

# RAFIX 22 FS<sup>+</sup>, emergency stop Plus 1, reset by rotating, Mushroom head red



## fields of application

- > Measurement-control-regulation
- > Electrical engineering
- > Mechanical and system engineering
- > Vehicle construction
- > Handheld terminals
- > Industrial robots

#### special features

- > Emergency stop in classic design for switching element with 2 Ö and 1 S contact
- > For emergency stop and additional signalling function
- > Low installation depth 9.2 mm (PCB) or 27 mm (QC)
- > Connection types: printed circuit board connection (PCB) or plug-in connection (QC)
- > PCB switching elements minimize mounting errors
- > Switching elements with silver contacts (max. 250 V/4 A) or gold contacts (max. 35 V/100 mA)
- > Degree of protection: IP 65 at the front





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1.30.273.502/0300

# RAFI

# description

RAFIX control devices are defined at RAFI as modular elements, consisting of an actuating element, if necessary a coupling and an individual contact or lighting unit.

Actuating elements (such as pushbuttons, emergency stop actuators, etc.) have the intended tactility, reset and function only when assembled with the appropriate switching elements.

This special emergency stop button not only has two redundant normally-closed contacts for the emergency stop function, but also a signaling contact. Unique: 3 contacts with the compact dimensions (mounting depth 9.2 or 27 mm) 2 normally-closed contacts Redundancy is increasingly required for safety applications in machine and control construction and helps to minimize the probability of a component failing. 1 signaling contact

The signaling contact is a normally-open contact and can be used, for example, to send information to a surveillance monitor or security master. The safety control can then initiate controlled shut-down, depending on the location and type of hazard. The signaling contact only provides pulses, and is not intended to be a permanent contact. The emergency stop button meets current standards. Thanks to a forcibly actuated mechanical motion sequence, it is dupe-proof in accordance with DIN EN ISO 13850. RAFIX 22 FS+ emergency stop "Plus 1" consists of a special emergency stop button and a corresponding emergency stop switching element, which can either be mounted directly (quick-connect terminal) or positioned on a PCB (THT terminal).

Note: Only use with emergency stop "Plus 1" switching element.

# technical data

> general		
Disassembly possible	no	direct links
Color of mushroom	red	> RAFI eCatalog
Property of bezel / mushroom	opaque	
Collar shape	round	
Operating temperature, min.	-25 °C	
Storage temperature, min.	-40 °C	
Operating temperature, max.	70 °C	
Storage temperature, max.	80 °C	
illuminated	No	
Packaging	Вох	
Packaging unit	2 pcs.	
net weight	17.7 g	
Operating life	50,000 cycles	
B10	65,000 cycles	
B10d	130,000 cycles	
Degree of protection, front side, according to DIN EN 60529	IP65	
UL Enclosure Type Rating front	type 1	Distributed by:
side	type 4X	
Environment resistance	IEC 60068-2-14	TEXIM-
	IEC 60068-2-30	EUROPE
	IEC 60068-2-33	www.texim-europe.com
	IEC 60068-2-78	

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	Salt-spray resistance according to	IEC 60068-2-11
	standard	
	MOQ order	50 pcs.
	RoHS compliant	Yes
	REACH compliant	Yes
>	mounting diameters	
	Mounting hole	22.3 mm
	Mounting depth	9.2 mm
	Installation height	33.2 mm
	Outside dimension, length	29.8 mm
	Outside dimension, width	29.8 mm
	Outside dimension, height	42.1 mm
	Collar dimension	ø 29,8 mm
>	mechanical data	
	Actuation function	latching
	Operating force, max.	100 N
	Resetting	by rotating
	Fixing	Threaded ring
	Threaded ring torque, max.	1.2 Nm



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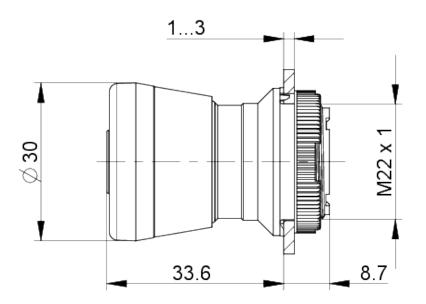
The information in this data sheet only contains general descriptions and / or performance features, which may not apply precisely as described to the respective application, and which my change due to further product enhancements. The technical data, illustrations and other information about our products are the mere results of individual technical testing. These descriptions and other product features are only binding if they expressly agreed upon at the time of the conclusion of a binding contract. In all other cases, we reserve the right to make technical changes as well as changes of availability. Pictures and other graphic illustrations are approximations only. All product names may be trademarks or brand names of the RAFI Group or any other sub-supplier of RAFI. The use of such by any third parties for their own purposes may infringe the rights of the respective entity holding those rights. **date**: Oct 18, 2022 **page**: 3/7



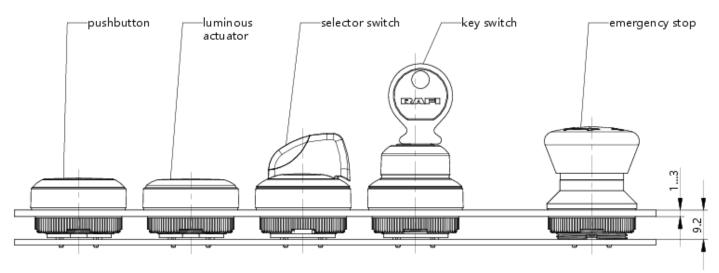


## drawings

#### **Dimensioned drawing**



### System drawing





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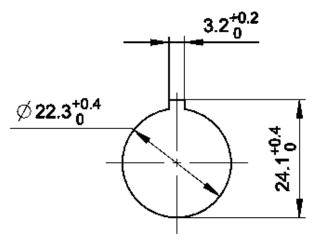




#### System drawing



#### Mounting hole drawing



acc. to IEC 60947-5-1



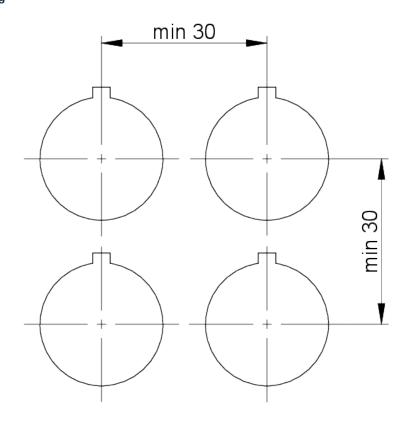
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#### front panel drawing





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# 1.30.273.502/0300



# mounting

LUMOTAST 22, RAFIX 22 FS <sup>+</sup>				
		ons EMERGENCY STOP lation of the source text)	Mode d'emploi auxiliaires de commande d'ARRÊT D'URGENCE (Traduction original)	
Sicherheitshinweise Vor Inbetriebnahme bitte Betriebsanleitung sorgfältig lesen. Not-Halt-Befehlsgeräte erfüllen eine Personenschutz-Funktion. U widrige Anwendung oder Manipulationen können zu schweren führen! Not-Halt-Befehlsgeräte dürfen nicht umgangen, entfernt oder a gemacht werden! Vor Erst-Inbetriebnahme der Naschine oder Anlage Not-Halt-Befel auf korrekte Montage und Funktion überprüfen. Not-Halt-Befehlsgeräte mit sichtbaren Beschädigungen sind unver Not-Halt-Befehlsgeräte mit sichtbaren Beschädigungen sind unver Not-Halt-Eufenktion darf nich als Ersstz für Schutzmaßnahmen oc tionen verwendet werden. Not-Halt-Funktion darf nich useintöchtigen.	Verletzungen von Personen uf andere Weise unwirksam en! Inlsgerät durch Testbetätigung rzüglich auszutauschen. oder andere Sicherheitsfunk-	Les auxiliaires de commande tromécaniques pour protéger véhicules et les installations, à les risques de dommages con Pour la mise en service, l'utilis suivantes: - La directive sur les machine - Les règlements de sécurité - Les instructions sur la préve C'est aux fabricants et utilis D'URGENCE sont utilisés, qu des prescriptions et réglemen Pour l'installation et l'exploita	ation et les contrôles techniques, il faut respecter les prescripti es selon la norme 2006/42/EG ainsi que ntion des accidents / règlements de sécurité asteurs de machines où des auxiliaires de commande d'AR ('incombe la responsabilité du respect du mode d'emploi ainsi	
. Safety instructions Please read the operating instructions carefully prior to use. EMERGENCY STOP control units are designed to protect perso			- EN ISO 13850:2008 - EN 60204-1/A1:2009	
EMERCENCE STOCENTROL THIS are designed to protect perso improper uses or inadmissible manipulation may result in severe inj EMERGENCY STOP control units must never be bypassed, remo way! Disconnect the power supply to the machinery and device prior to Operate the EMERGENCY STOP control unit to test and verify pr prior to initial start-up of the machine or line. An EMERGENCY STOP control unit with an obvious defect must the mergeney stop function is not to be used for safety measure	uries! oved or disabled in any other installation! oper installation and function be replaced immediately.	oder mehreren Schaltelemen einem Gehäuse verbaut. Die Betätigung erfolgt durch D	geräte bestehen aus einer Kombination von Betätigern mit ein ten. Die Not-Halt-Befehlsgeräte gibt es als Einbauversion odr Drücken, die Entriegelung erfolgt je nach Variante entweder dur htungen nach links oder nach rechts gungsrichtung	
The emergency stop function is not be used to sately neasons The emergency stop function must not compromise the effect devices with other safety functions. Consignes de sécurité Il faut soigneusement lire le mode d'emploi avant la mise en servir Les auxiliaires de commande d'ARRÊT D'URGENCE remplisent u sonnelle. Un montage inapproprié, une application contre-indiquée	iveness of safety devices or ce. ne fonction de protection per-	contact blocks. EMERGENCY installed in a separate housing	g. Unlatching is done by one of two methods:	
causer des blessures corporelles graves! Il est interdit de ponter, d'enlever ou de rendre inopérants les auxili D'URGENCE! Avant d'entamer l'installation il faut mettre l'installation et l'appare Avant la première mise en service de la machine ou de l'installa commande d'ARRÉ T D'URGENCE quant au montage et à un fonc Les auxiliaires de commande d'ARRÉT D'URGENCE présentant d remplacer sans tarder. La fonction d'arrêt d'urgence ne peut pas être utilisée en remplace	aires de commande d'ARRÊT il hors tension! ation, contrôler l'auxiliaire de tionnement corrects. es dommages visibles sont à	B. Description de produit Structure: Les boutons-pous d'actionneurs ou de plusieu D'URGENCE sont disponibles L'actionnement s'effectue par soit par: - Un mouvement de rotation-	soirs d'ARRÊT D'URGENCE sont composés d'une combina rs éléments de commutation. Les boutons-poussoirs d'AR en version intégrable ou installés dans un boîtier. appui sur ces derniers. Selon la variante, le déverrouillage s'effe- dans les deux directions, soit vers la gauche, soit à droite on opposée de la direction d'actionnement	

Produkt Product Produit	Einbau Ømm Mounting Ømm Montage Ømm	Betätiger Actuator Actionneur	Schaltelement Contact block Elément de commutation
LUMOTAST 22	Ø 22,3	1.15.105.001/0000 1.15.105.011/0000 1.15.105.021/0000 1.15.105.031/0000	integriert/incl.
RAFIX 22 FS <sup>+</sup>	Ø 22,3	1.30.273.001/2200 1.30.273.001/2300 1.30.273.301/2200 1.30.273.501/0300 1.30.273.502/0300	1.20.126.4xx 1.20.126.5xx 1.20.126.6xx 1.20.126.7xx

... www.enuew una betrieb von Not-Halt-Befehlsgeräten müssen zur bestimmungsgemäßen Verwendung folgende Anforderungen beachtet und eine Gefahrenbewertung durchgeführt werden:

dispositifs possédant d'autres fonctions de sécurité D 2. Allgemeine Beschreibung und bestimmungsgemäße Verwendung

- EN ISO 13849-1:2015 - EN ISO 13850:2008 - EN 60204-1/A1:2009 EN ISO 13849-2:2012

#### (GB) 2. General description and intended use

- Die Maschinenrichtlinie 2006/42/EG Die Sicherheitsvorschriften sowie
Die Unfallverhütungsvorschriften / Sicherheitsregeln

EMERGENCY STOP control units are electromechanical switching devices designed to protect persons. They are used for instant disconnection to achieve a safe status of machines, vehicles or other equipment in order to avoid or reduce risks or damage to man and machine.

La fonction d'arrêt d'urgence ne peut pas entraver l'efficacité de dispositifs de sécurité ou de

Nor-Halt-Befehlsgeräte sind elektromechanische Schaltgeräte zum Schutz von Personen. Sie dienen der schnellen Abschaltung um Maschinen, Fahrzeuge und Anlagen in einen sicheren Zu-stand zu bringen, um Gefahren und Schäden für Mensch und Maschine zu vermeiden oder zu

Für die Inbetriebnahme, den Einsatz und technischen Überprüfungen gelten im speziellen folgen-de Vorschriften:

Hersteller und Benutzer von Maschinen, an denen Not-Halt-Befehlsgeräte eingesetzt werden, tragen die Verantwortung für die Beachtung der Betrieban leuten gen, wie auch für die Einhaltung der für sie geltenden Sicherheitsvorschriften und -regeln. Für den Einbau und Betrieb von Not-Halt-Befehlsgeräten müssen zur bestimmungsgemäßen

The following standards and regulations apply to their start-up, use and technical inspections without limitation: - Machinery Directive 2006/42/EC

Safety standards

⚠

⚠

verringern.

Accident prevention regulations / rules for safety

Manufacturers and users of machines provided with EMERGENCY STOP control units are respon sible for ensuring that the operating instructions are observed and the applicable safety standards

and rules complied with.

For the installation and operation of EMERGENCY STOP control devices in line with the intended Pointerinstanation and operation of Enversion 2010 Control control devices in the wall the intended use, the following requirements must be observed and a risk assessment must be performed: - EN ISO 13849-1:2015 - EN ISO 13850:2008 - EN ISO 13849-2:2012 - EN 60204-1/A1:2009

D Tabelle 3.1 Weitere technische Daten sind dem Katalog zu entnehmen.

(B) Table 3.1 For additional technical data, please refer to the catalogue

(F) Tableau 3.1 Pour les autres caractéristiques techniques, voir catalogue.



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