

E³-NH fuse-switch, 910A, for use as feed device in transformer stations

NH fuse-switches of the E³ series have been developed to meet the requirements of today's power industry. Model 910A is an amendment to the series and has been specifically designed for use as a feed device with dimensions that are identical to those of the NH fuse-switches of size 1 to 3. The device complies with the requirements of IEC 60947-3 and withstands testing with the 1.6-fold rated current over a period of one hour. Matching accessories allow it to be upgraded for use in state-of-the-art power grids.



- **Electronic fuse monitoring:** Allows the remote monitoring of the system.
- **Compact power metering:** Drop-in transformers facilitate convenient power metering up to 800 amperes. Variants suitable for calibration are also available.
- **Excellent short-circuit performance:** The short-circuit performance are ready for the parallel using of the transformers.
- **15% less power dissipation:** Thanks to their specific design, the E³ 910A-NH fuse-switches ensure minimal power dissipation, which is beneficial to operation.

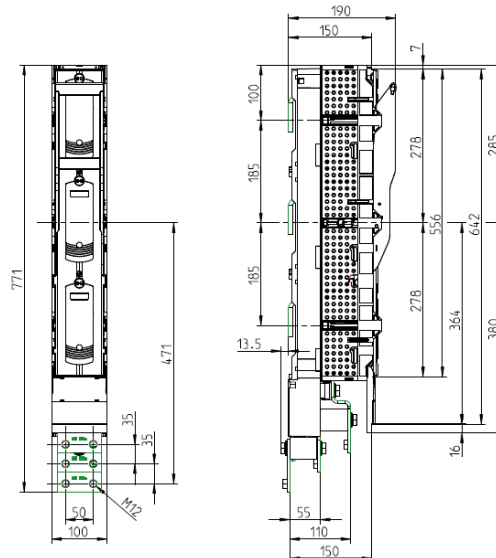
Various terminal options allow E³-910A-NH fuse-switches to be used as feed devices in different applications. They also offer the quality and upgrade features of the E³ product series.

E ³ -NH fuse-switch, size 3, 1 pole or 3 pole switching, 910A rated current			
Description	Size	Amps	Item no.
E ³ NH-La-Lei 3 910A 1P S6S6	3	910	38070-0780
E ³ NH-La-Lei 3 910A 3P S6S6			38070-0790
E ³ NH-La-Lei 3 910A 1Phh L6			38070-0720
E ³ NH-La-Lei 3 910A 3Phh L6			38070-0730
E ³ NH-La-Lei 3 910A 1PHg L8L6			38070-0760
E ³ NH-La-Lei 3 910A 3PHg L8L6			38070-0770

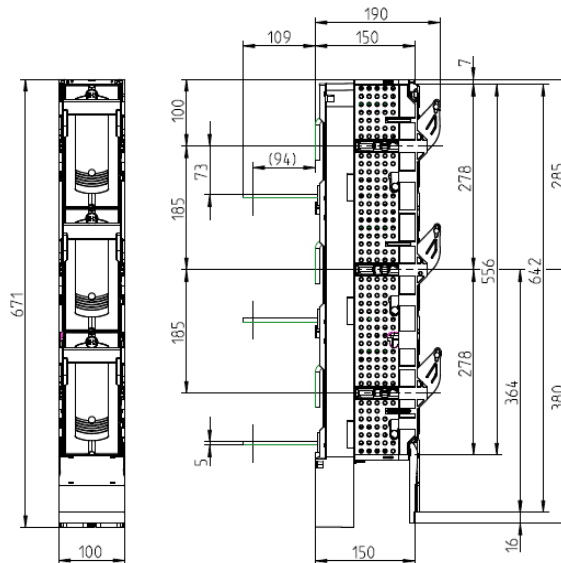
Sales start:	Delivery time:	Documentation:
Available	From stock, subject to prior sale	Product information 015, gross price sheet

Dimensions drawings

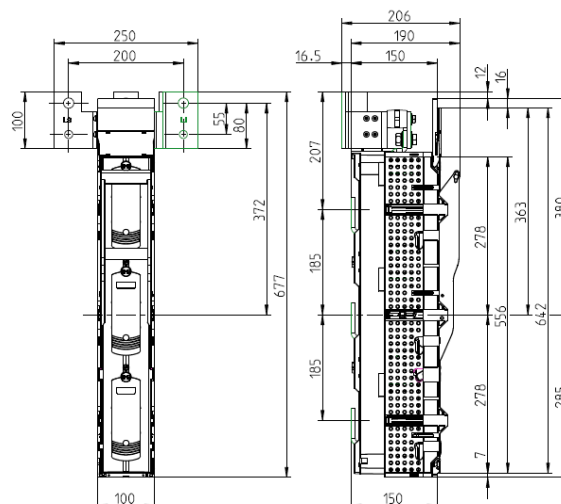
Terminal S6S6



Terminal Phh L6



Terminal Hg L8L6



Technical data
Technical data of NH fuse-switches
(according to IEC/EN 60 947-3, VDE 0660 part 107)

For NH Fuse-links acc. to DIN 73620/1				Size 3	Size 3	Size 3
			Unit	S6S6	Hg L8L6	Phh L6
Rated operational current	400 V	I_e	A	910	910	910
Conventional free-air thermic current with fuses		I_{th}	A	910	910	910
Rated operational voltage		U_e	V	AC 400	AC 400	AC 400
Rated insulation voltage		U_i	V	690	690	690
Rated insulation voltage		U_{imp}	kV	12	12	12
Rated conditional short-circuit current (when protected by NH Fuse-Links)	400 V		kA	50	50	50
Utilisation category VDE 0660 T107/EN/IEC 60947-3	400 V			AC-22B	AC-22B	AC-22B
Mechanical service life (switching cycles)			Cycles	500	500	500
Electrical service life (switching cycles)			Cycles	100	100	100
Permissible ambient air temperature			°C	-25 bis +55	-25 bis +55	-25 bis +55
Type of protection acc. DIN/EN 60529/VDE 0470 T1			IP	20	20	20
Max. permissible power dissipation of the NH fuse-link		P_v	W	70	70	70
Total power dissipation (devices without fuse-link)		P_v	W	158	142	194
Degree of pollution		-	-	3	3	3
Overvoltage category		-	-	IV	IV	IV
Rated frequency			Hz	50-60	50-60	50-60
Weight without NH Fuse-Links		-	kg	9,5	5,0	9,8

Selection criteria

Fuse-switches are fitted with NH fuse-links according to DIN 43620. When used as feed device in transformer stations, the switches are usually fitted with fuse-links with gTr characteristics according to VDE 0636/2011. This standard has been adjusted to the load characteristic of transformers and HH fuses. This means that the switching device must meet high requirements in terms of thermal resistance within the constraints given by the compact design. To ensure optimal use, we recommend using the following list to select an Efen E³-910A fuse-switch.

Service life of an NH fuse-link, size 3, 630kVA

Rated current	Overload factor	Resulting current	Permissible duration
630kVA (910A)	1	910 A	Full-time operation
	1.1	1000A	36 hours
	1.2	1090A	18 hours
	1.3	1180A	4 hours
	1.4	1270A	2 hours
	1.5	1360A	1.5 hours
	1.6	1450A	1 hour

