#### Product overview

#### Overview

#### LV HRC fuse links gG



- $\bullet$  Rated voltage  $\textit{U}_{\textrm{n}}$  to 690 V AC, 440 V DC
- $\bullet$  Rated current  $I_n$  2 ... 1250 A
- gG operational class
- Sizes 000, 00, 1, 2, 3, 4 and 4a
- Insulated or non-insulated grip lugs
- Combination or front indicator in the event of fuse failure

#### LV HRC fuse base



- Rated voltage Un 690 V AC, 250/440 V DC
- Rated current I<sub>n</sub> 160 ... 1250 A
- Flat connection, plug connection, saddle-type terminal connection, box terminal or terminal strip
- Sizes 000 to 4a

#### LV HRC signal detectors



- Signal detector with signal detector link
- Signal detector tops

#### LV HRC fuse switch disconnectors



- Rated insulation voltage  $U_{\rm i}$  690/800 V
- $\bullet$  Rated uninterrupted current  $I_{\rm n}$  160 ... 4630 A
- Flat or box terminal connection

#### Product overview

#### The product range

#### Areas of application

LV HRC fuses 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.

#### Non-interchangeability

LV HRC fuses 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 LV HRC fuses or isolation of systems.

#### Operational classes

LV HRC fuse links are available in the following versions:

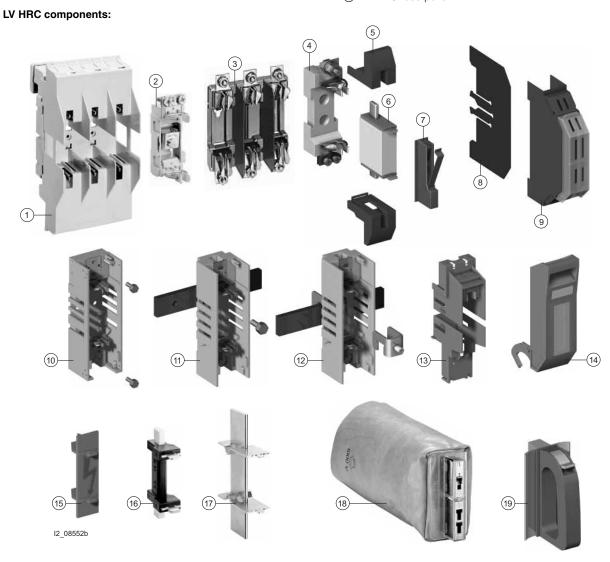
- gG for cable and line protection
- aM for short-circuit protection of switching devices in motor circuits (see page 1/130 ff.)
- gR or aR for protection of power semiconductors (see page 1/137)
- gS: The new gS operational class combines cable and line protection with semiconductor protection (see page 1/137)

#### Sizes

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

#### LV HRC components:

- LV HRC fuses comprise the following components:
- ① LV HRC fuse base from the SR60 busbar system
- ② LV HRC fuse base for busbar mounting
- ③ LV HRC fuse base, 3-pole
- (4) LV HRC fuse base, 1-pole
- 5 LV HRC contact covers
- 6 LV HRC fuse link
- ① LV HRC signal detector
- LV HRC partition
- LV HRC protective cover
  - LV HRC fuse bases with slewing equipment,
- n for screw connection on mounting plate
- (1) for screw connection on busbar system
- (12) for claw fixing on busbar
- (B) LV HRC protective cover for LV HRC fuse bases with slewing equipment
- (4) LV HRC slewing equipment
- 15) LV HRC fuse base cover
- (6) LV HRC isolating link with insulated grip lugs
- ① LV HRC isolating link with non-insulated grip lugs
- (8) LV HRC fuse puller with sleeve
- 19 LV HRC fuse puller



Product overview

#### LV HRC fuse links with combination alarm

#### Detecting the protection state

It is often difficult to detect failed fuse links within a system. If they are mounted in fuse bases with slewing equipment or LV HRC switch disconnectors, they often don't offer a clear view.

The LV HRC fuse links have a clearly visible center indicator

red: functioning white: not functioning

#### Better safe than sorry

In addition to this, the LV HRC fuse links are equipped with a front indicator on the top. This considerably improves the view of one or the other indicator.

#### The combination alarm

Siemens LV HRC fuse links have a combination alarm, a combination of center indicator and front indicator. This enables fast detection of a failed LV HRC fuse link from different directions.

#### Front indicator

For standard applications, which are characterized by freely accessible fuse links allowing easy detection of failed fuse links, we offer a range of product series with front indicators and without center indicators.

#### Insulated grip lugs

Insulated grip lugs must be made of metal. They are integrated in the top and bottom covers of the fuse link and provide greater safety when replacing. The mark shown below indicates that the grip lugs are insulated:



#### Silver-plated contact pin

LV HRC fuse links are always equipped with silver-plated contact pins. This means that they are non-corroding and have less contact resistance.



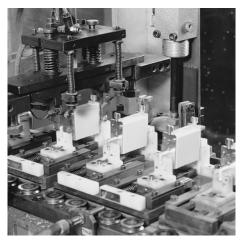
LV HRC fuse links with combination alarm



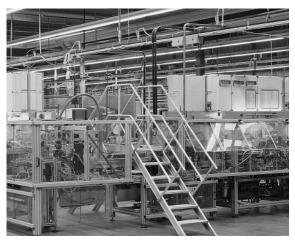
LV HRC fuse links with front indicator

#### Product overview

#### Highly-automated manufacturing



An overview of the production line with integrated test stations



Automated manufacturing sequences guarantee quality and precision

### Environmental protection is an ongoing task for today's modern industrial society and requires action!

#### Environmentally compatible recycling of LV HRC/HV HRC fuses

National and global environmental problems – for example global warming, the destruction of the ozone layer, the deterioration of the ground and water resources – have all proven the necessity of common action. The recycling law, which was enacted in Germany at the end of 1996, requires companies to recycle materials and thus to save resources.

#### Responsibility of the industry

Industry has been called upon to acknowledge its responsibility towards future generations and to take the initiative. Manufacturers of low-voltage and high-voltage fuses and high-voltage HRC fuses are very aware of this responsibility and are determined to focus more than ever on "protecting" the environment and taking care of our natural resources.

#### How is recycling organized?

Acting on a Siemens AG initiative, various German manufacturers of LV/HV HRC fuses have formed the non-profit association "NH/HH-Recycling e.V." Taking into account the prevailing legal regulations, the committee aims to actively contribute towards the protection of the environment and its natural resources by supporting the proper recycling of fuse links.

#### How are fuses recycled in Germany?

LV HRC and HV HRC fuse links without packaging will be accepted for recycling. Electrical wholesalers will provide Euro pallet boxes for this purpose. In the case of large quantities, Euro pallet boxes can also be delivered to you directly on-site. For further information, please contact our regional Siemens A&D ET sales managers.

#### Material recycling

The used fuses are completely melted down by an officially certified recycler. The copper and silver gained are put back into the materials cycle. Residual materials, such as slag, are used in road and dam building. The "NH/HH-Recycling e.V." association plans to donate any profits arising from these processes to non-profit organizations for the purpose of environmental research.

Please help us: be a part of our initiative and ask for the signs that stand for the recycling of LV HRC fuses.



