

### Overview

LV HRC fuse systems (NH type) are used for installation systems in non-residential, commercial and industrial buildings as well as in systems of power supply companies. They therefore protect essential building parts and installations.

NH fuse systems are fuse systems designed for operation by experts. There are no constructional requirements for non-interchangeability of rated current and touch protection.

The components and auxiliary equipment are designed in such a way as to ensure the safe replacement of NH fuses or isolation of systems.

LV HRC fuse links are available in the sizes 000, 00, 0, 1, 2, 3, 4 and 4a.

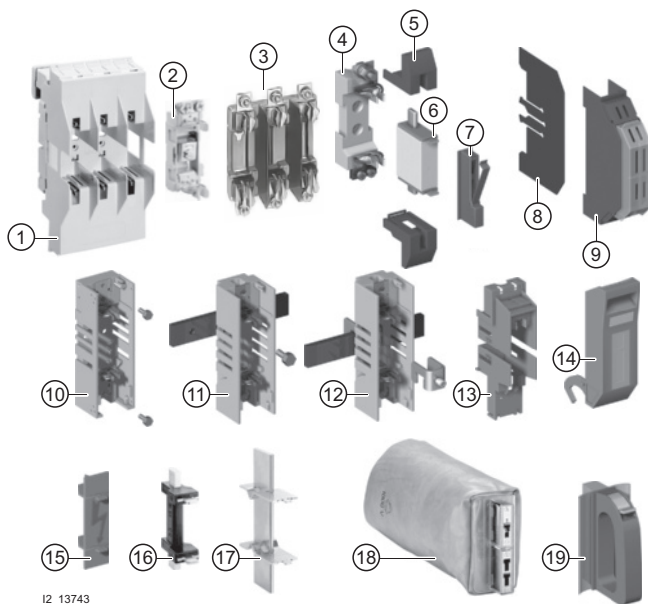
LV HRC fuse links are available in the following operational classes:

- gG for cable and line protection
- aM for the short-circuit protection of switching devices in motor circuits
- gR or aR for the protection of power semiconductors
- gS: The new gS operational class combines cable and line protection with semiconductor protection.

LV HRC fuse links of size 000 can also be used in LV HRC fuse bases, LV HRC fuse switch disconnectors, LV HRC fuse strips as well as LV HRC in-line fuse switch disconnectors of size 00.

The fuse links 300 A, 355 A and 425 A comply with the standard but do not have the VDE mark.

### LV HRC components:



12\_13743

- ① LV HRC fuse bases from the SR60 busbar system
- ② LV HRC fuse bases for busbar mounting
- ③ LV HRC fuse bases, 3P
- ④ LV HRC fuse bases, 1P
- ⑤ LV HRC contact covers
- ⑥ LV HRC fuse links
- ⑦ LV HRC signal detectors
- ⑧ LV HRC partitions
- ⑨ LV HRC protective covers  
LV HRC fuse bases with swivel mechanism
- ⑩ - For screw fixing on mounting plates
- ⑪ - For screw fixing on busbar systems
- ⑫ - For claw fixing on busbars
- ⑬ LV HRC protective cover for LV HRC fuse bases with swivel mechanism
- ⑭ LV HRC swivel mechanisms
- ⑮ LV HRC fuse base covers
- ⑯ LV HRC isolating blades with insulated grip lugs
- ⑰ LV HRC isolating blades with non-insulated grip lugs
- ⑱ LV HRC fuse pullers with sleeve
- ⑲ LV HRC fuse pullers

# Fuse Systems

## LV HRC Fuse Systems

### LV HRC fuse links, 3NA, 3ND

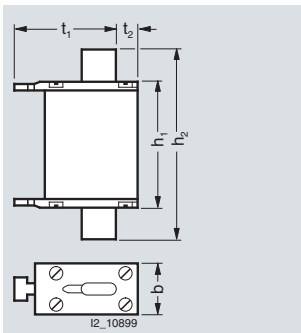
#### Technical specifications

		LV HRC fuse links					Operational class
		Operational class					Operational class
		gG					aM
		3NA6 ...-4 3NA6 ...-4KK 3NA3 83-8	3NA6 ... 3NA6 ...-7 3NA7 ... 3NA7 ...-7	3NA3 ... 3NA3 ...-7	3NA6 ...-6 3NA7 ...-6	3NA3 ...-6	3ND1 3ND2
<b>Standards</b>		IEC 60269-1, -2; EN 60269-1; DIN VDE 0636					
<b>Approvals</b>		DIN VDE 0636-2; CSA 22.2 No.106, File Number 016325_0_00 (CSA approval of fuses 500 V for 600 V)					
<b>Rated voltage <math>U_n</math></b>							
• Sizes 000 and 00	V AC	400	500	500	690	690	500
	V DC	--	250	250	250	250	--
• Sizes 1 and 2	V AC	400	500	500	690	690	690
	V DC	--	440	440	440	440	--
• Size 3	V AC			500		690	690
	V DC			440		440	
• Sizes 4 and 4a (IEC design)	V AC			500		--	
	V DC			400		--	
<b>Rated current <math>I_n</math></b>	A	10 ... 400	2 ... 400	2 ... 1250	2 ... 315	2 ... 500	6 ... 630
<b>Rated breaking capacity</b>	kA AC	120					
	kA DC	--	25				--
<b>Contact pins</b>		Non-corroding, silver-plated					
<b>Resistance to climate</b>	°C	-20 ... +50 at 95 % relative humidity					

#### Dimensional drawings

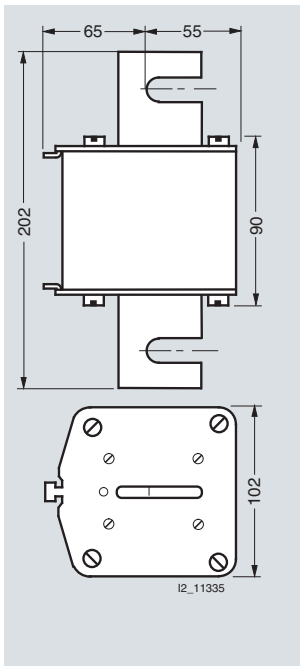
##### LV HRC fuse links, operational class gG

###### Sizes 000 to 3 and 4a



###### Size 4 (IEC design)

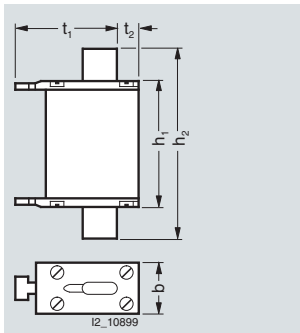
Sizes	$I_n$ A	$U_n$ V	Type	Dimensions				
				b	$h_1$	$h_2$	$t_1$	$t_2$
000	2 ... 35	690 AC/250 DC	3NA3 8..-6	21	54	80	45	8
	2 ... 160	500 AC	3NA3 8../-8					
	2 ... 100	500 AC/250 DC	3NA6 8..					
	10 ... 100	400 AC	3NA6 8..-4					
	2 ... 35	690 AC/250 DC	3NA6 8..-6					
	10 ... 100	500 AC/250 DC	3NA7 8..					
	2 ... 35	690 AC/250 DC	3NA7 8..-6					
00	35 ... 160	500 AC/250 DC	3NA3 8..	30	54	80	45	14
	40 ... 100	690 AC/250 DC	3NA3 8..-6					
	80 ... 160	500 AC/250 DC	3NA6 8../-7					
	80 ... 160	400 AC	3NA6 8..-4 (KK)					
	40 ... 100	690 AC/250 DC	3NA6 8..-6					
	80 ... 160	500 AC/250 DC	3NA7 8../-7					
	40 ... 100	690 AC/250 DC	3NA7 8..-6					
0	6 ... 160	500 AC/440 DC	3NA3 0..	30	67	126	45	14



<b>1</b>	16 ... 160	500 AC/440 DC	3NA3 1..	30	75	137	50	15										
	50 ... 160	690 AC/440 DC	3NA3 1..-6															
	16 ... 160	500 AC/440 DC	3NA6 1..															
	35 ... 160	400 AC	3NA6 1..-4															
	50 ... 160	690 AC/440 DC	3NA6 1..-6															
	16 ... 160	500 AC/440 DC	3NA7 1..															
	50 ... 160	690 AC/440 DC	3NA7 1..-6															
	200 ... 250	500 AC/440 DC	3NA3 1..						47	75	137	51	9					
	200	690 AC/440 DC	3NA3 1..-6															
	200 ... 250	500 AC/440 DC	3NA6 1..															
	200 ... 250	400 AC	3NA6 1..-4															
	200	690 AC/440 DC	3NA6 1..-6															
	200 ... 250	500 AC/440 DC	3NA7 1..															
	200	690 AC/440 DC	3NA7 1..-6															
<b>2</b>	35 ... 250	500 AC/440 DC	3NA3 2..	47	75	151	58	10										
	80 ... 200	690 AC/440 DC	3NA3 2..-6															
	35 ... 250	500 AC/440 DC	3NA6 2..															
	50 ... 250	400 AC	3NA6 2..-4															
	80 ... 200	690 AC/440 DC	3NA6 2..-6															
	35 ... 250	500 AC/440 DC	3NA7 2..															
	80 ... 200	690 AC/440 DC	3NA7 2..-6															
	300 ... 400	500 AC/440 DC	3NA3 2..						58	74	151	59	13					
	224 ... 250	690 AC/440 DC	3NA3 2..-6															
	300 ... 400	500 AC/440 DC	3NA6 2..															
	300 ... 400	400 AC	3NA6 2..-4															
	224 ... 315	690 AC/440 DC	3NA6 2..-6															
	300 ... 400	500 AC/440 DC	3NA7 2..															
	224 ... 315	690 AC/440 DC	3NA7 2..-6															
<b>3</b>	200 ... 400	500 AC/440 DC	3NA3 3..	58	74	151	71	13										
	250, 315	690 AC/440 DC	3NA3 3..-6															
	425 ... 630	500 AC/440 DC	3NA3 3..											71	74	151	70	13
	355 ... 500	690 AC/440 DC	3NA3 3..-6															
<b>4</b>	630 ... 1250	500 AC/440 DC	3NA3 4..	See adjacent drawing														
<b>4a</b>	500 ... 1250	500 AC/440 DC	3NA3 6..	102	97	201	95	20										

### LV HRC fuse links, operational class aM

#### Size 000 to 3



Sizes	$I_n$ A	$U_n$ V	Type	Dimensions				
				b	$h_1$	$h_2$	$t_1$	$t_2$
<b>000</b>	6 ... 80	500 AC	3ND1 8..	21	54	80	45	8
<b>00</b>	100 ... 160			30	54	80	45	14
<b>1</b>	63 ... 100	690 AC	3ND2 1..	30	75	137	50	15
	125 ... 250			47	75	137	51	9
<b>2</b>	125 ... 250	690 AC	3ND2 2..	47	75	151	58	10
	315 ... 400			58	74	151	59	13
<b>3</b>	315 ... 400	690 AC	3ND2 3..	58	74	151	71	13
	500, 630		3ND1 3..	71	74	151	70	13