

Product overview



## SAFEMASTER

Three-stage enabling switch  
RE 6909

Safe and ergonomic



**DOLD** 

Our experience. Your safety.

# Three-stage enabling switch RE 6909 with emergency stop and expandable functions

**When operating machines and devices there are operating modes and situations where the stay in hazardous areas is needed. In order to work safely even in these cases with increased danger additional measures are required.**

With the new three-stage enabling switch RE 6909 of the SAFEMASTER series, people are secured during commissioning, maintenance or setup. What is important here is the three-stage functionality. Only an actively operated middle position gives approval to a higher-level safe control. If the operator releases the three-stage enabling switch or pushes it through (panic function) he or she withdraws approval, thus releasing the safety-oriented switch-off.

Thanks to its functional and ergonomic design, the enabling switch grants fatigue-free working and, due to its modular setup, many additional operating and control functions such as a start-stop control device, key switches and further buttons. The robust handheld terminal meets the IP65 requirements for use even in rough ambient conditions.

With the new three-stage enabling switch RE 6909 of the SAFEMASTER series we are expanding our product range of wireless enabling switches and wireless emergency stop systems for the safety-oriented transmission of emergency stop and control functions by an ergonomic wired version.

## Emergency stop button

Optional emergency stop button provides the enabling switch with additional functionality and safety.



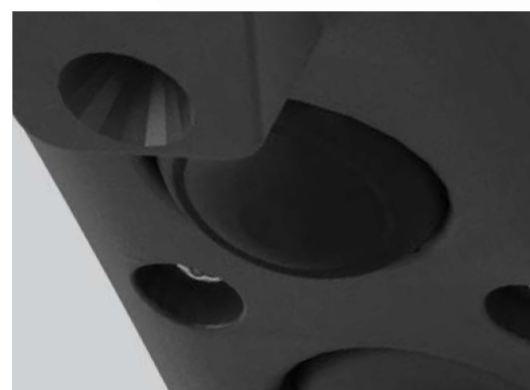
## Key switch

Additional integration of a key switch, e.g. for selecting the setup mode with lockable position.



## Product range enabling switches

Please find the full range of enabling switches, whether wired or wireless, at [www.dold.com](http://www.dold.com).



## Start button

Ergonomically located button for frequently used functions such as release of enabling switch.

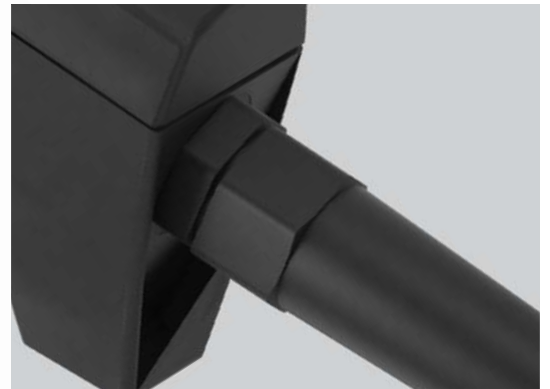


#### Expandable function buttons

A wide range of expansion options with up to four buttons, which turn the enabling switch into a small multifunction command unit.

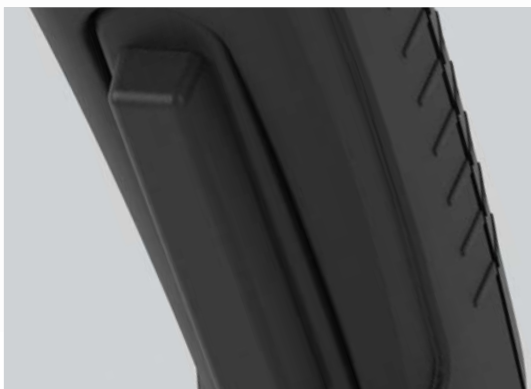
#### Ergonomic design

The ergonomic design allows for fatigue-proof operation. Suitable for left- and right-handed people and ideally operable with glove.



#### Connection / Cable

The enabling switch comes as standard with a 5 m cable.



#### Enabling switch

The three-stage enabling switch ensures optimum safety during the operation of machines and devices in hazardous areas. Only an actively operated middle position gives approval to a higher-level safe control.

#### Customer benefits:

- ▶ Safe working in hazardous areas
- ▶ Ergonomic design and fatigue-free working
- ▶ Expandable and applicable in many ways
- ▶ Safety during setup and normal operation or maintenance of machines

#### Highlights:

- ▶ Modular setup
- ▶ Three-stage enabling switch
- ▶ Optional emergency stop button
- ▶ Versatile operating functions
- ▶ Additional function buttons, expandable e.g. for control functions
- ▶ Robust enclosure in IP 65
- ▶ Universal mounting

# Product overview

The three-stage enabling switch serves as an enabling device acc. EN 60204-1 and meets the requirements for enabling switches with three positions as defined in EN 60947-5-8.

The three-stage enabling switch has two normally open contacts controlling the safety function. When the enabling switch is activated, both contacts are closed and the facility is released by a suitable safe evaluation device with cross-wire monitoring. When the three-stage enabling switch is pushed through resp. released, the safety function is triggered and both contacts open up.

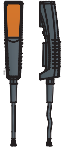
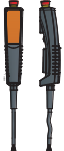
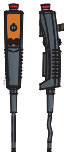
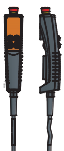
The enabling switch fulfils the following safety function:

- If the enabling switch is not pressed (position 1), the contacts are open.
- If the enabling switch is fully pushed through (position 3), the contacts are open.

Optionally, the enabling switch can be equipped with further functions, e.g. buttons, LEDs, etc.



Select your suitable product here<sup>1</sup>

	Type	
	RE6909/00000/1A05/00	
	RE6909/20000/1C05/00	
	RE6909/20C0D/1D05/00 (on request)	
	RE6909/200DD/1D05/00	

<sup>1</sup> Further variants on request

# Highest safety in your industry

- Mechanical and plant engineering
- Automation
- Transport and conveyor technology
- Paper and print industry
- Food industry
- Rubber and plastic industry
- Automotive industry
- Deformation industry
- Recycling industry
- Packaging machines
- General machine building
- Mining and metal
- Chemical and pharmaceutical industry
- Cable cars and ski lifts

... and wherever safety has highest priority.  
Also in your industry!

Our experience. Your safety – Protect your system or  
machine reliably.



Enabling switch	Emergency stop	Start button	Key switch	Potential-free buttons	Cable properties	Article no.
X		X			5 m cable with 6 x 0.25 mm <sup>2</sup> copper cores	0068910
X	X	X			5 m cable with 12 x 0.25 mm <sup>2</sup> copper cores	0068911
X	X	X	X	2	5 m cable with 18 x 0.25 mm <sup>2</sup> copper cores	0068912
X	X	X		4	5 m cable with 18 x 0.25 mm <sup>2</sup> copper cores	0068913

# Application examples

## Application example 1:

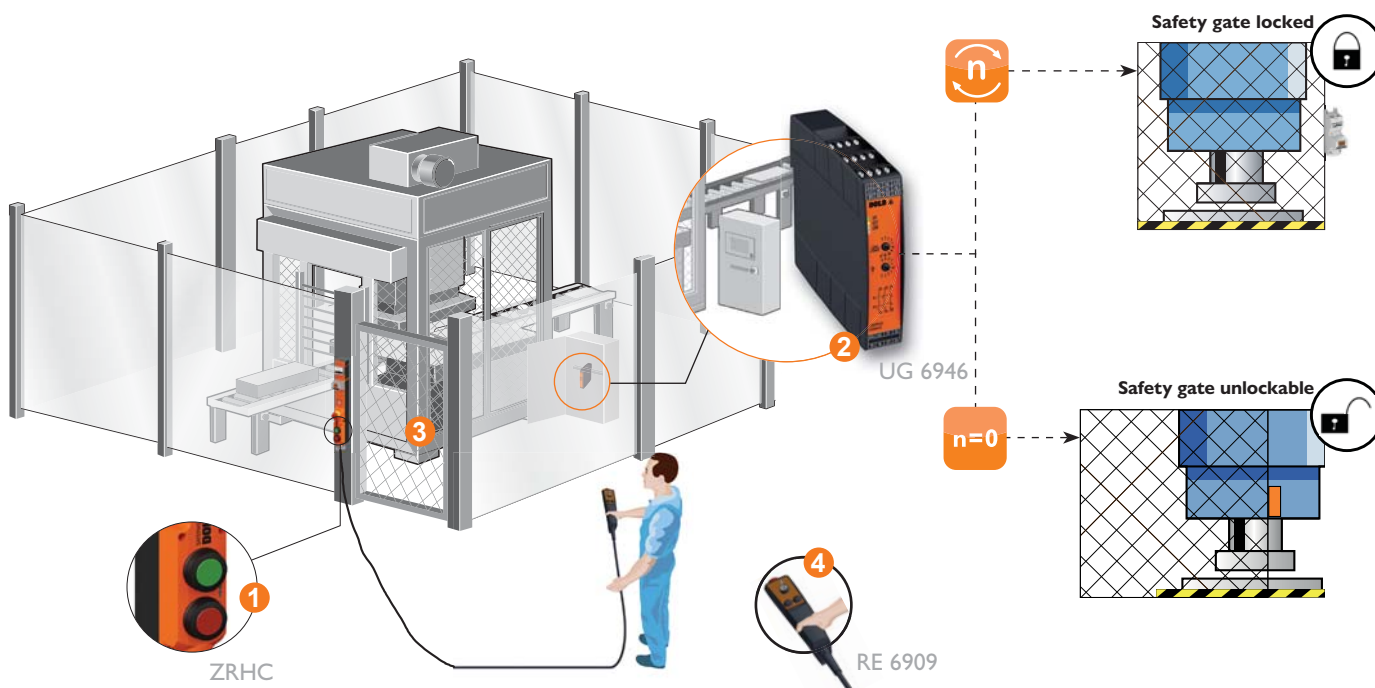
For maintenance work the plant is shut down in a controlled way by activating the stop function at the safety locking device ZRHC ❶.

Access to the dangerous installation area is controlled by the sensorless standstill monitor UG 6946 ❷. Only after the safe standstill has been recognized, the standstill monitor gets the release. The safety locking and the protection system ❸ can be unlocked.

When a protection system has been opened, dangerous movements have to be monitored reliably. Only then a service technician can safely access the plant. The enabling switch RE 6909 is taken into the safety area of the installation for one's own protection ❹.



## Application example 1:



# Safe and ergonomic

## Application example 2:

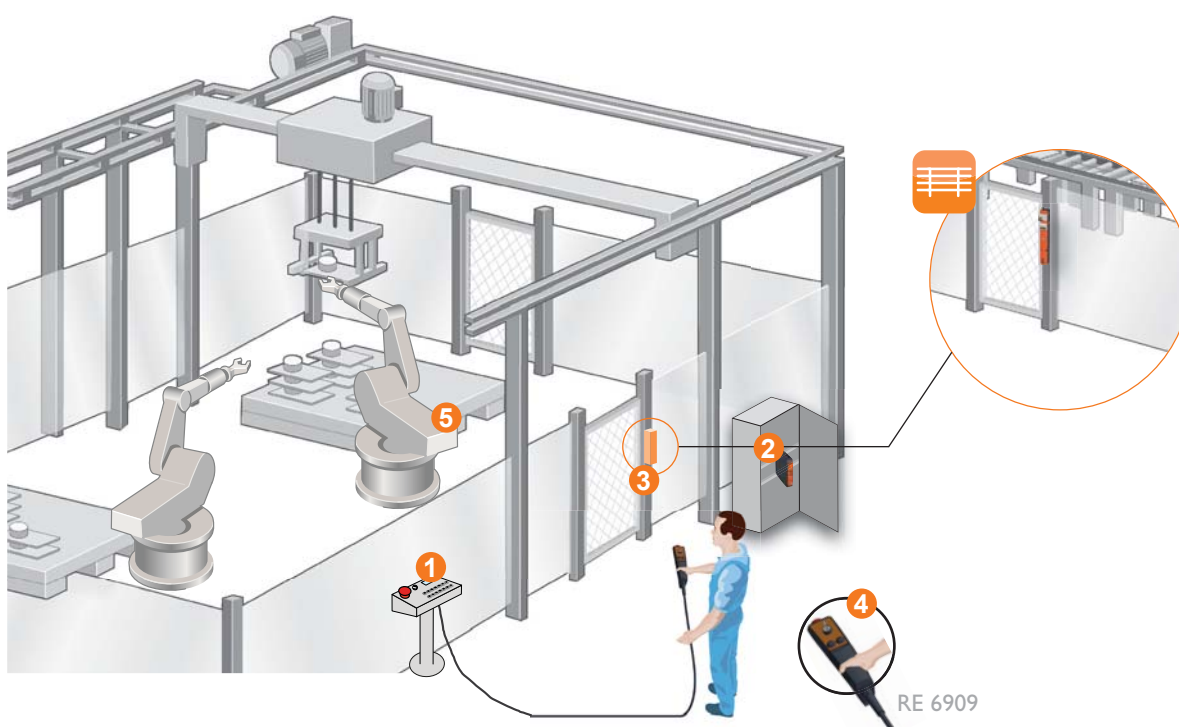
Service technicians have to enter the robot cell for troubleshooting. For this purpose, they switch the facility into setup mode ❶.

As soon as dangerous movements can be safely switched off, the sensorless standstill monitor UG 6946 ❷ sends a signal to the safety locking ZRHB01M ❸ that access to the facility.

The enabling switch RE 6909 is taken into the safety area of the machine for one's own protection. During this process, the three-stage enabling switch has to be pressed while being held in one hand ❹. Releasing or pressing the enabling switch reliably activates the safety-oriented stopping of the setup process in a potentially dangerous situation ❺.



## Application example 2:



# Our experience. Your safety.

## SAFEMASTER - The right solution for every application.

### Innovative safety concepts

As a solution provider for safe automation and electrical safety, DOLD offers a comprehensive product portfolio from a single source. Our SAFEMASTER solutions have been successfully used for many decades around the world.

From single function safety switching devices for simple safety applications through to multifunction, modular safety systems, DOLD develops tailor-made solutions for your industry and applications.

We would be happy to provide you with information about further safety solutions.



### SAFEMASTER STS

The SAFEMASTER STS modular safety switch and key transfer system serves to monitor moveable safety guards. It combines the advantages of safety switches, guard locks, key transfer and command functions in a single system. The new FRP variation stands out for its attractive design, and can be combined with our trusted stainless steel version.

### SAFEMASTER S

Our solutions for secure drive monitoring utilise a combination of safe speed, standstill, or frequency monitoring, with or without external sensors, to increase productivity and safety.



### SAFEMASTER PRO

The modular and configurable SAFEMASTER PRO safety system monitors all safety circuits of your machinery and installations – in a simple, flexible and safe manner. The number of inputs and outputs of the central control unit can be upgraded via extension modules at any time. Now also featuring safe speed monitoring and dynamic program realization.

### SAFEMASTER W

With the wireless safety solutions for emergency stop, enabling switch as well as pair and group operation of the SAFEMASTER W series, hazardous movements can be switched off wirelessly. The Wireless Safety Systems thus ensure maximum mobility for operating and maintenance personnel.



**E. Dold & Söhne GmbH & Co. KG**  
Bregstraße 18 • D-78120 Furtwangen  
T +49 7723 654-0 • F +49 7723 654-356  
dold-relays@dold.com • www.dold.com