				
	Mechanical				300						
					3,600						
Electrical Life (x10 ³ Operations)	AC-3 AC-4		1,000		800		600				
			200			150		100			
Mechanical Life (x10 ⁶ Operations)			10		8			6			
Matched Overload Relay Type		Ex9RD25			Ex9RD36		Ex9RD93				
Ex9CDR - FVR		09	12	18	25	32	40	50	65	80	95
Frame		Frame 1 (3 & 4 Poles)	Frame 2 (3 Poles)	Frame 3 (3 & 4 Poles)	Frame 4 (3 Poles)		Frame 5 (3 & 4 Poles)		Frame 6 (3 & 4 Poles)		
Rated Conventional Heating Current (A) AC-1		20	32	40	50	60	80		95		
le (A)	380/400 V 660/690 V	3.5	5	7.7	8.5	12	18.5	24	28	37	44
AC-4		1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3
Pe (kW)	380/400 V 660/690 V		2.2	3					15	18.5	22
		1.1	1.5	3.7	4	5.5	7.5	11	11	15	18.5
Power of Controlled 3-Phase Cage Motor AC-3 (hp)	200 V 240 V 460 V 600 V			7.5	10		15		20	25	
		3	5	7.5		10	15		20	25	30
					15		20		25	30	
						20			40		50
Terminal Connection	Number of Pieces	09	12	18	25	32	40	50	65	80	95
Flexible Cable with Cold-Pressed Socket AWG (mm ²)	1 2	16~14 (1~2.5)		16~12 (1.5~4)		14~10 (2.5~6)		10~4 (6~25)		8~2 (10~35)	
								12~8 (4~10)		10~6 (6~16)	
Flexible Cable without Cold-Pressed Socket AWG (mm ²)	1 2	16~12 (1~4)		16~10 (1.5~6)	1.5~10 (16~8)	14~8 (2.5~10)		10~4 (6~25)		8~2 (10~35)	
		1~2.5 (16~14)		16~12 (1.5~4)	1.5~6 (16~10)	14~10 (2.5~6)		4~10 (12~8)		10~6 (6~16)	
Inflexible Cable AWG (mm ²)	1 2	16~12 (1~4)		16~10 (1.5~6)		14~8 (2.5~10)		6~25 (10~4)		8~2 (10~35)	
								12~8 (4~10)		10~6 (6~16)	
Screw Size		M3.5			M4		M8			M10	
Tightening Torque in-lb (N.m)		7 (0.80)			10 (1.20)		45 (3.50)			89 (10)	

IEC Contactors

Ex9CDS/CDR Specifications

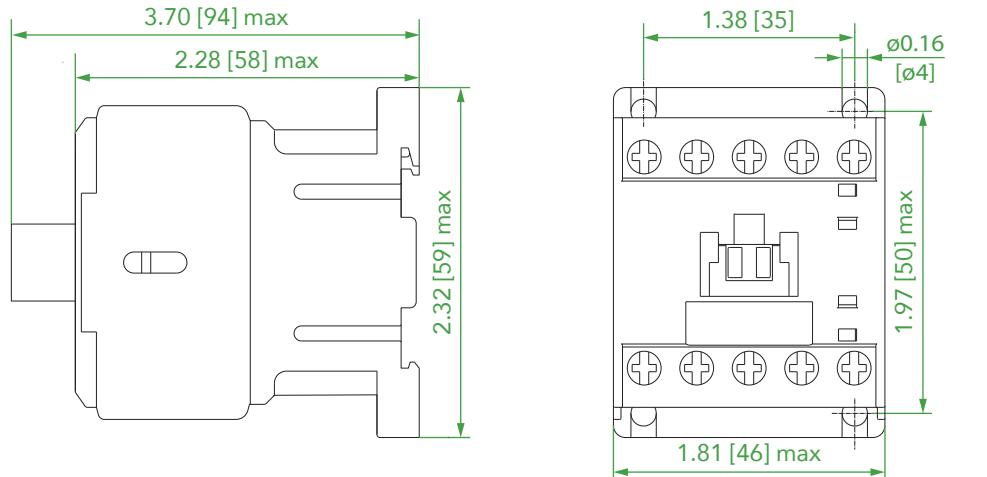
Ex9CDS - FVNR	115	150	185	225	265	330	400	500	630	
Frame	Frame 7 (3 & 4 Poles)	Frame 8 (3 & 4 Poles)	Frame 9 (3 & 4 Poles)	Frame 10 (3 & 4 Poles)	Frame 11 (3 & 4 Poles)	Frame 12 (3 Poles)	Frame 13 (3 & 4 Poles)			
Rated Insulation Voltage (Vac)				1,000						
Operating Frequency (Operations/h)	AC-3 Electrical	1,200			600					
	AC-4			300						
	Mechanical			1,200						
Electrical Life (x10 ³ Operations)	AC-3	1,200	1,000			800				
Mechanical Life (x10 ⁶ Operations)		10			6					
Matched Overload Relay Type		Ex9RD200			EX9RD630					
Ex9CDR - FVR	115	150	185	225	265	330	400	500	630	
Frame	Frame 7 (3 & 4 Poles)	Frame 8 (3 & 4 Poles)	Frame 9 (3 & 4 Poles)	Frame 10 (3 & 4 Poles)	Frame 11 (3 & 4 Poles)	Frame 12 (3 Poles)	Frame 13 (3 & 4 Poles)			
Rated Conventional Heating Current (A) AC-1		200	275	315	380	450	630	800		
AC-4	Ie (A)	380/400 V 660/690 V	115 86	150 108	185 118	225 137	265 170	330 235	400 303	
AC-3	Pe (kW)	380/400 V 660/690 V	55 80	75 100	90 110	110 129	132 160	160 220	200 280	
Power of Controlled 3-Phase Cage Motor AC-3 (hp)		200 V 240 V 460 V 600 V	40 60 75	50 75 100	60 110	75 125	100 150	125 150 200 250	150 200 250 300	
Terminal Connection	Number of Pieces	115	150	185	225	265	330	400	500	630
Cable Cross Section AWG (mm ²)	1	00~000 (70~95)		0000~300 MCM (95~150)	250~350 MCM (120~185)	350~500 MCM (185~240)				
	1 (2)					500 MCM [300 MCM] (240 [150])				
Cu Bus Bar Cross Section in (mm ²)	2						300~350 MCM (150~185)	350~500 MCM (185~240)		
Screw Size		M6	M8		M10		M12			
Tightening Torque in-lb (N.m)		27 (3)	54 (6)		89 (10)		124 (14)			

IEC Contactors

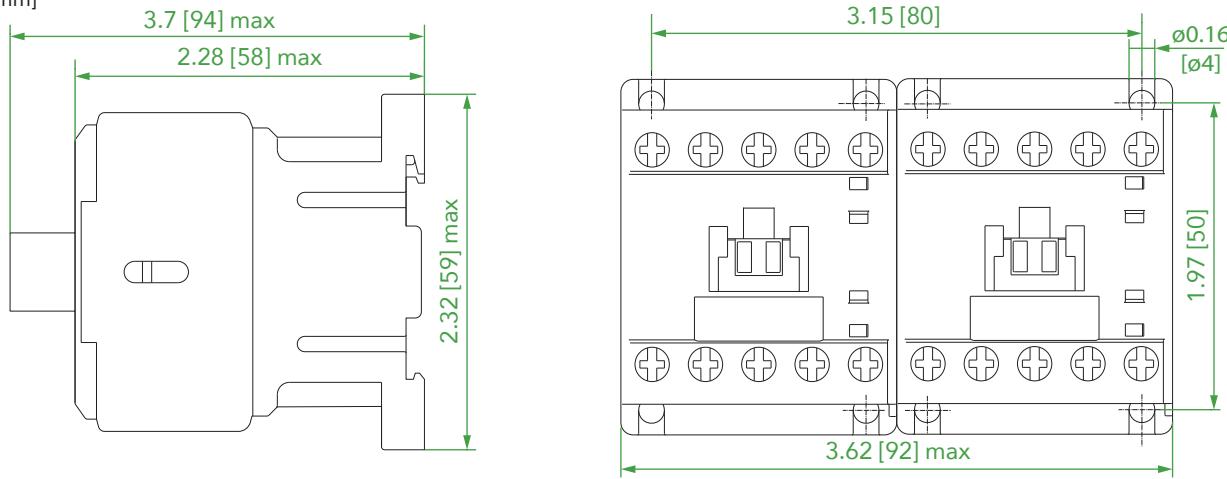
Ex9CMS/CMR Dimensions

Ex9CMS06~12

Unit: in [mm]

**Ex9CMR06~12**

Unit: in [mm]

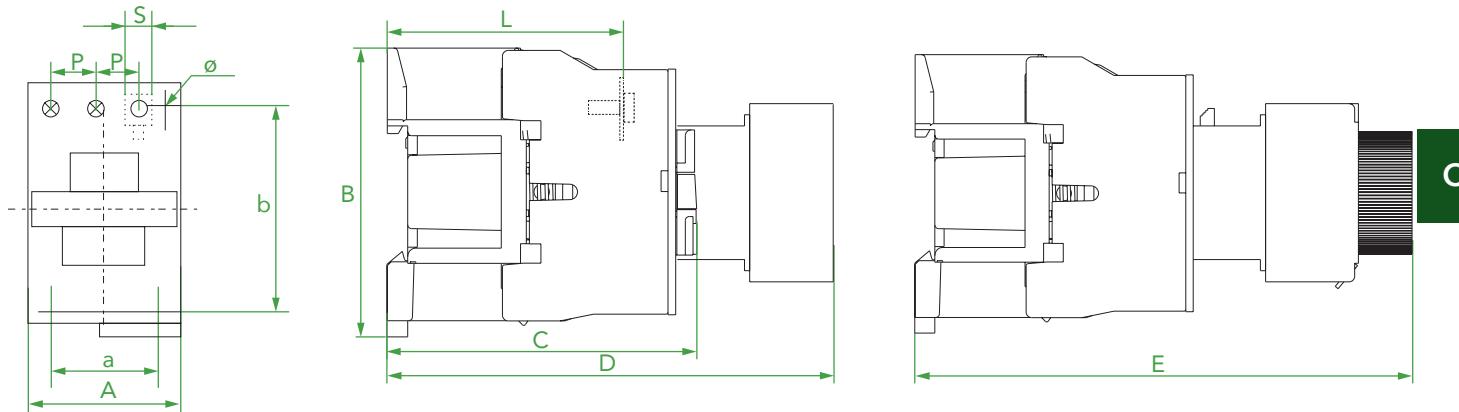


IEC Contactors

Ex9CDS Dimensions

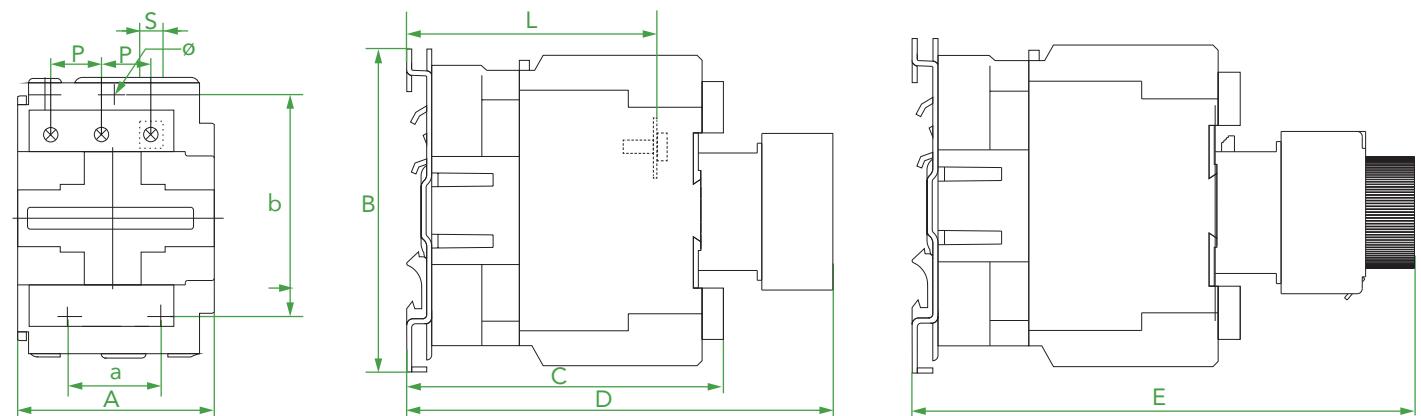
Ex9CDS09~32

Unit: in [mm]



Ex9CDS40~95

Unit: in [mm]



Ex9CDS	A _{max}	B _{max}	C _{max}	D _{max}	E _{max}	a	b	ø	L	P	S
09									2.36 [60]	0.41 [10.5]	0.34 [8.6]
12	1.85 [47]	2.99 [76]	3.38 [86]	4.74 [120.5]	5.53 [140.5]	1.34/1.38 [34/35]	1.97/2.36 [50/60]	0.18 [4.5]	2.40 [61]	0.44 [11.3]	0.41 [10.4]
18									2.76 [70]	0.52 [13.2]	0.46 [11.7]
25	2.25 [57]		3.38 [86]	3.74 [95]	5.25 [133.5]	6.04 [153.5]			2.82 [71.6]	0.57 [14.5]	0.51 [13]
32				3.94 [100]	5.45 [138.5]	6.24 [158.5]					
40~65 11	3.03 [77]			4.56 [116]	6.08 [154.5]	6.87 [174.5]			3.07 [78]	0.79 [20]	0.34 [8.6]
40~65 40	3.30 [84]			5.00 [128]	6.51 [165.5]	7.3 [185.5]					
40~65 22				4.80 [122]	6.31 [160.5]	7.10 [180.5]					
80~95 11	3.42 [87]			5.31 [135]					3.27 [83]	0.93 [23.5]	0.47 [12]
80~95 40	3.78 [96]										
80~95 22											

Note:

- 1) L is the distance between terminals and plate in main circuit.
- 2) P is the distance between two phase in main circuit.
- 3) S is the width of contacting plate: in main circuit.
- 4) Ex9CDS40~95: 11 = 3NO+1NO/1NC, 40 = 4NO, 22 = 2NO/2NC

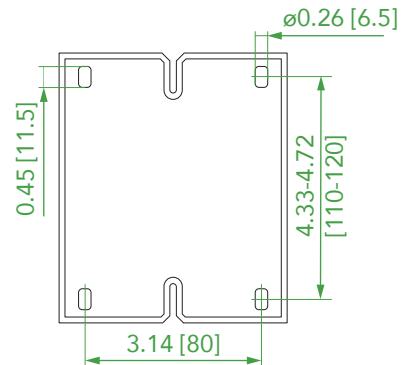
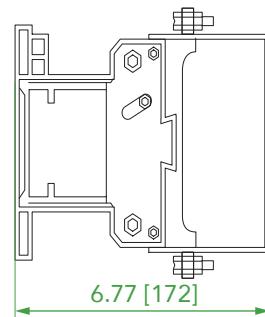
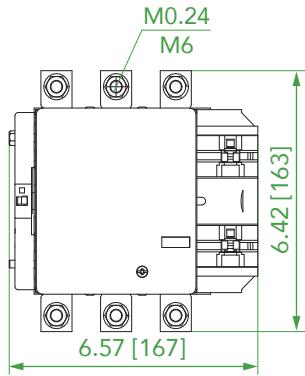
IEC Contactors

Ex9CDS Dimensions

Ex9CDS115

3 Poles

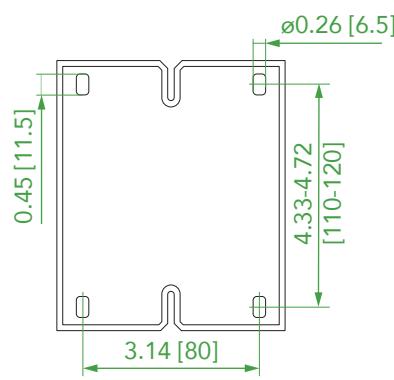
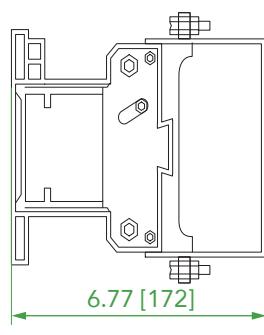
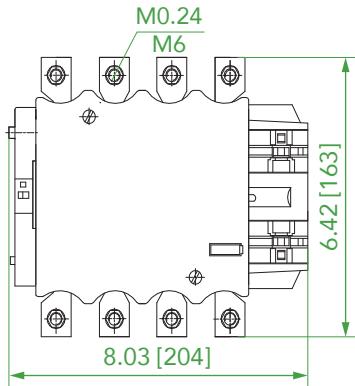
Unit: in [mm]



Ex9CDS115

4 Poles

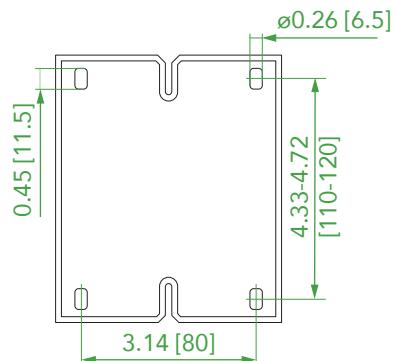
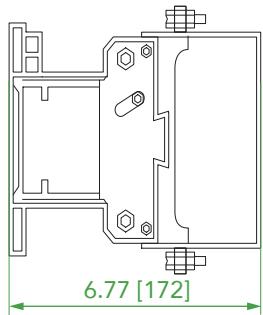
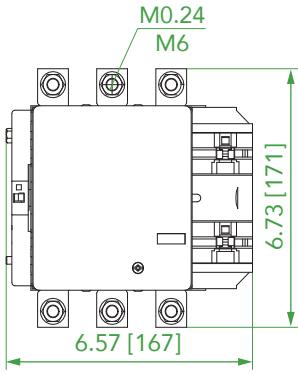
Unit: in [mm]



Ex9CDS150

3 Poles

Unit: in [mm]



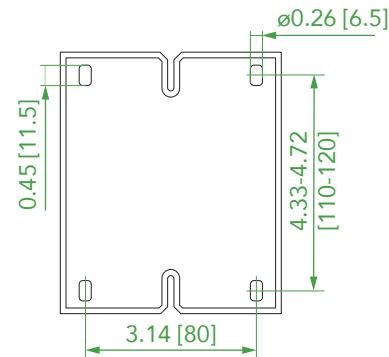
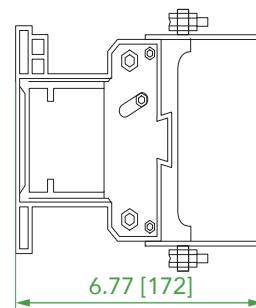
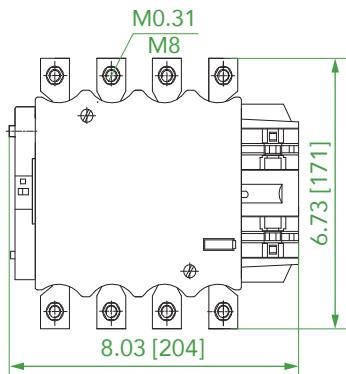
IEC Contactors

Ex9CDS Dimensions

Ex9CDS150

4 Poles

Unit: in [mm]

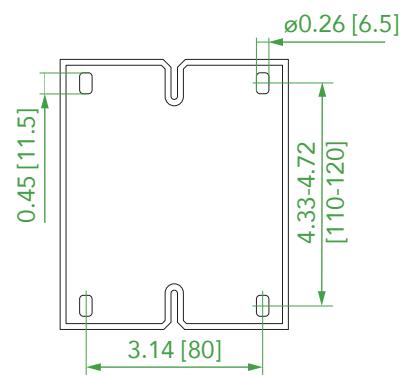
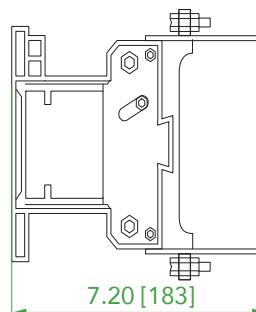
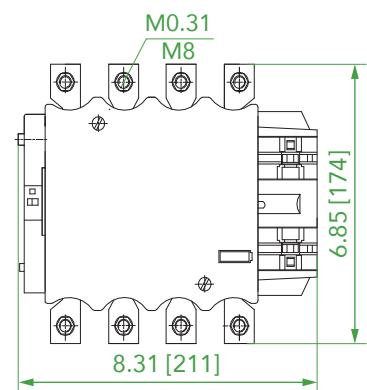
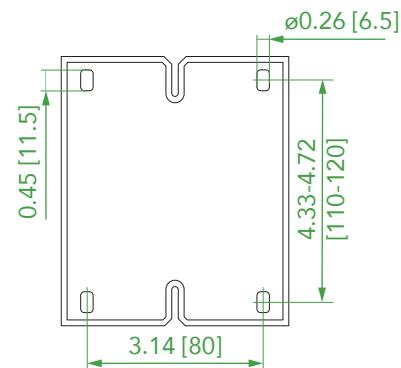
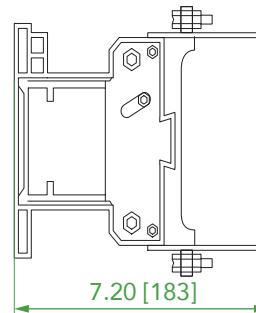
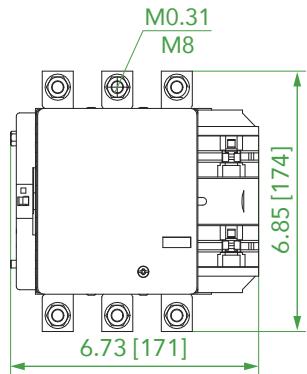


C

Ex9CDS185

3 Poles

Unit: in [mm]



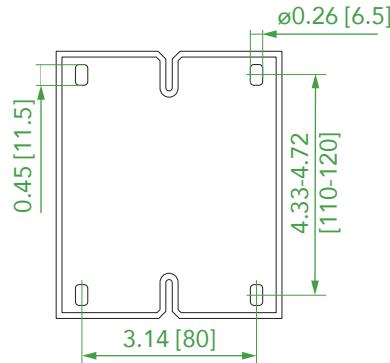
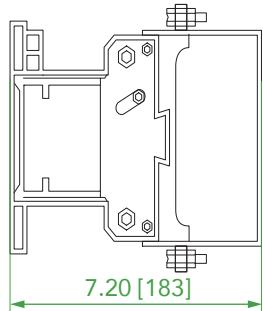
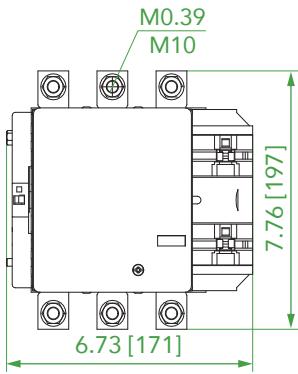
IEC Contactors

Ex9CDS Dimensions

Ex9CDS225

3 Poles

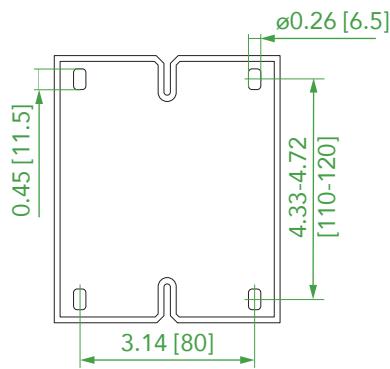
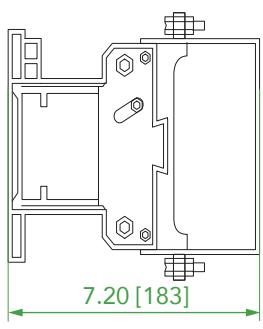
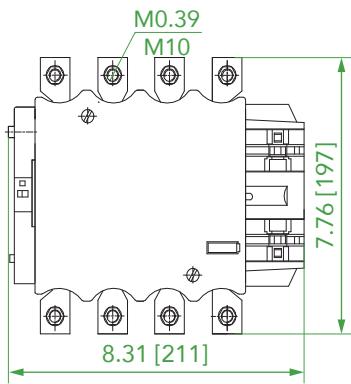
Unit: in [mm]



Ex9CDS225

4 Poles

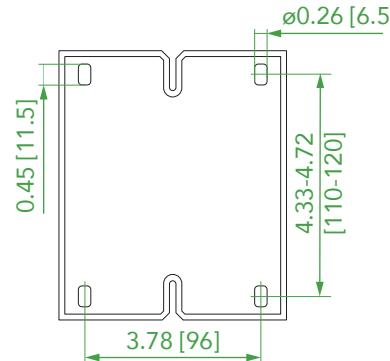
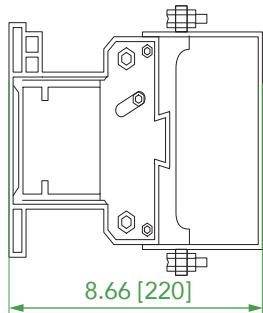
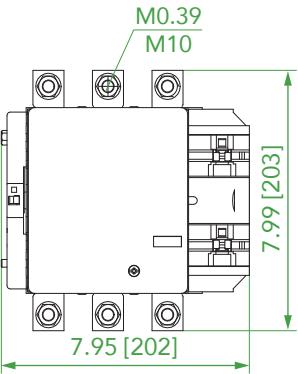
Unit: in [mm]



Ex9CDS265

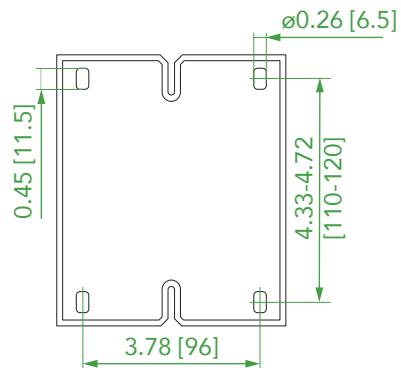
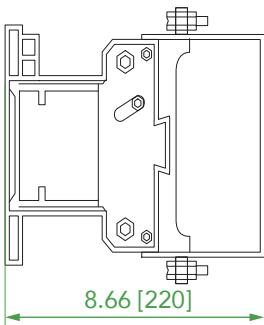
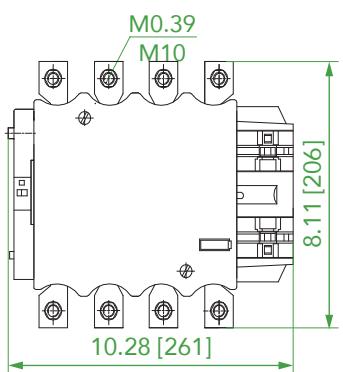
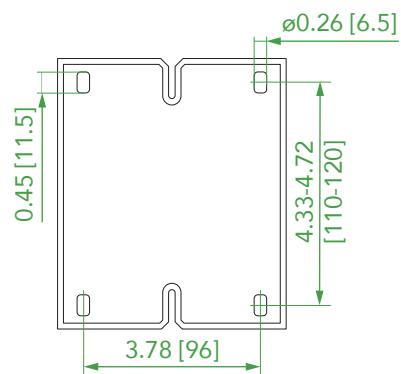
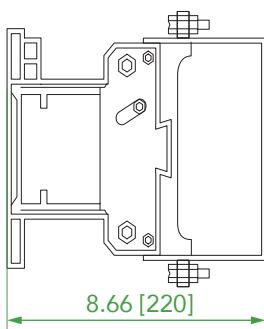
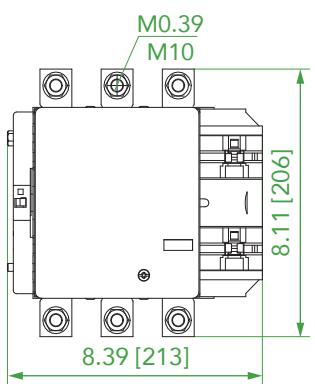
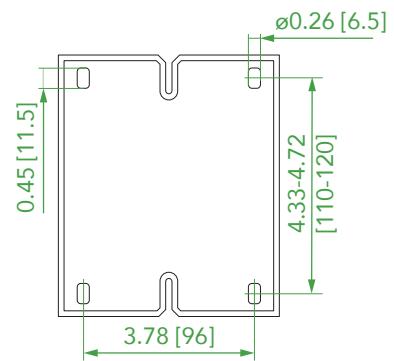
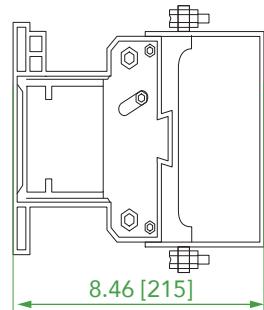
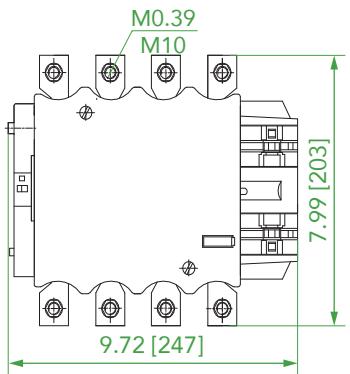
3 Poles

Unit: in [mm]



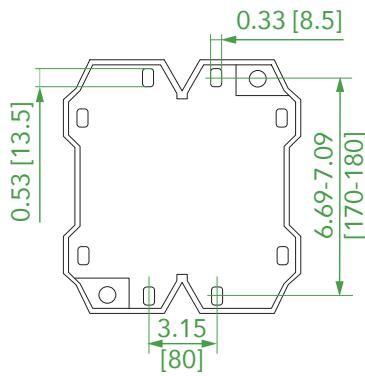
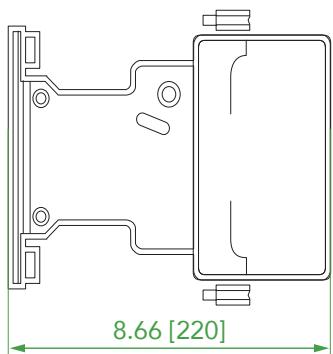
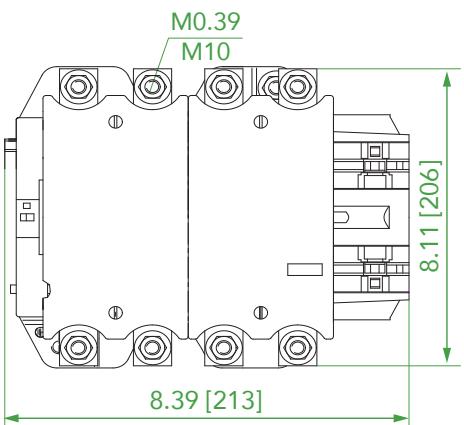
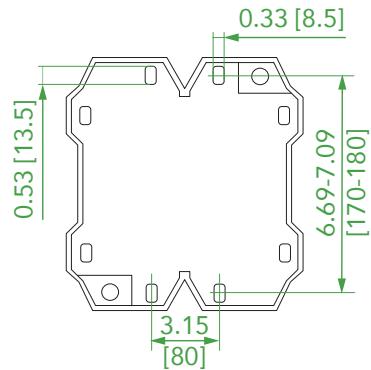
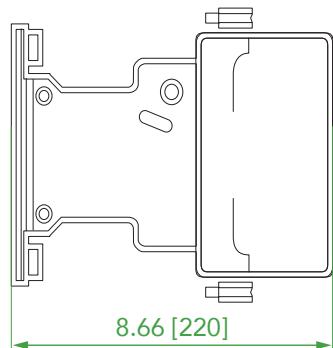
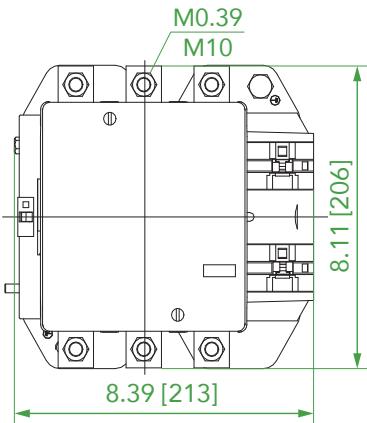
IEC Contactors

Ex9CDS Dimensions



IEC Contactors

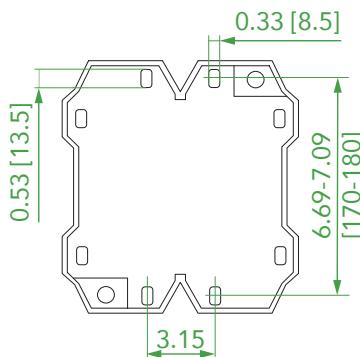
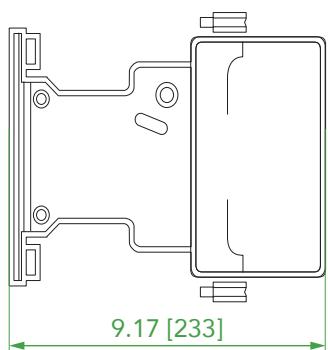
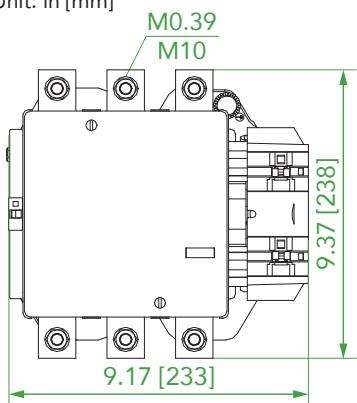
Ex9CDS Dimensions



Ex9CDS500

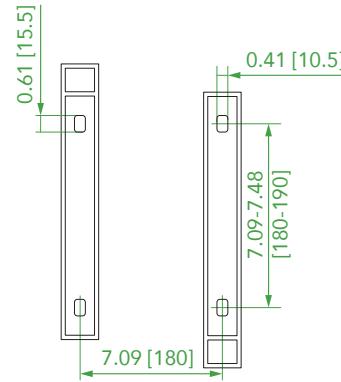
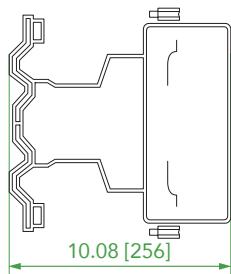
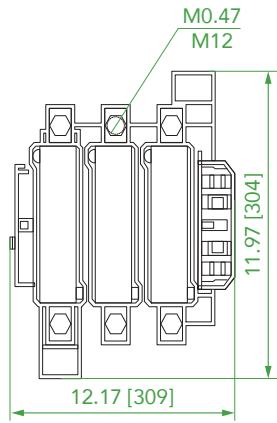
3 Poles

Unit: in [mm]

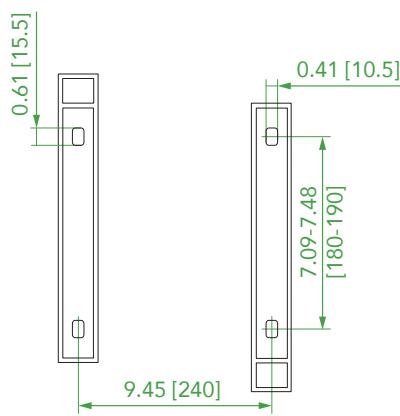
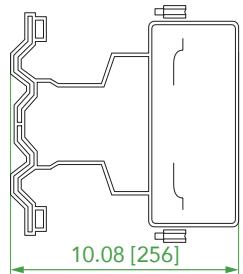
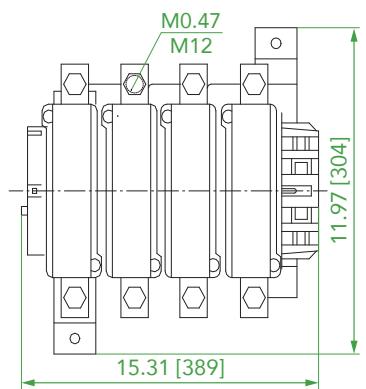


IEC Contactors

Ex9CDS Dimensions



C

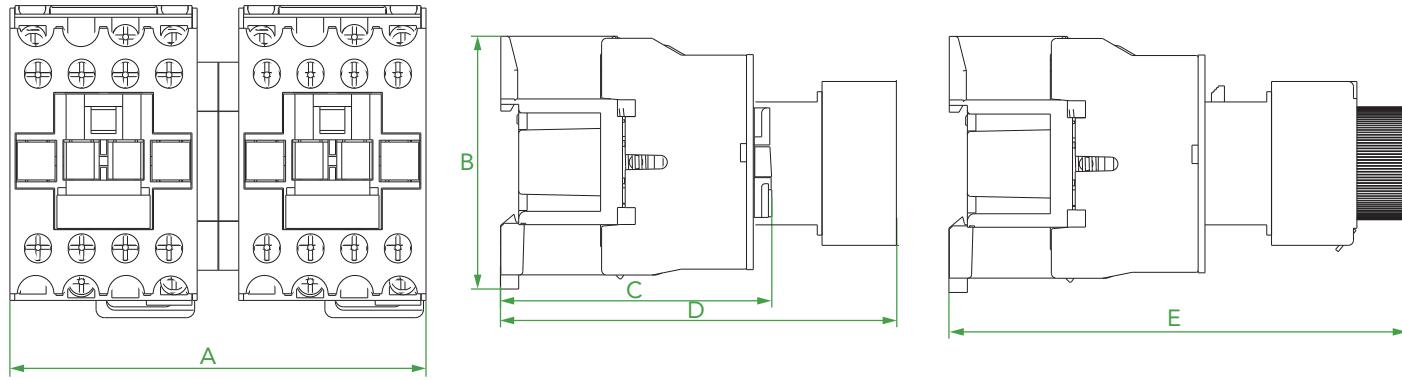


IEC Contactors

Ex9CDR Dimensions

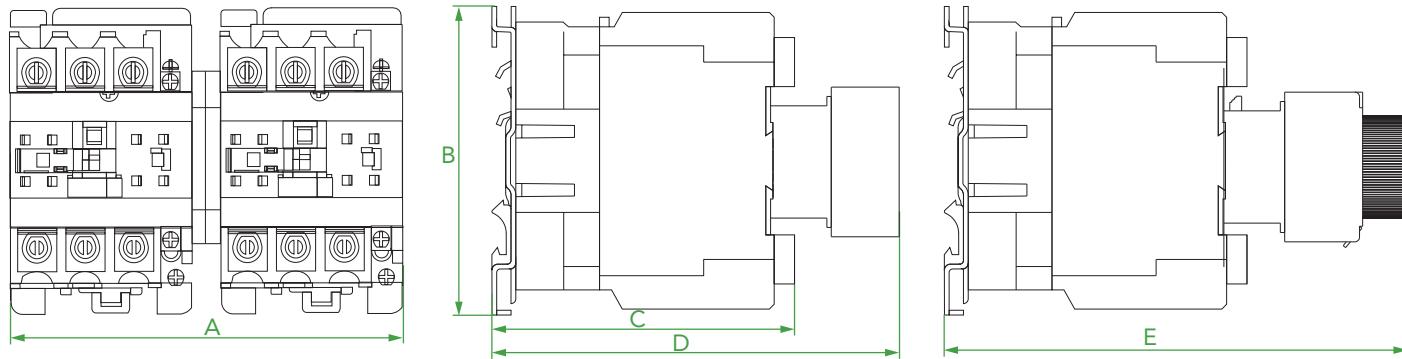
Ex9CDR09~32

Unit: in [mm]



Ex9CDR40~95

Unit: in [mm]

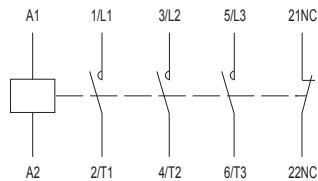


Ex9CDR	A	B	C	D	E
09					
12	4.13 [105]	3.07 [78]	3.23 [82]	4.74 [120.5]	5.53 [140.5]
18					
25	4.92 [125]	3.54 [90]	3.74 [95]	5.25 [133.5]	6.04 [153.5]
32			3.93 [100]	5.45 [138.5]	6.24 [158.5]
40~65 11	6.50 [165]		4.56 [116]	6.08 [154.5]	6.87 [174.5]
40~65 40	7.08 [180]				
80~95 11	7.36 [187]	5.08 [129]		6.51 [165.5]	7.30 [185.5]
80~95 40	8.07 [205]		5 [127]	6.31 [160.5]	7.10 [180.5]

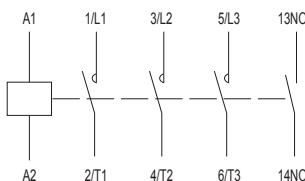
Note: 1) Ex9CDS40~80: 11 = 3NO+1NO/1NC, 40 = 4NO

IEC Contactors

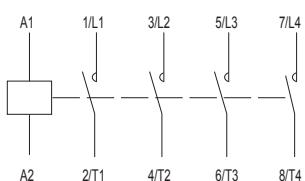
Ex9CMS/CDS Wiring Diagrams



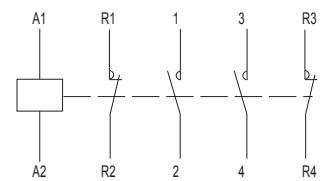
Ex9CMS... 3P 3NO+1NC



Ex9CMS... 3P 3NO+1NO

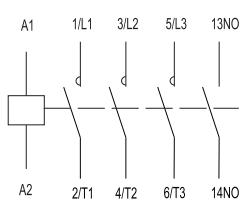


Ex9CMS... 4P 4NO

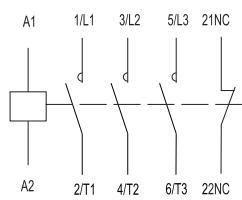


Ex9CMS... 4P 2NO+2NC

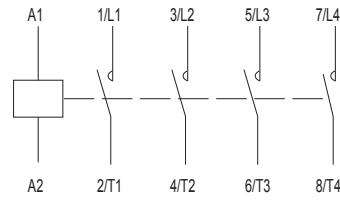
C



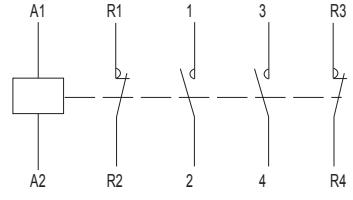
Ex9CDS... 3P 3NO+1NO



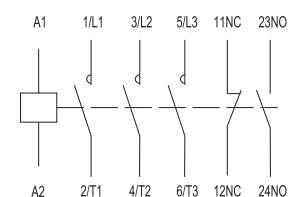
Ex9CDS... 3P 3NO+1NC



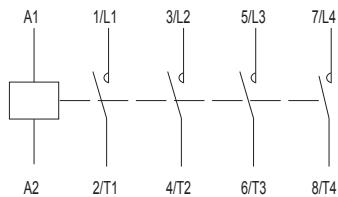
Ex9CDS... 4P 4NO



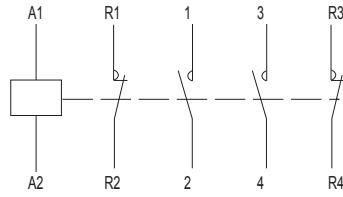
Ex9CDS... 4P 2NO+2NC



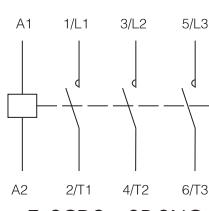
Ex9CDS... 3P 3NO+1NO/1NC



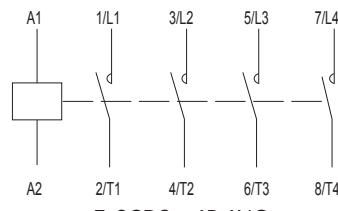
Ex9CDS... 4P 4NO



Ex9CDS... 4P 2NO+2NC



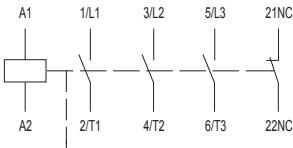
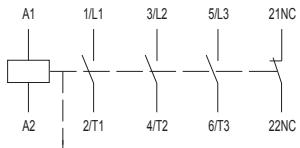
Ex9CDS... 3P 3NO



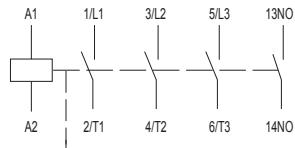
Ex9CDS... 4P 4NO

IEC Contactors

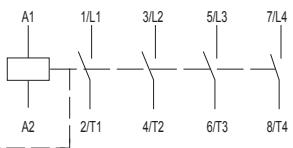
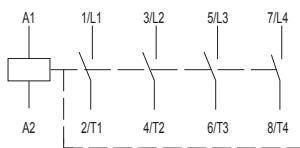
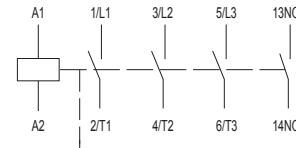
Ex9CMR/CDR Wiring Diagrams



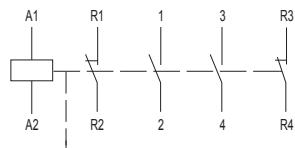
Ex9CMR... 3P 3NO+1NC



Ex9CMR... 3P 3NO+1NO

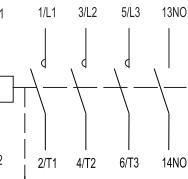
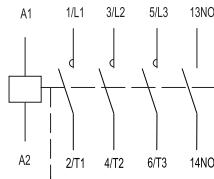


Ex9CMR... 4P 4NO

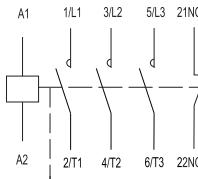
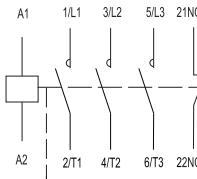


Ex9CMR... 4P 2NO+2NC

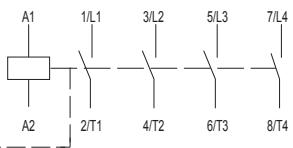
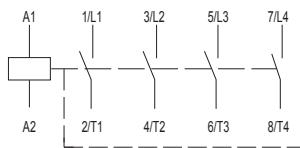
Ex9CDR09~32



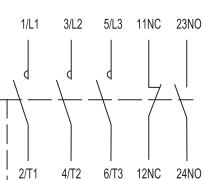
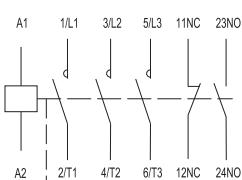
Ex9CDR... 3P 3NO+1NO



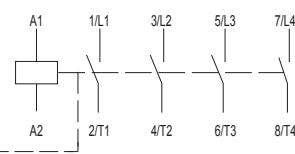
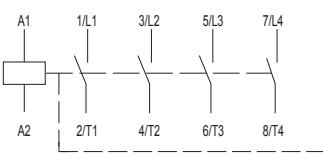
Ex9CDR... 3P 3NO+1NC



Ex9CDR... 4P 4NO



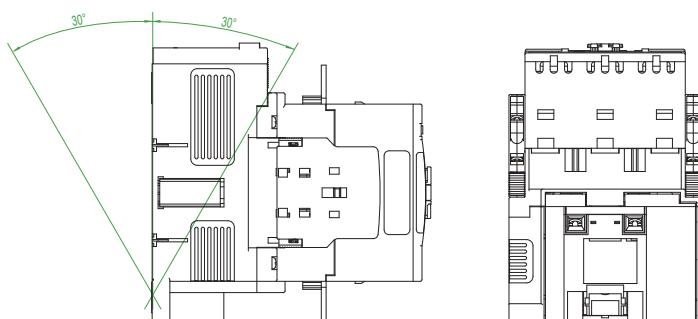
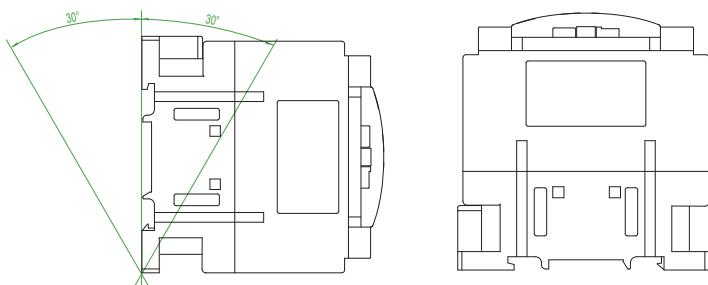
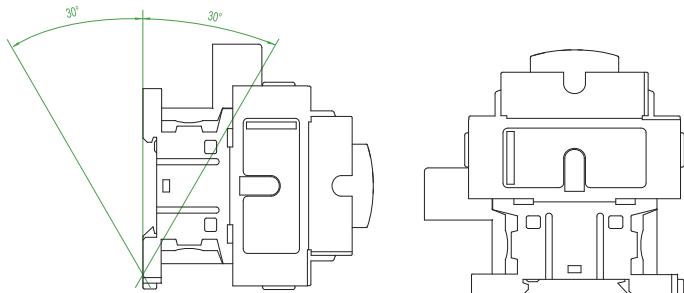
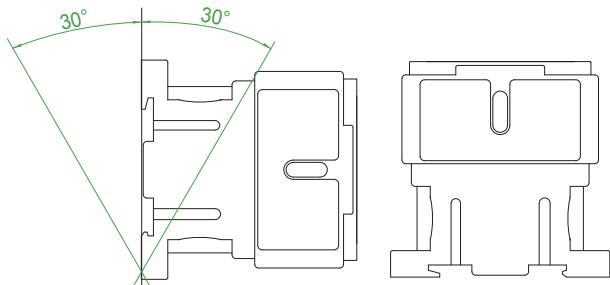
Ex9CDR... 3P 3NO+1NO/1NC



Ex9CDR... 4P 4NO

IEC Contactors

Ex9CM/CD Mounting Positions



IEC Contactors

Ex9CD/CM Accessories: Auxiliary Contact



AX	A	11
Description	Contactor Type and Rated Current	Auxiliary Contact
Auxiliary Contact	A: Ex9CD Standard Front Mount 09~630 A B: Ex9CM Mini Front Mount 0~12 A FA: Ex9CDS Standard Side Mount 09~95 A (Not UL Approved)	02: 2NC 04: 4NC 11: 1NO+1NC 13: 1NO+3NC 20: 2NO 22: 2NO+2NC 31: 3NO+1NC 40: 4NO

Front Mount

- For contactors Ex9CD, Ex9CDR, Ex9CM and Ex9CMR
- For subsequent mounting
- One unit used with a contactor
- Do not limit a possibility to install overload relays Ex9RD38 and Ex9RD100



Side Mount

- For contactors Ex9CDS
- NOT UL Approved**
- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

Accessory Description	Matched Contactor	Product	Part Number
Auxiliary Contact	Ex9CDS09~630 Ex9CDR09~630	AXA02	1311709
		AXA04	1311715
		AXA11	1311711
		AXA13	1311713
		AXA20	1311710
		AXA22	1311712
		AXA31	1311714
		AXA40	1311716
Auxiliary Contact	Ex9CMS06~12 Ex9CMR06~12	AXB02	1311717
		AXB04	1311723
		AXB11	1311719
		AXB13	1311721
		AXB20	1311718
		AXB22	1311720
		AXB31	1311722
		AXB40	1311724
Side Mount	Ex9CDS09~95	AXFA11	1313990

Specifications C118
 Dimensions..... C119
 Wiring Diagram.... C121

IEC Contactors

Ex9CD/CM Accessories: Coil



AXD	A	09	M	7
Description	Contactor Type	Rated Current AC-3	Control Voltage	Frequency
Coil	A: Ex9CD Standard	09: 9~18 A 25: 25~32 A 40: 40~95 A 115: 115~150 A 185: 185~225 A 265: 265 A 330: 330 A 400: 400 A 500: 500 A 630: 630 A	B: 24 V E: 48 V F: 110 V G: 120 V M: 220 V P: 230 V	U: 240 V N: 277 V Q: 380 V R: 440 V T: 480 V Y: 600 V
				7: 50/60 Hz

C

		Ex9CDS/CDR - Standard														
		Ex9CMS/ CMR Mini	06~12*	09~12	18	25	32	40~60	80~95	115~ 150	185~ 225	265	330	400	500	630
Coil Power	In-Rush (Vac)	25~40		70		110		200		660	966	840		1,500	1,700	
	Sealed (Vac)	2~7	8	8		11		20		85.5	91.2	150		34.2		
	Power (W)	1~4	1.8~2.7		3~4			6~10		-	-	-	-	-	-	
Operation Range	Operation Voltage (Us)									85~110%						
	Drop-Out Voltage (Us)									20~75%						
Coil Voltage (50/60 Hz)										24~600						

Note: Product and Part Numbers on pages C116.
Ex9CMS/CMR coil is not field changeable.

IEC Contactors**Ex9CD/CM Accessories: Coil**

Accessory Description	Coil Voltage (Vac)	09~18 A		25~32 A		40~95 A			
		Product	Part Number	Product	Part Number	Product	Part Number		
Coil (See page C115 for description)	24	AXDA09B7	1311750	AXDA25B7	1311786	AXDA40B7	1311810		
	48	AXDA09E7	1311978	AXDA25E7	1312014	AXDA40E7	1312038		
	110	AXDA09F7	1311742	AXDA25F7	1311778	AXDA40F7	1311802		
	120	AXDA09G7	1311744	AXDA25G7	1311780	AXDA40G7	1311804		
	220	AXDA09M7	1311972	AXDA25M7	1312008	AXDA40M7	1312032		
	230	AXDA09P7	1311746	AXDA25P7	1311782	AXDA40P7	1311806		
	240	AXDA09U7	1311748	AXDA25U7	1311784	AXDA40U7	1311808		
	277	AXDA09N7	1311980	AXDA25N7	1312016	AXDA40N7	1312040		
	380	AXDA09Q7	1311974	AXDA25Q7	1312010	AXDA40Q7	1312034		
	440	AXDA09R7	1311976	AXDA25R7	1312012	AXDA40R7	1312036		
	480	AXDA09T7	1311752	AXDA25T7	1311788	AXDA40T7	1311812		
	600	AXDA09Y7	1311970	AXDA25Y7	1312006	AXDA40Y7	1312030		
		115~150 A		185~225 A		265 A		330 A	
		Product	Part Number						
Coil (See page C115 for description)	110	AXDA115F7	1311862	AXDA185F7	1311886	AXDA265F7	1311910	AXDA330F7	1311922
	120	AXDA115G7	1311864	AXDA185G7	1311888	AXDA265G7	1311912	AXDA330G7	1311924
	220	AXDA115M7	1312092	AXDA185M7	1312116	AXDA265M7	1312140	AXDA330M7	1312152
	230	AXDA115P7	1311866	AXDA185P7	1311890	AXDA265P7	1311914	AXDA330P7	1311926
	240	AXDA115U7	1311868	AXDA185U7	1311892	AXDA265U7	1311916	AXDA330U7	1311928
	277	AXDA115N7	1312100	AXDA185N7	1312124	AXDA265N7	1312148	AXDA330N7	1312160
	380	AXDA115Q7	1312094	AXDA185Q7	1312118	AXDA265Q7	1312142	AXDA330Q7	1312154
		400 A		500 A		630 A			
		Product	Part Number	Product	Part Number	Product	Part Number		
	110	AXDA400F7	1311934	AXDA500F7	1311946	AXDA630F7	1311958		
	120	AXDA400G7	1311936	AXDA500G7	1311948	AXDA630G7	1311960		
	220	AXDA400M7	1312164	AXDA500M7	1312176	AXDA630M7	1312188		
	230	AXDA400P7	1311938	AXDA500P7	1311950	AXDA630P7	1311962		
	240	AXDA400U7	1311940	AXDA500U7	1311952	AXDA630U7	1311964		
	277	AXDA400N7	1312172	AXDA500N7	1312184	AXDA630N7	1312196		
	380	AXDA400Q7	1312166	AXDA500Q7	1312178	AXDA630Q7	1312190		

IEC Contactors

Ex9CD/CM Accessories: Mechanical Interlock and Time Delay Relay



AXE	A	09	A
Description	Contactor Type	Rated Current AC-3	Installation
Mechanical Interlock	A: Ex9CD Standard	09: 9~32 A 40: 40~95 A 115: 115~150 A 185: 185~225 A 265: 265~500 A 630: 630 A	A: Horizontal Mount

Accessory Description	Product	Part Number
Mechanical Interlock	AXEA09A	1311732
	AXEA40A	1311737
	AXEA115A	1313230
	AXEA185A	1313232
	AXEA265A	1313234
	AXEA630A	1313238



AXC	T	0
Description	Relay Type	Timing Range
Time Delay Relay	D: Off Delay	0: 0.1~3 s
	T: On Delay	2: 0.1~30 s 3: 10~180 s

Dimensions..... C120
Wiring Diagram.... C121

Accessory Description	Matched Contactor	Product	Part Number
Time Delay Relay (Pneumatic Timer)	Ex9CDS09~630	AXCT0	1311726
		AXCT2	1311727
		AXCT4	1311728
		AXCD0	1311730
		AXCD2	1311729
		AXCD4	1311731

IEC Contactors

Ex9CD/CM Accessory Specifications

	Auxiliary Contact															Side Mount AXFA 11		
	CMS/CMR Front Mount AXB								CDS/CDR Front Mount AXA									
	02	04	13	20	22	31	40		02	04	11	13	20	22	31	40		
UL Standard File Number	E353866																	
IEC Standard File Number	IEC/EN 60947-5-1																	
Certifications	UL Listed, CSA, CCC, RoHS																	
Electrical Parameters																		
Contacts	2NC	4NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	2NC	4NC	1NO+ 1NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	1NO+1NC		
Rated Frequency (Hz)	50/60																	
Rated Working Voltage Ue	AC-15 (V)	380/400/415																
	DC-13 (V)	220/250																
Rated Working Current Ie	AC-15 (A)	0.19																
	DC-13 (A)	0.31																
Rated Capacity	AC-15 (VA)	720																
	DC-13 (W)	69																
Rated Thermal Current Ith (A)	10																	
Rated Impulse Withstand Voltage Uimp (kV)	6 (1.2/50 µs)																	
Rated Insulation Voltage Ui (V)	690																	
Mechanical Parameters																		
Device Width in (mm)	1.30 (33)								1.89 (48)								0.39 (10)	
Device Height in (mm)	1.54 (39)								1.46 (37)								2.52 (64)	
Device Depth in (mm)	1.46 (37)								1.02 (26)	1.77 (45)								2.68 (68)
Degree of Protection	IP 20																	
Terminals	Lift																	
Terminal Capacity AWG (mm ²)	17-9 (1-6)																	
Torque of Terminals in-lb (N.m)	8.85 (1)																	

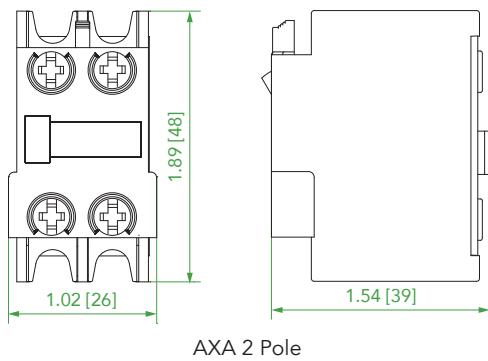
IEC Contactors

Ex9CD/CM Accessory Dimensions

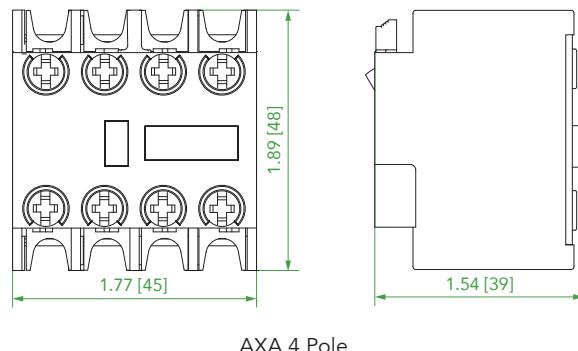
AXA

Front Mount Auxiliary Contact for Standard Contactor

Unit: in [mm]



AXA 2 Pole



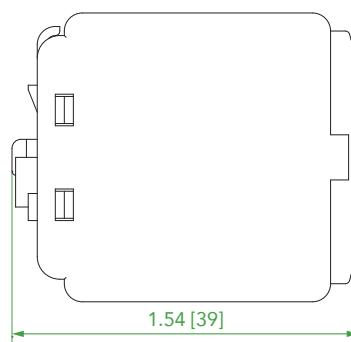
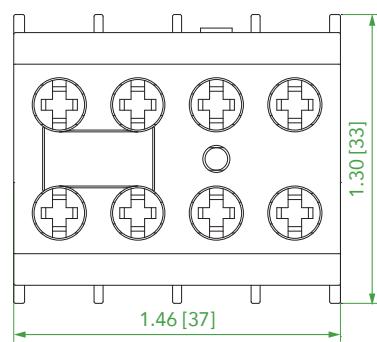
AXA 4 Pole

C

AXB

Front Mount Auxiliary Contact for Mini Contactor

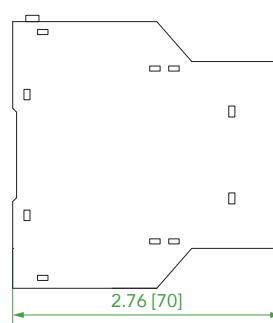
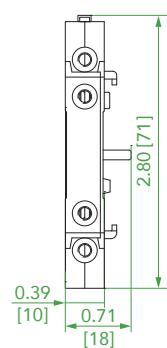
Unit: in [mm]



AXFA

Side Mount Auxiliary Contact for Standard Contactor

Unit: in [mm]



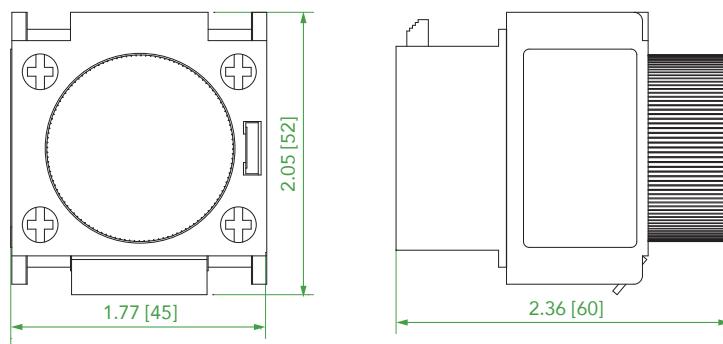
IEC Contactors

Ex9CD/CM Accessory Dimensions

AXC

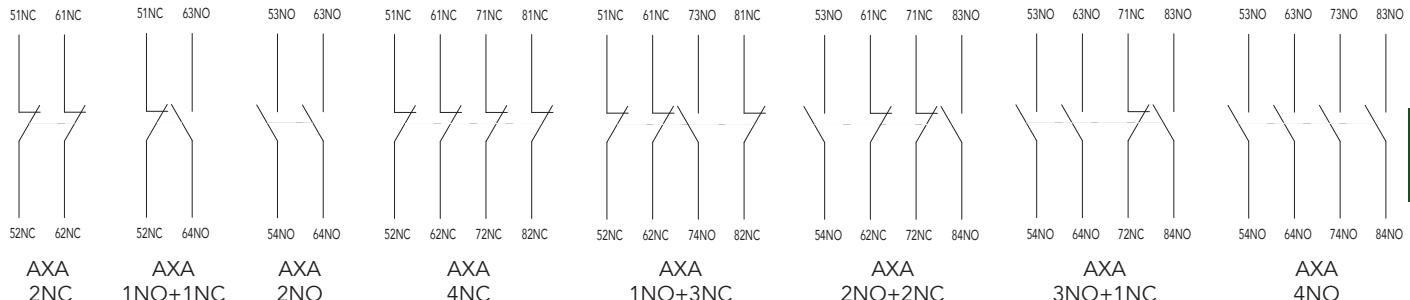
Time Delay Relay

Unit: in [mm]

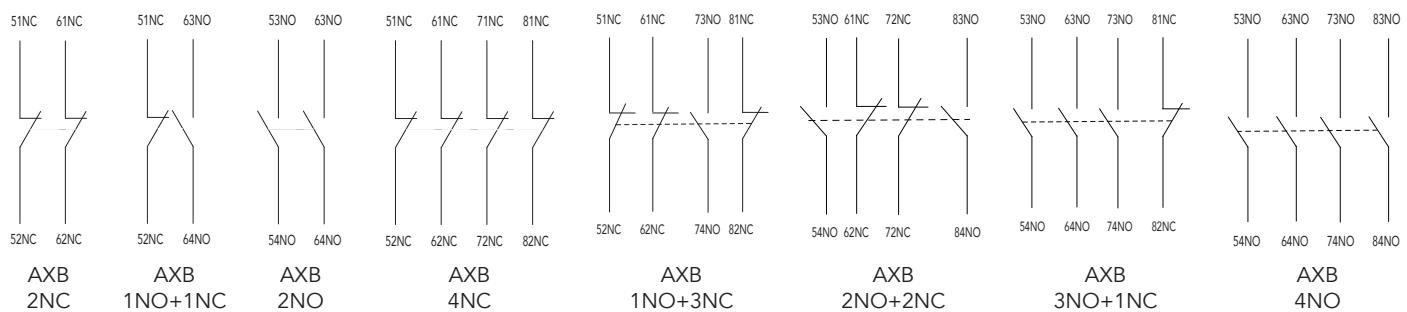


IEC Contactors

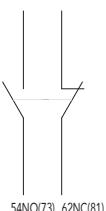
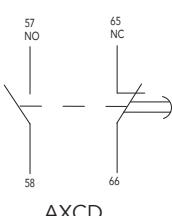
Ex9CD/CM Accessory Wiring Diagrams



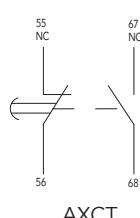
C



53NO(74) 61NC(82)

AXFA
1NO+1NC

AXCD



AXCT

TERMAL OVERLOAD RELAYS



Ex9RD

Thermal Overload Relays

Ex9RD Product Overview

Features

- Rated current up to 630 A @ 600 Vac, 50/60 Hz
- Overload protection trip Class 10 A
- Phase loss sensitivity
- Temperature compensation from -13 to 131 °F (-25 to +55 °C)
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Trip-free mechanism
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35 mm DIN rail mounting base option

D

Thermal Overload Relays

Ex9RD National and International Standards

Certifications

- UL Listed, File Number E353865
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Approved
- RoHS Compliant



Thermal Overload Relays

Ex9RD Product Selection Guide

Label



- D
- 1 Brand
 - 2 CE Mark
 - 3 Adjustable Current Range
 - 4 Push to Test
 - 5 UL Listed Mark
 - 6 Product Series/Frame Amperage
 - 7 Manual Stop
 - 8 Manual/Auto Reset
 - 9 Auxiliary Contacts

Product Selection Guide

Ex9RD	25	A	13
NOARK Ex9RD Series	Frame Size	Trip Class*	Setting Amperage
11.5: 11.5 A			0.16: 0.1~0.16 A
25: 25 A			0.25: 0.16~25 A
36: 36 A			0.4: 0.25~0.4 A
93: 93 A			0.63: 0.4~0.63 A
200: 200 A	2/T1	A: Class 10 A	1: 0.63~1 A
630: 630 A	4/T2		1.6: 1~1.6 A
	6/T3		2: 1.25~2 A
			2.5: 1.6~2.5 A
			4: 2.5~4 A
			6: 4~6 A
			8: 5.5~8 A
			10: 7~10 A
			13: 9~13 A
			18: 12~18 A
			25: 17~25 A
			32: 23~32 A
			36: 28~36 A
			40: 30~40 A
			50: 37~50 A
			65: 48~65 A
			70: 55~70 A
			80: 63~80 A
			93: 80~93 A
			125: 80~125 A
			160: 100~160 A
			200: 125~200 A
			250: 160~250 A
			315: 200~315 A
			400: 250~400 A
			500: 315~500 A
			630: 400~630 A

Note: Consult NOARK for information on Tripping Class 10 and 20

Thermal Overload Relays

Ex9RD 11.5~36 A

Certifications

IEC/EN 60947-4-1

**11.5 A****25 A****36 A**

Current Range Amp (Min-Max)	Use with Contactors: Ex9CM06~12				Use with Contactors: Ex9CD09~32				Use with Contactors: Ex9CD32			
	Matched Fuse aM gG		Product	Part Number	Matched Fuse aM gG		Product	Part Number	Matched Fuse aM gG		Product	Part Number
0.1-0.16	0.25	2	Ex9RD11.5A0.16	1410001	0.25	2	Ex9RD25A0.16	1410014	-	-	-	-
0.16-0.25	0.5	2	Ex9RD11.5A0.25	1410002	0.5	2	Ex9RD25A0.25	1410015	-	-	-	-
0.25-0.4	1	2	Ex9RD11.5A0.4	1410003	1	2	Ex9RD25A0.4	1410016	-	-	-	-
0.4-0.63	1	2	Ex9RD11.5A0.63	1410004	1	2	Ex9RD25A0.63	1410017	-	-	-	-
0.63-1	2	4	Ex9RD11.5A1	1410005	2	4	Ex9RD25A1	1410018	-	-	-	-
1-1.6	2	4	Ex9RD11.5A1.6	1410008	2	4	Ex9RD25A1.6	1410019	-	-	-	-
1.25-2	4	6	Ex9RD11.5A2	1410006	4	6	Ex9RD25A2	1410020	-	-	-	-
1.6-2.5	4	6	Ex9RD11.5A2.5	1410007	4	6	Ex9RD25A2.5	1410021	-	-	-	-
2.5-4	6	10	Ex9RD11.5A4	1410009	6	10	Ex9RD25A4	1410022	-	-	-	-
4-6	8	16	Ex9RD11.5A6	1410010	8	16	Ex9RD25A6	1410023	-	-	-	-
5.5-8	12	20	Ex9RD11.5A8	1410011	12	20	Ex9RD25A8	1410024	-	-	-	-
7-10	12	20	Ex9RD11.5A10	1410012	12	20	Ex9RD25A10	1410025	-	-	-	-
9-13	16	25	Ex9RD11.5A13	1410013	16	25	Ex9RD25A13	1410026	-	-	-	-
12-18	-	-	-	-	20	35	Ex9RD25A18	1410027	-	-	-	-
17-25	-	-	-	-	25	50	Ex9RD25A25	1410028	-	-	-	-
23-32	-	-	-	-	-	-	-	-	40	63	Ex9RD36A32	1410030
28-36	-	-	-	-	-	-	-	-	40	80	Ex9RD36A36	1410031

Specifications D128
Trip Curve D130Dimensions D131
Accessories D133

Thermal Overload Relays

Ex9RD 93~630 A



93 A



200 A



630 A

D

Current Range Amp (Min-Max)	Use with Contactors: Ex9CD40~95				Use with Contactors: Ex9CD115~225				Use with Contactors: Ex9CD185~630			
	Matched Fuse aM	Product gG	Part Number	Matched Fuse aM	Product gG	Part Number	Matched Fuse aM	Product gG	Part Number	Matched Fuse aM	Product gG	Part Number
23-32	40	63	Ex9RD93A32	1410032	-	-	-	-	-	-	-	-
30-40	40	100	Ex9RD93A40	1410033	-	-	-	-	-	-	-	-
37-50	63	100	Ex9RD93A50	1410034	-	-	-	-	-	-	-	-
48-65	63	100	Ex9RD93A65	1410035	-	-	-	-	-	-	-	-
55-70	80	125	Ex9RD93A70	1410036	-	-	-	-	-	-	-	-
63-80	80	125	Ex9RD93A80	1410037	-	-	-	-	-	-	-	-
80-93	100	160	Ex9RD93A93	1410038	-	-	-	-	-	-	-	-
80-125	-	-	-	-	125	200	Ex9RD200A125	1410039	-	-	-	-
100-160	-	-	-	-	160	250	Ex9RD200A160	1410040	-	-	-	-
125-200	-	-	-	-	200	315	Ex9RD200A200	1410041	-	-	-	-
160-250	-	-	-	-	-	-	-	-	250	400	Ex9RD630A250	1410042
200-315	-	-	-	-	-	-	-	-	315	500	Ex9RD630A315	1410043
250-400	-	-	-	-	-	-	-	-	400	630	Ex9RD630A400	1410044
315-500	-	-	-	-	-	-	-	-	500	800	Ex9RD630A500	1410045
400-630	-	-	-	-	-	-	-	-	630	800	Ex9RD630A630	1410046

Specifications D129
 Trip Curve D130

Dimensions D132
 Accessories D133

Thermal Overload Relays

Ex9RD Specifications

Ex9RD		11.5 A																					
Current Class (A)		13																					
Phase Failure Protection Function																							
Automatic and Manual Reset																							
Temperature Compensation																							
Tripping Indicator		Yes																					
Test and Stop Pushbutton																							
Mounting Mode	Plug-In Independent																						
Number of Contacts		1NO+1NC																					
Auxiliary Contacts	AC-15 220 V	2.73																					
	Rated Current (A)	1.58																					
	DC-15 220 V	0.2																					
Current Setting Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13									
Matched Fuse	aM (A) gG (A)	0.25	0.5	1		2		4		6	8	12		16									
		2			4			6			10	16	20										
Ex9RD		25 A																					
Current Class (A)		25																					
Phase Failure Protection Function																							
Automatic and Manual Reset																							
Temperature Compensation																							
Tripping Indicator		Yes																					
Test and Stop Pushbutton																							
Mounting Mode	Plug-In Independent																						
Number of Contacts		1NO+1NC																					
Auxiliary Contacts	AC-15 220 V	2.73																					
	Rated Current (A)	1.58																					
	DC-15 220 V	0.2																					
Current Setting Range (A)		0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13									
Matched Fuse	aM (A) gG (A)	0.25	0.5	1		2		4		6	8	12		16									
		2			4			6			10	16	20										
		25			35			40			50												
Ex9RD		36 A																					
Current Class (A)		36																					
Phase Failure Protection Function																							
Automatic and Manual Reset																							
Temperature Compensation																							
Tripping Indicator		Yes																					
Test and Stop Pushbutton																							
Mounting Mode	Plug-In Independent																						
Number of Contacts		1NO+1NC																					
Auxiliary Contacts	AC-15 220 V	2.73																					
	Rated Current (A)	1.58																					
	DC-15 220 V	0.2																					
Current Setting Range (A)		23~32						28~36															
Matched Fuse	aM (A) gG (A)	40						40						80									

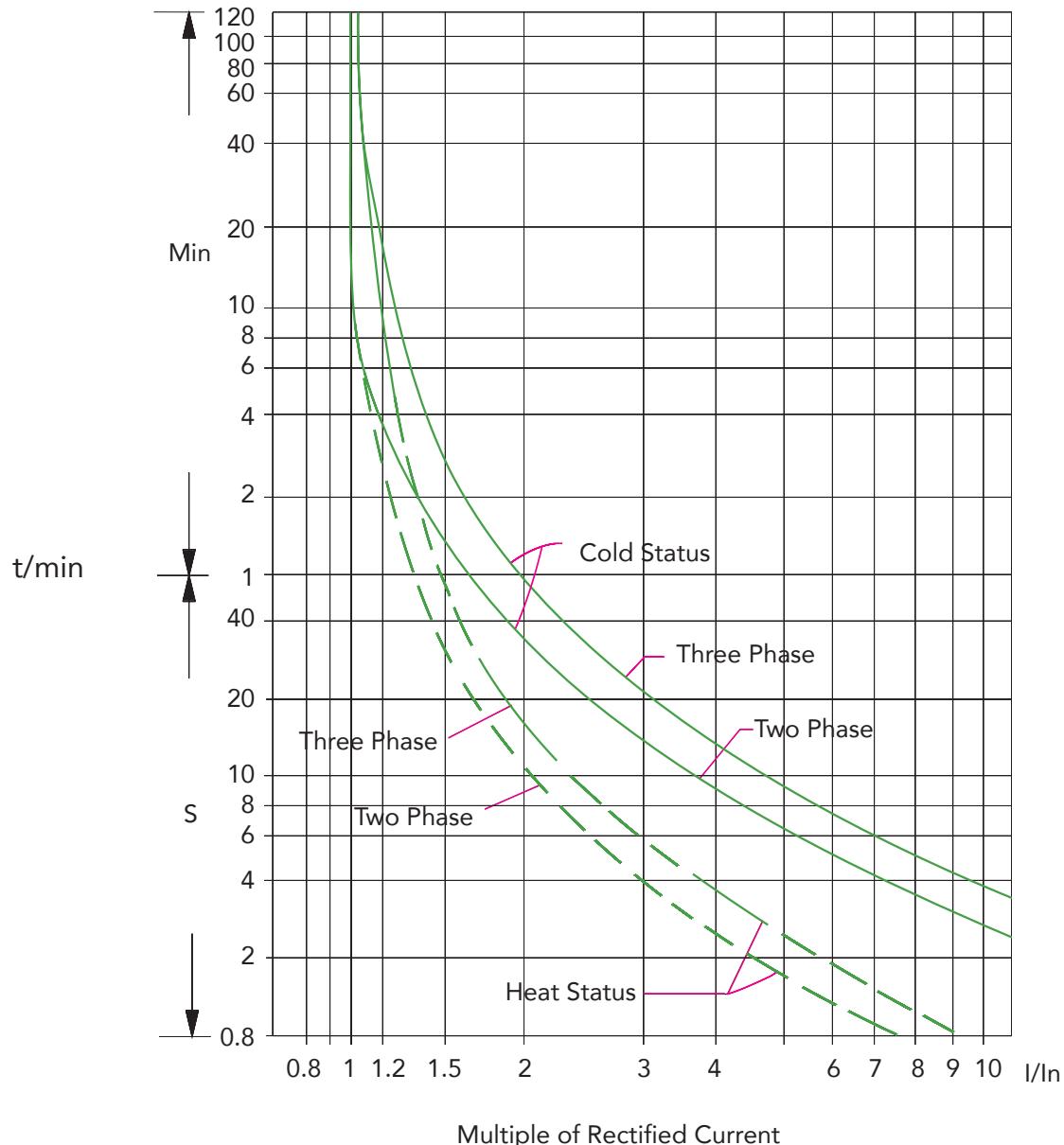
Thermal Overload Relays

Ex9RD Specifications

Ex9RD		93 A							
Current Class (A)		93							
Phase Failure Protection Function									
Automatic and Manual Reset									
Temperature Compensation									
Tripping Indicator		Yes							
Test and Stop Pushbutton									
Mounting Mode	Plug-In Independent								
Number of Contacts		1NO+1NC							
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73						
		AC-15 380 V	1.58						
		DC-15 220 V	0.2						
Current Setting Range (A)		23~32	30~40	37~50	48~65	55~70	63~80	80~93	
Matched Fuse	aM (A) gG (A)	40 63		63 100		80 125		100 160	
Ex9RD		200A							
Current Class (A)		200							
Phase Failure Protection Function									
Automatic and Manual Reset									
Temperature Compensation		Yes							
Tripping Indicator									
Test and Stop Pushbutton									
Mounting Mode	Plug-In Independent	No Yes							
Number of Contacts		1NO+1NC							
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73						
		AC-15 380 V	1.58						
		DC-15 220 V	0.2						
Current Setting Range (A)		80~125		100~160		125~200			
Matched Fuse	aM (A) gG (A)	125 200		160 250		200 315			
Ex9RD		630 A							
Current Class (A)		630							
Phase Failure Protection Function									
Automatic and Manual Reset									
Temperature Compensation		Yes							
Tripping Indicator									
Test and Stop Pushbutton									
Mounting Mode	Plug-In Independent	No Yes							
Number of Contacts		1NO+1NC							
Auxiliary Contacts	Rated Current (A)	AC-15 220 V	2.73						
		AC-15 380 V	1.58						
		DC-15 220 V	0.2						
Current Setting Range (A)		160~250		200~315		250~400			
Matched Fuse	aM (A) gG (A)	250 400		315 500		400~630			

Thermal Overload Relays

Ex9RD Trip Curves

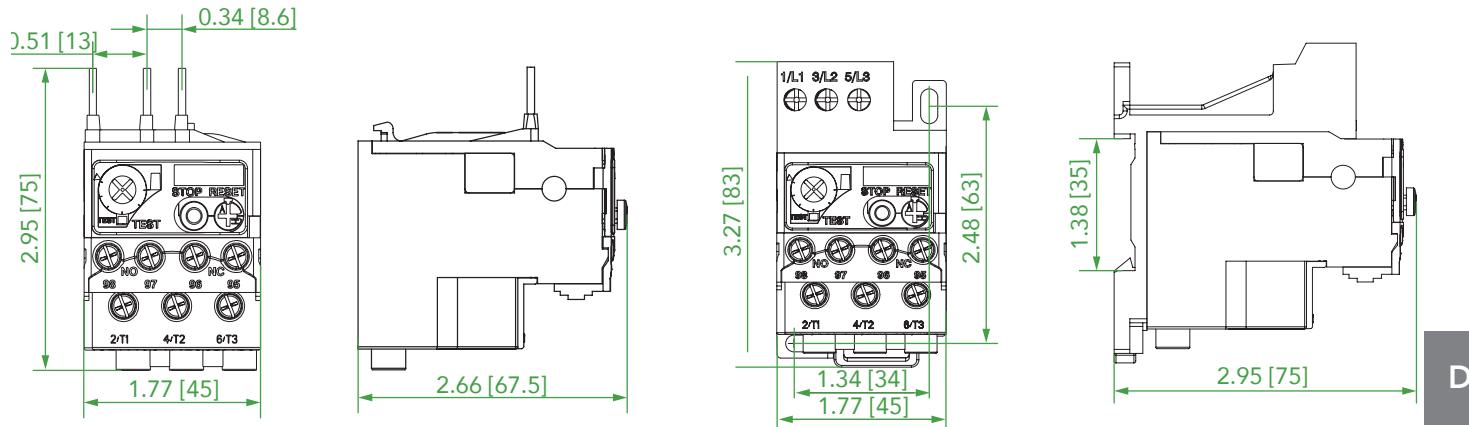


Thermal Overload Relays

Ex9RD Dimensions

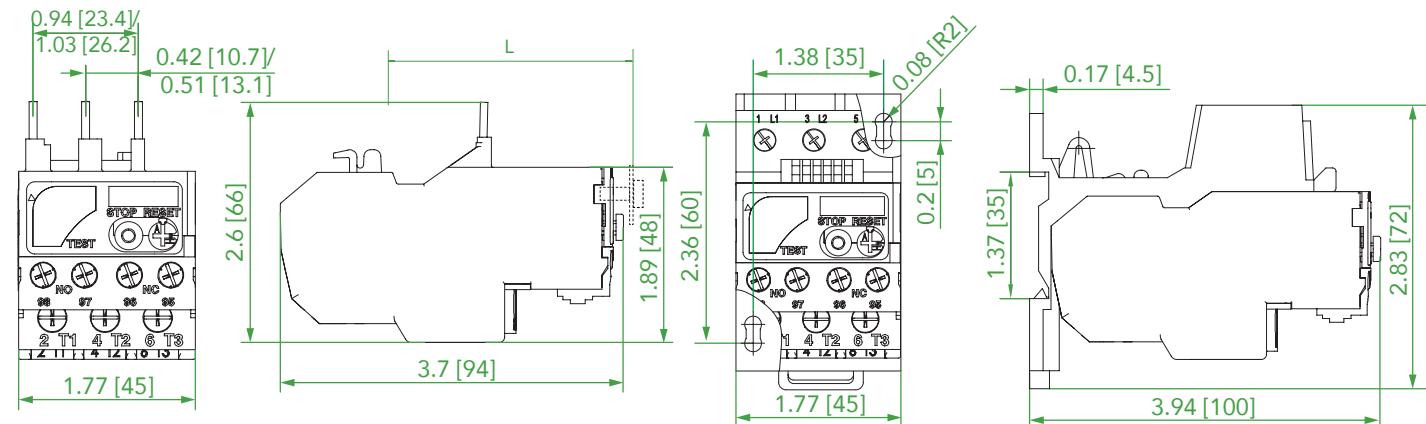
Ex9RD11.5

Unit: in [mm]



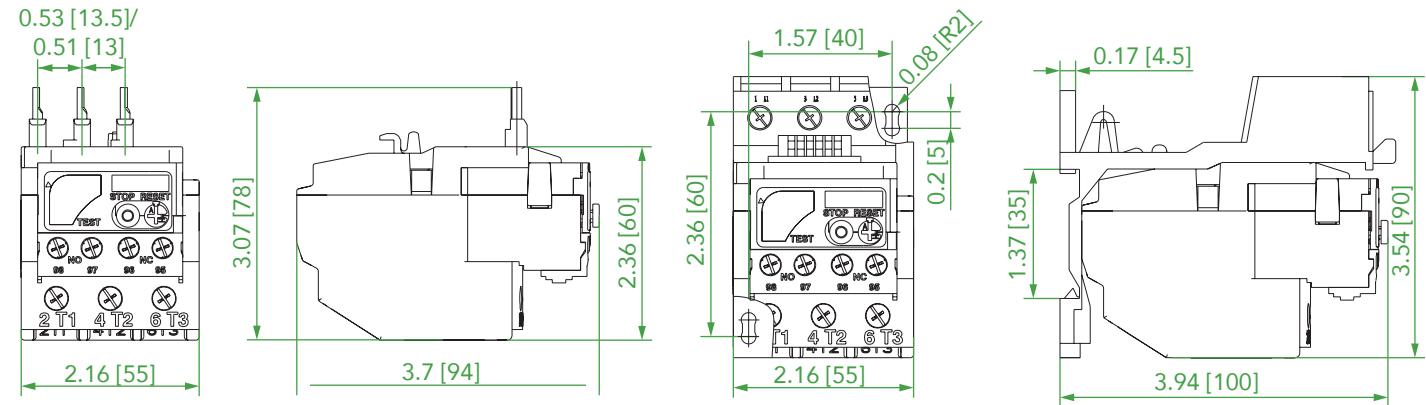
Ex9RD25

Unit: in [mm]



Ex9RD36

Unit: in [mm]

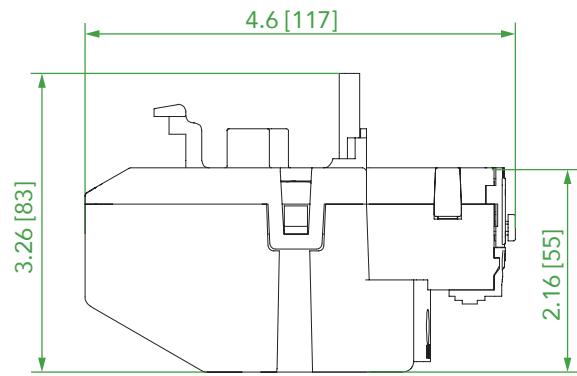
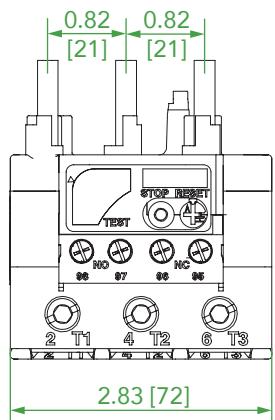


Thermal Overload Relays

Ex9RD Dimensions

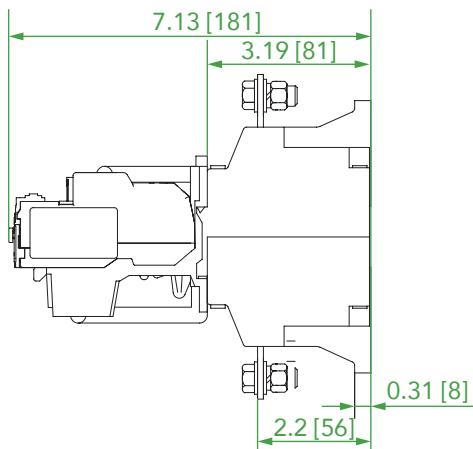
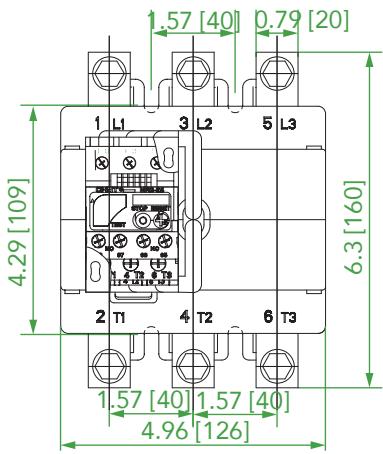
Ex9RD93

Unit: in [mm]



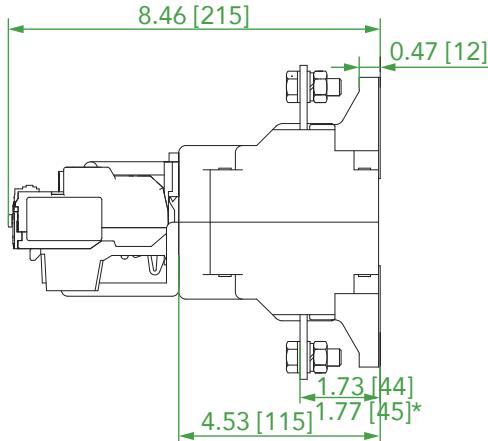
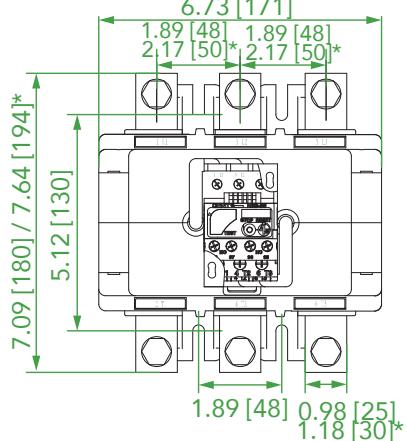
Ex9RD200

Unit: in [mm]



Ex9RD630

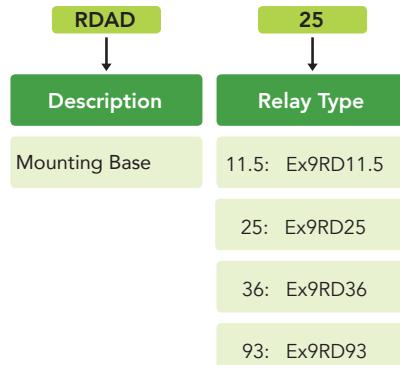
Unit: in [mm]



Note: Dimensions with ** for the product over 400 A.

Thermal Overload Relays

Ex9RD Accessories: Mounting Base



Accessory Description	Product	Part Number
Mounting Base	RDAD11.5	1410052
	RDAD25	1410049
	RDAD36	1410050
	RDAD93	1410051

Mounting Base	RDAD11.5	RDAD25	RDAD36	RDAD93
Current Rating (A)	11.5	25	36	93
Voltage (Vac)			600	
Terminal Wire Range	#18-12 AWG		#18-10 AWG #8 AWG Str	#12-10 AWG #8-1 AWG, Str
Terminal Torque in-lb (N.m)	7 (0.80)		22 (2.50)	80 (9)
Wire Strip Length in (mm)	0.39 (10)		0.51 (13)	0.71 (18)
Matched Contactor Type	Ex9CMS6~12	Ex9CDS09~32	Ex9CDS32	Ex9CDS40~95

DEFINITE PURPOSE CONTACTORS



Ex9CK

Definite Purpose Contactors

Ex9CK Product Overview

Features

- Rated current from 20~90 A
- Coil voltages from 24~600 Vac, 50/60 Hz
- Coil is Class H 180 °C (356 °F)
- Available with enclosed coils for protection against particle contamination
- 1, 2, 3 and 4 pole configurations
- Industry standard mounting plate provides easily accessible mounting holes
- More connection terminal options, including screw or lug connections each with quick connect spades
- Double E magnet assembly provides optimal performance with reduced power consumption
- 1NO+1NC auxiliary contact block with 600 Vac available as an option
- Base assembly is made from high arc-resistant polyester

E

Definite Purpose Contactors

Ex9CK National and International Standards

Certifications

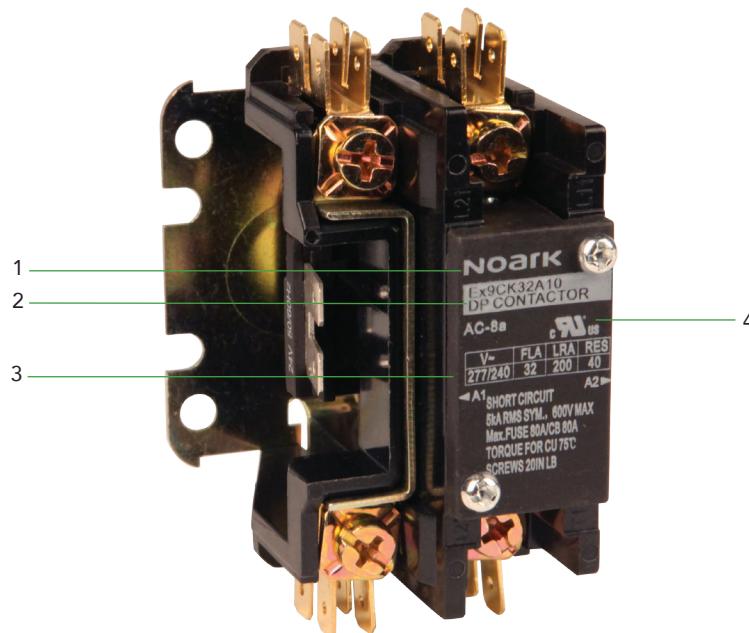
- UL Recognized Component, File Number E353866
- Certified for Canada according to CSA standards
- IEC/EN 60947
- Complies with VDE standards
- RoHS Compliant



Definite Purpose Contactors

Ex9CK Product Selection Guide

Label



E

- 1 Brand
- 2 Product Selection
- 3 AC Coil Voltage
- 4 UL Recognized Component

Product Selection Guide

Ex9CK	40	A	10	G	7	E
NOARK Ex9CK Series	Full Load Amperage (FLA)	Terminal	Pole	Coil Voltage	Frequency	Coil
20: 20 A	A: Screw	10: 1NO+1Shunt	B: 24 V	7: 50/60 Hz	Blank: Open Coil	
25: 25 A	B: Lug	20: 2NO	E: 48 V			
30: 30 A		30: 3NO	F: 110 V			
32: 32 A		40: 4NO (30/40 A Only)	G: 120 V			
40: 40 A			M: 220 V			
50: 50 A			P: 230 V			
60: 60 A			U: 240 V			
75: 75 A			N: 277 V			
90: 90 A			Q: 380 V			
			R: 440 V			
			T: 480 V			
			Y: 600 V			

Definite Purpose Contactors

Ex9CK 20 A

- Auxiliary contacts for 3 and 4 pole only; see page E150 for part numbers
 - Enclosed coils available for 3 and 4 poles; add "E" suffix to end of Part Number; contact NOARK sales for ordering assistance



20 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK20B10B7	1311360	Ex9CK20B20B7	1313921	Ex9CK20B30B7	1313935
48	Ex9CK20B10E7	1313557	Ex9CK20B20E7	1313963	Ex9CK20B30E7	1313977
110	Ex9CK20B10F7	1311362	Ex9CK20B20F7	1313923	Ex9CK20B30F7	1313937
120	Ex9CK20B10G7	1311364	Ex9CK20B20G7	1313925	Ex9CK20B30G7	1313939
220	Ex9CK20B10M7	1313561	Ex9CK20B20M7	1313967	Ex9CK20B30M7	1313981
230	Ex9CK20B10P7	1311368	Ex9CK20B20P7	1313929	Ex9CK20B30P7	1313943
240	Ex9CK20B10U7	1311372	Ex9CK20B20U7	1313933	Ex9CK20B30U7	1313947
277	Ex9CK20B10N7	1311366	Ex9CK20B20N7	1313927	Ex9CK20B30N7	1313941
380	Ex9CK20B10Q7	1313565	Ex9CK20B20Q7	1313971	Ex9CK20B30Q7	1313985
440	Ex9CK20B10R7	1313569	Ex9CK20B20R7	1313975	Ex9CK20B30R7	1313989
480	Ex9CK20B10T7	1311370	Ex9CK20B20T7	1313931	Ex9CK20B30T7	1313945
600	Ex9CK20B10Y7	1313559	Ex9CK20B20Y7	1313965	Ex9CK20B30Y7	1313979

20 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		20 A Ratings	1 Pole	2 Poles		3 Poles		
	Product	Part Number	Product	Part Number			Full Load Amperes (A)	20	15	20	15
24	Ex9CK20A10B7	1311346	Ex9CK20A20B7	1313907							
48	Ex9CK20A10E7	1313543	Ex9CK20A20E7	1313949							
110	Ex9CK20A10F7	1311348	Ex9CK20A20F7	1313909							
120	Ex9CK20A10G7	1311350	Ex9CK20A20G7	1313911							
220	Ex9CK20A10M7	1313547	Ex9CK20A20M7	1313953							
230	Ex9CK20A10P7	1311354	Ex9CK20A20P7	1313915							
240	Ex9CK20A10U7	1311358	Ex9CK20A20U7	1313919							
277	Ex9CK20A10N7	1311352	Ex9CK20A20N7	1313913							
380	Ex9CK20A10Q7	1313551	Ex9CK20A20Q7	1313957							
440	Ex9CK20A10R7	1313555	Ex9CK20A20R7	1313961							
480	Ex9CK20A10T7	1311356	Ex9CK20A20T7	1313917							
600	Ex9CK20A10Y7	1313545	Ex9CK20A20Y7	1313951							

Specifications E144 to 145
Dimensions E147

Wiring Diagram E149
Mounting Positions E149

Accessories..... E150 to 151

Definite Purpose Contactors

Ex9CK 25 A

- Auxiliary contacts for 3 and 4 pole only; see page E150 for part numbers
 - Enclosed coils available for 3 and 4 poles; add "E" suffix to end of Part Number; contact NOARK sales for ordering assistance



Certifications

IEC/EN 60947-4-1



25 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK25B10B7	1311402	Ex9CK25B20B7	1311416	Ex9CK25B30B7	1311430
48	Ex9CK25B10E7	1313599	Ex9CK25B20E7	1313613	Ex9CK25B30E7	1313627
110	Ex9CK25B10F7	1311404	Ex9CK25B20F7	1311418	Ex9CK25B30F7	1311432
120	Ex9CK25B10G7	1311406	Ex9CK25B20G7	1311420	Ex9CK25B30G7	1311434
220	Ex9CK25B10M7	1313603	Ex9CK25B20M7	1313617	Ex9CK25B30M7	1313631
230	Ex9CK25B10P7	1311410	Ex9CK25B20P7	1311424	Ex9CK25B30P7	1311438
240	Ex9CK25B10U7	1311414	Ex9CK25B20U7	1311428	Ex9CK25B30U7	1311442
277	Ex9CK25B10N7	1311408	Ex9CK25B20N7	1311422	Ex9CK25B30N7	1311436
380	Ex9CK25B10Q7	1313607	Ex9CK25B20Q7	1313621	Ex9CK25B30Q7	1313635
440	Ex9CK25B10R7	1313611	Ex9CK25B20R7	1313625	Ex9CK25B30R7	1313639
480	Ex9CK25B10T7	1311412	Ex9CK25B20T7	1311426	Ex9CK25B30T7	1311440
600	Ex9CK25B10Y7	1313601	Ex9CK25B20Y7	1313615	Ex9CK25B30Y7	1313629

25 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		25 A Ratings	1 Pole	2 Poles		3 Poles			
	Product	Part Number	Product	Part Number		Full Load Amperes (A)	25	20	15	25	20	15
24	Ex9CK25A10B7	1311374	Ex9CK25A20B7	1311388								
48	Ex9CK25A10E7	1313571	Ex9CK25A20E7	1313585								
110	Ex9CK25A10F7	1311376	Ex9CK25A20F7	1311390								
120	Ex9CK25A10G7	1311378	Ex9CK25A20G7	1311392	Conventional Thermal Current (A)					32		
220	Ex9CK25A10M7	1313575	Ex9CK25A20M7	1313589								
230	Ex9CK25A10P7	1311382	Ex9CK25A20P7	1311396								
240	Ex9CK25A10U7	1311386	Ex9CK25A20U7	1311400								
277	Ex9CK25A10N7	1311380	Ex9CK25A20N7	1311394	Line Voltage (Vac)	277	240/277	480	600	240/277	480	600
380	Ex9CK25A10Q7	1313579	Ex9CK25A20Q7	1313593								
440	Ex9CK25A10R7	1313583	Ex9CK25A20R7	1313597								
480	Ex9CK25A10T7	1311384	Ex9CK25A20T7	1311398	Locked Rotor (A)	150		120	90	150	110	90
600	Ex9CK25A10Y7	1313573	Ex9CK25A20Y7	1313587								

Specifications E144 to 145
Dimensions E147

Wiring Diagram E149
Mounting Positions E149

Accessories..... E150 to 151

Definite Purpose Contactors

Ex9CK 30 A

- Auxiliary contacts for 3 and 4 pole only; see page E150 for part numbers
- Enclosed coils available for 3 and 4 poles; add "E" suffix to end of Part Number; contact NOARK sales for ordering assistance



Certifications
IEC/EN 60947-4-1
CE cULus

30 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO		30 A Ratings	1 Pole	2 Poles
	Product	Part Number	Product	Part Number	Product	Part Number			
24	Ex9CK30B10B7	1311472	Ex9CK30B20B7	1311486	Ex9CK30B30B7	1311500	Full Load Amperes (A)	30	25 20
48	Ex9CK30B10E7	1313669	Ex9CK30B20E7	1313683	Ex9CK30B30E7	1313697	Conventional Thermal Current (A)	40	
110	Ex9CK30B10F7	1311474	Ex9CK30B20F7	1311488	Ex9CK30B30F7	1311502			
120	Ex9CK30B10G7	1311476	Ex9CK30B20G7	1311490	Ex9CK30B30G7	1311504			
220	Ex9CK30B10M7	1313673	Ex9CK30B20M7	1313687	Ex9CK30B30M7	1313701			
230	Ex9CK30B10P7	1311480	Ex9CK30B20P7	1311494	Ex9CK30B30P7	1311508			
240	Ex9CK30B10U7	1311484	Ex9CK30B20U7	1311498	Ex9CK30B30U7	1311512			
277	Ex9CK30B10N7	1311478	Ex9CK30B20N7	1311492	Ex9CK30B30N7	1311506			
380	Ex9CK30B10Q7	1313677	Ex9CK30B20Q7	1313691	Ex9CK30B30Q7	1313705			
440	Ex9CK30B10R7	1313681	Ex9CK30B20R7	1313695	Ex9CK30B30R7	1313709			
480	Ex9CK30B10T7	1311482	Ex9CK30B20T7	1311496	Ex9CK30B30T7	1311510			
600	Ex9CK30B10Y7	1313671	Ex9CK30B20Y7	1313685	Ex9CK30B30Y7	1313699	Locked Rotor (A)	200	150 120

30 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		4 Poles 4NO		30 A Ratings	3 & 4 Poles		
	Product	Part Number	Product	Part Number	Product	Part Number		32	25	20
24	Ex9CK30A10B7	1311444	Ex9CK30A20B7	1311458	Ex9CK30A40B7	1314005	Full Load Amperes (A)	32	25	20
48	Ex9CK30A10E7	1313641	Ex9CK30A20E7	1313655	Ex9CK30A40E7	1314012	Conventional Thermal Current (A)	40		
110	Ex9CK30A10F7	1311446	Ex9CK30A20F7	1311460	Ex9CK30A40F7	1314006				
120	Ex9CK30A10G7	1311448	Ex9CK30A20G7	1311462	Ex9CK30A40G7	1314007				
220	Ex9CK30A10M7	1313645	Ex9CK30A20M7	1313659	Ex9CK30A40M7	1314014				
230	Ex9CK30A10P7	1311452	Ex9CK30A20P7	1311466	Ex9CK30A40P7	1314009				
240	Ex9CK30A10U7	1311456	Ex9CK30A20U7	1311470	Ex9CK30A40U7	1314011				
277	Ex9CK30A10N7	1311450	Ex9CK30A20N7	1311464	Ex9CK30A40N7	1314008				
380	Ex9CK30A10Q7	1313649	Ex9CK30A20Q7	1313663	Ex9CK30A40Q7	1314016				
440	Ex9CK30A10R7	1313653	Ex9CK30A20R7	1313667	Ex9CK30A40R7	1314018				
480	Ex9CK30A10T7	1311454	Ex9CK30A20T7	1311468	Ex9CK30A40T7	1314010				
600	Ex9CK30A10Y7	1313643	Ex9CK30A20Y7	1313657	Ex9CK30A40Y7	1314013	Locked Rotor (A)	200	115	95

Specifications	E144 to 145	Wiring Diagram	E149	Accessories.....	E150 to 151
Dimensions	E147 to 148	Mounting Positions	E149		

Definite Purpose Contactors

Ex9CK 32 A

- Auxiliary contacts for 3 and 4 pole only; see page E150 for part numbers
- Enclosed coils available for 3 and 4 poles; add "E" suffix to end of Part Number; contact NOARK sales for ordering assistance



Certifications

IEC/EN 60947-4-1



32 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK32B10B7	1311542	Ex9CK32B20B7	1311556	Ex9CK32B30B7	1311570
48	Ex9CK32B10E7	1313739	Ex9CK32B20E7	1313753	Ex9CK32B30E7	1313767
110	Ex9CK32B10F7	1311544	Ex9CK32B20F7	1311558	Ex9CK32B30F7	1311572
120	Ex9CK32B10G7	1311546	Ex9CK32B20G7	1311560	Ex9CK32B30G7	1311574
220	Ex9CK32B10M7	1313743	Ex9CK32B20M7	1313757	Ex9CK32B30M7	1313771
230	Ex9CK32B10P7	1311550	Ex9CK32B20P7	1311564	Ex9CK32B30P7	1311578
240	Ex9CK32B10U7	1311554	Ex9CK32B20U7	1311568	Ex9CK32B30U7	1311582
277	Ex9CK32B10N7	1311548	Ex9CK32B20N7	1311562	Ex9CK32B30N7	1311576
380	Ex9CK32B10Q7	1313747	Ex9CK32B20Q7	1313761	Ex9CK32B30Q7	1313775
440	Ex9CK32B10R7	1313751	Ex9CK32B20R7	1313765	Ex9CK32B30R7	1313779
480	Ex9CK32B10T7	1311552	Ex9CK32B20T7	1311566	Ex9CK32B30T7	1311580
600	Ex9CK32B10Y7	1313741	Ex9CK32B20Y7	1313755	Ex9CK32B30Y7	1313769

32 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		32 A Ratings	1 Pole	2 Poles		3 Poles			
	Product	Part Number	Product	Part Number			Full Load Amperes (A)	25	20	32	25	20
24	Ex9CK32A10B7	1311514	Ex9CK32A20B7	1311528	Full Load Amperes (A)	32	25	20	32	25	20	
48	Ex9CK32A10E7	1313711	Ex9CK32A20E7	1313725	Conventional Thermal Current (A)	40						
110	Ex9CK32A10F7	1311516	Ex9CK32A20F7	1311530	Line Voltage (Vac)	277	240/277	480	600	240/277	480	600
120	Ex9CK32A10G7	1311518	Ex9CK32A20G7	1311532	Locked Rotor (A)	200	150	120	240	150	120	
220	Ex9CK32A10M7	1313715	Ex9CK32A20M7	1313729								
230	Ex9CK32A10P7	1311522	Ex9CK32A20P7	1311536								
240	Ex9CK32A10U7	1311526	Ex9CK32A20U7	1311540								
277	Ex9CK32A10N7	1311520	Ex9CK32A20N7	1311534								
380	Ex9CK32A10Q7	1313719	Ex9CK32A20Q7	1313733								
440	Ex9CK32A10R7	1313723	Ex9CK32A20R7	1313737								
480	Ex9CK32A10T7	1311524	Ex9CK32A20T7	1311538								
600	Ex9CK32A10Y7	1313713	Ex9CK32A20Y7	1313727								

Specifications E144 to 145
Dimensions E147 to 148

Wiring Diagram E149
Mounting Positions E149

Accessories E150 to 151

Definite Purpose Contactors

Ex9CK 40 A

- Auxiliary contacts for 3 and 4 pole only; see page E150 for part numbers
- Enclosed coils available for 3 and 4 poles; add "E" suffix to end of Part Number; contact NOARK sales for ordering assistance



Certifications
IEC/EN 60947-4-1
CE cULus

40 A Lug

Coil Voltage Vac	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO		40 A Ratings	1 Pole	2 Poles
	Product	Part Number	Product	Part Number	Product	Part Number			
24	Ex9CK40B10B7	1311612	Ex9CK40B20B7	1311626	Ex9CK40B30B7	1311640	Full Load Amperes (A)	40	32 25
48	Ex9CK40B10E7	1313809	Ex9CK40B20E7	1313823	Ex9CK40B30E7	1313837	Conventional Thermal Current (A)		50
110	Ex9CK40B10F7	1311614	Ex9CK40B20F7	1311628	Ex9CK40B30F7	1311642			
120	Ex9CK40B10G7	1311616	Ex9CK40B20G7	1311630	Ex9CK40B30G7	1311644			
220	Ex9CK40B10M7	1313813	Ex9CK40B20M7	1313827	Ex9CK40B30M7	1313841			
230	Ex9CK40B10P7	1311620	Ex9CK40B20P7	1311634	Ex9CK40B30P7	1311648	Line Voltage (Vac)	277	240/277 480 600
240	Ex9CK40B10U7	1311624	Ex9CK40B20U7	1311638	Ex9CK40B30U7	1311652			
277	Ex9CK40B10N7	1311618	Ex9CK40B20N7	1311632	Ex9CK40B30N7	1311646			
380	Ex9CK40B10Q7	1313817	Ex9CK40B20Q7	1313831	Ex9CK40B30Q7	1313845			
440	Ex9CK40B10R7	1313821	Ex9CK40B20R7	1313835	Ex9CK40B30R7	1313849			
480	Ex9CK40B10T7	1311622	Ex9CK40B20T7	1311636	Ex9CK40B30T7	1311650			
600	Ex9CK40B10Y7	1313811	Ex9CK40B20Y7	1313825	Ex9CK40B30Y7	1313839	Locked Rotor (A)	240	200 160

40 A Screw

Coil Voltage Vac	1 Pole 1NO+1 Shunt		2 Poles 2NO		4 Poles 4NO		40 A Ratings	3 & 4 Poles		
	Product	Part Number	Product	Part Number	Product	Part Number		3 & 4 Poles	3 & 4 Poles	3 & 4 Poles
24	Ex9CK40A10B7	1311584	Ex9CK40A20B7	1311598	Ex9CK40A40B7	1313991	Full Load Amperes (A)	40	32 25	
48	Ex9CK40A10E7	1313781	Ex9CK40A20E7	1313795	Ex9CK40A40E7	1313998	Conventional Thermal Current (A)		50	
110	Ex9CK40A10F7	1311586	Ex9CK40A20F7	1311600	Ex9CK40A40F7	1313992				
120	Ex9CK40A10G7	1311588	Ex9CK40A20G7	1311602	Ex9CK40A40G7	1313993				
220	Ex9CK40A10M7	1313785	Ex9CK40A20M7	1313799	Ex9CK40A40M7	1314000				
230	Ex9CK40A10P7	1311592	Ex9CK40A20P7	1311606	Ex9CK40A40P7	1313995				
240	Ex9CK40A10U7	1311596	Ex9CK40A20U7	1311610	Ex9CK40A40U7	1313997	Line Voltage (Vac)	240/277	480 600	
277	Ex9CK40A10N7	1311590	Ex9CK40A20N7	1311604	Ex9CK40A40N7	1313994				
380	Ex9CK40A10Q7	1313789	Ex9CK40A20Q7	1313803	Ex9CK40A40Q7	1314002				
440	Ex9CK40A10R7	1313793	Ex9CK40A20R7	1313807	Ex9CK40A40R7	1314004				
480	Ex9CK40A10T7	1311594	Ex9CK40A20T7	1311608	Ex9CK40A40T7	1313996				
600	Ex9CK40A10Y7	1313783	Ex9CK40A20Y7	1313797	Ex9CK40A40Y7	1313999	Locked Rotor (A)	240	150 120	

Specifications	E144 to 145	Wiring Diagram	E149	Accessories.....	E150 to 151
Dimensions	E147 to 148	Mounting Positions	E149		

Definite Purpose Contactors

Ex9CK 50~90 A

- Auxiliary contacts for 3 and 4 pole only; see page E150 for part numbers
- Enclosed coils available for 3 and 4 poles; add "E" suffix to end of Part Number; contact NOARK sales for ordering assistance



Certifications
IEC/EN 60947-4-1
CE cULus

50 A Lug

Coil Voltage Vac	3 Poles 3NO		3 Poles 3NO		Ratings	50 A 3 Poles			60 A 3 Poles			
	Product	Part Number	Product	Part Number		Full Load Amperes (A)	50	40	32	60	40	32
24	Ex9CK50B30B7	1311654	Ex9CK60B30B7	1311668								
48	Ex9CK50B30E7	1313851	Ex9CK60B30E7	1313865								
110	Ex9CK50B30F7	1311656	Ex9CK60B30F7	1311670								
120	Ex9CK50B30G7	1311658	Ex9CK60B30G7	1311672								
220	Ex9CK50B30M7	1313855	Ex9CK60B30M7	1313869								
230	Ex9CK50B30P7	1311662	Ex9CK60B30P7	1311676								
240	Ex9CK50B30U7	1311666	Ex9CK60B30U7	1311680								
277	Ex9CK50B30N7	1311660	Ex9CK60B30N7	1311674								
380	Ex9CK50B30Q7	1313859	Ex9CK60B30Q7	1313873								
440	Ex9CK50B30R7	1313863	Ex9CK60B30R7	1313877								
480	Ex9CK50B30T7	1311664	Ex9CK60B30T7	1311678								
600	Ex9CK50B30Y7	1313853	Ex9CK60B30Y7	1313867								

60 A Lug

E

75 A Lug

Coil Voltage Vac	3 Poles 3NO		3 Poles 3NO		Ratings	75 A 3 Poles			90 A 3 Poles			
	Product	Part Number	Product	Part Number		Full Load Amperes (A)	75	60	50	90	75	60
24	Ex9CK75B30B7	1311682	Ex9CK90B30B7	1311696								
48	Ex9CK75B30E7	1313879	Ex9CK90B30E7	1313893								
110	Ex9CK75B30F7	1311684	Ex9CK90B30F7	1311698								
120	Ex9CK75B30G7	1311686	Ex9CK90B30G7	1311700								
220	Ex9CK75B30M7	1313883	Ex9CK90B30M7	1313897								
230	Ex9CK75B30P7	1311690	Ex9CK90B30P7	1311704								
240	Ex9CK75B30U7	1311694	Ex9CK90B30U7	1311708								
277	Ex9CK75B30N7	1311688	Ex9CK90B30N7	1311702								
380	Ex9CK75B30Q7	1313887	Ex9CK90B30Q7	1313901								
440	Ex9CK75B30R7	1313891	Ex9CK90B30R7	1313905								
480	Ex9CK75B30T7	1311692	Ex9CK90B30T7	1311706								
600	Ex9CK75B30Y7	1313881	Ex9CK90B30Y7	1313895								

Specifications E144 to 146
 Dimensions E148

Wiring Diagram E149
 Mounting Positions E149

Accessories E150 to 151

Definite Purpose Contactors

Ex9CK Pole Specifications

Description	Poles	Full Load (A)	Line Voltage (Vac)	Locked Rotor (A)	Conventional Thermal Current (A)	Horsepower (hp)	
Ex9CK20	1+Shunt	20	277	150	32	-	
			240/277				
	2	15	480	120			
			600	90		7.5	
			240/277	150		10	
	3	20	480	110			
			600	90			
			240/277	150			
Ex9CK25	1+Shunt	25	277	150		-	
			240/277				
	2	20	480	120			
			600	90			
			240/277	150		7.5	
	3	25	480	110		10	
			600	90			
			240/277	150			
Ex9CK30	1+Shunt	30	277	200	40	-	
			240/277				
	2	25	480	150			
			600	120			
	3 & 4	32	240/277	200		10	
			480	115		15	
			600	95			
Ex9CK32	1+Shunt	32	277	200		-	
			240/277				
	2	25	480	150			
			600	120			
	3	32	240/277	240		10	
			480	150		15	
			600	120			
Ex9CK40	1+Shunt	40	277	240	50	-	
			240/277				
	2	32	480	200			
			600	160			
	3 & 4	40	240/277	240		10	
			480	150		20	
			600	120			
Ex9CK50	3	50	240/277	300	60	15	
		40	480	215		30	
		32	600	175			
Ex9CK60	3	60	240/277	360	75	20	
		40	480	215		30	
		32	600	175			
Ex9CK75	3	75	240/277	450	90	25	
		60	480	375		50	
		50	600	300			
Ex9CK90	3	90	240/277	540	100	30	
		75	480	450			
		60	600	360		60	

Definite Purpose Contactors

Ex9CK Coil Specifications

Ex9CK			20			25			30			32			40														
Poles			1 Pole+ Shunt	2 Poles	3 Poles	1 Pole+ Shunt	2 Poles	3 Poles	1 Pole+ Shunt	2 Poles	3 Poles	4 Poles	1 Pole+ Shunt	2 Poles	3 Poles	1 Pole+ Shunt	2 Poles	3 Poles	4 Poles										
Power Consumption*	In-Rush (Vac) @ 50 Hz	55		51	55		51	55		51	-	55		51	55		51	-											
	Sealed (Vac) @ 50 Hz	13		12	13		12	13		12		13		12	13		12												
	In-Rush (Vac) @ 60 Hz	25	40	47	25	40	47	25	40	47	51	25	40	47	25	40	47	51											
	Sealed (Vac) @ 60 Hz	6.7	8.8	9.3	6.7	8.8	9.3	6.7	8.8	9.3	12	6.7	8.8	9.3	6.7	8.8	9.3	12											
Operation Range	Pick-Up Voltage	85~110% Us																											
	Drop-Out Voltage	20~65% Us																											
Power Supply Voltage Us		50/60 Hz; 24~600 Vac																											
Terminal Connection																													
Line and Load Terminals			#10-32 Screw Box Lug																										
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)				12~8 (4~10)			16~8 (1.5~10)		2~8 (4~10)		16~8 (1.5~10) (2.5~21)	2~8 (4~10)	16~8 (1.5~10)													
	Flexible Stranded Wire	Lug	14~8 (2.5~10)				14~12 (2.5~6)				14~8 (2.5~10)				14~4 (2.5~21)														
	Flexible Stranded Wire	Screw	14~8 (2.5~10)				14~12 (2.5~6)				14~8 (2.5~10)				14~4 (2.5~21)														
Tightening Torque in-lb (N.m)	Coil		-																										
	Main Circuit	Screw	20 (1.8~2)				20 (1.8~2)				40 (4~6)				22 (1.8~2.5)														
	Lug	-																											
Quick Connects	Power Terminals		Dual 0.250 QC (2)																										
	Coil Terminals		-																										
	0.250 Standard	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**											
Covers			Optional	Standard	Optional	Standard	Optional	Standard	Optional	Standard	Optional	Standard	Optional	Standard	Optional	Standard	Optional	Standard											
Insulation System			Class H 180 °C (356 °F)																										

* Power consumption is the same for 24, 120, 240, 277 and 480 Vac.

** Quad is standard. Contact NOARK sales representative to order dual.

Definite Purpose Contactors

Ex9CK Coil Specifications

Ex9CK		50	60	75	90		
Poles		3 Poles					
Power Consumption*	In-Rush (Vac) @ 50 Hz	84		165			
	Sealed (Vac) @ 50 Hz	14		30			
	In-Rush (Vac) @ 60 Hz	83		250			
	Sealed (Vac) @ 60 Hz	9.3		27			
Operation Range	Pick-Up Voltage	85~110% Us					
	Drop-Out Voltage	20~65% Us					
Power Supply Voltage Us		50/60 Hz; 24~600 Vac					
Terminal Connection							
Line and Load Terminals		#10-32 Screw Box Lug					
Copper Cable AWG (mm ²)	Ridge Wire with Single Core	Screw		-			
	Lug		10~6 (6~16)	14~6 (2.5~16)	6~3 (16~35) 4~3 (25~35)		
Tightening Torque in-lb (N.m)	Flexible Stranded Wire	Screw		-			
	Lug		10~8 (4~10)		8~4 (10~25) 8~4 (16~25)		
Coil		10 (0.8~1.2)					
Main Circuit			-				
	Lug		50 (4~7)				
Quick Connects	Power Terminals		Dual 0.250 QC (2)	Dual 0.250 QC (2)			
	Coil Terminals		6~32 Screw and 0.250 QC (2)				
	0.250 Standard			-			
Covers		Standard					
Insulation System		Class H 180 °C (356 °F)					

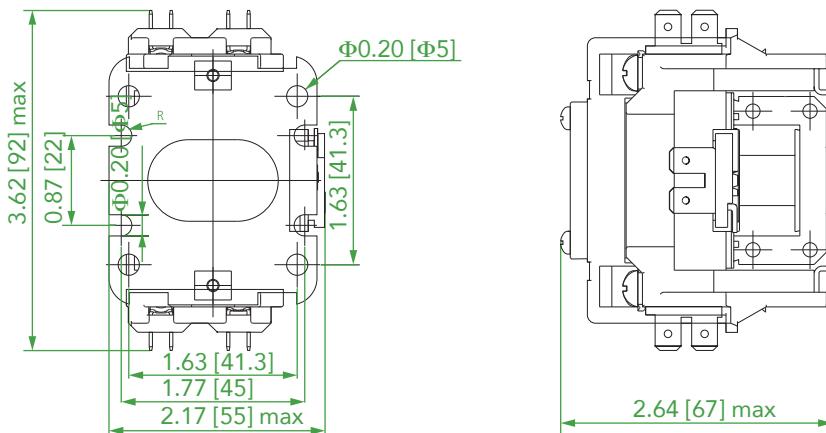
* Power consumption is the same for 24, 120, 240, 277 and 480 Vac.

Definite Purpose Contactors

Ex9CK Dimensions

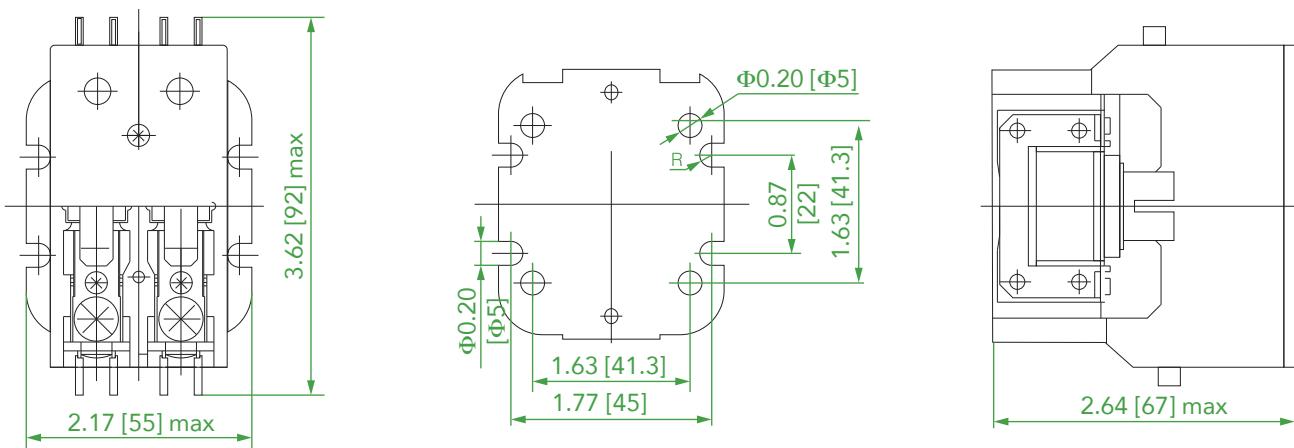
Ex9CK20~40

1 Pole+Shunt
Unit: in [mm]



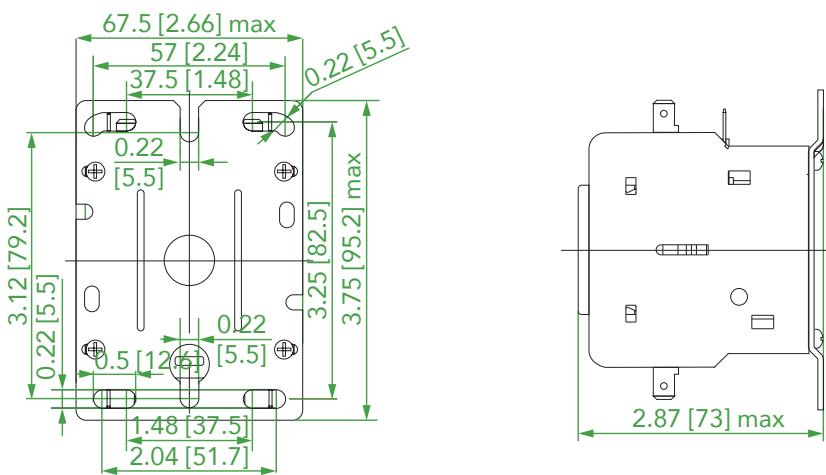
Ex9CK20~40

2 Poles
Unit: in [mm]



Ex9CK20~40

3 Poles
Unit: in [mm]



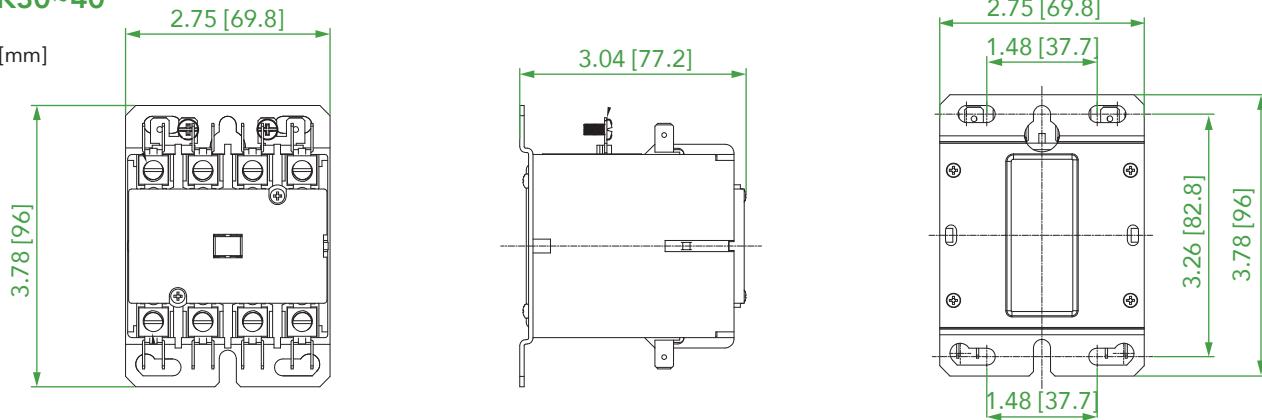
Definite Purpose Contactors

Ex9CK Dimensions

Ex9CK30~40

4 Poles

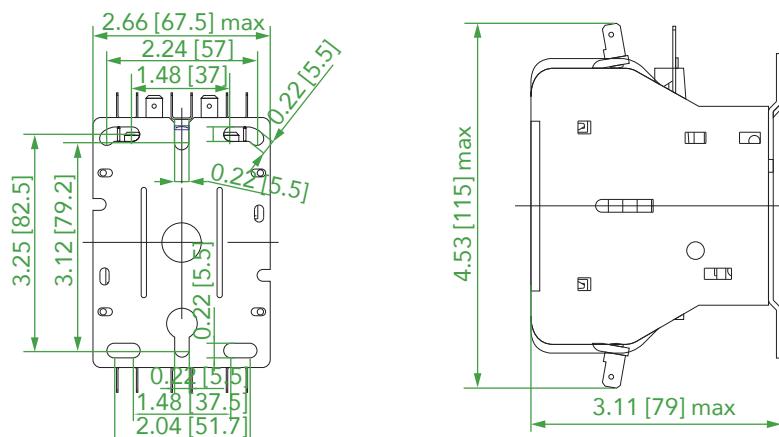
Unit: in [mm]



Ex9CK50~60

3 Poles

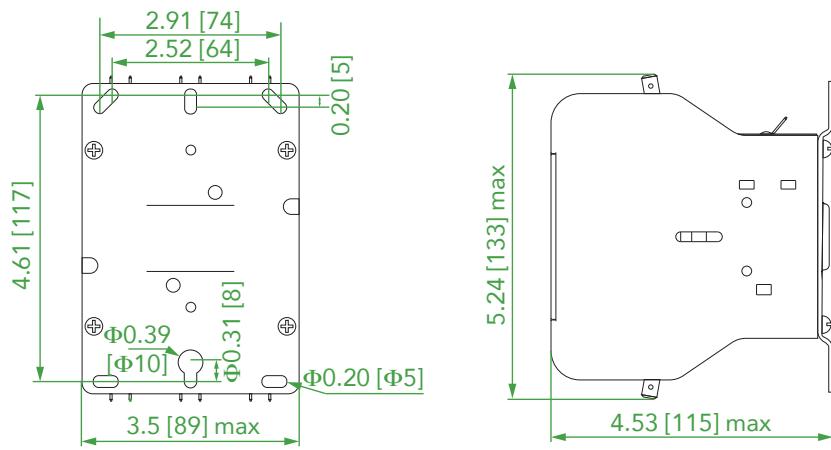
Unit: in [mm]



Ex9CK75~90

3 Poles

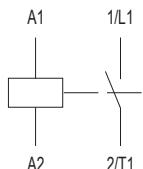
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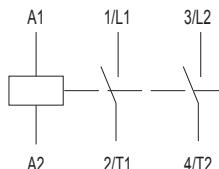
Definite Purpose Contactors

Ex9CK Wiring Diagrams and Mounting Positions

Ex9CK20~40

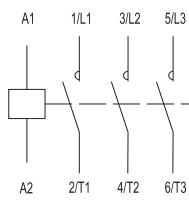


Ex9CK... 1P 1NO+1Shunt



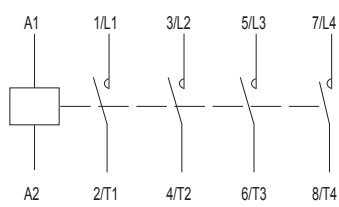
Ex9CK... 2P 2NO

Ex9CK20~95



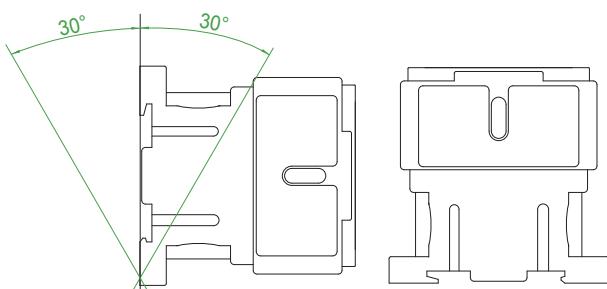
Ex9CK... 3P 3NO

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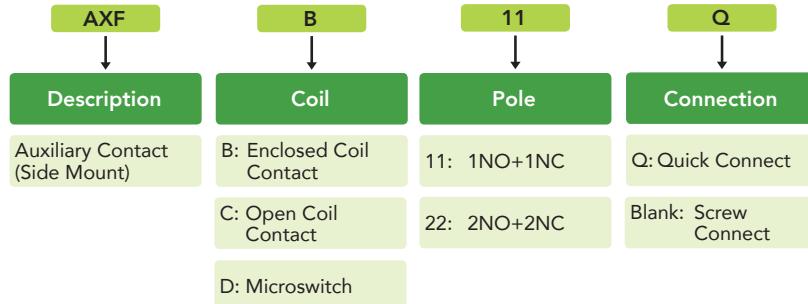
Ex9CK... 4P 4NO

Ex9CK20~90



Definite Purpose Contactors

Ex9CK Accessories and Specifications



Dimensions..... C151

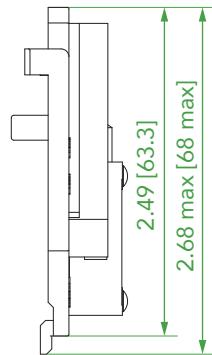
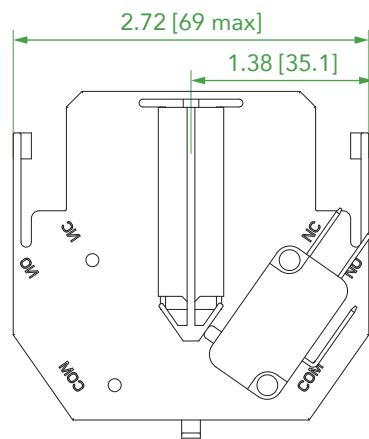
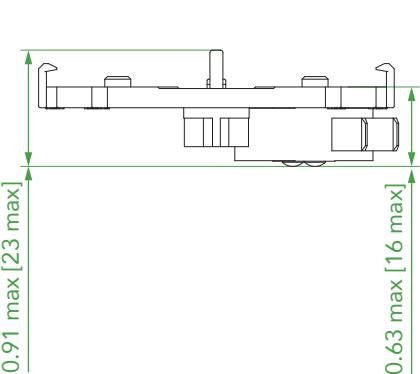
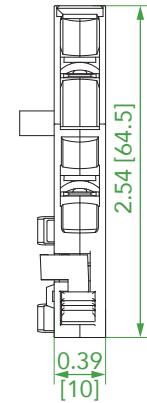
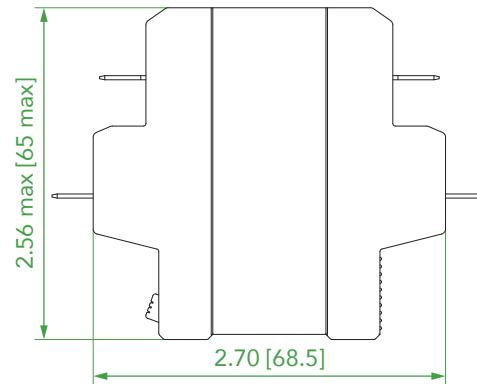
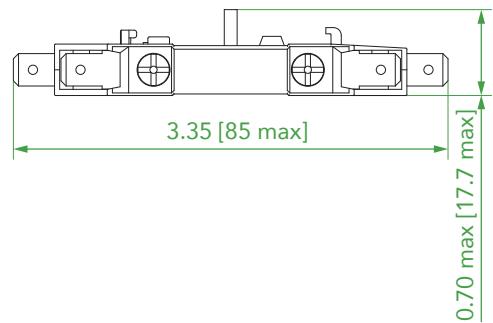
- Contact a NOARK sales representative for more information.

Accessory Description	Matched Contactor	Product	Part Number
	Ex9CK30~40 4P Enclosed Coil	AXFB11	1314038
	Ex9CK30~40 4P Enclosed Coil, Quick Connect	AXFB11Q	1314039
Auxiliary Contact (Side Mount)	Ex9CK20~40 3P Open Coil Ex9CK50~90 Open Coil Ex9CK20~40 Open Coil, Microswitch	AXFC11 AXFC11Q AXFD11	1311725 1314051 1314052
	Ex9CK20~40 Open Coil, Microswitch	AXFD22	1314053

Auxiliary Contact		AXFB11/AXFB11Q	AXFC11/AXFC11Q	AXFD11	AXFD22		
Microswitch		SPDT One Switch Per Side (1NO+1NC) or SPDT Two Switches Per Side (2NO or 2NC)		-	SPDT One Switch Per Side		
Mounting		Side Mounted (Maximum of two)			-		
Wiring		1NO+1NC, 2 NO or 2NC	1NO+1NC	1NO+1NC	2NO+2NC		
Ratings							
Drop-Off (A)	120 Vac	3		Contact a NOARK sales rep for information			
	240 Vac	1.50					
	480 Vac	0.75					
	600 Vac	0.60					
Pick-Up (A)	120 Vac	30					
	240 Vac	15					
	480 Vac	7.50					
	600 Vac	6					
Continuous (A)	120 Vac	10					
	240 Vac						
	480 Vac						
	600 Vac						
Current Ratings							
125 or 250 Vac		10 A, 1/3 hp					
120 Vac on Lamp Load		4 A					
125 Vdc		1/2 A					
250 Vdc		1/4 A					

Definite Purpose Contactors

Ex9CK Accessories Dimensions



- Contact a NOARK sales representative for AXFB11 and AXFB11Q dimensions.

MANUAL MOTOR STARTERS



Ex9SN

Manual Motor Starters

Ex9SN Product Overview

Features

Manual motor starters are electromechanical protection devices for the main circuit. They are used mainly to switch motors manually ON/OFF and protect them fuse less against short circuit and loss-phase. None-fuss protection with a manual motor starter saves costs, space and ensures a quick reaction under short-circuit condition, by switching off the motor within milliseconds. Manual motor starter combinations are setup together with contactors and overload relays.

- Available with enclosed coils for protection against particle contamination
- Short-circuit protection
- Disconnect function
 - ✓ Overload protection
 - ✓ Loss-phase protection
- Suitable for three and single-phase application
- Trip-free mechanism
- Clear switch position indication ON/OFF/TRIP
- Lockable handle

F

Manual Motor Starters

Ex9SN National and International Standards

Certifications

- UL 508 Listed, File Number E467185, UL 60947-1 and 60947-4-1A
- Certified for Canada according to CSA standards 22.2 No. 14
- IEC/EN 60947-2 and 60947-4-1
- CE Approved
- RoHS Compliant



Manual Motor Starters

Ex9SN Product Selection Guide

Label



- 1 Adjustable Current Range
- 2 Rated Current
- 3 Test Button
- 4 Brand
- 5 Product Selection
- 6 OFF/ON Push Buttons or
Rotary Handle with Padlock

F

Product Selection Guide

Ex9SN	25	A	0.16A
NOARK Ex9SN Series	Frame Size	Style	Rated Current
	25: 25 A	A: Rotary Handle B: Pushbutton	0.16A: 0.10~0.16 A 0.25A: 0.16~0.25 A 0.4A: 0.25~0.40 A 0.63A: 0.40~0.63 A 1A: 0.63~1 A 1.6A: 1~1.6 A 2.5A: 1.6~2.5 A 4A: 2.5~4 A 6.3A: 4~6.3 A 10A: 6~10 A 14A: 9~14 A 18A: 13~18 A 23A: 17~23 A 25A: 20~25 A

Manual Motor Starters

Ex9SN 25 A



25 A

Rated Current Amp (Min-Max)	Rotary Handle		Pushbutton	
	Product	Part Number	Product	Part Number
0.10~0.16	Ex9SN25A0.16A	1600001	Ex9SN25B0.16A	1600015
0.16~0.25	Ex9SN25A0.25A	1600002	Ex9SN25B0.25A	1600016
0.25~0.40	Ex9SN25A0.4A	1600003	Ex9SN25B0.4A	1600017
0.40~0.63	Ex9SN25A0.63A	1600004	Ex9SN25B0.63A	1600018
0.63~1	Ex9SN25A1A	1600005	Ex9SN25B1A	1600019
1~1.6	Ex9SN25A1.6A	1600006	Ex9SN25B1.6A	1600020
1.6~2.5	Ex9SN25A2.5A	1600007	Ex9SN25B2.5A	1600021
2.5~4	Ex9SN25A4A	1600008	Ex9SN25B4A	1600022
4~6.3	Ex9SN25A6.3A	1600009	Ex9SN25B6.3A	1600023
6~10	Ex9SN25A10A	1600010	Ex9SN25B10A	1600024
9~14	Ex9SN25A14A	1600011	Ex9SN25B14A	1600025
13~18	Ex9SN25A18A	1600012	Ex9SN25B18A	1600026
17~23	Ex9SN25A23A	1600013	Ex9SN25B23A	1600027
20~25	Ex9SN25A25A	1600014	Ex9SN25B25A	1600028

Specifications F157 to 158
 Dimensions F159

Wiring Diagram F160
 Accessories F162 to 166

Manual Motor Starters

Ex9SN Specifications

Operating Conditions							
Tripping Class			Class 10 A				
Environmental Temperature	Transportation or Storage		-76 to 176 °F (-60 to +80 °C)				
	Working at		-4 to 131 °F (-20 to +55 °C)				
	Testing at		23 to 104 °F (-5 to +40 °C)				
Altitude ft (m)			Not to exceed 6,562 (2,000)				
Air Conditions		At mounting site, relative humidity not exceed 50% at the max temperature of 104 °F (+40 °C), higher relative humidity is allowable under lower temperature					
Pollution Grade			Class III				
Release Grade			10 A (SN25)				
Rated Operational Frequency (Hz)			50/60				
Mounting Conditions		The inclination between the mounting plane and the vertical plane shall not exceed 5°. The product shall be installed and operated at a place without obvious shake, impact and vibration.					
Rated Insulation Voltage Ui (V)			IEC 690, UL/CSA 600				
Rated Operational Voltage Ue (V)			230/340, 400/415, 440, 50, 690				
Rated Impulse Withstand Voltage Uimp (V)			8,000				
Interrupting Rating Icu			5 ka				
Service Life	Electrical		2,000				
	Mechanical		10,000				
Degree of Protection			IP20				
Overload Protection Properties							
Series Number	Multiple of Setting Current	Initial Status	Time		Expected Results	Ambient Temperature	
1	1.05	Cold Status	$t \geq 2h$		Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)	
2	1.20	Heat Status (right after test 1)	$t < 2h$		Tripping		
3	1.50		Tripping Class	10 A $t < 2$ min			
4	7.20	Cold Status	Tripping Class	10 A $2s < t \leq 10s$			
Phase Failure Protection Properties							
Series Number	Multiple of Setting Current Any 2 Phase	The Other Phase	Initial Status	Time	Expected Results	Ambient Temperature	
1	1.0	0.9	Cold Status	$t \geq 2h$	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)	
2	1.15	0	Heat Status (right after test 1)	$t < 2h$	Tripping		
Temperature Compensation Properties							
Series Number	Multiple of Setting Current		Initial Status	Time	Expected Results	Ambient Temperature	
1	1.0		Cold Status	$t \geq 2h$	Non-Tripping	104°F to ±35.6°F (+40°C to ±2°C)	
2	1.2		Heat Status (right after test 1)	$t < 2h$	Tripping		
3	1.05		Cold Status	$t \geq 2h$	Non-Tripping		
4	1.3		Heat Status (right after test 1)	$t < 2h$	Tripping		

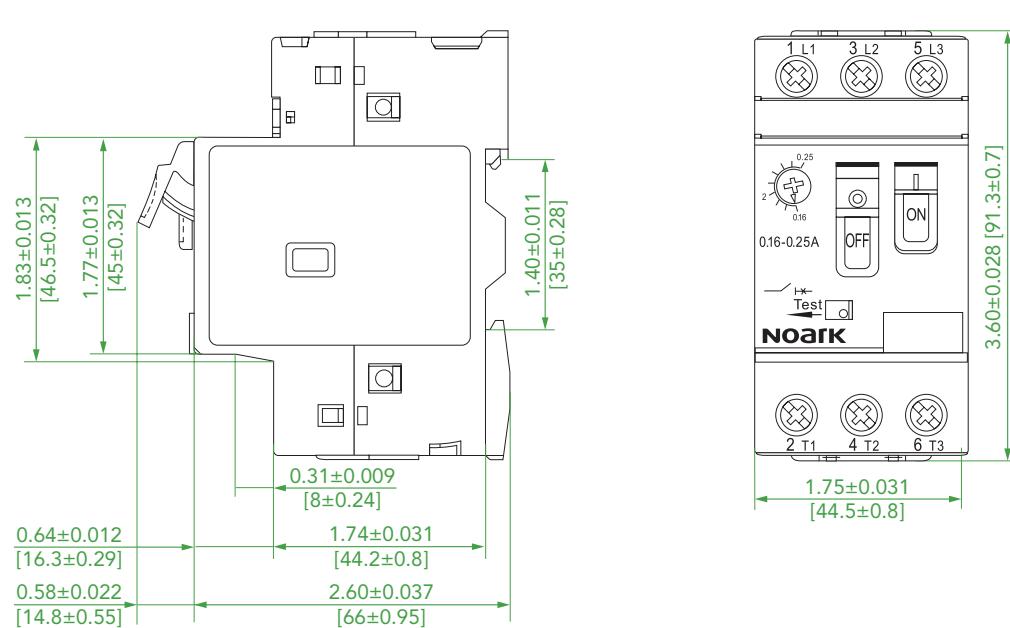
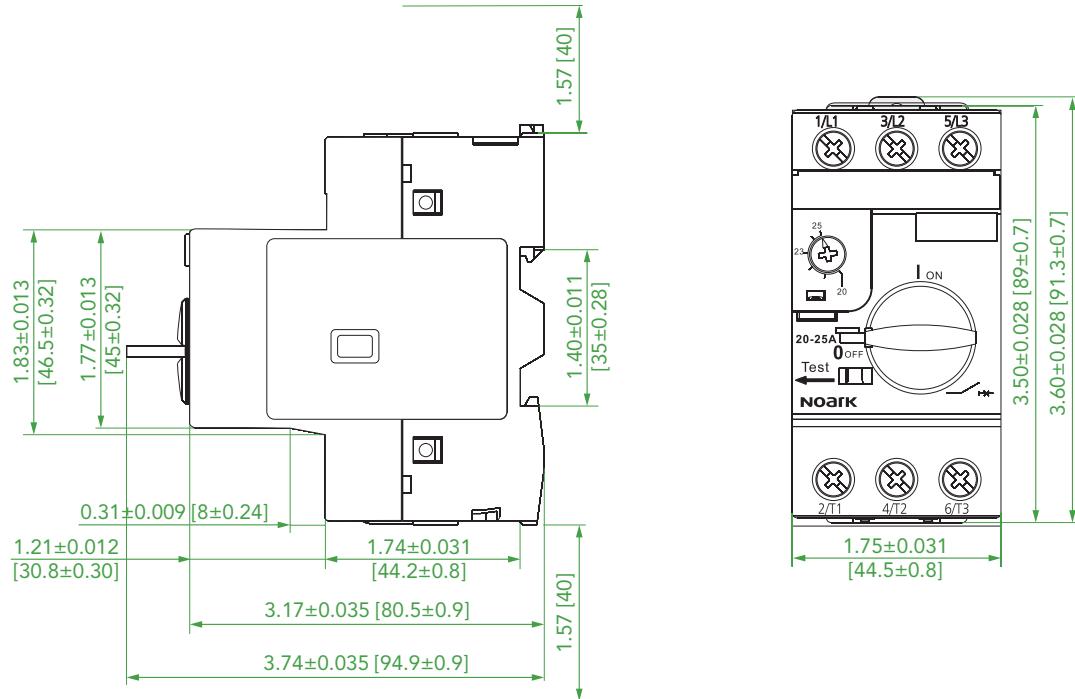
Manual Motor Starters

Ex9SN Specifications

Setting Current Range (A)	0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6.3	6~10	9~14	13~18	17~23	20~25
Rated Current of Release	0.16	0.25	0.4	0.63	1	1.6	2.5	4	6.3	10	14	18	23	25
UL Ratings														
Single-Phase (HP)	120 Vac					-	-	1/8	1/4	1/2	3/4	1	1.5	2
	240 Vac					-	1/10	1/6	1/3	1/2	1.5	2		3
	240 Vac					-	1/2	1	1.5		3		10	7.5
Three-Phase (HP)	480 Vac					1/2	3/4	1	2	3	5	10		15
	600 Vac						1.5	3	5	7.5		15		20
IEC Ratings														
400/415 Vac	Icu (kA)								100				15	
	Ics % Icu									50			40	
690 Vac	Icu (kA)									3				
	Ics % Icu										75			
Rated Ultimate Short-Circuit Breaking Capacity	230/240 V									100		100		50
Icu (kA)	400/415 V										15			
	440 V									50	15	8		6
	480/500 V									10	10	6		4
	660/690 V										3			
Rated Service Short-Circuit Breaking Capacity	230/240 V									100		100		50
Ics (kA)	400/415 V										7.5		6	
	440 V									50	15	4		3
	480/500 V									10	10	4.5		
	660/690 V										2.25			
Arcing Distance in (mm)														
										1.57 (40)				
Standard Rated Power of Three-Phase Motor (kW)	230/240 V												5.5	
	400 V											7.5		
	415 V									0.37	0.75	2.2		
	440 V										1.5	4	5.5	
	500 V											3		
	660/690 V									0.37	0.55	1.1	2.2	
												3.7	5.5	
													7.5	
													9	
														11
														15
Current Setting Value of Instantaneous Electromagnetic Release Ir (A)														
	1.5	2.4	5	8	13	22.5	33.5	51	78	138	170	223		327
Current Rating of Fuse-Link of Back-Up Fuse, Which is Only Needed in Case of Icc>Icu (Icc: Prospective Short-Circuit Breaking Current)	230/240 V	aM A gl/gG A											★	80
	400/415 V	aM A gl/gG A											★	100
	440 V	aM A gl/gG A											63	80
	500 V	aM A gl/gG A											80	100
★: Fuse is not Required	690 V	aM A gl/gG A											50	63
													16	25
													32	40
													20	32
													40	50

Manual Motor Starters

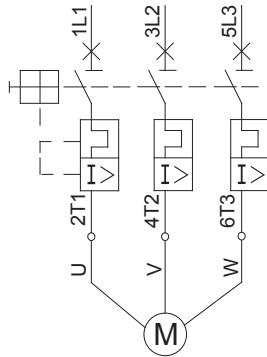
Ex9SN Dimensions



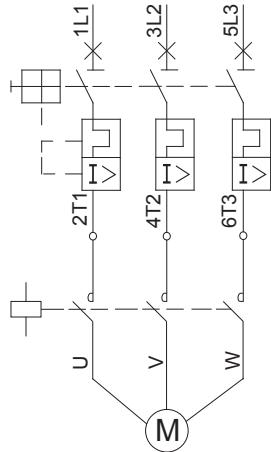
Manual Motor Starters

Ex9SN Wiring Diagrams

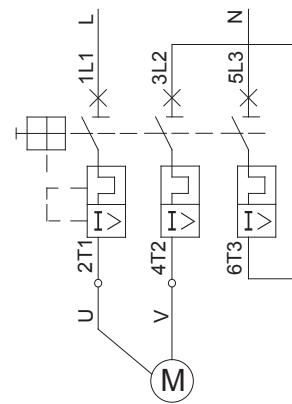
Ex9SN25A/B



Operating principle
diagram of starter



Principle connection diagram
of starters and contactors



Principle connection diagram
of single-phase or DC motor

Manual Motor Starters

Ex9SN Accessories: Auxiliary Contact and Enclosure



ASN	Description	Type	Auxiliary Contact
	Manual Motor Starter Accessory	A: Auxiliary Contact Side Mount	11: 1NO+1NC
		B: Auxiliary Contact Front Mount	20: 2NO
		F: Auxiliary Contact with Fault Signal Contact	1001: 1NO (Fault)+1NC (Auxiliary) 0101: 1NC (Fault)+1NC (Auxiliary) 1010: 1NO (Fault)+1NO (Auxiliary) 0110: 1NC (Fault)+1NO (Auxiliary)

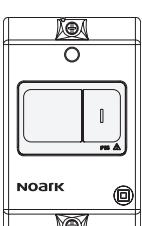


ASNF

Accessory Description	Type	Product	Part Number
Auxiliary Contact	Side Mount	ASNA11	1600030
	Front Mount	ASNA20	1600029
	Fault Signal Contact	ASNB11	1600032
Fault Signal Contact		ASNB20	1600031
		ASNF1001	1600039
		ASNF0101	1600040
		ASNF1010	1600041
		ASNF0110	1600042

F

Specifications F163 to 164
 Dimensions..... F165



ASNEA



ASNEB

ASN	Description	Type
	Manual Motor Starter Accessory	EA: Enclosure with Actuating Diaphragm
		EB: Enclosure with Emergency Stop Pushbutton

Accessory Description	Product	Part Number
Enclosure	ASNEA	1600043
	ASNEB	1600044

Specifications F163 to 164
 Dimensions..... F166

Manual Motor Starters

Ex9SN Accessories: Shunt Trip and Under-Voltage Release



ASN	T	A
Description	Type	Rated Voltage
Manual Motor Starter Accessory	T: Shunt Trip Release	A: 110~115 Vac 50 Hz 127 V 60 Hz
		B: 220~240 Vac 60 Hz
		C: 380~400 Vac 50 Hz 440 V 60 Hz

Specifications F163
Dimensions..... F165

Accessory Description	Product	Part Number
Shunt Trip Release (Side Mount)	ASNTA	1600036
	ASNTB	1600037
	ASNTC	1600038



ASN	UV	A
Description	Type	Rated Voltage
Manual Motor Starter Accessory	UV: Under-Voltage Release	A: 110~115 Vac 50 Hz 127 V 60 Hz
		B: 220~240 Vac 60 Hz
		C: 380~400 Vac 50 Hz 440 V 60 Hz

Specifications F163
Dimensions..... F165

Accessory Description	Product	Part Number
Under Voltage Release (Side Mount)	ASNUVA	1600033
	ASNUVB	1600034
	ASNUVC	1600035

Manual Motor Starters

Ex9SN Accessory Specifications

	Side Mount ASNA	Auxiliary Contact Front Mount ASNB	Fault Signal Contact ASNF	Enclosure Actuating Diaphragm ASNEA	Emergency Stop Pushbutton ASNEB	Shunt Trip Release ASNT	Under Voltage Release ASNUV
UL File Number	E467185						
UL Ratings							
Electrical Contact Type	B600	D300	Fault: D300 Auxiliary: B600				-
Rated Insulation Voltage Ui (V)	690	250	690				690
Voltage Range of Operation (Ue)		-				70~110%	35~70%
Ue Max (V)	690	250	Fault: 240 Auxiliary: 690				
Conventional Heating Current Ith (A)	6	2.5	Fault: 2.5 Auxiliary: 6				
AC-15	720 Vac 240 V	120 Vac 240 V	Fault: 720 Vac/240 V Auxiliary: 720 Vac/240 V				
IEC File Number	IEC/EN 60947-5-1				IEC/EN 60947-2		
IEC Ratings							
Pick-Up Voltage (Un)						-	85~110%
Drop-Off Voltage (Un)		-				70~110%	35~70%
IP Class				IP 55			-

F

Manual Motor Starters

Ex9SN Accessory Specifications

		Auxiliary Contact			
		Side Mount ASNA	Front Mount ASN B	Fault Signal Contact ASN F	
Utilization Category		AC-15		AC-14	
Rated Operational Current Ie (A)	24 Vac	-	2	1.50	
	48 Vac	6	1.25	1	
	110/127 Vac	4.50	1	0.50	
	230/240 Vac	3.30	0.50	0.30	
	380/415 Vac	2.20	-		
	440 Vac	1.50			
	500 Vac	1			
	690 Vac	0.60			
	DC-13				
	24 Vdc	6	1		
Normal Operational Power P (W)	48 Vdc	5	0.30		
	60 Vdc	3	0.15		
	110 Vdc	1.30	-		
	220 Vdc	0.50			
	AC-15				
	24 Vac	-	48	36	
	48 Vac	300	60	48	
	110/127 Vac	500	127	72	
	230/240 Vac	720	120		
	380/415 Vac	850	-		
	440 Vac	650			
	500 Vac	500			
	690 Vac	400			
	DC-13				
Operational Features (Times)	24 Vdc	140	24		
	48 Vdc	240	15		
	60 Vdc	180	9		
	110 Vdc	140	-		
	220 Vdc	120			
Operational Features (Times)		-	1,000		

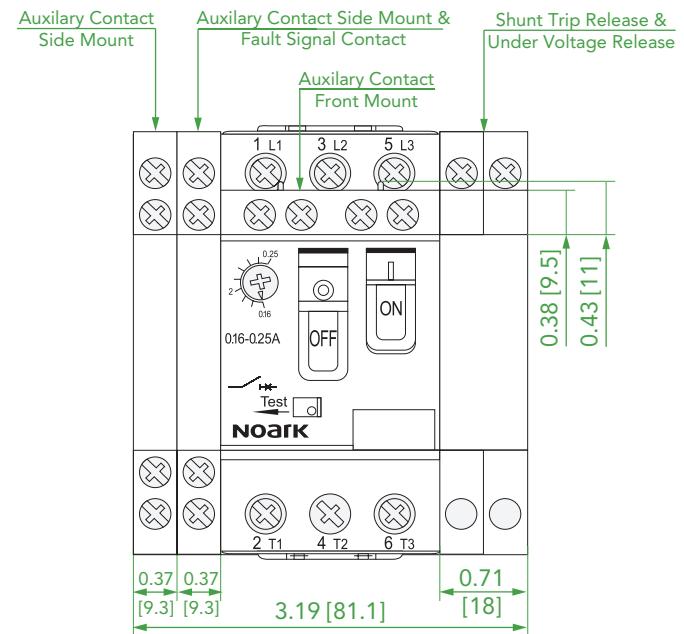
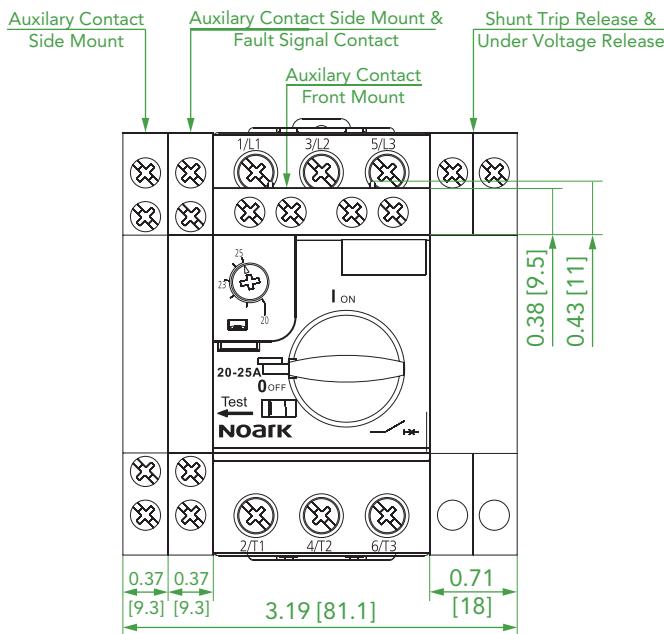
		Auxiliary Contact		
		Fault Signal Contact		ASN F
Utilization Category		AC-14	AC-15	DC-13
Connection	I/le	6	10	1.10
	U/Ue	1.10		
Disconnection	Cos φ or t 0.95	0.70	0.30	6 Pe
	I/le	6	10	1.10
	U/Ue	1.10		
	Cos φ or t 0.95	0.70	0.30	6 Pe
Number of Operation Cycles	10			
	Number of Operation Cycles and Operation Frequency			
Number of On/Off Operation Cycles and Operation Frequency	2			
	On Power Time	0.05		

Manual Motor Starters

Ex9SN Accessory Dimensions

Manual Motor Starter with Accessories

Unit: in [mm]



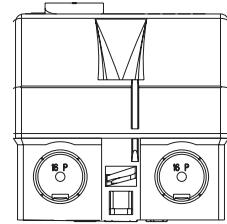
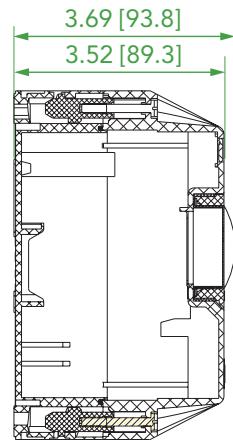
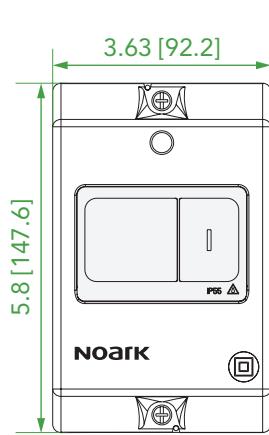
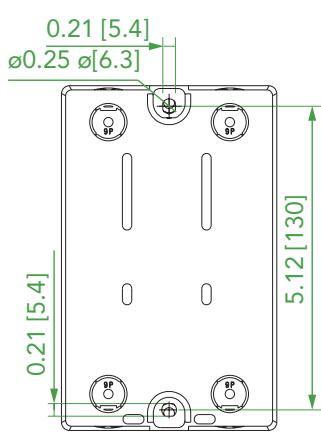
Manual Motor Starters

Ex9SN Accessory Dimensions

ASNEA

Enclosure with Actuating Diaphragm

Unit: in [mm]



ASNEB

Enclosure with Emergency Stop Pushbutton

Unit: in [mm]

