

HAUG Ionization - for the elimination of electrostatic charges



HAUG Ionization systems

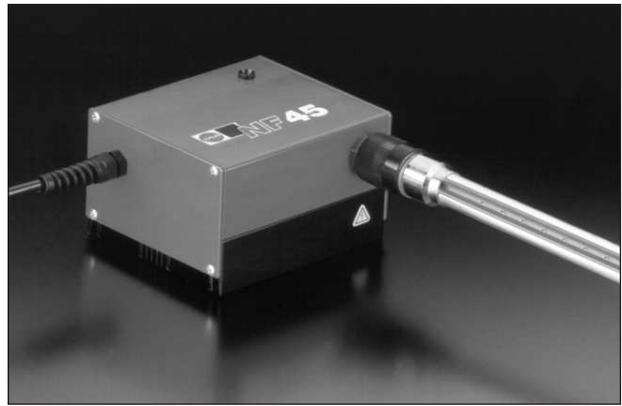
HAUG develops and produces ionization systems for the removal and generation of electrostatic charges. A system for the removal of interfering electrostatic charges consists of two components: a power pack and an ionizing bar.

Power pack NF 45 and ionizing bar NFA

The combination of power pack **NF 45** and ionizing bar **NFA** was developed specifically for use on fast running machines. The power pack **NF 45** automatically adjusts the discharging frequency (400–800 Hz) to the connected bar length. The higher frequency of the power pack **NF 45** ensures a high decoupled current and therefore fast, even discharge of the material. Still, the ionizing bar **NFA** is absolutely safe to touch. The compact aluminum housing allows the **NF 45** to be used in locations where space is at a premium. The ionizing bar **NFA** which is adapted to the **NF 45** can be connected directly or using a connection cable. Only the ionizing bar **NFA** can be connected to any one **NF 45**.

Power pack NF 45 RLC

The functions of power pack **NF 45 RLC** are identical of those of power pack **NF 45**, but the **NF 45 RLC** is characterized by a different arrangement of the external ports. In addition to the signaling socket, an error message can be output. Following an overload (switch-off of high voltage), the **NF 45 RLC** automatically performs a readjustment.



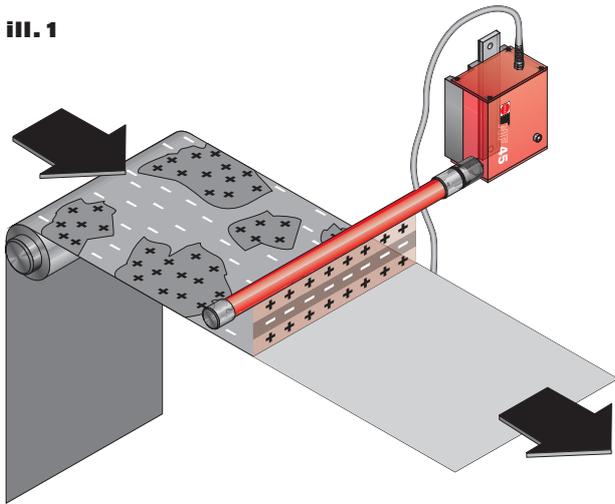
NF 45

Function

The power pack **NF 45 / NF 45 RLC** is supplied with a low voltage of 24 V_{AC} / 30 V_{DC}. Mostly this required voltage can be received directly of the machine.

A series transformer with connection facility for up to five power packs **NF 45 / NF 45 RLC** is available as accessory for all customary mains voltages (230 V_{AC} / 115 V_{AC}).

III. 1



NF 45 RLC

Cleaning and maintenance

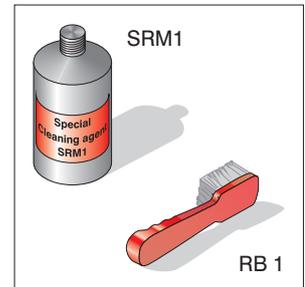
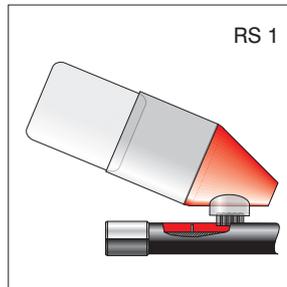
Regular use of HAUG special cleaning agent **SRM 1** and cleaning kit **RS 1** will ensure consistently high efficiency of the ionizing bar **NFA**.

NF 45 RLC



Contact assignment and logic diagram

High-voltage OK	Contacts closed
no	1 and 2
yes	2 and 3



Special properties and benefits

Due to its low weight, the power pack **NF 45 / NF 45 RLC** can be attached using the retaining plate included, e.g. on swivel or robot arms.

The ionizing bar **NFA** is connected to the unit using the proven, patented, gas-tight coaxial high-voltage connector X-2000 NFA. The ionizing bar can be assembled without the need for tools. The operating status of the power pack is indicated by an LED (green = has been adjusted to the maximum power / orange = bar is adjusting itself to optimum power).

HAUG GmbH & Co. KG

Germany

Friedrich-List-Str. 18
D-70771 Leinf.-Echterdingen
Phone: +49 711 / 94 98-0
Telefax: +49 711 / 94 98-298

www.haug.de
E-mail: info@haug.de

HAUG Biel AG

Switzerland

Johann-Renfer-Str. 60
CH-2500 Biel-Bienne 6
Phone: +41 32 / 344 96 96
Telefax: +41 32 / 344 96 97

www.haug-ionisation.com
E-mail: info@haug-biel.ch

Static Line - Power pack NF 45 / NF 45 RLC





Accessories

Related ionizing bar NFA:	Order no.:	03.8042.000
Series transformer VG NF:		
	115 V	Order no.: 12.0011.000
	230 V	Order no.: 12.0010.000
Connection cable: axial	Order no.:	02.8563.xxx
Bar holder "Klick-Zack"	Order no.:	10.0004.000
Signalling cable K3, shielded (NF 45 RLC)		
5 m, incl. plug	Order-No.:	06.8960.000
10 m, incl. plug	Order-No.:	06.8960.001
20 m, incl. plug	Order-No.:	06.8960.002
Plug	Order-No.:	X-6099

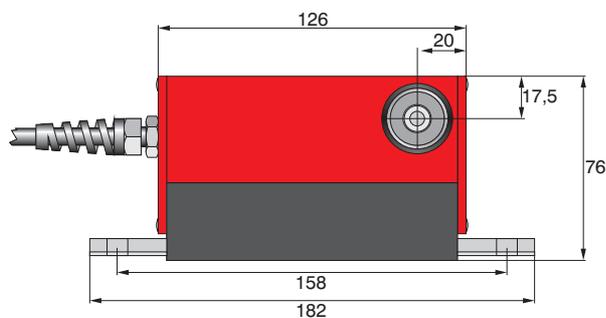
NF 45 / NF 45 RLC

Technical data NF 45 / NF 45 RLC

Types:	NF 45	Order no.:	01.9700.001
	NF 45 RLC	Order no.:	01.9701.000
Protection type:	IP 54		
Protection class:	I		
Supply voltage:	24 V _{AC} ± 10% (50 – 60 Hz) / 30 V _{DC} ± 10%		
Power input:	20 VA		
Output voltage:	approx. 5.5 kV at 400 – 800 Hz		
Short-circuit output current:	$I_k < 1.5 \text{ mA}$		
HV-terminals:	1		
Connectable length NF 45:	0.5 – 2.5 m (NFA incl. HV-cable)		
Connectable length NF 45 RLC:	0 – 2.5 m (NFA incl. HV-cable)		
Max. bar length NF 45 RLC:	2 m		
Operating temperature:	+5 °C to +45 °C		
Storage-/transport temperature:	-15 °C to +60 °C		
Weight:	1.5 kg		
Mains cable NF 45:	10 m		
Mains cable NF 45 RLC:	2.6 m (highly flexible), fixed to the device		

Subject to technical changes!

NF 45



NF 45 RLC

