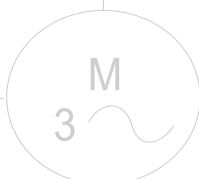
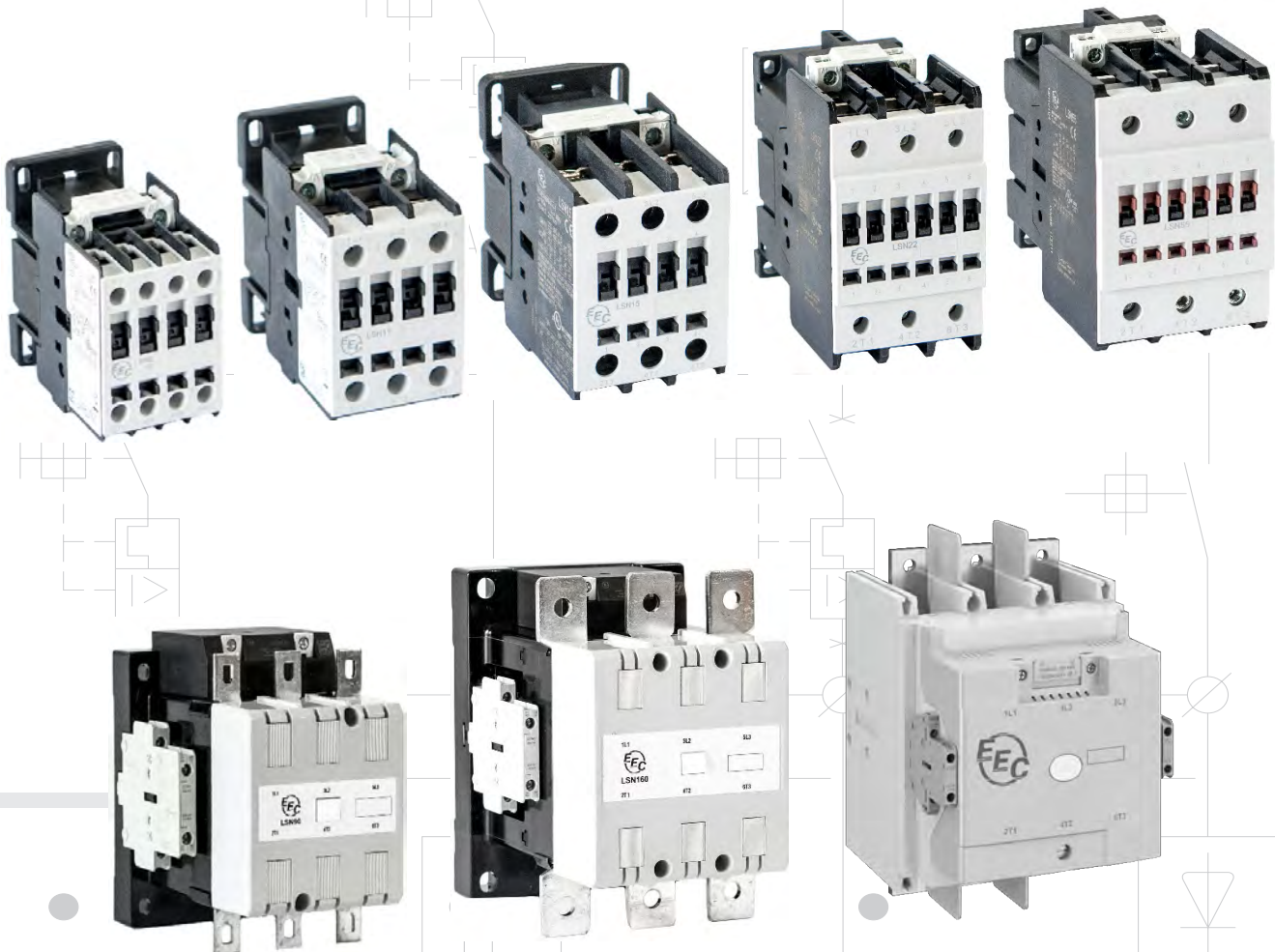


CONTACTORS - LSN series

Low Voltage Motor Control



LSN Contactors - Presentation

The LSN general-purpose contactor series offers a wide array of power devices, accessories, and enclosures to give you greater design versatility.

Rated for inductive loads up to 560A or 500hp @ 575VAC (AC-3), EEC's LSN series can offer the most suitable contactor for your application.

LSN series contactors allow panel space optimization, with only a few compact frame sizes from 7.5hp to 500hp @ 575VAC. With commonality designs for the LSN series accessories, the LSN series offers simplified inventory requirements, while maintaining the necessary items required for every day use. An example of the LSN's flexibility is with its side mount auxiliary contacts (HBXS11), which is suitable for use throughout the entire LSN series range.

Designed to meet growing demands expected from modern IEC frame contactors, the LSN series has been designed with extended mechanical and electrical cycles, offer dependable switching and a longer lifespan in even the most heavy-duty applications.

The entire range of LSN contactors have been tested and approved to be used under Type 1 and Type 2 short-circuit coordination (Testing Standard below).

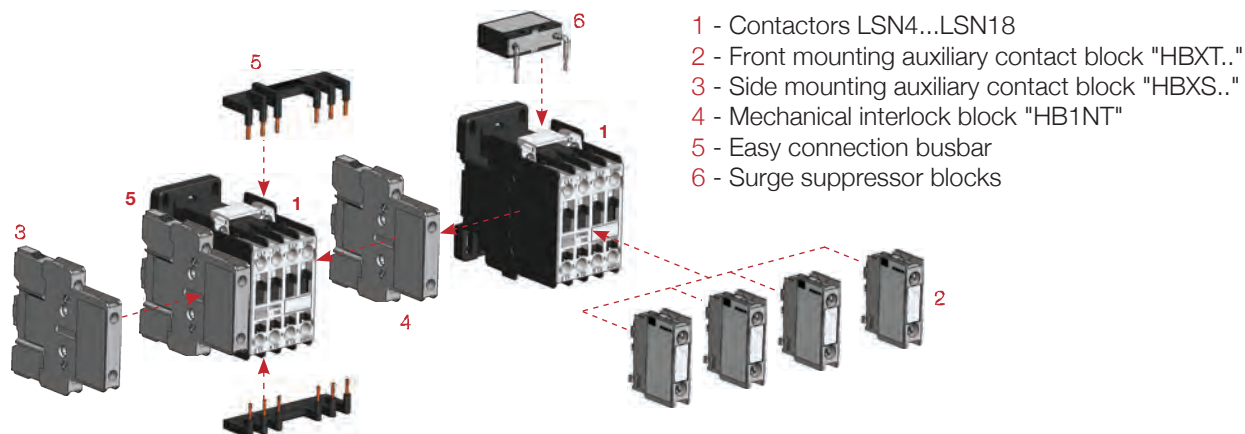
Type 1 - Under short circuit conditions, the contactor or starter shall cause no danger to persons or installation and may not be suitable for further service without repair and replacement parts.

Type 2 - Under short circuit conditions, the contactor or starter shall cause no danger to persons or installation and shall be suitable for further use. The risk of contact welding is recognized, in which case the manufacturer shall indicate the measures to be taken in regards to equipment maintenance.

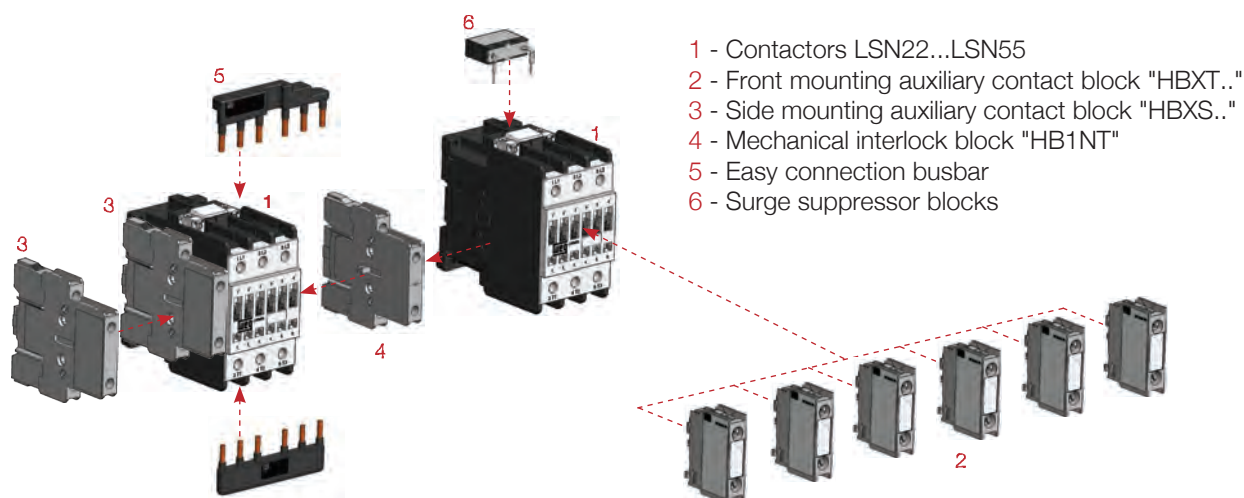
The LSN Series adhere to UL508, CSA 22.2 #14 (USA and Canada), as well as IEC 60947 and CE approvals.



LSN Contactors from 9 up to 40A (AC-3) - Accessories Overview

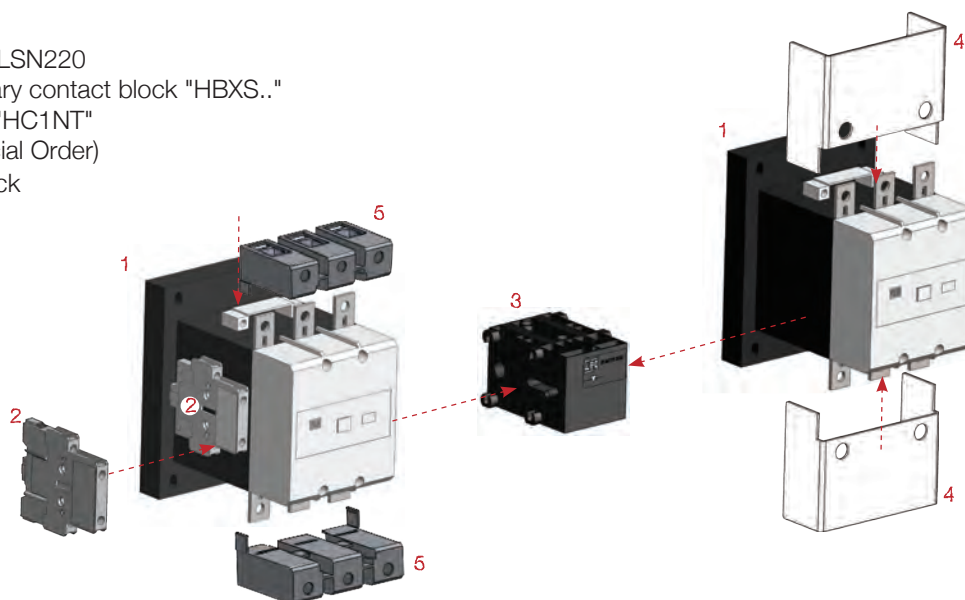


LSN Contactors from 50 up to 105A (AC-3) - Accessories Overview



LSN Contactors from 112 up to 300A (AC-3) - Accessories Overview

- 1 - Contactors LSN75...LSN220
- 2 - Side mounting auxiliary contact block "HBXS.."
- 3 - Mechanical interlock "HC1NT"
- 4 - Terminal cover (Special Order)
- 5 - HTC VN..terminal block





The LSN line of general purpose contactors, are rated for inductive loads up to 560 A or 185 kW.

Reducing inventory is simple with LSN common accessories. For example, side-mounted auxiliary contact blocks are the same from the smallest to largest size.

Designed for extended mechanical and electrical life, dependable switching in even the most heavy-duty applications can be achieved. No matter how demanding the application, all LSN contactors are tested and approved to be used under Type 1 and Type 2 short-circuit coordination. Ensuring global acceptance, all components conform to UL 508 (USA and Canada), IEC 60947 and CE.



Three-Pole Compact Contactors - 9 A to 560 A (AC-3)

Rated operational current I_n AC-3 ($U_e \leq 440$ V)	Conv. thermal current $I_{th} = I_n$ AC-1	Max. rated operational power of single-phase motors 50/60 Hz		Max. rated operational power of three-phase motors 50/60 Hz				Auxiliary contacts per contactor		Part #	List \$	
		120 V	230 V	208 V	230 V	480 V	575 V	*3 *4 NO	*1 *2 NC		AC Coil	DC Coil
A	A	HP	HP	HP	HP	HP	HP					
9	25	1/2	1.5	3	3	5	7.5	1	0	LSN4-310-♦	\$ 88	NA
12	25	3/4	2	3	3	7.5	10	1	0	LSN5-310-♦	\$ 98	NA
18	32	1	3	5	5	10	15	1	0	LSN7-310-♦	\$ 102	NA
25	45	2	5	7.5	7.5	15	15	1	0	LSN11-310-♦	\$ 120	NA
32	60	3	5	10	10	20	25	1	0	LSN15-310-♦	\$ 170	\$ 204
40	60	3	5	10	15	30	25	1	1	LSN18-311-♦	\$ 186	\$ 220
50	90	5	7.5	15	15	40	40	1	1	LSN22-311-♦	\$ 200	\$ 280
65	110	5	10	20	20	50	50	1	1	LSN30-311-♦	\$ 270	\$ 344
80	110	7.5	15	20	25	50	60	1	1	LSN37-311-♦	\$ 300	\$ 374
95	140	7.5	15	25	30	60	75	1	1	LSN45-311-♦	\$ 396	\$ 470
105	140	10	20	30	40	75	75	1	1	LSN55-311-♦	\$ 490	\$ 564
112	180	—	—	40	50	100	100	2	2	LSN75-322-♦	\$ 870	
150	225	—	—	50	60	125	150	2	2	LSN90-322-♦	\$ 1,100	
180	225	—	—	60	75	150	200	2	2	LSN132-322-♦	\$ 1,410	
250	350	—	—	75	100	200	250	2	2	LSN160-322-♦	\$ 1,680	
300	410	—	—	100	125	250	350	2	2	LSN220-322-♦	\$ 1,920	
450	600	—	—	125	150	300	400	2	2	LSN280-322-♦	\$ -	
560	700	—	—	1500	200	400	450	2	2	LSN375-322-♦	\$ -	

To Complete the Part #, Replace "♦" with the Appropriate Coil Voltage Code ²⁾

LSN4 - LSN55

AC coil - 60 Hz						
Coil voltage codes	G	A	C	E	F	H
VAC - 50/60 Hz	24	120	208/230	480	600	277

DC coil - (LSN15- LSN55)						
Coil voltage codes	M	N	O	P	R	I
VDC	12	24	48	110/125	220	72

Notes: 2) Other voltages available.

LSN75 - LSN375

50/60 Hz / DC ³⁾ LSN75- LSN220 ³⁾						
Coil voltage codes	G	A	C	E	F	
50/60 Hz / DC ³⁾	24-28 V	110-130 V	208-250 V	430-500 V	600VAC *	

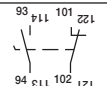
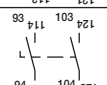
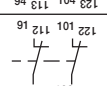
50/60 Hz / DC ³⁾ LSN280- LSN375 ³⁾			
Coil voltage codes	A	C	F
50/60 Hz / DC ³⁾	100...127 V	200...240 V	440...575 V

3) Surge suppressor is already integrated.

Accessories

Auxiliary Contact Blocks

- Rated 10A I_{th}
- UL508 & CSA 22.2 #14 (USA & Canada)
- Positive driven contacts in accordance with IEC 60947-4-1 resp. IEC 60947-5-1

Illustrative picture	For use with	Max. number of contacts/ contactor	Contacts		Terminal Identification	Part #	List \$
			NO	NC			
	LSN4...LSN55	4 - LSN4...LSN11	1	0		HBXT10	\$ 14
		6 - LSN15...LSN18	0	1		HBXT01	\$ 14
	LSN4...LSN220	8 - LSN22...55	2	0		HBXS20	\$ 26
		8 - LSN75...LSN220	1	1		HBXS11	\$ 26
	LSN280 LSN375	8 - LSN280...LSN375	1	1		HCXS11	\$ 26
			2	0		HCXS20	\$ 26
			0	2		HCXS02	\$ 26

Mechanical Interlock for Contactors

Illustrative picture	For use with	Description	Part #	List \$
	LSN4...LSN55 - 3 or 4-pole	Mechanical / Electrical Built in N.C. for each contactor No need for additional aux. contacts for electrical interlocking.	HB1NT	\$ 40
	LSN75...LSN375 - 3-pole	Mechanical Only Requires N.C. contact on contactor for electrical interlocking.	HC1NT	\$ 80

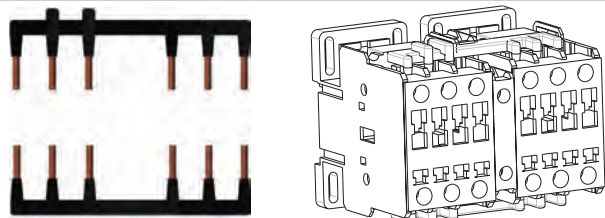
Surge Suppressors

- Connect directly to coil terminals A1 - A2

Illustrative picture	For use with	Voltage	Description	Part #	List \$
	LSN4...LSN18	24 - 48 V 50/60 Hz	 RC	HBRC1-G	\$ 30
		50 - 127 V 50/60 Hz		HBRC1-A	
		130 - 250 V 50/60 Hz		HBRC1-C	
	LSN22...LSN55	24 - 48 V 50/60 Hz		HBRC2-G	
		50 - 127 V 50/60 Hz		HBRC2-A	
		130 - 250 V 50/60 Hz		HBRC2-C	
	LSN4...LSN55	270 - 380 V 50/60 Hz	 Varistor	HBVCS1-D	
		400 - 510 V 50/60 Hz		HBVCS1-E	

Accessories

Reversing Wiring Kits¹⁾

Illustrative picture	For use with	Part #	List \$
	LSN4....LSN7	HBKRN7	\$
	LSN11	HBKRN11	\$
	LSN15....LSN18	HBKRN18	\$
	LSN22....LSN37	HBKRN37	\$

Individual Spare Coils

Illustrative picture	Description	For use with	Part #	List \$
	AC coil	LSN4....LSN11	LCN2-♦	\$ 30
		LSN15...LSN18	LCN3-♦	\$ 40
		LSN22...LSN55	LCN4-♦	\$ 70
	DC coil	LSN15...LSN18	LDN3-♦	\$
		LSN22...LSN55	LDN4-♦	\$
	Dual-voltage coils AC/DC (contactors with electronic module)	LSN75...LSN90	LCN5-♦	\$ 120
		LSN132	LCN6-♦	\$ 130
		LSN160...LSN220	LCN7-♦	\$
		LSN280...LSN375	LCN8-♦	\$

Electronic Module

Illustrative picture	Description	For use with	Part #	List \$
	AC/DC	LSN75...LSN220	LCE220-♦ ²⁾	\$ 30
		LSN280...LSN375	LCE375-♦ ²⁾	\$ 40

To Complete the Part #, Replace “♦” with the Appropriate Coil Voltage Code ³⁾

LSN4 - LSN55

AC coil - 60 Hz						
Coil voltage codes	G	A	C	E	F	H
VAC - 50/60 Hz	24	120	208/230	480	600	277

DC coil - (LSN15- LSN55)						
Coil voltage codes	M	N	O	P	R	I
VDC	12	24	48	110/125	220	72

LSN75 - LSN375

50/60 Hz / DC ³⁾ LSN75- LSN220)						
Coil voltage codes	G	A	C	E	F	
50/60 Hz / DC ³⁾	24-28 V	110-130 V	208-250 V	430-500 V	600VAC *	

50/60 Hz / DC ³⁾ LSN280- LSN375)			
Coil voltage codes	A	C	F
50/60 Hz / DC ³⁾	100...127 V	200...240 V	440...575 V

Note: 1) Contactors and mechanical interlock are sold separately.

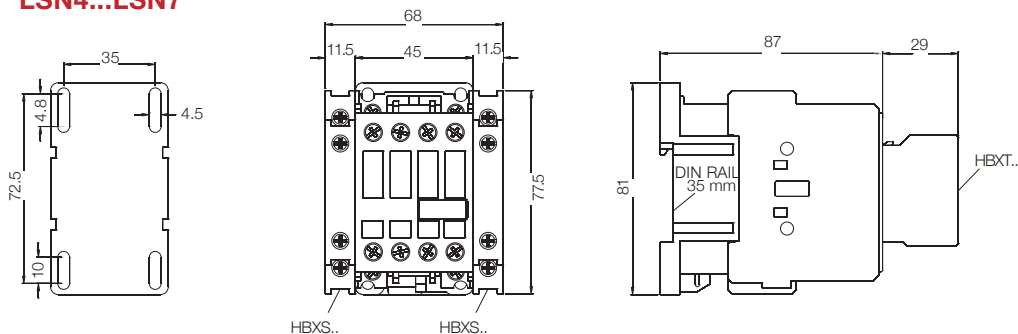
2) The voltage code of the electronic module must be the same as the coil voltage code.

3) Other voltages on request.

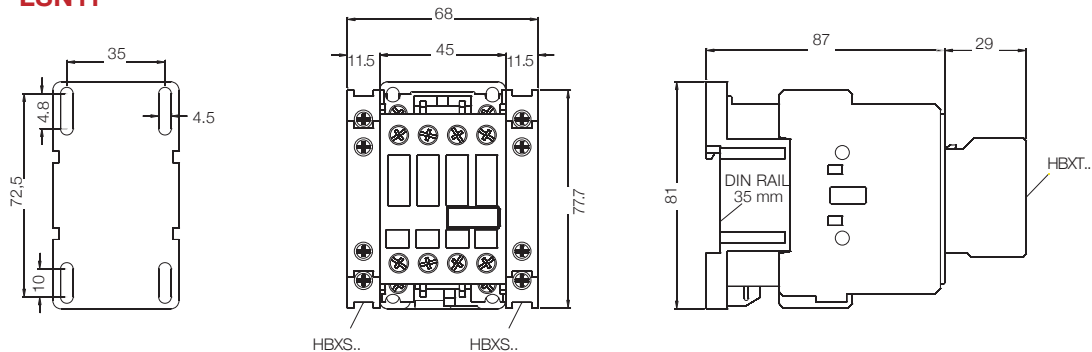
Dimensions

Dimensions (mm)

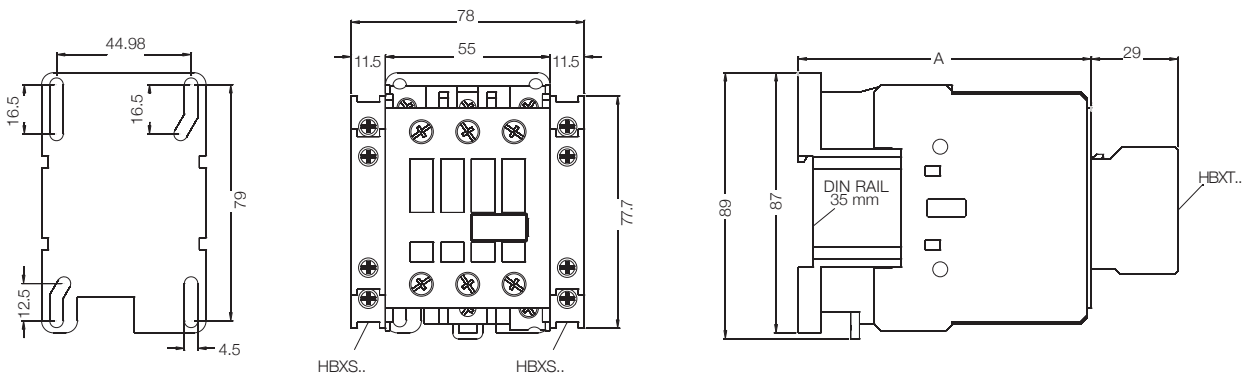
LSN4...LSN7



LSN11

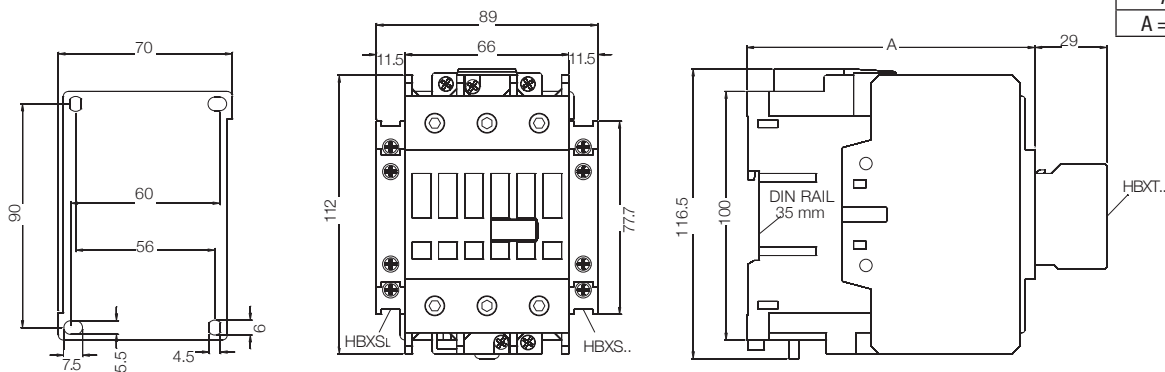


LSN15...LSN18



Coil	
AC	DC
A = 98	A = 118

LSN22...LSN37



Coil	
AC	DC
A = 116	A = 116

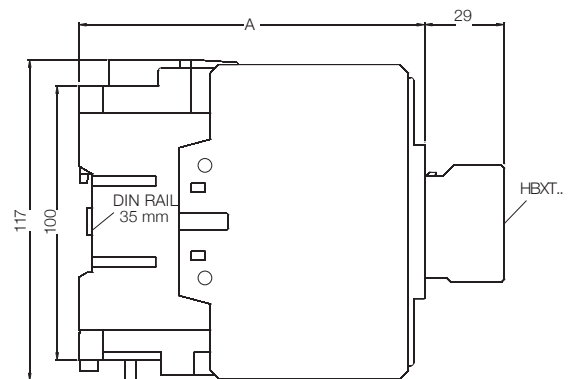
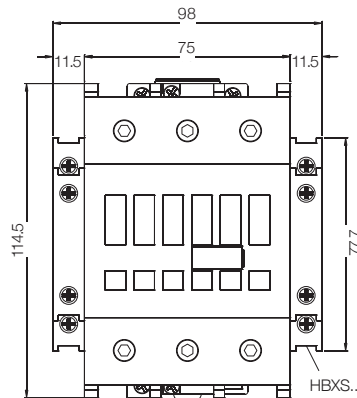
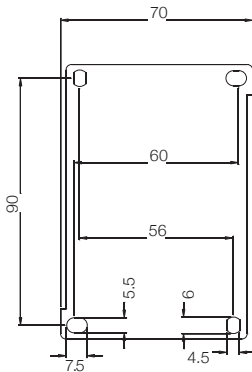
LSN Contactors

Dimensions

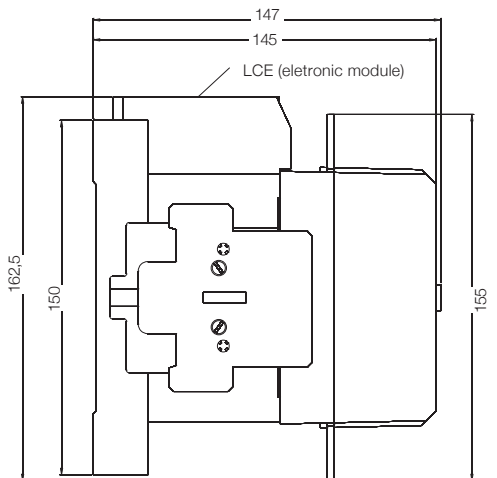
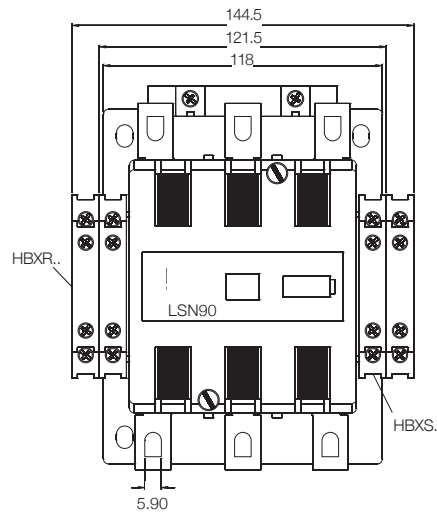
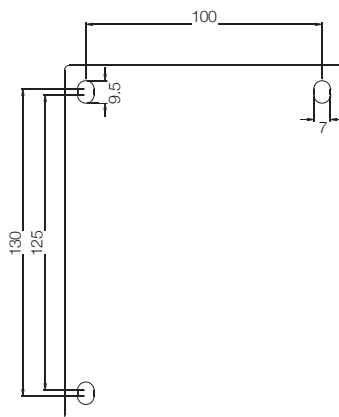
Dimensions (mm)

LSN45...LSN55

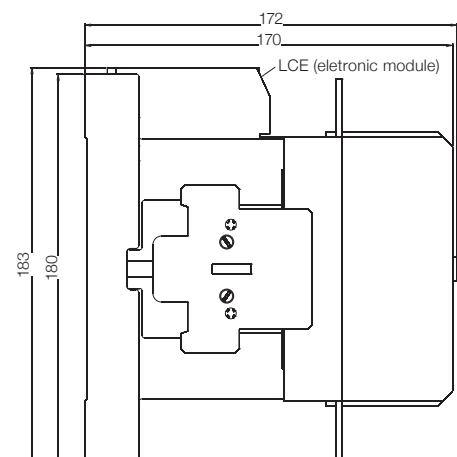
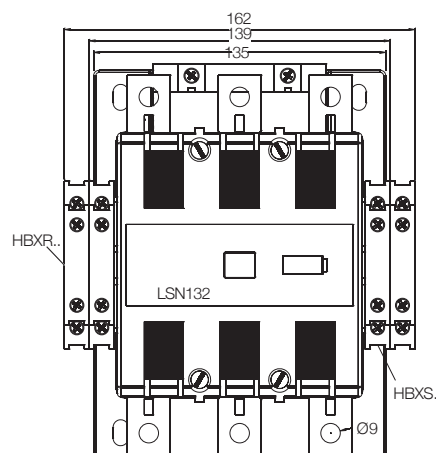
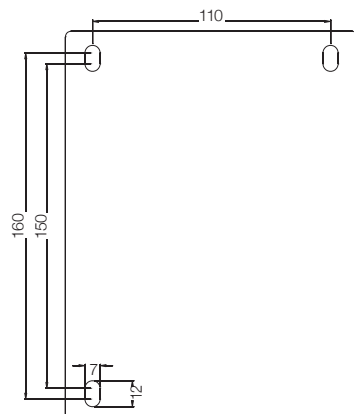
Coil	
AC	DC
A = 126	A = 126



LSN75...LSN90



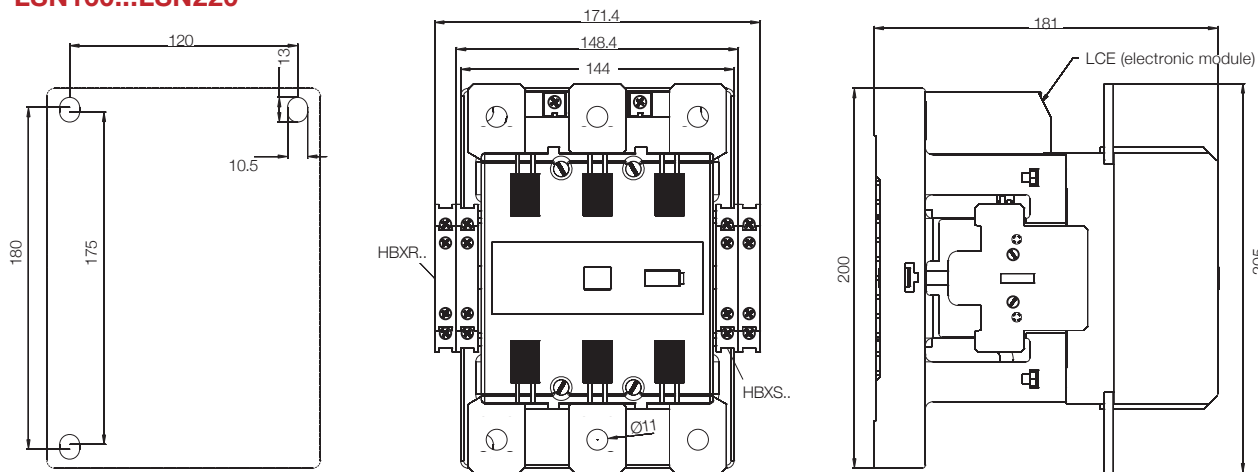
LSN132



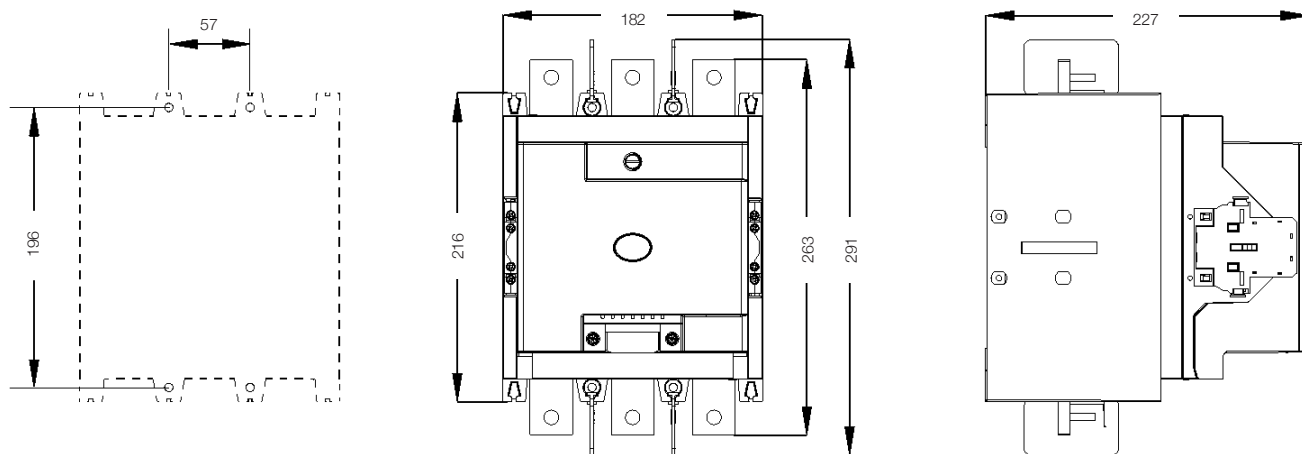
Dimensions

Dimensions (mm)

LSN160...LSN220

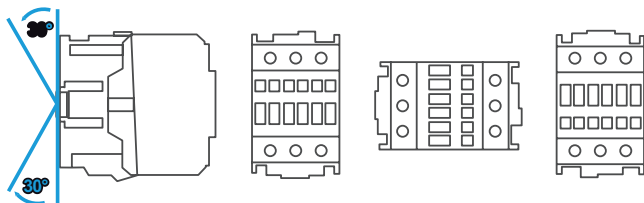


LSN280...LSN375



Mounting Position

LSN4...LSN55



LSN75...LSN220

