Command and signalling devices

"N" program

Area of application

Series N was originally developed for the specific requirements of food industry mechanical engineering. The command and signalling devices of the machines for this branch of industry must comply with strict hygiene requirements and be easy to clean.

Series N command and signalling devices meet the requirements of Protection class IP69K. This means that even when cleaned on a regular basis using high-pressure cleaners they have an outstanding long service life. They were designed on the basis of the general design concepts for hygienic construction of food processing machinery (EN 1762-2). This means, for example, that the geometry of the devices has no sharp edges. Type examination carried out by the Meat Trade Association confirmed that the design of the N programme was hygiene-appropriate.

In addition, the devices are clean room-approved and also due to their resistance to spray water, they are deployed in outdoor-applications, e.g on municipal vehicles and in car washes. Apart from this, they are tried and tested in extreme applications in food processing, e.g. fish filleting and packaging lines that are installed directly on trawlers.

Design and way of functioning

The N series is of modular structure too which means that machine tool builders always have available a wide selection of different command and signalling devices. The device heads each have one mounting flange that provides effective sealing in conjunction with a labyrinth seal. The EF contact system (see page 62) is used in exactly the same way as with the series.

The N range is characterised by the short actuating stroke of the command devices and the high protection class even behind the front plate. This is a significant benefit in butchers' machines, for example, since condensation can form inside the machines.

The special features of the N range include main switches for up to 63 A. They allow design engineers to design the entire control unit of a (food) machine using just one range of products.



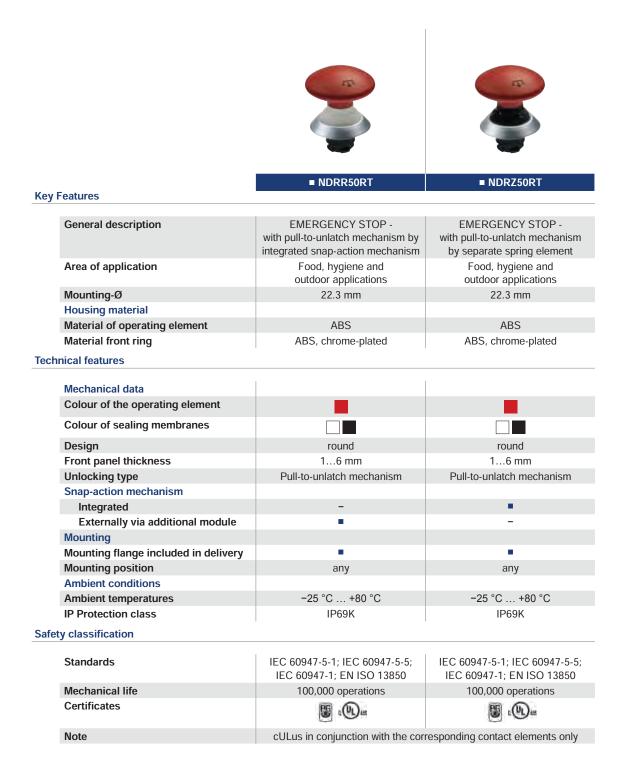
Pro	Page	
1	EMERGENCY STOP	28
2	Pushbutton	32
3	Mushroom head impact button/ EMERGENCY STOP pushbutton	34
4	Selector switch/key button	36
5	Illuminated pushbutton	32
6	Illuminated signal	30
7	Step selector switch	40
8	Potentiometer drive	40
9	Mounting flange EFM	63
10	Mounting flange EFMH	-
11	Short-stroke key element	_
12	Mounting flange ELM	63
13	Contact element EF	63
14	Spring element EFR	63
15	Securing plate	_
16	Position switches	_
17	Contact element EFK	_
18	Light terminal block ELDE	63
19	Light terminal block EL	63
20	EMERGENCY STOP label	66
21	EMERGENCY STOP protective collar	66
22	Identification label	66
23	Stainless steel enclosure for surface mounting	70
24	Adapter ring	68
25	Blanking plug	66



S SCHMERSAL 27

Command and signalling devices - N programme

EMERGENCY STOP control devices





Command and signalling devices - N programme

EMERGENCY STOP control devices

Туре	Unlocking	Snap-action mechanism	Bellows	Α	В	С	Type designation	Material number
	Pull-to-unlatch mechanism	Integrated	White	45	22.3		NDRZ50RT	101177168
EMERGENCY STOP			Black			50	NDRZ50GR/RT	101177170
command device		External with spring element EFR *	White			50	NDRR50RT	101163587
			Black				NDRR50GR/RT	101163594

^{*} Spring element EFR must be ordered separately.

All dimensions in mm.

Key

A Height Height of command device in front of the front panel B Mounting-Ø Installation diameter for the command device head

C Key Ø Width of command device head

S SCHMERSAL 29