

Industrial price list 12-22.1

Valid from 01.06.2022

Special controls

Hörmann international sales companies and sales partners



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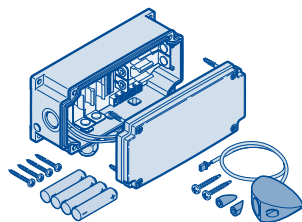
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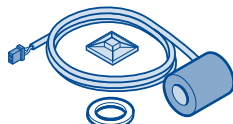
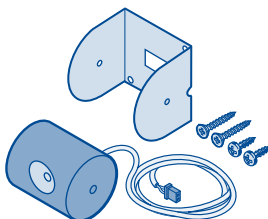
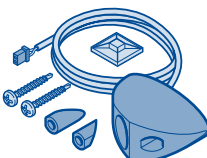
Symbols used

Symbol	Description
	Price on request
	Please note the extended delivery times
●	Prices marked with a dot indicate articles that are available from stock or are available immediately ex works.
	Item no longer available

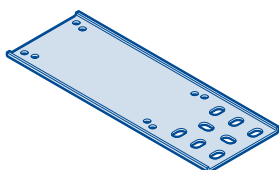
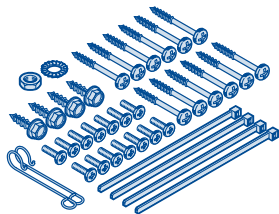
1 Command elements

Article	Description
 	

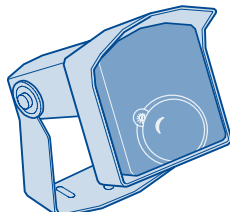
1 Command elements

Article	Description																				
 1.1.3	1.1.3 Additional internal sensor LHF-1, 868-BS Application range: Light flash control LHF-1, 868-BS (Item 1.1.1) Advantages / benefits: 1. For entering vehicles with glass elements, for exiting vehicles 2. Fast and easy installation 3. Interior installation 4. Fitting possible behind glass elements 5. Extends the detection range, e.g. for various vehicle heights 6. Available in various cable lengths (300 mm / 700 mm / 1,200 mm) Note: Please use the order form for clarification. <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>1.1.3 Additional internal sensor LHF-1, 868-BS, 868-BS</td><td></td><td></td><td></td></tr><tr><td>Cable length 300 mm</td><td>01.10.2007 –</td><td>637543</td><td>69,00</td></tr><tr><td>Cable length 700 mm</td><td>01.10.2007 –</td><td>637544</td><td>72,00</td></tr><tr><td>Cable length 1200 mm</td><td>01.03.2008 –</td><td>637578</td><td>75,00</td></tr></table>	Article name	Production period	Art. no.	€	1.1.3 Additional internal sensor LHF-1, 868-BS, 868-BS				Cable length 300 mm	01.10.2007 –	637543	69,00	Cable length 700 mm	01.10.2007 –	637544	72,00	Cable length 1200 mm	01.03.2008 –	637578	75,00
Article name	Production period	Art. no.	€																		
1.1.3 Additional internal sensor LHF-1, 868-BS, 868-BS																					
Cable length 300 mm	01.10.2007 –	637543	69,00																		
Cable length 700 mm	01.10.2007 –	637544	72,00																		
Cable length 1200 mm	01.03.2008 –	637578	75,00																		
 1.1.4	1.1.4 Turnable internal / external sensor LHF-1, 868-BS Application range: Light flash control LHF-1, 868-BS (Item 1.1.1) Advantages / benefits: 1. Fast and easy installation 2. Vertically and horizontally turnable external sensor, e.g. for vehicles entering at an oblique angle 3. Available in various cable lengths (300 mm / 700 mm) Note: Please use the order form for clarification. <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>1.1.4 Turnable internal / external sensor LHF-1, 868-BS</td><td></td><td></td><td></td></tr><tr><td>Cable length 300 mm</td><td>01.01.2009 –</td><td>637618</td><td>89,00</td></tr><tr><td>Cable length 700 mm</td><td>01.01.2009 –</td><td>637619</td><td>94,00</td></tr></table>	Article name	Production period	Art. no.	€	1.1.4 Turnable internal / external sensor LHF-1, 868-BS				Cable length 300 mm	01.01.2009 –	637618	89,00	Cable length 700 mm	01.01.2009 –	637619	94,00				
Article name	Production period	Art. no.	€																		
1.1.4 Turnable internal / external sensor LHF-1, 868-BS																					
Cable length 300 mm	01.01.2009 –	637618	89,00																		
Cable length 700 mm	01.01.2009 –	637619	94,00																		
 1.1.5	1.1.5 External LED feedback LHF-1, 868-BS Application range: Light flash control LHF-1, 868-BS (Item 1.1.1) Advantages / benefits: 1. Fast and easy installation 2. Visible feedback if light from vehicle headlight is detected 3. Cable length 700 mm Note: Please use the order form for clarification. <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>1.1.5 External LED feedback LHF-1, 868-BS</td><td></td><td></td><td></td></tr><tr><td>Cable length 700 mm</td><td>01.01.2009 –</td><td>637622</td><td>79,00</td></tr></table>	Article name	Production period	Art. no.	€	1.1.5 External LED feedback LHF-1, 868-BS				Cable length 700 mm	01.01.2009 –	637622	79,00								
Article name	Production period	Art. no.	€																		
1.1.5 External LED feedback LHF-1, 868-BS																					
Cable length 700 mm	01.01.2009 –	637622	79,00																		

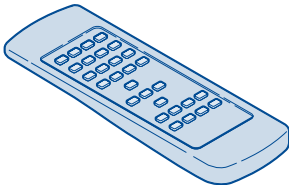
1 Command elements

Article	Description										
 1.1.6	1.1.6	Plate holder LHF-1, 868-BS Application range: Light flash control LHF-1, 868-BS (Item 1.1.1) Function: Fitting option for light flash control LHF-1, 868-BS (Item 1.1.1) on non-insulated doors Note: Please use the order form for clarification.									
	<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>1.1.6 Plate holder LHF-1, 868-BS</td><td>01.02.2007 –</td><td>638245</td><td>14,90</td></tr></table>				Article name	Production period	Art. no.	€	1.1.6 Plate holder LHF-1, 868-BS	01.02.2007 –	638245
Article name	Production period	Art. no.	€								
1.1.6 Plate holder LHF-1, 868-BS	01.02.2007 –	638245	14,90								
 1.1.7	1.1.7	Screw bag LHF-1, 868-BS Application range: Light flash control LHF-1, 868-BS (Item 1.1.1) Function: Fixing material for light flash control LHF-1, 868-BS (Item 1.1.1) and plate holder (Item 1.1.6) Note: Please use the order form for clarification.									
	<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>1.1.7 Screw bag LHF-1, 868-BS</td><td>01.02.2007 –</td><td>638080</td><td>7,60</td></tr></table>				Article name	Production period	Art. no.	€	1.1.7 Screw bag LHF-1, 868-BS	01.02.2007 –	638080
Article name	Production period	Art. no.	€								
1.1.7 Screw bag LHF-1, 868-BS	01.02.2007 –	638080	7,60								

1 Command elements

Article	Description																														
	1.2	Movement detector																													
	1.2.1	Movement detector PRM 1																													
																															
	Application range: A / B 460, B 460 FU, 460 R, 360 Advantages / benefits: 1. Quick and easy fitting 2. Easy retrofitting is possible 3. Presence detection holds the door open 4. Can open the door 5. Functions similar to induction loops Functions / settings: 1. Monitoring of the door 2. Covers a zone of 3 × 3 m with 40 spots (at a fitting height of 5 m) Technical features <table><tr><td>Power supply:</td><td>12 – 24 V DC +30% / –5%</td></tr><tr><td>Power consumption:</td><td>< 2 W</td></tr><tr><td>Max. switching capacity:</td><td>42 V AC/DC 48 VA (AC) / 30 W (DC)</td></tr><tr><td>Temperature range:</td><td>–30 °C to +60 °C</td></tr><tr><td>Protection class:</td><td>IP 65</td></tr><tr><td>Detection type:</td><td>Movement and presence</td></tr><tr><td>Technology:</td><td>Infrared</td></tr><tr><td>Fitting height:</td><td>2.5 – 6 m</td></tr><tr><td>Dimensions (D × W × H):</td><td>127 × 102 × 96 mm</td></tr><tr><td>Housing material:</td><td>ABS</td></tr><tr><td>Housing colour:</td><td>Black</td></tr><tr><td>Front panel material:</td><td>Polycarbonate</td></tr><tr><td>Front panel colour:</td><td>Violet</td></tr><tr><td>Cable length:</td><td>10 m</td></tr></table>				Power supply:	12 – 24 V DC +30% / –5%	Power consumption:	< 2 W	Max. switching capacity:	42 V AC/DC 48 VA (AC) / 30 W (DC)	Temperature range:	–30 °C to +60 °C	Protection class:	IP 65	Detection type:	Movement and presence	Technology:	Infrared	Fitting height:	2.5 – 6 m	Dimensions (D × W × H):	127 × 102 × 96 mm	Housing material:	ABS	Housing colour:	Black	Front panel material:	Polycarbonate	Front panel colour:	Violet	Cable length:
Power supply:	12 – 24 V DC +30% / –5%																														
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Housing colour:	Black																														
Front panel material:	Polycarbonate																														
Front panel colour:	Violet																														
Cable length:	10 m																														
1.2.1																															
Article name		Production period	Art. no.	€																											
1.2.1 Movement detector PRM 1		01.09.2010 –	637708	463,00																											

1 Command elements

Article	Description						
 1.2.2	1.2.2	Remote control for PRM 1					
		Application range: Movement detector PRM 1 programming					
		Advantages / benefits: 1. Easy and fast modification / adjustment of the movement detector's operating parameters 2. Various options for adjusting and adapting with minimal effort 3. 2 × output relays, of which the first relay can be set					
		Functions / settings: 1. IR detection field setting 2. Presence time setting 3. Possible to program channel 1 (presence, input and output impulse) 4. Etc.					
		Technical features <table> <tr> <td>Colour:</td><td>Black</td></tr> <tr> <td>Technology:</td><td>Infrared</td></tr> </table>			Colour:	Black	Technology:
Colour:	Black						
Technology:	Infrared						
		Article name	Production period	Art. no.	€		
		1.2.2 Remote control for PRM 1	01.09.2010 –	637710	49,00		

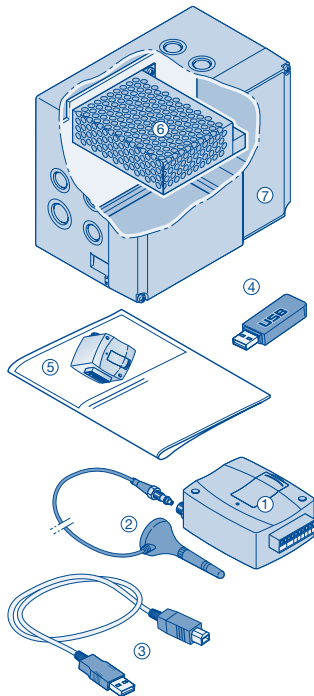
1 Command elements

Article	Description			
	1.3	Non-contact switching elements		
	1.3.1	HTR 1-230		
		Radar button with volt-free relay output		
	1.3.2	HTR 1-24		
		Radar button with volt-free relay output		
		Application range:		
		1. Control of door operators		
		2. Operation of electrical consumers		
		Advantages / benefits:		
		1. Non-contact activation of a door travel		
	2. Non-contact operation of light and other consumers			
	3. Prevents the spread of microbes and bacteria			
	4. Good visibility in the dark due to the illumination			
	5. Easy retrofitting is possible			
	6. Quick and easy fitting			
	7. Surface-mounted housing included in the scope of delivery			
	Functions / settings:			
	Symbol:	Not illuminated, illuminated, flashing		
	Switching output:	Switching (on, off, on, ...) Impulse output – 1 second Impulse output – 3 seconds Impulse output – 3 minutes Impulse output – 5 minutes Impulse output – 10 minutes		
	Technical features			
	Power supply:	HTR 1-230: 100–240 V AC, 50/ 60 Hz HTR 1-24: 12–24 V AC/ DC		
	Temperature range:	-20 °C to +60 °C		
	Protection class:	IP 41		
	Detection type:	Motion		
	Detection range:	10–50 cm		
	Technology:	Radar		
	Frequency:	5.8 GHz		
	Dimensions (W × H × D):	80 × 80 × 14 mm		
	Housing material:	PC		
	Housing colour:	RAL 9010		
	Switching output:	Relay (volt-free change-over contact)		
	Contact load	10 A/ 250 V		
1.3.1 / 1.3.2				
Article name		Production period	Art. no.	€
1.3.1 HTR 1-230		From 01.10.2016 –	437394	161,00
1.3.2 HTR 1-24		From 01.10.2017 –	437393	161,00

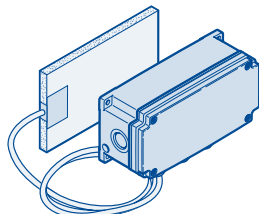
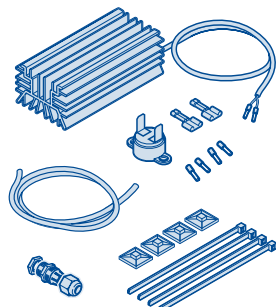
1 Command elements

Article	Description																							
	1.3.3	FSR 1 BS Radar button with BiSecur radio																						
	Application range: 1. Control of door operators with BiSecur radio 2. Control of receivers with BiSecur radio Advantages / benefits: 1. Non-contact activation of a door travel 2. Non-contact operation of light and other consumers 3. Prevents the spread of microbes and bacteria 4. Good visibility in the dark due to the illumination 5. Easy retrofitting is possible 6. Quick and easy fitting 7. Surface-mounted housing included in the scope of delivery Functions / settings: Symbol: Not illuminated, illuminated, flashing Technical features <table><tr><td>Power supply:</td><td>100 – 240 V AC, 50 / 60 Hz</td></tr><tr><td>Temperature range:</td><td>-20 °C to +60 °C</td></tr><tr><td>Protection class:</td><td>IP 41</td></tr><tr><td>Detection type:</td><td>Motion</td></tr><tr><td>Detection range:</td><td>10 – 50 cm</td></tr><tr><td>Technology:</td><td>Radar</td></tr><tr><td>Frequency:</td><td>5.8 GHz</td></tr><tr><td>Dimensions (W × H × D):</td><td>80 × 80 × 14 mm</td></tr><tr><td>Housing material:</td><td>PC</td></tr><tr><td>Housing colour:</td><td>RAL 9010</td></tr><tr><td>Radio technology:</td><td>BiSecur, fixed code 868 MHz</td></tr></table>			Power supply:	100 – 240 V AC, 50 / 60 Hz	Temperature range:	-20 °C to +60 °C	Protection class:	IP 41	Detection type:	Motion	Detection range:	10 – 50 cm	Technology:	Radar	Frequency:	5.8 GHz	Dimensions (W × H × D):	80 × 80 × 14 mm	Housing material:	PC	Housing colour:	RAL 9010	Radio technology:
Power supply:	100 – 240 V AC, 50 / 60 Hz																							
Temperature range:	-20 °C to +60 °C																							
Protection class:	IP 41																							
Detection type:	Motion																							
Detection range:	10 – 50 cm																							
Technology:	Radar																							
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Housing colour:	RAL 9010																							
Radio technology:	BiSecur, fixed code 868 MHz																							
		<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>1.3.3 FSR 1 BS</td><td>From 01.07.2016 –</td><td>437392</td><td>161,00</td></tr></table>	Article name	Production period	Art. no.	€	1.3.3 FSR 1 BS	From 01.07.2016 –	437392	161,00														
Article name	Production period	Art. no.	€																					
1.3.3 FSR 1 BS	From 01.07.2016 –	437392	161,00																					

2 GSM modules

Article	Description																		
 2.1 1 GSM module 2 GSM antenna 3 USB cable, type A / B 4 Installation USB flash drive 5 Instructions 6 Power supply unit 7 Housing	2.1 Hörmann GSM Control Application range: Door and barrier systems Advantages / benefits: 1. Opening the system via telephone 2. Receiving status or error messages via SMS 3. No restrictions concerning the distance 4. Simple parameterisation via software or SMS commands 5. Up to 1000 authorised users (telephone numbers) can be stored 6. The telephone call is free of charge for users (Free Call) Functions: 1. An authorised user can activate up to two volt-free relay contacts for an adjustable time. 2. During parameterisation, it is determined for each user which of the two relays is activated or whether both relays are activated simultaneously. 3. The GSM module contains digital ports to which volt-free contacts can be connected. This allows, for example, a door system malfunction message to be forwarded to up to 4 selected persons via SMS. 4. The last 2000 events are stored in a log file. This data can be called up with the included software. 5. This requires an activated SIM card that is not included in the scope of delivery. Technical features<table><tr><td>Transmission channel:</td><td>4G / 3G / 2G / GSM</td></tr><tr><td>Frequency range:</td><td>UMTS 900 / 2100 MHz , GSM / GPRS 900 / 1800 MHz</td></tr><tr><td>Power supply (power supply unit):</td><td>100 – 240 V AC / 50 / 60 Hz</td></tr><tr><td>Power consumption:</td><td>100 mA</td></tr><tr><td>Relay contacts:</td><td>2 volt-free normally open contacts</td></tr><tr><td>Max. switching capacity:</td><td>5 A at 24 V AC / V DC</td></tr><tr><td>Digital inputs:</td><td>4 inputs (configurable NO/NC)</td></tr><tr><td>Temperature range:</td><td>- 20 °C to + 60 °C</td></tr><tr><td>Protection category:</td><td>IP 65</td></tr></table>	Transmission channel:	4G / 3G / 2G / GSM	Frequency range:	UMTS 900 / 2100 MHz , GSM / GPRS 900 / 1800 MHz	Power supply (power supply unit):	100 – 240 V AC / 50 / 60 Hz	Power consumption:	100 mA	Relay contacts:	2 volt-free normally open contacts	Max. switching capacity:	5 A at 24 V AC / V DC	Digital inputs:	4 inputs (configurable NO/NC)	Temperature range:	- 20 °C to + 60 °C	Protection category:	IP 65
Transmission channel:	4G / 3G / 2G / GSM																		
Frequency range:	UMTS 900 / 2100 MHz , GSM / GPRS 900 / 1800 MHz																		
Power supply (power supply unit):	100 – 240 V AC / 50 / 60 Hz																		
Power consumption:	100 mA																		
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Temperature range:	- 20 °C to + 60 °C																		
Protection category:	IP 65																		
<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>2.1 Hörmann GSM Control</td><td>01.04.2012 –</td><td>639782</td><td>543,00</td></tr></table>		Article name	Production period	Art. no.	€	2.1 Hörmann GSM Control	01.04.2012 –	639782	543,00										
Article name	Production period	Art. no.	€																
2.1 Hörmann GSM Control	01.04.2012 –	639782	543,00																

3 Heating for equipment

Article	Description								
 3.1	3.1 Heating mat WA 400 Application range: Shaft operator: WA 400, WA 400 M, ITO 400 Advantages / benefits: 1. Application area in extremely cold areas up to −35 °C 2. Easy and fast fitting (also retrofitting) 3. Monitoring of ambient temperature via thermal switch Technical features Connecting voltage: 230 V AC / 50 Hz Maximum power: 70 W								
	<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>3.1 Heating mat WA 400</td><td>01.11.2005 –</td><td>637446</td><td>280,00</td></tr></table>	Article name	Production period	Art. no.	€	3.1 Heating mat WA 400	01.11.2005 –	637446	280,00
Article name	Production period	Art. no.	€						
3.1 Heating mat WA 400	01.11.2005 –	637446	280,00						
 3.2	3.2 Housing heater for fitting in industrial door control Application range: HÖRMANN sectional door controls: A / B 440 / 445 / 460, B 460 FU HÖRMANN rolling shutter controls: 445 R, 460 R HÖRMANN dock leveller controls: 420 S / T, 445 S / T, 460 S / T Advantages / benefits: 1. Application area in extremely cold areas up to −35 °C 2. Easy and fast fitting (also retrofitting) 3. Monitoring of ambient temperature via thermal switch Technical features Connecting voltage: 230 V AC / 50 Hz Maximum power: 10 W								
	<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>3.2 Housing heater for fitting in industrial door control</td><td>01.12.2005 –</td><td>637422</td><td>237,00</td></tr></table>	Article name	Production period	Art. no.	€	3.2 Housing heater for fitting in industrial door control	01.12.2005 –	637422	237,00
Article name	Production period	Art. no.	€						
3.2 Housing heater for fitting in industrial door control	01.12.2005 –	637422	237,00						

4 Overview of ATEX / IECEx marking for electrical explosion-proof equipment

Potentially explosive areas						
Conditions and zone classification			Required labelling of devices			
Flammable materials	Temporary behaviour: of the potentially explosive atmosphere	Classification of potentially explosive areas	Group As defined in the Directive 2014 / 34 / EU	Device category As defined in the Directive 2014 / 34 / EU	Device group As defined in EN IEC 60079-0	Equipment protection level (EPL) As defined in the EN IEC 60079-0
Gases Vapours	are present continuously, long-term or frequently	Zone 0	II	1G	II	Ga
	occurs occasionally during normal operation	Zone 1	II	2G or 1G	II	Gb or Ga
	normally does not occur in normal operation, or only for a short time	Zone 2	II	3G or 2G or 1G	II	Gc or Gb or Ga
Dusts	are present continuously, long-term or frequently in cloud form	Zone 20	II	1D	III	Da
	forms occasionally during normal operation in cloud form	Zone 21	II	2D or 1D	III	Db or Da
	normally does not occur in cloud form in normal operation, or only for a short time	Zone 22	II	3D or 2D or 1D	III	Dc or Db or Da
Methane Carbon dust	Operation with risk of explosion	–	I	M1	I	Ma
	Shutdown on risk of explosion	–	I	M2 or M1	I	Mb or Ma

ATEX

Gases / vapours	CE NB ¹⁾ Ex	II	2G	Ex db eb
Dusts	CE NB ¹⁾ Ex	II	2D	Ex tb

IECEx

Gases / vapours				Ex db eb
Dusts				Ex tc

Protection principle / ignition protection types

Application	Flammable substance	Protection principle	Ignition protection type
All applications	Gases, vapours (G) and dusts (D)	–	General requirement
Switch devices, controls, motors, command and signalling devices, power electronics, * only catalytic gas sensors	Gases and vapours (G)	Transmission of an explosion to the outside is excluded	Pressure-resistant enclosures
Junction and connection boxes, housings, motors, lights, terminals	Gases and vapours (G)	Prevention of sparks and temperatures	Increased security
Junction and connection boxes, housings, motors, lights, switch and control cabinets, plugs	Dusts (D)	Explosive dust atmosphere is kept away from the source of ignition	Protection by housing
Measurement and control technology, sensors, actuators, instruments	Gases, vapours (G) and dusts (D)	Energy limitation of sparks and temperatures	Intrinsic safety
Switch and control cabinets, motors, measuring and analysis equipment, computers	Gases, vapours (G) and dusts (D)	Explosive atmosphere is kept away from the source of ignition	Pressurised enclosures
Coils of relays and motors, electronics, solenoid valves, connection systems	Gases, vapours (G) and dusts (D)	Explosive atmosphere is kept away from the source of ignition	Encapsulation
Transformers, relays, start-up controls, switching devices	Gases and vapours (G)	Explosive atmosphere is kept away from the source of ignition	Liquid immersion
Transformers, relays, capacitors	Gases and vapours (G)	Transmission of an explosion to the outside is excluded	Powder filling
Applications in zone 2	Gases and vapours (G)	Ignition protection principles adapted for zone 2	Encapsulated, sealed Restricted-breathing enclosure
Optical devices, laser scanners, photocells, LED lights, optical waveguides	Gases, vapours (G) and dusts (D)	Energy limitation of ignition sparks and temperature	Inherently safe optical radiation
Optical fibres, optical waveguides	Gases, vapours (G) and dusts (D)	Explosive atmosphere is kept away from the source of ignition	Protected optical radiation
Optical fibres, optical waveguides	Gases, vapours (G) and dusts (D)	Explosive atmosphere is kept away from the source of ignition	Optical system with locking

- 1) Identification number of the authorised test centre responsible for the certification of the manufacturer quality system (cat. 1 and 2).
- 2) Notified Body (NB): authorised test centre that has tested and certified the product (cat. 1 and 2).
- 3) Certification Body (CB): certified body that has tested and certified the product (EPL a, b and c).

ATEX is a mandatory and IECEx a voluntary certification procedure in the European Union.
For the correct application of the certification procedures, please observe the relevant directives, regulations and standards.

Classification of gases and vapours						
Gases and vapours			Classification of gases and vapours according to their ignition temperature	Temperature class	Maximum surface temperature (Devices)	Permissible temperature classes (Devices)
Ammonia, Methane, ethane Propane	Town gas (coal gas), Acrylonitrile	Hydrogen	> 450 °C	T1	450 °C	T1 to T6
Ethyl alcohol, Cyclohexane, n-butane	Ethylene, Ethylene oxide	Ethine (acetylene)	> 300 °C ... ≤ 450 °C	T2	300 °C	T2 to T6
Petroleum spirits in general Aviation fuel, n-hexane	Ethylene glycol, Hydrogen sulphide		> 200 °C ... ≤ 300 °C	T3	200 °C	T3 to T6
Acetaldehyde	Ethyl ether		> 135 °C ... ≤ 200 °C	T4	135 °C	T4 to T6
			> 100 °C ... ≤ 135 °C	T5	100 °C	T5 to T6
		Carbon disulphide	> 85 °C ... ≤ 100 °C	T6	85 °C	T6

Gas groups		
IIA	IIB	IIC
Permissible device groups		
IIA, IIB, IIC	IIB, IIC	IIC

IIC	T6	Gb	NB ²⁾ 18 ATEX 1234	X
IIIC	T120 °C	Db	NB ²⁾ 18 ATEX 1234	X
IIB	T4	Gb	IECEx ExCB ³⁾ 11.1234	X
IIIB	T120 °C	Dc	IECEx ExCB ³⁾ 11.1234	X

Identification according to the device protection level				Standards
Very high protection	High protection	Increased protection		
+	+	+		EN IEC 60079-0
Ex da*	Ex db	Ex dc		EN IEC 60079-1
–	Ex eb	Ex ec		EN IEC 60079-7
Ex ta	Ex tb	Ex tc		EN IEC 60079-31
Ex ia	Ex ib	Ex ic		EN IEC 60079-11 EN IEC 60079-25
–	Ex pxb, Ex pyb	Ex pzc		EN IEC 60079-2
Ex ma	Ex mb	Ex mc		EN IEC 60079-18
–	Ex ob	Ex oc		EN IEC 60079-6
–	Ex q	–		EN IEC 60079-5
–	–	Ex nC Ex nR		EN IEC 60079-15
Ex op is	–	–		EN IEC 60079-28
–	Ex op pr	–		EN IEC 60079-28
–	Ex op sh	–		EN IEC 60079-28

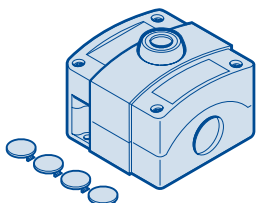
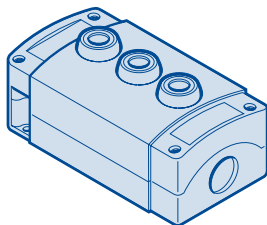
Application area (devices)		
Zone 0/20 Zone 1/21 Zone 2/22	Zone 1/21 Zone 2/22	Zone 2/22

Application area of equipment	
Labelling	Conditions
Without X or U	Device usable without restrictions
With X	Specific operating conditions for the device
With U	Component with partial certificate, conformity is certified with installation in a complete device

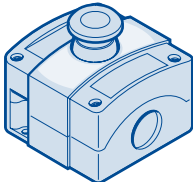
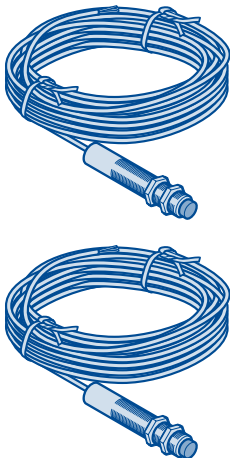
Max. permissible surface temperature of the device	
Temperature limitation for dust layers T _{5 mm} : minimum ignition temperature of dust layer	T _{max.} < T _{5 mm} - 75 °C
Temperature limitation for dust clouds T _{CL} : minimum ignition temperature of the dust cloud	T _{max.} < 2/3 T _{CL}
Max. permissible surface temperature of the device:	the lowest of the two T _{max.} values

Classification of dusts		
Permissible device groups	Dust groups	Dusts
IIIA, IIIB, IIIC	IIIA	Flammable lint
IIIB, IIIC	IIIB	Non-conductive
IIIC	IIIC	Conductive

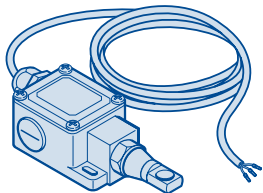
5 Equipment for use in potentially explosive atmospheres

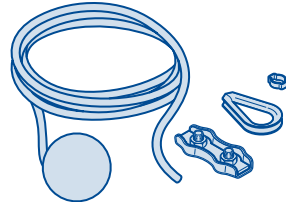
Article	Description								
 5.1	5.1 Push button Application range: Potentially explosive atmosphere Advantages / benefits: 1. Document of compliance PTB 00 ATEX 1068 2. Can be used flexibly Functions / settings: Impulse function Technical features Explosion protection: II 2G EEx edm IIC T6 II 2D IP 6X T 80 °C IP 66 / IP 67 Connecting terminals: 2.5 mm² <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>5.1 Push button</td><td>01.01.2005 –</td><td>637093</td><td>668,00</td></tr></table>	Article name	Production period	Art. no.	€	5.1 Push button	01.01.2005 –	637093	668,00
	Article name	Production period	Art. no.	€					
5.1 Push button	01.01.2005 –	637093	668,00						
 5.2	5.2 3-way push button Application range: Potentially explosive atmosphere Advantages / benefits: 1. Document of compliance PTB 00 ATEX 1068 2. Can be used flexibly Functions / settings: Function Open / Stop / Close Technical features Explosion protection: II 2G EEx edm IIC T6 II 2D IP 6X T 80 °C IP 66 / IP 67 Connecting terminals: 2.5 mm² <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>5.2 3-way push button</td><td>01.01.2005 –</td><td>637094</td><td>734,00</td></tr></table>	Article name	Production period	Art. no.	€	5.2 3-way push button	01.01.2005 –	637094	734,00
	Article name	Production period	Art. no.	€					
5.2 3-way push button	01.01.2005 –	637094	734,00						

5 Equipment for use in potentially explosive atmospheres

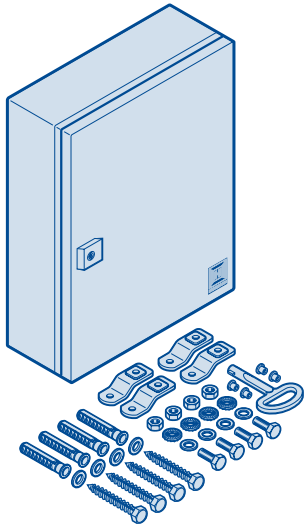
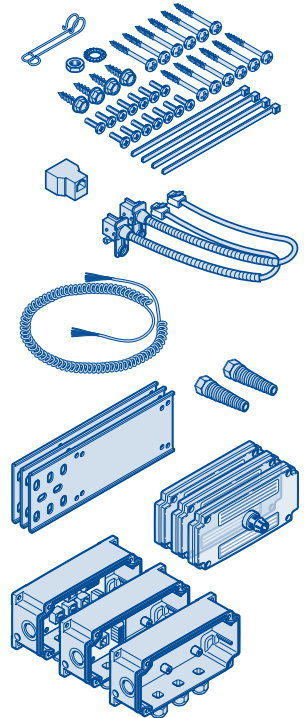
Article	Description									
 5.3	5.3	Emergency-off palm button Application range: Potentially explosive atmosphere Advantages / benefits: 1. Document of compliance PTB 00 ATEX 1068 2. Can be used flexibly Functions / settings: Emergency-off function Technical features Explosion protection: Ⓔ II 2G EEx edm IIC T6 Ⓔ II 2D IP 6X T 80 °C IP 66 / IP 67 Connecting terminals: 2.5 mm²								
	<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>5.3 Emergency-off palm button</td><td>01.01.2005 –</td><td>637096</td><td>468,00</td></tr></table>			Article name	Production period	Art. no.	€	5.3 Emergency-off palm button	01.01.2005 –	637096
Article name	Production period	Art. no.	€							
5.3 Emergency-off palm button	01.01.2005 –	637096	468,00							
 5.4	5.4	One-way photocell Application range: Potentially explosive atmosphere Advantages / benefits: 1. Safety equipment for crash protection 2. Can be used flexibly 3. Long range 4. Unsusceptible to dirt and external factors 5. Stand-by indicator 6. Optimum alignment option via status indicator Functions / settings: Safety equipment Technical features Explosion protection: Ⓔ II 2G, EEx d IIC T6 Ⓔ II 1/2D IP 67 T 90 °C Supply voltage: 24 V DC Housing: M18 nickel-plated (incl. holder and diversion) Perm. ambient temperature: –20 °C < TA < +50 °C Power consumption: Transmitter 40 mA, receiver 40 mA Speed of response: 5 ms								
	<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>5.4 One-way photocell</td><td>01.01.2005 –</td><td>637245</td><td>2989,00</td></tr></table>			Article name	Production period	Art. no.	€	5.4 One-way photocell	01.01.2005 –	637245
Article name	Production period	Art. no.	€							
5.4 One-way photocell	01.01.2005 –	637245	2989,00							

5 Equipment for use in potentially explosive atmospheres

Article	Description				
 5.5.1	5.5	Pull switch			
	5.5.1	Pull switch – EX version with 3 m connecting lead			
		Application range: Potentially explosive atmosphere			
		Advantages / benefits: 1. Document of compliance PTB 03 ATEX 1067 2. Can be used flexibly			
		Functions / settings: Impulse function			
		Technical features Explosion protection: $\text{Ex II 2G / D EEx d IIC IP 65 T 80 }^{\circ}\text{C}$ Housing: Light alloy diecast Switching component: Change-over contact Connecting lead: 3 m, H05VV-F Connection cross section: $4 \times 0.75 \text{ mm}^2$ Rated surge voltage resistance: 4 kV Rated insulation voltage: 250 V			
		Article name	Production period	Art. no.	€
		5.5.1 Pull switch – EX version with 3 m connecting lead	01.05.2006 –	639050	562,00

 5.5.2	5.5.2	Pull cord with ball			
		Application range: Pull switch (Item 5.5.1)			
		Technical features Cord length: 4 m Colour: Yellow Miscellaneous: With ball and duplex clamp			
		Article name	Production period	Art. no.	€
		5.5.2 Pull cord with ball	01.05.2006 –	639051	124,00

5 Equipment for use in potentially explosive atmospheres

Article	Description								
 5.6	5.6 Extension set SKS for EX area Application range: a. In zone 2 (gas-ex, category 3G) in explosion groups IIA and IIB b. In zone 22 (dust-ex, category 3D) for dust with a minimum trigger energy > 3 mJ c. In zone 1 (gas-ex, category 2 G) in explosion groups IIA and IIB d. In zone 21 (dust-ex, category 2D) for dust with a minimum trigger energy > 3 mJ Version: 1. Closing edge safety device in EX area, for the above zones 2. The extension set SKS is prepared for fitting in explosion-free atmospheres 3. Fitted in the immediate vicinity of the basic control (A / B 445 / 460) Additional accessories required: 1. SKS activating kit complete up to 6 m door height (Item 5.7.1) or SKS activating kit complete from 6 m door height (Item 5.7.2.) 2. Safety contact strip 8k2 and C profile Attention: Technical clarification required! <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>5.6 Extension set SKS for EX area</td><td>01.11.2004 –</td><td>637238</td><td>905,00</td></tr></table>	Article name	Production period	Art. no.	€	5.6 Extension set SKS for EX area	01.11.2004 –	637238	905,00
Article name	Production period	Art. no.	€						
5.6 Extension set SKS for EX area	01.11.2004 –	637238	905,00						
 5.7 5.7.1	5.7 SKS activating kit 5.7.1 Complete SKS activating kit up to 6 m door height for the EX area Application range: a. In zone 2 (gas-ex, category 3G) in explosion groups IIA and IIB b. In zone 22 (dust-ex, category 3D) for dust with a minimum trigger energy > 3 mJ c. In zone 1 (gas-ex, category 2 G) in explosion groups IIA and IIB d. In zone 21 (dust-ex, category 2D) for dust with a minimum trigger energy > 3 mJ Version: Closing edge safety device in the EX area for the above zones for door heights up to 6 metres Attention: Technical clarification required! <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>5.7.1 Complete SKS activating kit up to 6 m door height for the EX area</td><td>01.11.2004 –</td><td>637091</td><td>555,00</td></tr></table>	Article name	Production period	Art. no.	€	5.7.1 Complete SKS activating kit up to 6 m door height for the EX area	01.11.2004 –	637091	555,00
Article name	Production period	Art. no.	€						
5.7.1 Complete SKS activating kit up to 6 m door height for the EX area	01.11.2004 –	637091	555,00						

5 Equipment for use in potentially explosive atmospheres

5.7.2

Description

5.7.2 Complete SKS activating kit from 6 m door height for the EX area

Application range:

- a. In zone 2 (gas-ex, category 3G) in explosion groups IIA and IIB
- b. In zone 22 (dust-ex, category 3D) for dust with a minimum trigger energy > 3 mJ
- c. In zone 1 (gas-ex, category 2 G) in explosion groups IIA and IIB
- d. In zone 21 (dust-ex, category 2D) for dust with a minimum trigger energy > 3 mJ

Version:

Closing edge safety device in the EX area for the above zones for door heights from 6 metres

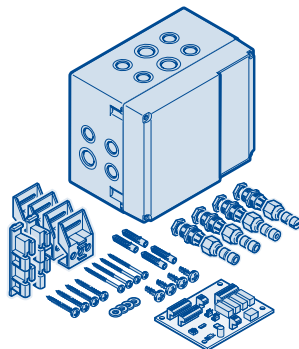
Attention:

Technical clarification required!

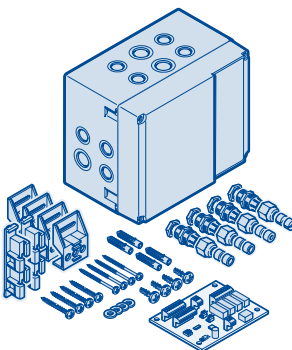
Article name	Production period	Art. no.	€
5.7.2 Complete SKS activating kit from 6 m door height for the EX area	01.11.2004 –	637092	579,00

5.7.2

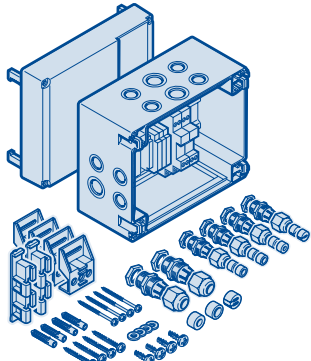
6 Control variations

Article	Description			
	6.1	Air lock systems		
	6.1.1	Basic air lock, version 2		
	Application range:			
	Industrial door controls with impulse operation			
	Advantages / benefits:			
	1. No draughts			
	2. Low heat loss			
	Functions / settings:			
	1. Interdependent locking of 2 doors			
	2. Locking requires external command units for “Open door” and “Close door” (“Close door” only if an automatic timer is not available or set).			
3. Locking is not possible when working directly at the operator controls.				
4. Operator controls with “automatic timer function” are recommended.				
5. Locking can be optionally switched off via on-site switch.				
Technical features				
On-site connecting voltage:		24 V DC (80 mA)		
On-site signals per door:		• OPEN commands (volt-free normally open contacts) • CLOSE commands (volt-free normally open contacts) if automatic timer is not used • Bottom limit switch reporting (volt-free normally open contacts) • If required, STOP and CLOSE commands must be connected directly to the operator controls.		
Signals to on-site controls:		Open impulses (volt-free normally open contacts of the lock controller)		
Scope of delivery:				
1 lock controller in extension housing				
Article name		Production period	Art. no.	€
6.1.1 Basic air lock, version 2		01.03.2008 –	636919	387,00

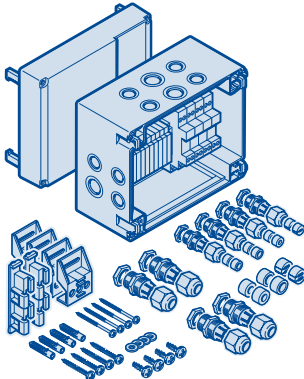
6 Control variations

Article	Description												
	6.1.2	Automatic loading house											
		Application range: Industrial door controls with impulse operation											
		Advantages / benefits: 1. No draughts 2. Low heat loss											
		Functions / settings: 1. Interdependent locking of 2 doors 2. Automatic opening of the second door after the first door has closed 3. Signal memory 4. Locking requires external command units for “Open door” and “Close door” (“Close door” only if an automatic timer is not available or set). 5. Locking is not possible when working directly at the operator controls 6. Operator controls with “automatic timer function” are recommended 7. Locking can be optionally switched off via on-site switch											
		Technical features On-site connecting voltage: 24 V DC (80 mA) On-site signals per door: • OPEN commands (volt-free normally open contacts) • CLOSE commands (volt-free normally open contacts) if automatic timer is not used • Bottom limit switch reporting (volt-free normally open contacts) • If required, STOP and CLOSE commands must be connected directly to the operator controls. Signals to on-site controls: Open impulses (volt-free normally open contacts of the lock controller)											
6.1.2		Scope of delivery: 1 lock controller in extension housing											
		<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>6.1.2 Automatic loading house</td><td>01.03.2008 –</td><td>636920</td><td>433,00</td></tr></table>				Article name	Production period	Art. no.	€	6.1.2 Automatic loading house	01.03.2008 –	636920	433,00
Article name	Production period	Art. no.	€										
6.1.2 Automatic loading house	01.03.2008 –	636920	433,00										

6 Control variations

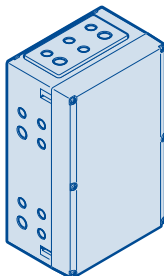
Article	Description
	6.2 Central control boxes
	6.2.1 Central control box 1 command
	Application range: 1. HÖRMANN sectional door controls: 360, A / B 445 / 460, B 460 FU, 545, 560 2. HÖRMANN rolling shutter controls: 360, 445 R, 460 R
	Advantages / benefits: 1. Open or close multiple doors with one command 2. Fast and easy operation, e.g. for fire brigade vehicles 3. Control box can be multifunctionally extended for multiple door units 4. Easy retrofitting is possible
	Functions: 1. An external central command (volt-free) controls the respective door systems. 2. With one central control box, you have the possibility of controlling up to 4 doors, or 3 doors and an additional central control box.
	Control options: 1 box = max. 4 doors 2 boxes = max. 7 doors 3 boxes = max. 10 doors 4 boxes = max. 13 doors etc.
	Technical features per box Connecting voltage: 230 V AC / 50 Hz Control voltage: 230 V AC / 50 Hz Outputs: 4 × volt-free Protection category / housing: IP 65
	Scope of delivery: 1 extension semi-housing incl. control
	Note: 1. A command unit for triggering the command is not included in the scope of delivery. (e.g. foot and mushroom button) 2. One central circuit board must be provided for each door system.

6 Control variations

Article	Description
	6.2.2 Central control box 2 command
	Application range: 1. HÖRMANN sectional door controls: 360, A / B 445 / 460, B 460 FU, 545, 560 2. HÖRMANN rolling shutter controls: 360, 445 R, 460 R Advantages / benefits: 1. Open and close multiple doors via external commands 2. Fast and easy operation, e.g. for fire brigade vehicles 3. Control box can be multifunctionally extended for multiple door units 4. Easy retrofitting is possible Functions: 1. A defined central “open and close” command (volt-free) controls the respective door systems. 2. With one central control box, you have the possibility of controlling up to 4 doors, or 3 doors and an additional central control box. Control options: 1 box = max. 4 doors 2 boxes = max. 7 doors 3 boxes = max. 10 doors 4 boxes = max. 13 doors - etc. Technical features per box - Connecting voltage: 230 V AC / 50 Hz - Control voltage: 230 V AC / 50 Hz - Outputs: 8 × volt-free - Protection category / housing: IP 65 Scope of delivery: 1 extension semi-housing incl. control Note: 1. The command unit for triggering the central commands is not included in the scope of delivery. 2. One central circuit board must be provided for each door system.
6.2.2	

Article name	Production period	Art. no.	€
6.2.2 Central control box 2 command	01.12.2005 –	637457	415,00

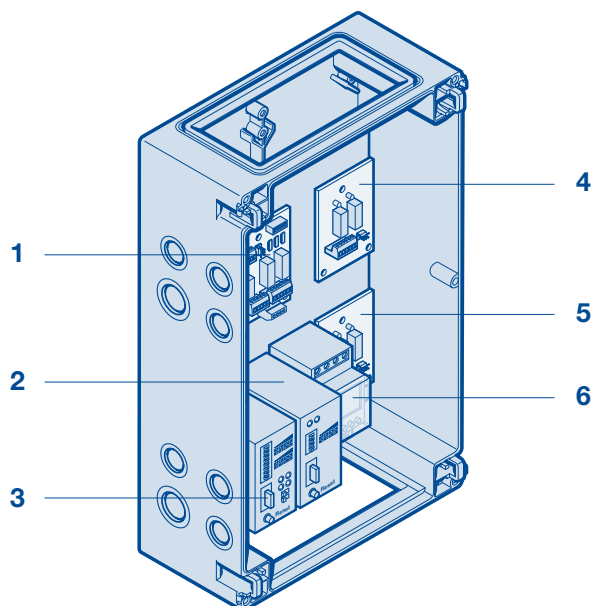
7 Miscellaneous

Article	Description											
	7.1	Extension housing (large) for variable design										
	Application range: 1. Sectional door controls: 360, A / B 445 / 460, B 460 FU, 545, 560 2. Rolling shutter controls: 445/460 R Advantages / benefits: 1. Multifunctional design for various circuit boards and special accessories 2. Simple retrofitting of additional components 3. Can be flanged to the basic control											
7.1	<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>7.1 Extension housing (large) for variable design With hat rails</td><td>01.10.2005 –</td><td>637242</td><td>241,00</td></tr></table>	Article name	Production period	Art. no.	€	7.1 Extension housing (large) for variable design With hat rails	01.10.2005 –	637242	241,00			
Article name	Production period	Art. no.	€									
7.1 Extension housing (large) for variable design With hat rails	01.10.2005 –	637242	241,00									

Design:	Variant 1	Variant 2	Variant 3	Variant 4	Variant 5	Variant 6	Variant 7	Variant 8	Variant 9	Variant 10	Other variants possible after technical clarification!
Extension housing, large (Article no. 637242)	•	•	•	•	•	•	•	•	•	•	
Traffic control circuit board (Article no. 637053 – not shown)	•	•	•	•	•	•	•	•	–	–	
Multi-function circuit board (Article no. 637026)	–	–	–	–	–	–	–	–	•	•	
Relay circuit board (end-of-travel positions) (Article no. 637028)	•	•	•	•	•	•	•	•	•	•	
Relay circuit board (option function) (Article no. 637028)	–	•	–	•	•	–	–	•	–	–	
Induction detector DI 1-Pro (Article no. 637545)	• *)	• *)	–	–	• *)	–	–	–	• *)	• *)	
Induction detector DI 2-Pro (Article no. 637546)	•	• *)	–	–	• *)	• *)	–	–	• *)	• *)	
Weekly timer ZSU 2 (Article no. 637501)	•	•	•	•	•	–	–	–	•	–	
Yearly timer ZSJ 2 (Article no. 637502)	•	•	–	–	–	•	•	•	–	–	

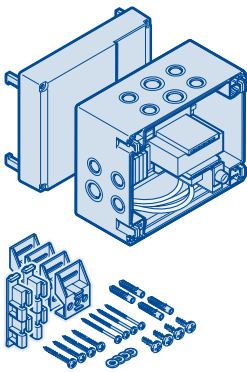
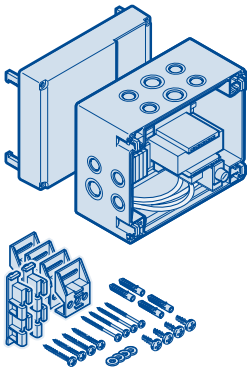
* ATTENTION: It is mandatory to place the max. 2 induction detectors on the bottom left

Schematic equipment example of extension housing – variant 5

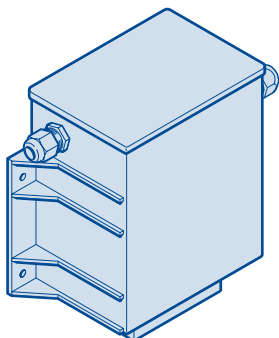


- Multi-function circuit board
- Induction detector DI 1-Pro
- Induction detector DI 2-Pro
- Relay circuit board (end-of-travel positions)
- Relay circuit board (option function)
- Weekly timer ZSU 2

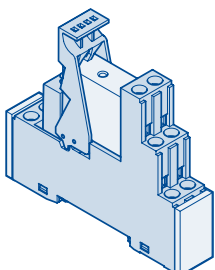
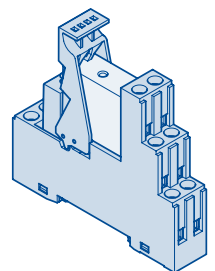
7 Miscellaneous

Article	Description																		
 7.2	7.2 Mains supply 3 L without N for industrial door controls Application range: - HÖRMANN sectional door controls: A 445 / 460 - HÖRMANN rolling shutter controls: 445 R and 460 R (400 V version) - HÖRMANN dock leveller controls: 420 S / T, 420 Si / Ti, 460 S / T Advantages / benefits: Use for "IT" grid (3-phase current) without neutral conductor Function: A neutral conductor is generated for the above-mentioned control variations. The power is not designed for the connection of further 230 V AC accessories. Technical features <table><tr><td>Input voltage of transformer:</td><td>400 V AC</td></tr><tr><td>Output voltage:</td><td>230 V AC</td></tr><tr><td>Savings:</td><td>45 VA</td></tr><tr><td>Fuse:</td><td>0.25 A</td></tr><tr><td>Protection class:</td><td>IP 65</td></tr></table> Note: The activating kit is pre-assembled in the HÖRMANN extension housing. <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>7.2 Mains supply 3 L without N for industrial door controls</td><td>01.04.2004 –</td><td>637101</td><td>514,00</td></tr></table>	Input voltage of transformer:	400 V AC	Output voltage:	230 V AC	Savings:	45 VA	Fuse:	0.25 A	Protection class:	IP 65	Article name	Production period	Art. no.	€	7.2 Mains supply 3 L without N for industrial door controls	01.04.2004 –	637101	514,00
Input voltage of transformer:	400 V AC																		
Output voltage:	230 V AC																		
Savings:	45 VA																		
Fuse:	0.25 A																		
Protection class:	IP 65																		
Article name	Production period	Art. no.	€																
7.2 Mains supply 3 L without N for industrial door controls	01.04.2004 –	637101	514,00																
 7.3.1	7.3 Transformer 7.3.1 Transformer 440-500 / 230 V 50 / 60 Hz for loading technology controls and rolling shutter controls Application range: - HÖRMANN loading technology controls: 420 S / T and 460 S / T - HÖRMANN rolling shutter controls: 445 R and 460 R Advantages / benefits: Use for mains voltages of 440 – 500 V Function: 230 V is generated for the above-mentioned control variations. The power is not designed for the connection of further 230 V AC accessories. Technical features <table><tr><td>Input voltage of transformer:</td><td>440 V AC, 460 V AC, 480 V AC and 500 V AC</td></tr><tr><td>Output voltage:</td><td>230 V AC</td></tr><tr><td>Savings:</td><td>45 VA</td></tr><tr><td>Fuse:</td><td>0.25 A</td></tr><tr><td>Protection class:</td><td>IP 65</td></tr></table> Note: The activating kit is pre-assembled in the HÖRMANN extension housing. <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>7.3.1 Transformer 440-500 / 230 V 50 / 60 Hz for loading technology controls and rolling shutter controls</td><td>01.01.2005 –</td><td>637254</td><td>510,00</td></tr></table>	Input voltage of transformer:	440 V AC, 460 V AC, 480 V AC and 500 V AC	Output voltage:	230 V AC	Savings:	45 VA	Fuse:	0.25 A	Protection class:	IP 65	Article name	Production period	Art. no.	€	7.3.1 Transformer 440-500 / 230 V 50 / 60 Hz for loading technology controls and rolling shutter controls	01.01.2005 –	637254	510,00
Input voltage of transformer:	440 V AC, 460 V AC, 480 V AC and 500 V AC																		
Output voltage:	230 V AC																		
Savings:	45 VA																		
Fuse:	0.25 A																		
Protection class:	IP 65																		
Article name	Production period	Art. no.	€																
7.3.1 Transformer 440-500 / 230 V 50 / 60 Hz for loading technology controls and rolling shutter controls	01.01.2005 –	637254	510,00																

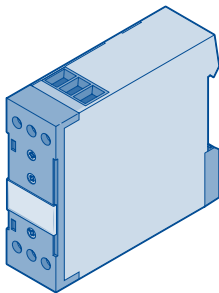
7 Miscellaneous

Article	Description			
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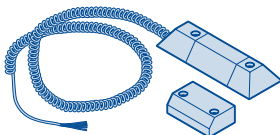
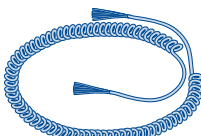
7 Miscellaneous

Article	Description			
	7.5	Coupling relay		
	7.5.1	Coupling relay 2 change-over contacts (24 V DC)		
	7.5.2	Coupling relay 2 change-over contacts (230 V AC)		
		Application range: For fitting in extension housing		
		Advantages / benefits: 1. For multiplying a signal 2. Higher contact switching capacity, depending on the signal		
		Functions: 2 volt-free signal contacts are available for each coupling relay used		
		Technical features		
		Description:	Number of contacts: 2 volt-free change-over contacts	
		Max. switching voltage:	250 V AC	
		Max. switching capacity AC1:	2000 VA	
		Max. switching capacity AC15:	400 VA	
		Max. motor load AC3:	0.3 kW	
		Max. switching current DC1:	8 A at 30 V DC	
		Min. switching load:	500 mW / 10 V / 5 mA	
		Fitting:	For clipping in a 35-mm hat rail (Item 7.4)	
		Fitting dimensions (H x W x D):	75 x 15.5 x 75 mm	
		Temperature range:	-40 °C to +70 °C	
		Protection category:	IP 40	
		Nominal voltage of coil:	Available for 2 different voltages: 24 V DC or 230 V AC	

7 Miscellaneous

Article	Description											
	7.6	Multi-function time relay										
		Application range: For fitting in extension housing										
		Advantages / benefits: 1. 4x adjustable functions 2. Variable use 3. Adjustable time ranges of 0.05 s ... 100 h 4. Wide voltage range of 24 – 240 V AC / DC										
		Function: 1. Power-on delay 2. Off delay 3. Leading edge momentary trigger 4. Flashing										
		Technical features										
		Supply voltage:		24...240 V AC / DC								
		Supply voltage tolerance:		-15 / +10 %								
		Nominal frequency:		50 / 60 Hz								
		Output:		Relay								
		Number of output contacts:		1x change-over contact								
Rated operational current:		AC-1 8 A / 250 V AC-15 1.5 A / 240 V DC 12 8 A / 24 V DC 13 0.1 A / 250 V										
Fitting:		DIN rail										
Dimensions (W × H × D):		22.5 × 67 × 76 mm										
		<table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>7.6 Multi-function time relay</td><td>01.03.2017 –</td><td>436054</td><td>176,00</td></tr></table>			Article name	Production period	Art. no.	€	7.6 Multi-function time relay	01.03.2017 –	436054	176,00
Article name	Production period	Art. no.	€									
7.6 Multi-function time relay	01.03.2017 –	436054	176,00									

7 Miscellaneous

Article	Description																																							
 7.7	7.7	Magnetic contact VDS class C for opening monitoring																																						
	Application range: 1. Sectional doors 2. Sliding doors Advantages / benefits: 1. Simple and fast fitting 2. Easy retrofitting is possible 3. Non-contact switching Function: 1. Monitoring the closed door 2. For connecting to an alarm system (differential line) Technical features <table><tr><td>Contact type:</td><td>3 × single pole normally open contacts</td></tr><tr><td>Switching voltage:</td><td>Max. 100 V DC</td></tr><tr><td>Switching current:</td><td>Max. 500 mA</td></tr><tr><td>Contact load:</td><td>Max. 6 W</td></tr><tr><td>Contact resistance:</td><td>Max. 0.15 ohm</td></tr><tr><td>Breakdown voltage:</td><td>> 250 V</td></tr><tr><td>Permissible operating voltage:</td><td>Max. 40 V</td></tr><tr><td>Connection cable:</td><td>LIYY 4 × 0.14 mm² Diameter 3.2 mm Length 2 m</td></tr><tr><td>Protective sleeve:</td><td>Galvanized steel, coated with UPVC Diameter 9 mm Length 1 m</td></tr><tr><td>Contact housing:</td><td>Polyamide GF / grey Dimensions 144 × 50 × 16.5 mm</td></tr><tr><td>Magnet housing:</td><td>Polyamide GF / grey Dimensions 66 × 40 × 35 mm</td></tr><tr><td>Fixing kit:</td><td>V2 A screws</td></tr><tr><td>Temperature range:</td><td>−30 °C to +70 °C</td></tr><tr><td>Protection category:</td><td>IP 67</td></tr><tr><td>VDS data:</td><td>Class C / Environmental class IV / no. G109045</td></tr></table> <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>7.7 Magnetic contact VDS class C for opening monitoring</td><td>01.08.2010 –</td><td>637675</td><td>89,00</td></tr></table>			Contact type:	3 × single pole normally open contacts	Switching voltage:	Max. 100 V DC	Switching current:	Max. 500 mA	Contact load:	Max. 6 W	Contact resistance:	Max. 0.15 ohm	Breakdown voltage:	> 250 V	Permissible operating voltage:	Max. 40 V	Connection cable:	LIYY 4 × 0.14 mm² Diameter 3.2 mm Length 2 m	Protective sleeve:	Galvanized steel, coated with UPVC Diameter 9 mm Length 1 m	Contact housing:	Polyamide GF / grey Dimensions 144 × 50 × 16.5 mm	Magnet housing:	Polyamide GF / grey Dimensions 66 × 40 × 35 mm	Fixing kit:	V2 A screws	Temperature range:	−30 °C to +70 °C	Protection category:	IP 67	VDS data:	Class C / Environmental class IV / no. G109045	Article name	Production period	Art. no.	€	7.7 Magnetic contact VDS class C for opening monitoring	01.08.2010 –	637675
Contact type:	3 × single pole normally open contacts																																							
Switching voltage:	Max. 100 V DC																																							
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Contact load:	Max. 6 W																																							
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Breakdown voltage:	> 250 V																																							
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Contact housing:	Polyamide GF / grey Dimensions 144 × 50 × 16.5 mm																																							
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Fixing kit:	V2 A screws																																							
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VDS data:	Class C / Environmental class IV / no. G109045																																							
Article name	Production period	Art. no.	€																																					
7.7 Magnetic contact VDS class C for opening monitoring	01.08.2010 –	637675	89,00																																					
 7.8.1 / 7.8.2	7.8	Connecting leads																																						
	7.8.1	Coiled cable 7 × 0.25 mm²																																						
	7.8.2	Coiled cable 9 × 0.25 mm²																																						
	Application range: Special solutions for sectional doors (e.g. alarm contact or electric strike for wicket door etc.) <table><tr><th>Article name</th><th>Production period</th><th>Art. no.</th><th>€</th></tr><tr><td>7.8.1 Coiled cable 7 × 0.25 mm² Up to 6 m</td><td>01.01.2011 –</td><td>637527</td><td>76,00</td></tr><tr><td>7.8.2 Coiled cable 9 × 0.25 mm² Up to 6 m</td><td>01.07.2012 –</td><td>4545155</td><td>96,00</td></tr></table>				Article name	Production period	Art. no.	€	7.8.1 Coiled cable 7 × 0.25 mm² Up to 6 m	01.01.2011 –	637527	76,00	7.8.2 Coiled cable 9 × 0.25 mm² Up to 6 m	01.07.2012 –	4545155	96,00																								
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7.8.2 Coiled cable 9 × 0.25 mm² Up to 6 m	01.07.2012 –	4545155	96,00																																					

Page 1 of 1

► Fill in or mark where applicable

Customer no.: Customer:

Invoice via:

Delivery address:*

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Fax:

Order no./date/com.:

Requested date:

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Quotation no./dd.:

Delivery key:

Subsidiary:

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Payment conditions:

Administrator:

Date:

* ME = Quantity unit	1 = Pieces	3 = kg
	2 = Metres	4 = Hours

Total amount in €

+ VAT

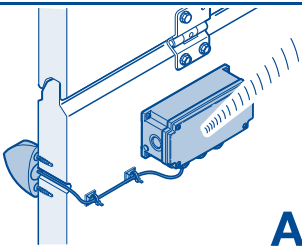
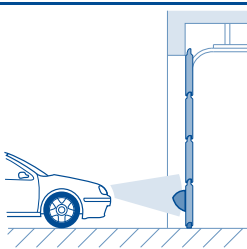
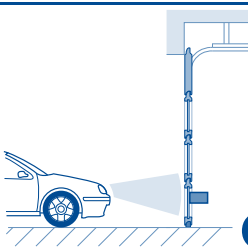
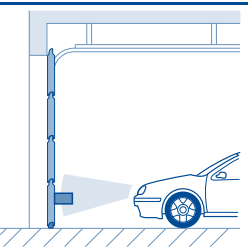
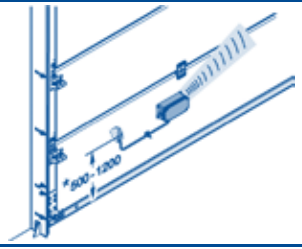
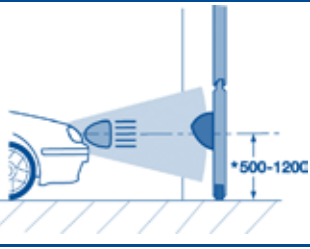
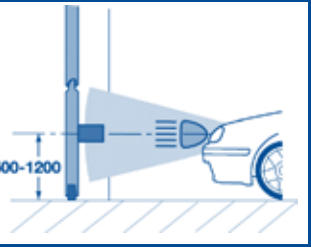
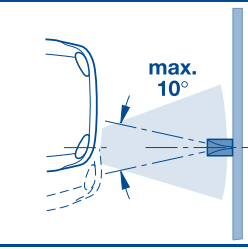
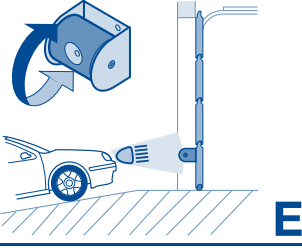
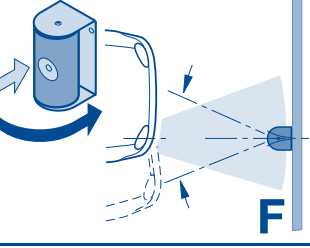
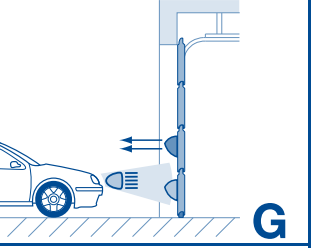
Please take information from the data plate!

Order number

Product number

Place, date

Stamp and signature

Order: Radio Light Flash Control LHF-1, 868-BS Page 1 of 2		► Fill in or mark where applicable For new orders, please add this form and the complete WA/TO 400 form to the order form for operators. The fields with a grey border will be filled in at the factory.	
Customer no.: _____		Customer: _____	
Invoice via: _____			
Delivery address: * _____			
☎		Fax: _____	
Order no. / date / com.: _____		Requested date: _____ WK	
Quotation no. / dd.: _____		Delivery key: _____	
Paym. conditions: _____		Sales office: _____ Page: _____ /	
Administrator: _____		Date: _____	
Project postal code: _____		Project location: _____	
Retrofitting for order no.: _____		Door no.: _____	
Construction project: _____			
Fitting details			
			
Radio light flash control	External sensor on door leaf	Internal sensor for vehicles entering (door leaf with glass infill)	Internal sensor for vehicles exiting (section / glass infill)
			
*Fitting height of the sensors as regards vehicle types must be determined on site (see fitting instructions)		Detection area	
			
Turnable external sensor		External LED feedback	

Page 2 of 2

Customer no.:	Customer:	Sales office:
Order no. / date / com.:	Quotation no. / dd.:	
►		

Art. no.	Article designation	Non-insulated door leaf	Use as PU section ≥ 16 mm	Door leaf with glass	Unit(s)	Discount
436787	Basic equipment A Light flash control LHF-1, 868-BS with - Radio transmitter 868 MHz, please order receiver BS separately -1× external sensor, 300 mm lead length -Additional 4× sensors can be connected -Additional 1× LED feedback can be connected	X	X	Order internal sensor separately! X		
Sensors:						
637541	External sensor, 300 mm lead length B	X	X	-		
637542	External sensor, 700 mm lead length B	X	X	-		
637577	External sensor, 1200 mm lead length B	X	X	-		
637618	Turnable external sensor, 300 mm lead length E, F	X	X	-		
637619	Turnable external sensor, 700 mm lead length E, F	X	X	-		
637543	Internal sensor, 300 mm lead length C, D	X	X	X		
637544	Internal sensor, 700 mm lead length C, D	X	X	X		
637578	Internal sensor, 1200 mm lead length C, D	X	X	X		
Displays:						
637622	External LED feedback, 700 mm lead length G	X	X	-		
Accessories not shown:						
638245	Plate holder	X	-	-		
638080	SKS screw bag	X	-	-		
Total in USD						
Conditions:				+VAT		
Comments:						

Notes and sketches

Brand quality for residential and commercial construction

The family-owned company Hörmann offers all important construction components for building and renovating projects from a single source. We manufacture in highly-specialised factories using the latest production technologies. Furthermore, our employees work intensively on new products, continual further developments and improvements to details. The results are patents and one-of-a-kind products you can depend on.

