

Product Details and Certifications

Cross Reference RA Part Number: 100S-D250EN22C B

 **Product: 100S-D250EN22C**

Description: 100S-D Safety Contactor, IEC 250A, 380-500V 50/60Hz
Electronic Coil with Electric Interface, 2 N.O. - 2 N.C.



Representative Photo Only (actual product may vary based on configuration sections)

CONTACTOR DATA

Bulletin Number	100S-D IEC Safety Contactor
Current Rating	250A
Coil Voltage	380-500V 50Hz/60Hz
Number of Poles	3 Poles
Coil Type	Electronic Coil with Electronic Interface
Auxiliary Contact Configuration	2 N.O. - 2 N.C.

CERTIFICATIONS AND APPROVALS

UL

CSA

IEC

CE

For UL Certifications Directory:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

Safety Contactors



Bulletin	100S-C/104S-C	100S-D
Screw Terminals	✓	Thru-hole Threaded (630...860 A)
Max. Current I_e	97 A	860 A
Current Rating	9...97 A	115...860 A
Features	<ul style="list-style-type: none"> Positively guided/mechanically linked auxiliary contacts Front-mounted auxiliary contacts: <ul style="list-style-type: none"> Permanently fixed Protective cover to prevent manual operation Red contact housing for easy identification Incorporates IEC 947-5-1 "Mechanically Linked" symbol Optional gold-plated bifurcated versions AC and DC operating coils SUVA third-party certification 	<ul style="list-style-type: none"> Mirror contact performance on auxiliary contacts, which are required in feedback circuit for modern safety applications. The N.C. auxiliary contacts will not change state when a power contact welds. SUVA third-party certification AC and DC operating coils "Mirror Contact" symbol
Contacts	3 main poles with N.C. mechanically linked feedback contacts	3 main poles with N.C. mechanically linked feedback contacts
Coil Voltages	AC = 12...600V, 50/60Hz DC = 12...250V	<p>Conventional Coils Cat. Nos. 100S-D115...D180 AC: 24...550V, 50 Hz; 24...600V, 60Hz; 100...277V, 50/60Hz DC: 24...250V</p> <p>Electronic Coils Cat. Nos. 100S-D115...D300 AC: 24...500V, 50/60 Hz DC: 24...255V</p> <p>Cat. Nos. 100S-D420 AC: 42...500V 50/60 Hz DC: 48...255V</p> <p>Cat. Nos. 100S-D630...D860 AC: 100...600V, 50/60 Hz DC: 110...255V</p>
Optional Accessories	<ul style="list-style-type: none"> Side-mount auxiliary contacts Surge suppressors Electronic timers Mechanical interlocks 	<ul style="list-style-type: none"> Side-mount auxiliary contacts Surge suppressors IP20 terminal blocks Terminal shields Terminal covers Connecting components Terminal lugs Mechanical/electrical interlocks
Standards Compliance	EN/IEC 60947-4 IEC 60947-5-1 Annex L — Mechanically Linked Contacts IEC 60947-4-1 Annex H — Mirror Contacts UL 508 CSA C22.2 No. 14 EN50205	EN/IEC 60947-4 IEC 60947-4-1, Annex H — Mirror Contacts IEC 60947-4-1/A1: 2002-09, Annex F UL 508 CSA C22.2, No. 14
Certifications	<ul style="list-style-type: none"> cULus Listed (File No. E3125; Guide NLDX, NLDX7) SUVA Third-Party Certified CE Marked 	<ul style="list-style-type: none"> cULus Listed (File No. E3125; Guide No. NLDX, NLDX7) SUVA Third-Party Certified CE Marked CCC (115...180 A - conventional coil; 140...420 A - electronic coil)
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Bulletin 100S-D — Safety Contactors

- 63...500 kW @ 400V
- 75...600 Hp @ 460V
- 100...700 Hp @ 575V
- Electronic and conventional coils
 - AC & DC
 - Integrated PLC interface
 - Low power pick-up & hold-in
 - Wide voltage ranges
- Complete range of accessories
- Environmentally friendly
- Compact dimensions

Bulletin 100S-D safety contactors were designed to address the needs of modern safety applications requiring feedback and monitoring of the energy isolating switchgear used in hazardous motion loads. The

100S-D meets these needs through its "mirror contact" design. If a power contact welds, the N.C. auxiliary contacts will not change state. This feature provides reliable indication about the open/closed status of the main power poles. In addition, the gold-plated bifurcated auxiliary contacts are ideally suited for low-energy applications or feedback control circuits with multiple series-connected N.C. auxiliary contacts.

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Standards Compliance

- IEC 60947-4-1
- IEC 60947-4 Annex F
- IEC 60947 Type "2"
- Coordination
- CSA C22.2 No. 14
- UL 508

Certifications

- CE Marked
- cULus Listed (File No. E 41850, Guide NLDX, NLDX7)
- SUVA Certified
- CCC (115...180 conventional coil; 140...420 electronic coil)

Your order must include: cat. no. of the contactor specified with coil voltage code and, if required, cat. no. of any accessories and/or replacement coils.

Product Selection
3-Pole AC-Operated Contactors

I_e [A]		Switching of 3-phase motors AC-2, AC-3											Auxiliary contacts		Cat. No.
60 °C	40 °C	kW (50 Hz)*						Hp (60 Hz)					N.O.	N.C.	
AC-3	AC-1	230V	400V	415V	500V	690V	1000V	200V	230V	460V	575V				
115	250	37	63	66/75	80	111	63	40	40	75	100	2	2	100S-D115 \otimes 22BC	
140	250	45	78	82/90	80/100 \ddagger	110/132 \ddagger	75	40	50	100	125	2	2	100S-D140 \otimes 22BC	
180	250	55	101	100	90/125 \ddagger	132/160 \ddagger	90	50	60	150	150	2	2	100S-D180 \otimes 22BC	
210	350	63	118	110	205	200	110	60	75	150	200	2	2	100S-D210 \otimes 22BC	
250	350	80	140	150	250	250	133	75	100	200	250	2	2	100S-D250\otimes22BC	
300	450	90	170	160	290	300	160	100	125	250	300	2	2	100S-D300 \otimes 22BC	
420	540	132	238	250	420	425	220	150	175	350	400	2	2	100S-D420 \otimes 22BC	
630	800	200	355	355	500	500	—	200	250	500	600	2	2	100S-D630 \otimes 22BC	
860	1000	250	500	500	500	600	—	250	300	600	700	2	2	100S-D860 \otimes 22BC	

* Preferred values according to IEC 60072-1.

\otimes The N.C. contacts meet IEC 60947-4 Annex F requirements for mirror contact performance. The N.C. mirror contacts are wired in series or parallel and must be used as monitoring contacts with feedback to the safety circuit.

\ddagger Higher kW rating only applies to contactors with electronic coil.

$\mathbf{\>}$ If standard cross-stamped auxiliary contacts are required, remove the letter "B" before the letter "C" in the cat. no. Example: Cat. No. **100S-D115 \otimes 22BC** becomes Cat. No. **100S-D115 \otimes 22C**.

\otimes Coil voltage code—see page 2-152



⊗ **Coil Voltage Codes for AC Control**

Conventional Coil	[V]	24	48	100	110	120	200	208	220	230	240	277	380	415	440	480	500	550	600
		24	42...64	100	110...130	200	208...277	200...220	230...250	277	380...415	380...440	440...480	380...500	500				
100S-D115...100S-D180	AC, 50 Hz	K	Y	—	D	—	—	—	A	—	T	—	N	B	G	—	M	C	—
	AC, 60 Hz	J	X	—	—	D	—	H	—	—	A	T	—	—	N	B	—	—	C
100S-D115	AC, 50/60 Hz	—	—	KP	KN	—	KG	—	KL	KF	KA	KT	—	—	—	—	—	—	—



Electronic Coil w/ PLC Interface§	[V]	24	42...64	100	110...130	200	208...277	200...220	230...250	277	380...415	380...440	440...480	380...500	500
100S-D95...100S-D300	AC, 50/60 Hz	EJ*	EY	EP	ED	EG	EA	—	—	—	—	VN	—	EN	←
100S-D420	AC, 50/60 Hz	—	—	EP	ED	EG	EA	—	—	—	—	—	—	EN	—
100S-D630...100S-D860	AC, 50/60 Hz	—	—	EP	ED	EG	—	EG	EA	ET	EN	—	EB	—	EM

§ Signal voltage of the Cat. No. 100S-D... electronic interface U_g : 24V DC/ I_g : 15 mA

Pick-up voltage: 13.0V DC...30.2V DC
 Drop-out voltage: -3.0V DC...+5.0V DC

* Not available with 100S-D300.

3-Pole DC-Operated Contactors

I_e [A]		Switching of 3-phase motors AC-2, AC-3										Auxiliary contacts		Conventional Coil Cat. No.	Electronic Coil Cat. No. >
60 °C	40 °C	kW (50 Hz) *					Hp (60 Hz)					N.O.	N.C. * *		
AC-3	AC-1	230V	400V	415V	500V	690V	1000V	200V	230V	460V	575V				
115	250	37	63	66/75	80	111	63	40	40	75	100	2	2	100S-D115⊗33LC‡	100S-D115⊗22BC
140	250	45	78	75	80/100§	110/132§	75	40	50	100	125	3	2/1L	100S-D140⊗33LC‡	100S-D140⊗22BC
180	250	55	101	100	90/125§	132/160§	90	50	60	150	150	3	2/1L	100S-D180⊗33LC‡	100S-D180⊗22BC
210	350	63	118	110	205	200	110	60	75	150	200	2	2	—	100S-D210⊗22BC
250	350	80	140	150	250	250	133	75	100	200	250	2	2	—	100S-D250⊗22BC
300	450	90	170	160	290	300	160	100	125	250	300	2	2	—	100S-D300⊗22BC
420	540	132	238	250	420	425	220	150	175	350	400	2	2	—	100S-D420⊗22BC
630	800	200	355	355	500	500	—	200	250	500	600	2	2	—	100S-D630⊗22BC
860	1000	250	500	500	500	600	—	250	300	600	700	2	2	—	100S-D860⊗22BC

* Preferred values according to IEC 60072-1.

* The N.C. contacts meet IEC 60947-4 Annex F requirements for mirror contact performance. The N.C. mirror contacts are wired in series or parallel and must be used as monitoring contacts with feedback to the safety circuit.

‡ For conventional DC coil only. The pickup winding must be interconnected with the N.C. late-breaking auxiliary contacts.

§ Higher kW rating only applies to contactors with electronic coil.

> If standard cross-stamped front-mount auxiliary contacts are required, remove the letter "B" before the letter "C" in the Cat. No. Example: Cat. No. **100S-D115⊗22BC** becomes Cat. No. **100S-D115⊗22C**.

⊗ **Coil Voltage Codes for DC Control**

Conventional Coil	[V]	24	48	110	125	220	250
100S-D115...100S-D180	DC	ZJ	ZY	ZD	ZS	ZA	ZT

Electronic Coil w/ EI Interface *	[V]	24	48...72	110...130	200...255
100S-D115...100S-D300	DC	EZJ	EZY	EZD	EZA
100S-D420	DC	—	—	EZD	EZA
100S-D630...860	DC	—	—	ED	EA

* Signal voltage of the cat. no. 100S-S... electronic interface U_g : 24V DC/ I_g : 15 mA

Pick-up voltage: 13.0V DC...30.2V DC
 Drop-out voltage: -3.0V DC...+5.0V DC