Industrial price list 12-23

Valid from 01.06.2023

Special controls

HÖRMANN

Hörmann international sales companies and sales partners

Hörmann KG Verkaufsgesellschaft
Upheider Weg 94-98
D-33803 Steinhagen
Telefon +49 5204 915-0
Telefax +49 5204 915-277
Internet www.hoermann.com

Hörmann international sales companies

International sales partners

Hörmann international sales companies

Hörmann Austria
A-5310 Mondsee
info@hoermann.at

Hörmann Baltic
LT-14247 Vilnius r.
info@hormann.lt

Hörmann Bel
BY-220125 Minsk
info@hormann.by

Hörmann Belgium
B-3700 Tongeren
info@hormann.be

Hörmann Bulgaria
BG-1532 Sofia
info.sof@hormann.bg

Hörmann Česká republika
CZ-252 68 Středokluky
info@hormann.cz

Hörmann China
CN-100176 Beijing
info@hoermann.cn

Hörmann Danmark
DK-8920 Randers
info@hoermann.dk

Hörmann Eesti
EST-76505 Saue
info.tll@hormann.ee

Hörmann España
E-08228 Terrassa
info.cat@hormann.es

Hörmann Finnland
FIN-02420 Jorvas
info@mesvac.fi

Hörmann France
F-89107 Sens
info@hormann.fr

Hörmann Hellas
GR-19400 Koropi
info@hormann.gr

Hörmann Hong Kong
HK-Quarry Bay
info@hoermann.com.hk

Hörmann Hrvatska
HR-10290 Zaprešić
info@hormann.hr

Hörmann Hungária
H-2310 Szigetszentmiklós
info@hormann.hu

Hörmann Indien
Shakti Hormann
IND-500015 Secunderabad, Telangana
sales@shaktihormann.com

Hörmann Indonesia
ID-12520 Jakarta
info@hormann.id

Hörmann Ireland
IRL – Y35 HH72 Wexford
info@hoermann.ie

Hörmann Italia
I-38015 Lavis (Trento)
info@hormann.it

Hörmann Kazakhstan
KZ-050019 Almaty
info@hormann.kz

Hörmann Maghreb
MA-28810 Mohammedia
info@hormann.ma

Hörmann Malaysia
MAL-40150 Shah Alam, Selangor
info_apac@hoermann.com

Hörmann Mexico
MEX-66350
Santa Catarina
info@hormann.com.mx

Hörmann Middle East & Africa
UAE-Dubai
info.dxb@hormann.com

Hörmann Nederland
NL-3771 MB Barneveld
info@hormann.nl

Hörmann Norge
N-4640 Søgne
info@hoermann.no

Hörmann Polska
PL-62-052 Komorniki
info@hormann.pl

Hörmann Portugal
P-2710-297 Sintra
info@hormann.pt

Hörmann Romania
RO-077040, Chiajna, Judeţul Ilfov
info@hormann.ro

Hörmann Russia
RUS-196696
Sankt Petersburg
info@hoermann.ru

Hörmann Schweiz
CH-4702 Oensingen
info@hoermann.ch

Hörmann Serbia
SRB-11272
Beograd-Dobanovci
info@hormann.rs

Hörmann Slovenija
SI-3301 Petrovče
info@hormann.si

Hörmann Slovenská republika
SK-903 01 Senec
info.bts@hoermann.com

Hörmann Svenska
S-70369 Örebro
info@hoermann.se

Hörmann Thailand
TH-Bangplee, Samutprakarn 10540
info@hormann.co.th

Hörmann Türkiye
TR-34870 Kartal – İstanbul
info.ist@hoermann.com.tr

Hörmann UK
GB-Leicestershire
LE67 4JW
info@hormann.co.uk

Hörmann Ukraine
UA-08300 Boryspil, Kyiwska Obl.
info@hoermann.com.ua

Hörmann High Performance Doors
USA-Burgettstown, PA 15021
info2@hormann.us

Hörmann LLC
USA-Montgomery, IL 60538
info1@hormann.us

Hörmann Vietnam
VN-Hanoi
info.han@hormann.vn

International sales partners

Albania
Algeria
Argentina
Armenia
Australia
Azerbaijan
Bangladesh
Bosnia-Herzegovina
Brazil
Cambodia
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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

Notes and sketches

We think green.

Hörmann leads by example: We use green electricity to cover 100% of our electricity requirements at all European production sites. Together with an intelligent and certified energy management system, the use of recycled paper, the saving and upcycling of packaging and the recycling of reusable materials, this saves over 75000 tons of CO_2 each year. Additionally, we offset the remaining unavoidable emissions generated during our production of products for residential construction by supporting renewable energy, forest protection and reforestation projects in cooperation with ClimatePartner.

We use 100% green electricity from naturstrom ENERGY FOR THE FUTURE

GRÜNER STROM The green electricity label of German environmental associations

You can find all information and many videos at www.hormann.co.uk/company/environment

Only from Hörmann

WE ACT GREEN. Our climate protection strategy is based on the annual calculation of the CO_2 balance at our sites, which includes the products manufactured there. And we have been reducing our emissions wherever possible for years. This means we are taking various steps, big and small, to reduce our carbon footprint. We offset the remaining CO_2 emissions through climate protection projects. This makes us the first and only construction component manufacturer to offer CO_2-neutral garage doors, entrance doors and residential internal doors.

As standard

For all garage doors, operators, entrance doors, residential internal doors, steel frames, steel doors for residential construction as well as storage space systems

ClimatePartner certified product
climate-id.com/XNEBKC

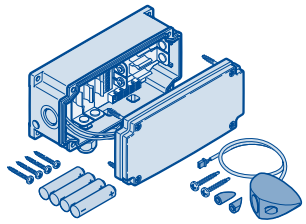
CO_2
measure
reduce
contribute

1 Command elements

Article	Description

1.1 Light flash control

1.1.1 Light flash control LHF-1, 868-BS



1.1.1

Application range:
Sectional doors

Advantages / benefits:
1. Fast and easy installation (suitable for halogen, xenon and LED lights)
2. Simple to operate
3. Functionally safe
4. Can be retrofitted
5. Optional extension with additional sensors (max. 4) and LED feedback

Functions / settings:
1. Signal transmission via radio signal (868 MHz BS / 868 MHz)
2. Suppression of undesired extraneous light
3. Time setting for light impulse detection
4. Setting the light impulses
5. Blocking time can be set

Technical features

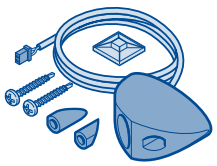
Decoder unit power supply:	6 V DC via 4 batteries, type AA (Mignon)
Radio module power supply:	1.5 V DC from 1 battery, type AAA (Micro)
Protection class:	IP 65
Max. capacity:	5 sensors total
Frequency:	868 MHz
Operating temperature:	–20°C to +60°C
Operating instructions in 3 languages:	D, GB, F
Connections:	for 4 sensors (max. 2 per travel direction recommended), LED feedback

Notice:
Please use the order form for clarification.

Attention:
Operation is only possible with the HÖRMANN radio system!

Article name	Production period	Art. no.	€
1.1.1 Light flash control LHF-1, 868-BS	01.04.2013 –	436787	**444,00**

1.1.2 Additional external sensor LHF-1, 868-BS



1.1.2

Application range:
Light flash control LHF-1, 868-BS (Item 1.1.1)

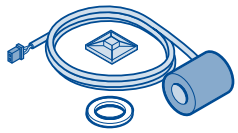
Advantages / benefits:
1. Fast and easy installation
2. Extends the detection range, e.g. for various vehicle heights
3. Available in various cable lengths (300 mm / 700 mm / 1200 mm)

Notice:
Please use the order form for clarification.

Article name	Production period	Art. no.	€
1.1.2 Additional external sensor LHF-1, 868-BSS			
Cable length 300 mm	01.02.2007 –	637541	**62,00**
Cable length 700 mm	01.02.2007 –	637542	**64,00**
Cable length 1200 mm	01.03.2008 –	637577	**68,00**

1 Command elements

Article	Description



1.1.3

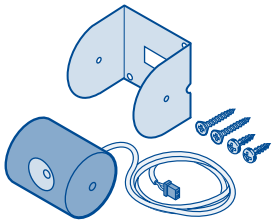
1.1.3 Additional internal sensor LHF-1, 868-BS

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)

Notice:
Please use the order form for clarification.

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

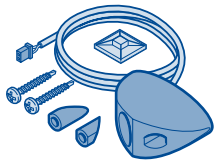
1.1.4 Turnable internal / external sensor LHF-1, 868-BS

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)

Notice:
Please use the order form for clarification.

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

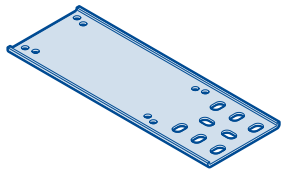
Application range:
Light flash control LHF-1, 868-BS (Item 1.1.1)

Advantages / benefits:
1. Fast and easy installation
2. Visible feedback if light from vehicle headlight is detected
3. Cable length 700 mm

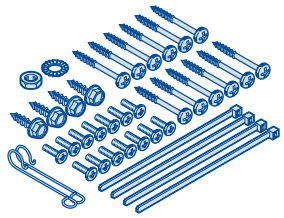
Notice:
Please use the order form for clarification.

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 **Notice:** Please use the order form for clarification.

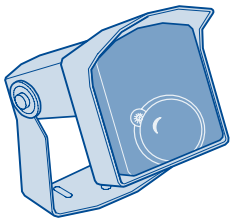
Article name	Production period	Art. no.	€
1.1.6 Plate holder LHF-1, 868-BS	01.02.2007 –	638245	**14,90**

Article	Description
 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) **Notice:** Please use the order form for clarification.

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



1.2.1

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

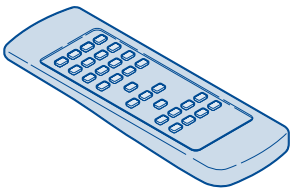
Functions / settings:
1. Monitoring of the door
2. Covers a zone of 3 × 3 m with 40 spots (at a fitting height of 5 m)

Technical features

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:	10 m

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** 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

1.3.1 / 1.3.2

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 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

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

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 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

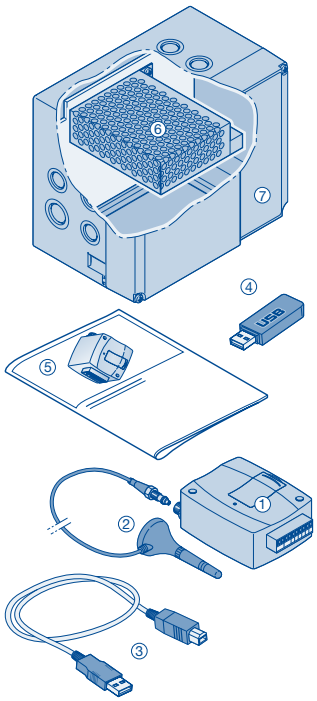
Technical features

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:	BiSecur, fixed code 868 MHz

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 stick
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.

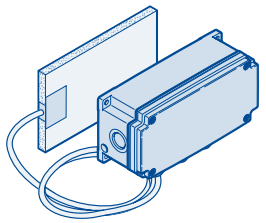
Technical features

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

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

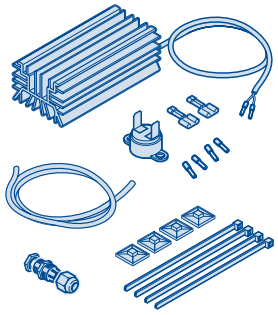
Application range:
Shaft operator: WA 400, WA 400 M, ITO 400

Advantages / benefits:
1. Application range 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

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:
1. HÖRMANN sectional door controls: A / B 440 / 445 / 460, B 460 FU
2. HÖRMANN rolling shutter controls: 445 R, 460 R
3. HÖRMANN dock leveller controls: 420 S / T, 445 S / T, 460 S / T

Advantages / benefits:
1. Application range 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

Article name		Production period	Art. no.	€
3.2	**Housing heater for fitting in industrial door control**	01.12.2005 –	637422	**237,00**

Notes and sketches

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 EN IEC 60079-0
Gases Vapours	Are present continuously, long-term or frequently	Zone 0	II	1G	II	Ga
	Occur occasionally in normal operation	Zone 1	II	2G or 1G	II	Gb or Ga
	Do not normally occur in normal operation, or only occur short-term	Zone 2	II	3G or 2G or 1G	II	Gc or Gb or Ga
Dusts	Are present continuously, long-term or frequently in the form of a cloud	Zone 20	II	1D	III	Da
	Occur occasionally in normal operation in the form of a cloud	Zone 21	II	2D or 1D	III	Db or Da
	Do not normally occur in normal operation in the form of a cloud, or only occur short-term	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 (Notified Body) 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**

	Marking according to the equipment 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

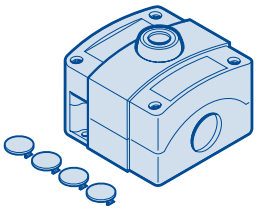
Application area of equipment	
Labelling	**Conditions**
Without X or U	Device usable without restrictions
With X	Specific operating conditions for the device
With U	Component with partial certificate, conformity is certified with installation in a complete device

Max. permissible surface temperature of the device	
Temperature limitation for dust layers $T_{5\,mm}$: minimum ignition temperature of dust layer	$T_{max.} < T5_{mm} - 75°C$
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 Ex

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

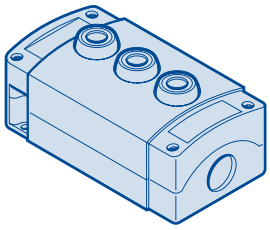
Functions / settings:
Impulse function

Technical features

Explosion protection: Ex II 2G EEx edm IIC T6
Ex II 2D IP 6X T 80°C
IP 66 / IP 67

Connecting terminals: 2.5 mm²

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

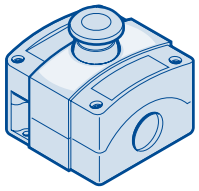
Explosion protection: Ex II 2G EEx edm IIC T6
Ex II 2D IP 6X T 80°C
IP 66 / IP 67

Connecting terminals: 2.5 mm²

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

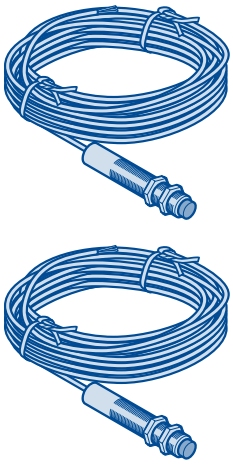
Advantages / benefits:
1. Document of compliance PTB 00 ATEX 1068
2. Can be used flexibly

Functions / settings:
Emergency stop function

Technical features

Explosion protection:	Ex II 2G EEx edm IIC T6 Ex II 2D IP 6X T 80°C IP 66 / IP 67
Connecting terminals:	2.5 mm²

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

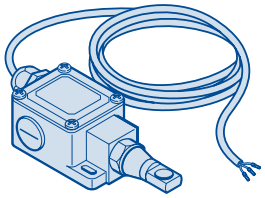
Technical features

Explosion protection:	Ex II 2G, EEx d IIC T6 Ex 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

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 with 3 m connecting lead

Application range:
Potentially explosive atmosphere

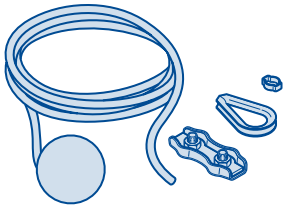
Advantages / benefits:
1. Document of compliance PTB 03 ATEX 1067
2. Can be used flexibly

Functions / settings:
Impulse function

Technical features

Explosion protection:	Ex II 2G / D EEx d IIC IP 65 T 80°C
Housing:	Light alloy diecast
Switching component:	Change-over contact
Connecting lead:	3 m, H05VV-F
Connection cross-section:	4 × 0.75 mm²
Rated surge voltage resistance:	4 KV
Rated insulation voltage:	250 V

Article name	Production period	Art. no.	€
5.5.1 Pull switch – EX 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)

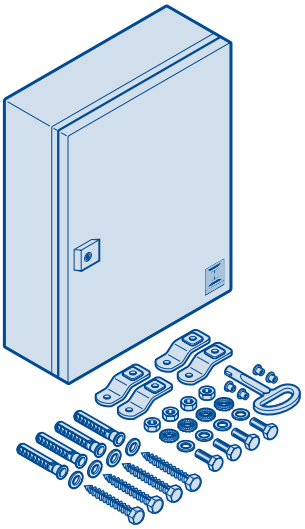
Technical features

Cable 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

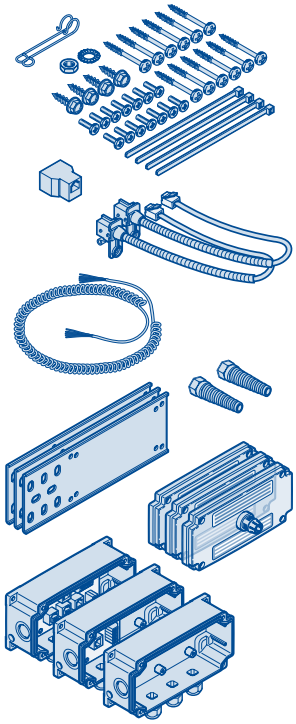
Application range:
a. In zone 2 (gas-ex, category 3G) in explosion groups IIA and IIB
b. In zone 22 (dust-ex, category 3D) for dust with a minimum trigger energy > 3 mJ
c. In zone 1 (gas-ex, category 2 G) in explosion groups IIA and IIB
d. In zone 21 (dust-ex, category 2D) for dust with a minimum trigger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

Article name		Production period	Art. no.	€
5.6	**Extension set SKS for EX area**	01.11.2004 –	637238	**905,00**



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

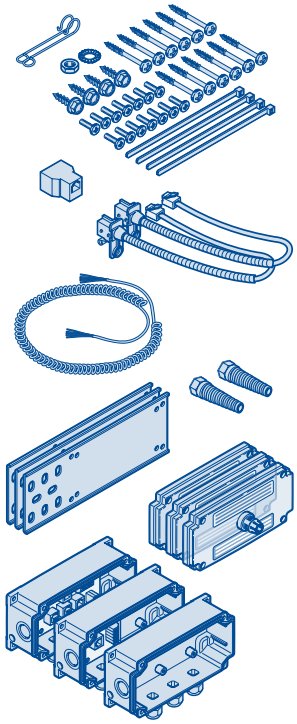
Application range:
a. In zone 2 (gas-ex, category 3G) in explosion groups IIA and IIB
b. In zone 22 (dust-ex, category 3D) for dust with a minimum trigger energy > 3 mJ
c. In zone 1 (gas-ex, category 2 G) in explosion groups IIA and IIB
d. In zone 21 (dust-ex, category 2D) for dust with a minimum trigger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

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

Article	Description
 5.7.2	**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:

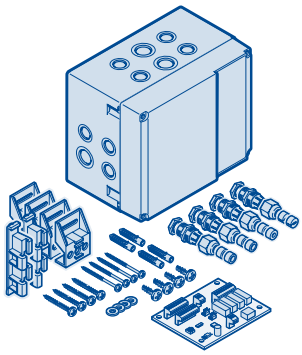
Closing edge safety device in the EX area for the above zones for door heights from 6 metres

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**

6 Control variations

Article	Description



6.1.1

6.1 Air locks

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

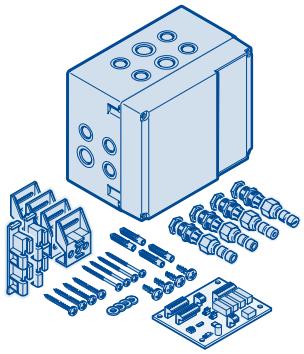
On-site connecting voltage:	24 V DC (80 mA)
On-site signals per door:	• OPEN commands (volt-free normally open contacts) • CLOSE commands (volt-free normally open contacts) if automatic timer is not used • Bottom limit switch reporting (volt-free normally open contacts) • If required, STOP and CLOSE 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

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

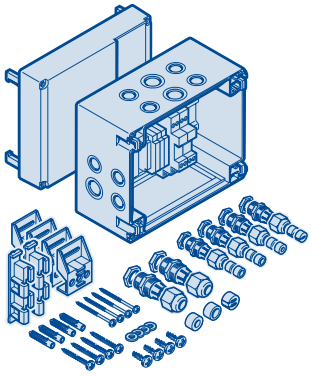
On-site connecting voltage:	24 V DC (80 mA)
On-site signals per door:	• OPEN commands (volt-free normally open contacts) • CLOSE commands (volt-free normally open contacts) if automatic timer is not used • Bottom limit switch reporting (volt-free normally open contacts) • If required, STOP and CLOSE 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)

Scope of delivery:
1 lock controller in extension housing

Article name		Production period	Art. no.	€
6.1.2	**Automatic loading house**	01.03.2008 –	636920	**433,00**

6 Control variations

Article	Description



6.2.1

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

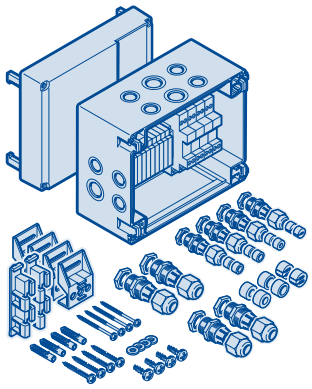
Scope of delivery:
1 extension semi-housing incl. control

Notice:
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.

Article name	Production period	Art. no.	€
6.2.1 **Central control box 1 command**	01.12.2005 –	637456	**307,00**

6 Control variations

Article	Description



6.2.2

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

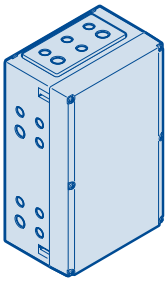
Scope of delivery:
1 extension semi-housing incl. control

Notice:
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.

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

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

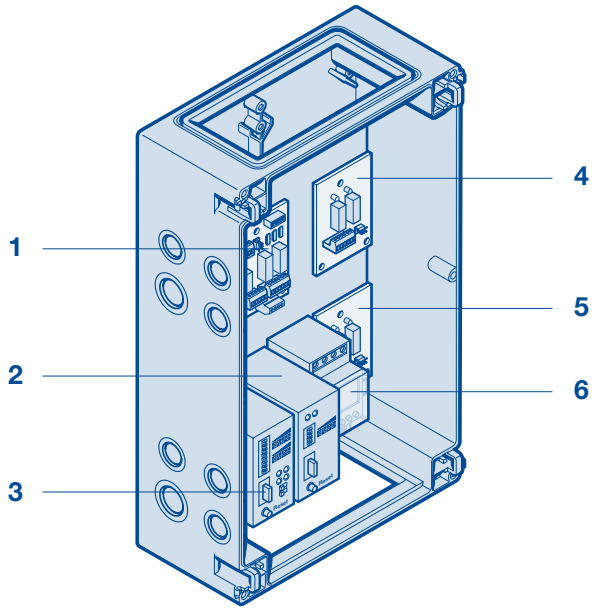
Advantages / benefits:
1. Multifunctional design for various circuit boards and special accessories
2. Simple retrofitting of additional components
3. Can be flanged to the basic control

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

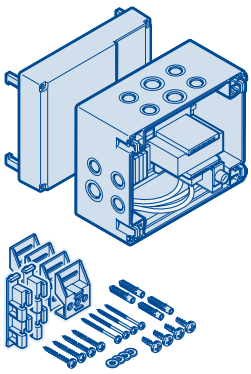
Schematic equipment example of extension housing – variant 5



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

7 Miscellaneous

Article	Description



7.2

7.2 Mains supply 3 L without N for industrial door controls

Application range:
1. HÖRMANN sectional door controls: A 445 / 460
2. HÖRMANN rolling shutter controls: 445 R and 460 R (400 V version)
3. 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

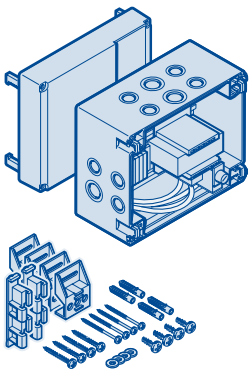
Function:
A neutral conductor is generated for the above-mentioned control variations.
The power is not designed for the connection of further 230 V AC accessories.

Technical features

Input voltage of transformer:	400 V AC
Output voltage:	230 V AC
Savings:	45 VA
Fuse:	0.25 A
Protection class:	IP 65

Notice:
The activating kit is pre-assembled in the HÖRMANN extension housing.

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:
1. HÖRMANN loading technology controls: 420 S / T and 460 S / T
2. 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

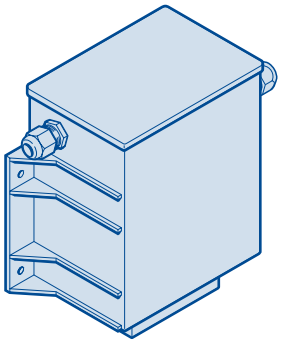
Input voltage of transformer:	440 V AC, 460 V AC, 480 V AC and 500 V AC
Output voltage:	230 V AC
Savings:	45 VA
Fuse:	0.25 A
Protection class:	IP 65

Notice:
The activating kit is pre-assembled in the HÖRMANN extension housing.

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



7.3.2

7.3.2 Transformer 500 / 230 V 50 / 60 Hz for sectional door controls
360 with WA 300, B 445 / B 460 with WA 400, B 460 FU with WA 400 FU, 545 / 560 with WA 500 FU

Application range:
1. Sectional door controls on 50 Hz mains: 360 / B 445 / B 460 / B 460 FU / 545 / 560
2. Sectional door controls on 60 Hz mains: B 460 FU, 545 / 560

Advantages / benefits:
Application of 230 V AC components (control, operator, accessories) on the 500 V AC mains

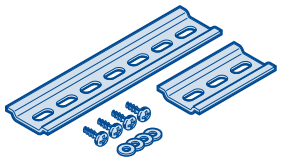
Function:
1. A voltage of 230 V AC is generated from the mains voltage of 500 V AC.
2. The transformer has a power reserve of 200 W for connection of 230 V AC accessories.

Technical features

Mains voltage:	500 V AC
Output voltage:	230 V AC
Frequency:	50 / 60 Hz
Power:	750 VA
Protection class:	IP 65
Temperature switch:	115°C

Attention:
If the transformer is permanently connected to the mains, an all-pole mains isolator switch with corresponding pre-fuse must be installed.

Article name		Production period	Art. no.	€
7.3.2	**Transformer 500 / 230 V 50 / 60 Hz for sectional door controls**	01.02.2008 –	637579	**403,00**



7.4

7.4 Hat rail set for fitting in extension housing

Application range:
HÖRMANN industrial extension housing

Advantages / benefits:
1. For fitting individual components such as induction loop detectors, coupling relays or
2. devices of other makes that are suitable for fitting on hat rails.

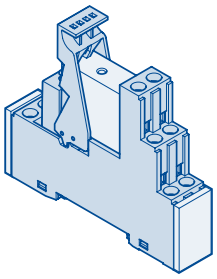
Technical features

Description:	2 × 35 mm rail (pre-drilled) incl. 4 fitting screws
Material:	Galvanized bichrome steel
Standard:	According to EN 50022 / DIN 3
Length:	180 mm and 60 mm

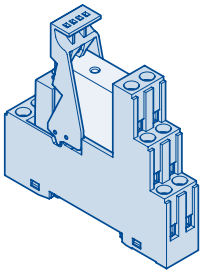
Article name		Production period	Art. no.	€
7.4	**Hat rail set for fitting in extension housing**	01.05.2008 –	637592	**30,00**

7 Miscellaneous

Article	Description



7.5.1



7.5.2

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

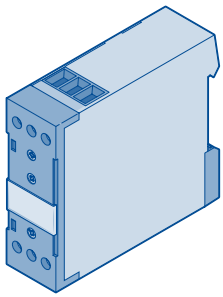
Technical features

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 × W × D):	75 × 15.5 × 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

Article name		Production period	Art. no.	€
7.5.1	**Coupling relay 2 change-over contacts (24 V DC)**	01.06.2005 –	637440	**39,00**
7.5.2	**Coupling relay 2 change-over contacts (230 V AC)**	01.06.2005 –	637441	**45,00**

7 Miscellaneous

Article	Description



7.6

7.6 Multi-function time relay

Application range:
For fitting in extension housing

Advantages / benefits:
1. 4 × 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

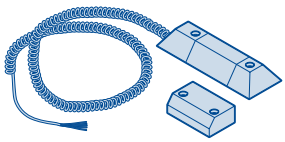
Technical features

Supply voltage:	24 … 240 V AC / DC
Supply voltage tolerance:	–15 / +10%
Nominal frequency:	50 / 60 Hz
Output:	Relay
Number of output contacts:	1 × 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

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

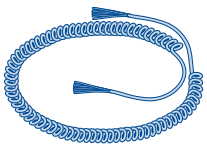
Advantages / benefits:
1. Easy and quick fitting
2. Easy retrofitting is possible
3. Non-contact switching

Function:
1. Monitoring the closed door
2. For connecting to an alarm system (differential line)

Technical features

Contact type:	3 × 1-pole normally open contact
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 PVC Diameter 9 mm Length 1 m
Contact housing:	Polyamide GF / grey Dimensions 144 × 50 × 16.5 mm
Magnetic housing:	Polyamide GF / grey Dimensions 66 × 40 × 35 mm
Fixing kit:	V2A 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	**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 doors, etc.)

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**

Order: Special control and accessories

Page 1 of 1

▶ **Fill in or mark where applicable**

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: Subsidiary: Sheet: /

Payment conditions: Administrator: Date:

* Only fill in if different from the permanent customer address in our database.

Item	C. no.	Type	No.	Art. no.	Article designation	Qty.	ME*	Unit price in €
	-	-	-	11860	☐ Fitting according to price per hour.			

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

Total amount in €

+ VAT

Please take information from the data plate!

Order number **Product number**

Place, date Stamp and signature

Status: 03/2009

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/ITO 400 form to the order form for operators.

The fields with a grey border will be filled in at the factory.

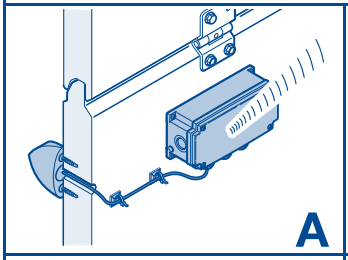
Customer no.:	Customer:		
Invoice via:			
Delivery address:*			
☎	Fax:		
Order no. / date / com.:		Requested date:	WK
Quotation no. / dd.:	Delivery key:	Sales office:	Page: /
Paym. conditions:	Administrator:	Date:	
Project postal code:	Project location:		

* Only fill in if different from the permanent customer address in our database

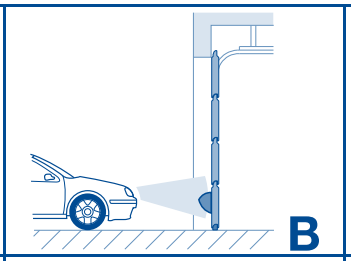
Retrofitting for order no.: _____ **Door no.:** _____

Construction project: _____

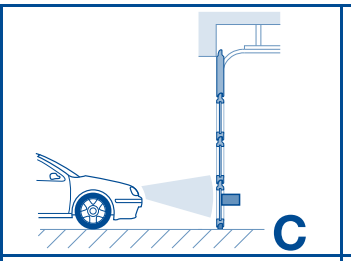
Fitting details



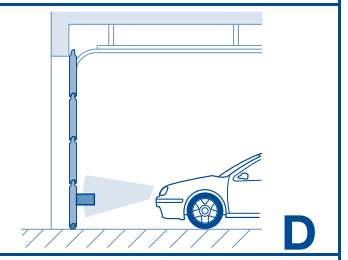
Radio light flash control



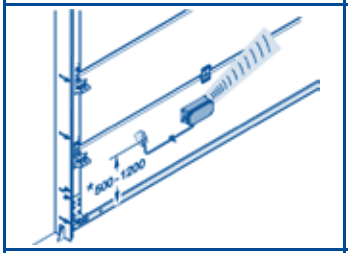
External sensor on door leaf



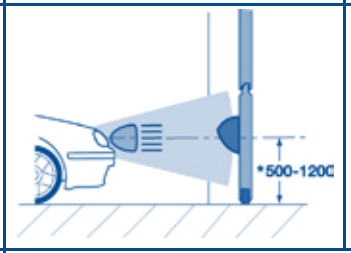
Internal sensor
for vehicles **entering**
(door leaf with glass infill)

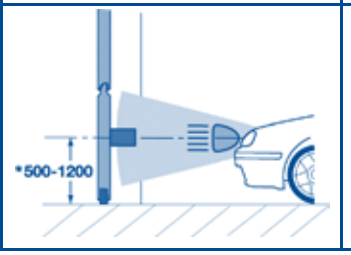


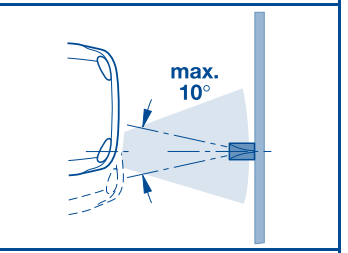
Internal sensor
for vehicles **exiting**
(section / glass infill)



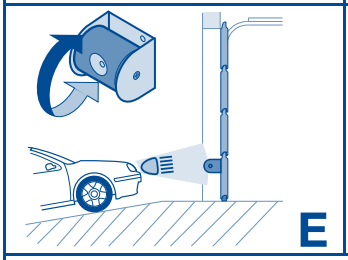
***Fitting height** of the sensors as regards vehicle types must be determined on site (see fitting instructions)

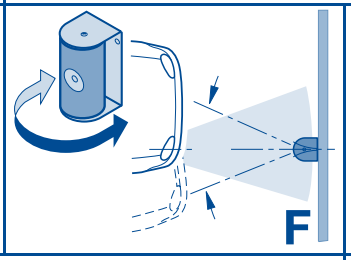




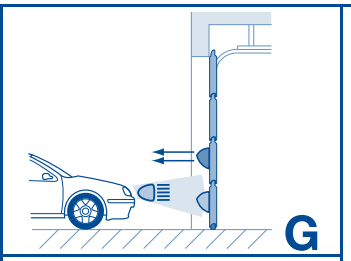


Detection area





Turnable external sensor



External LED feedback

Stand: 03/2017

Page 2 of 2

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

Art. no.	Article designation		Use as: Non-insulated door leaf	Use as: PU section ≥ 16 mm	Use as: Door leaf with glass	Unit(s)	Discount
436787	**Basic equipment** 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	**A**	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:

Please take information from the data label!

Order number	**Product number**

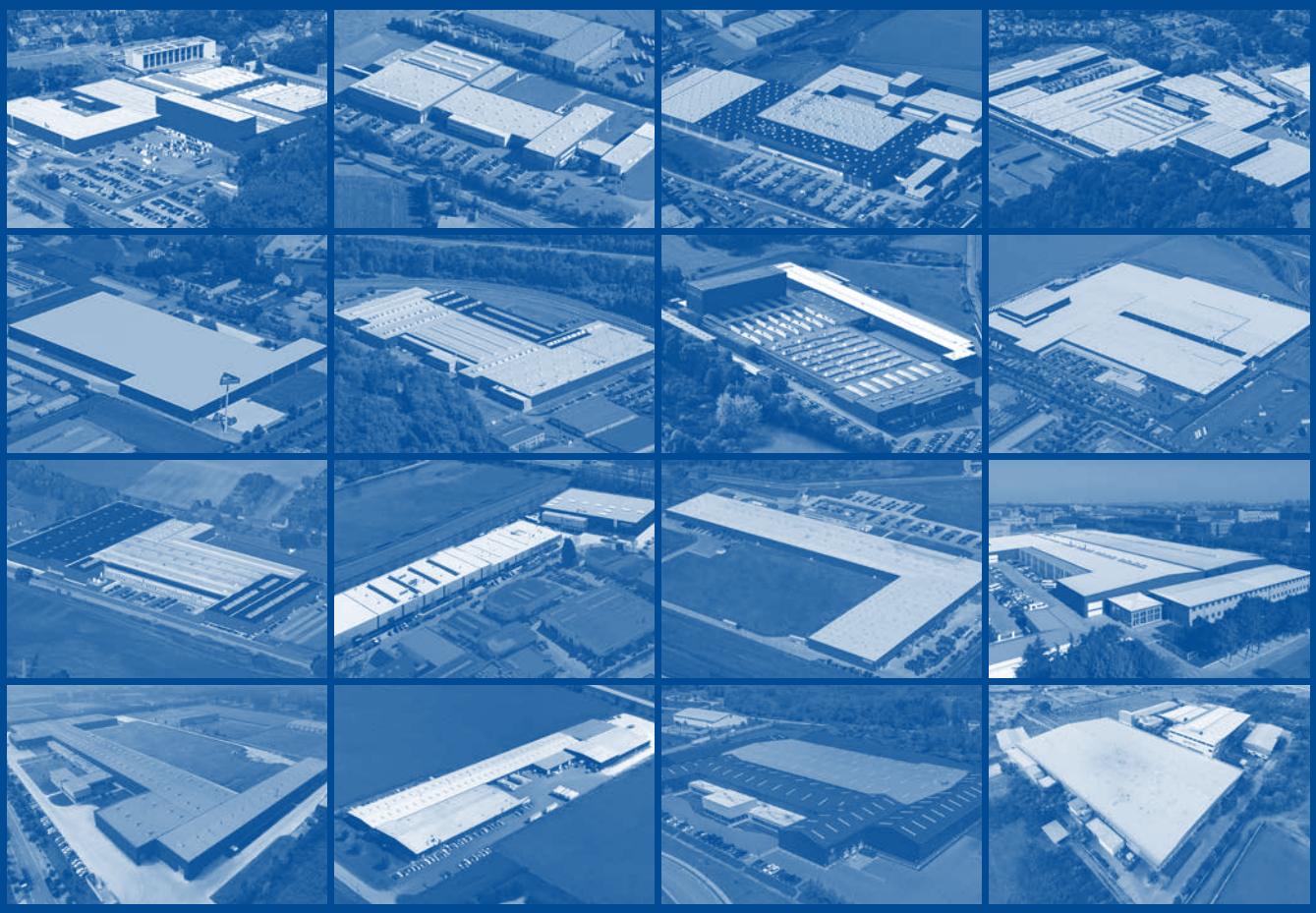
Place, date — Stamp and signature

Status: 03/2018

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 state-of-the-art 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.



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