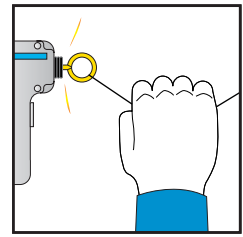
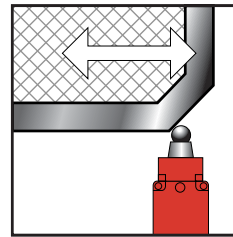
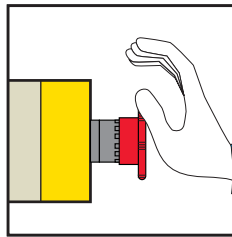


Applications



Modules

For Emergency stop and switch monitoring



Conformity to standards

EN 954-1 - category 3/
ISO 13849-1,
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN 418/ISO 13850,
EN/IEC 60947-1 + A11,
EN/IEC 60947-5-1

EN 954-1 - category 4/
ISO 13849-1
(instantaneous contacts)
EN 954-1 - category 3/
ISO 13849-1
(time delay contacts),
EN/IEC 60204-1,
EN/IEC 60947-5-1,
EN 418/ISO 13850,
EN 50082-2

EN 954-1 - category 4/
ISO 13849-1,
EN/IEC 60204-1,
DIN V VDE 801 + A1,
EN 418/ISO 13850,
EN 1088/ISO 14119,
EN/IEC 60947-1 A11,
EN/IEC 60947-5-1

Product certifications

UL, CSA, BG

UL, CSA, BG

UL, CSA, BIA

Number of circuits

Safety	3 N/O
Additional	1 solid-state output for signalling to PLC

3 N/O
1 solid-state output for signalling to PLC

2 N/O instantaneous + 3 N/O time delay
4 solid-state output for signalling to PLC

3 N/O instantaneous + 3 N/O time delay
3 solid-state outputs for signalling to PLC

Display

2 LEDs

4 LEDs

11 LEDs

Supply voltage

~ and --- 24 V
~ 48 V
~ 115 V
~ 230 V

~ and --- 24 V
~ 115 V
~ 230 V

--- 24 V

Synchronisation time between inputs

Unlimited

75 ms (automatic start)

Unlimited or 1.5 s (depending on wiring)

Input channel voltage

24 V/48 V version	~ and --- 24 V/~ 48 V
24 V/48 V or 110 V/120 V/230 V version	~ 115 V/230 V -

~ and --- 24 V/~ 48 V
~ 115 V/230 V -

--- 24 V/-
~ 48 V/48 V -

--- 24 V/-
- -

Module type

XPS AC

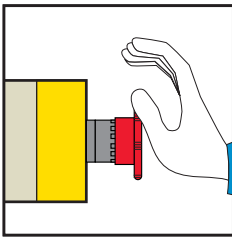
XPS ATE

XPS AV

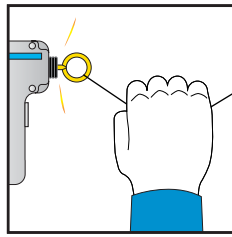
Page

38770/4

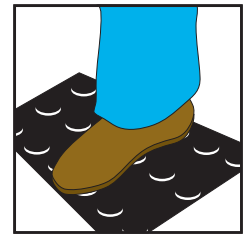
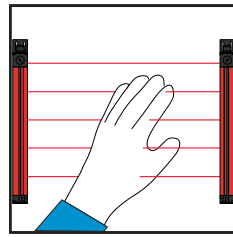
38783/4



For Emergency stop and switch monitoring



For Emergency stop, switch or solid-state output safety light curtain monitoring



For Emergency stop, switch, sensing mat/edges or solid-state output safety light curtain monitoring



EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN/IEC 60947-5-1,
EN 418/ISO 13850,
EN 50082-2

UL, CSA, BG



EN 954-1 - category 3
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN/IEC 60947-5-1,
EN 418/ISO 13850,
EN 50082-2
EN/IEC 61496-1 (type 4)
Category 4 for the monitoring of light
curtains type 4 with solid state
outputs and test function

UL, CSA, BG



EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN 418/ISO 13850,
EN/IEC 60947-1,
EN/IEC 60947-5-1

UL, CSA, BG



EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN/IEC 60947-5-1,
EN 418/ISO 13850,
EN/IEC 60947-1 + A11

UL, CSA, BG

3 N/O

–

3 LEDs

~ and ≍ 24 V

7 N/O

2 N/C + 4 solid-state outputs for
signalling to PLC

4 LEDs

~ and ≍ 24 V
~ 115 V and ≍ 24 V
~ 230 V and ≍ 24 V

3 N/O instantaneous

1 N/C + 4 solid-state outputs for
signalling to PLC

4 LEDs

~ and ≍ 24 V
~ 48 V
~ 110 V and ≍ 24 V
~ 120 V and ≍ 24 V
~ 230 V and ≍ 24 V

Unlimited

≍ 24 V/–

–

–

≍ 24 V/–

~ 24 V/24 V

–

Unlimited or 2 s, 4 s (depending on
wiring)

≍ 24 V/–

–
≍ 24 V/24 V/24 V

XPS AF

XPS AFL

XPS AR

XPS AK

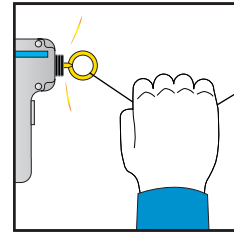
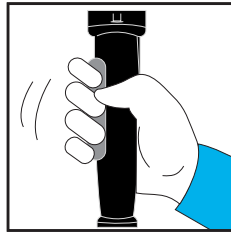
38781/3

38786/3

38791/3

38782/3

Applications



Modules

For enabling switch monitoring

For electrical monitoring of switches combined in pairs



Conformity to standards

EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN/IEC 60947-5-1,
EN 61326 + A1
DIN V VDE 0801 (1990),
DIN V VDE 0801 A1 (1994)

EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN/IEC 60947-5-1,
EN 50082-2

Product certifications

UL, CSA, BIA

UL, CSA, BG

Number of circuits

Safety

2 N/O

3 N/O

Additional

2 solid-state outputs for signalling to PLC

1 N/C + 2 solid-state outputs for signalling to PLC

Display

3 LEDs

3 LEDs

Supply voltage

⎓ 24 V

~ and ⎓ 24 V
~ and ⎓ 48 V
~ 115 V
~ 230 V

Synchronisation time between inputs

–

1.5 s

Input channel voltage

24 V/48 V version

24 V/–

⎓ 24 V/48 V

115 V/230 V version

–

~ 48 V/48 V

Module type

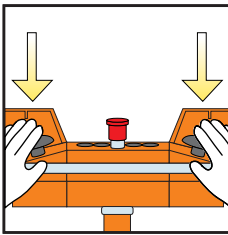
XPS VC

XPS FB

Page

38792/3

38780/4



For electrical monitoring of two-hand control stations



EN 954-1 - category 1/ISO 13849-1,
EN/IEC 60204-1,
EN/IEC 60947-5-1,
EN 574 type III A/ISO 13851,
EN 50082-2

EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN/IEC 60947-5-1,
EN 574 type III C/ISO 13851,
EN 50082-2

EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN 574 type III C/ISO 13851,
EN/IEC 60947-1,
EN/IEC 60947-5-1,
DIN V VDE 0801 (1990),
DIN V VDE 0801 A1 (1994)

UL, CSA

UL, CSA, INRS

UL, CSA, BIA

1 N/O

2 N/O

2 N/O

1 N/C

1 N/C

2 solid-state outputs for signalling to PLC

2 LEDs

3 LEDs

3 LEDs

~ and ≍ 24 V
~ 115 V
~ 230 V

≍ 24 V
~ 24 V
~ 115 V
~ 230 V

≍ 24 V

500 ms

500 ms

500 ms

≍ 24 V/-

≍ 24 V (≍ 24 V)
≍ 48 V (~ 24 V)
~ 48 V/48 V

≍ 24 V/-

~ 24 V/24 V

-

XPS BA

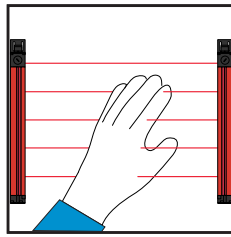
XPS BC

XPS BF

38790/2

38790/3

Applications



Modules

For monitoring type 4 slim light curtains (1 transmitter-receiver pair)

For monitoring 2 to 4 type 2 and type 4 light curtains (transmitter-receiver pair)



Functions

Protects access to a hazardous zone by associating the module with slim light curtains XUS LM

Protects access to a hazardous zone by associating the module with 2 to 4 light curtains type XUS L

Built-in "muting" function

No

Conformity to standards

EN 954-1 - category 4/ISO 13849-1,
EN/IEC 61496-1,
EN/IEC 61496-2

Product certifications

UL, CSA, TÜV

Number of circuits

Safety

2 solid-state PNP (N/O)

Additional

1 PNP N/O + 1 NPN N/O output for signalling to PLC

Display

4 LEDs + 2-digit display

9 LEDs + 2-digit display

Supply voltage

~ 24 V

Module type

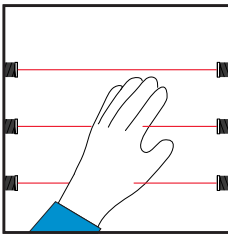
XPS LCB

XPS LCD

Page

30309/3

30310/3



For control of 1 to 4 single-beam photo-electric sensors XU2 S (transmitter-receiver pair)



For monitoring type 4 light curtains
Compact range



For monitoring type 4 light curtains
Compact and slim ranges



Protects access to a hazardous zone by associating the module with 1 to 4 single-beam photo-electric sensors

Yes

Protects access to a hazardous zone by associating the module with light curtains XUS L

1 transmitter-receiver pair

Yes

2 transmitter-receiver pairs

Yes

EN 954-1 - category 2/ISO 13849-1, EN/IEC 60204-1, EN/IEC 61496-1, EN/IEC 60947-5-1, EN/IEC 60947-1

UL, CSA, BIA

EN 954-1 - category 4/ISO 13849-1, EN/IEC 61496-1 (1998), EN 50082-2 (1995), EN 55011 (1998), DIN V VDE 0801 (1990), DIN V VDE 0801 A1 (1994)

UL, CSA, TÜV

EN 954-1 - category 4/ISO 13849-1, EN/IEC 61496-1, EN/IEC 61496-2

UL, CSA, TÜV

2 N/O

4 solid-state PNP N/O outputs for signalling to PLC

4 LEDs

3 N/O

2 solid-state PNP N/O outputs for signalling to PLC

5 LEDs

3 solid-state

–

5 LEDs

2 solid-state

1 PNP + 1 NPN output for signalling to PLC

14 LEDs + 2-digit display

⎓ 24 V

XPS CM

XPS LMR

XPS LMS

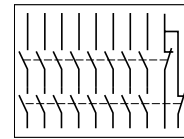
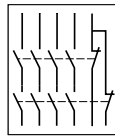
XPS LCM

30303/3

38794/3

30311/3

Applications



Modules

For increasing the number of safety contacts



Functions

Allows additional safety contacts to be added to another module

Conformity to standards

EN 954-1 - category 4/ISO 13849-1 (when connected to the appropriate module),
EN/IEC 60204-1,
EN/IEC 60947-5-1

EN 954-1 - category 4/ISO 13849-1 (when connected to the appropriate module),
EN/IEC 60204-1,
EN/IEC 60947-5-1

Product certifications

UL, CSA

UL, CSA

Number of circuits

Safety

4 N/O

8 N/O

Additional

1 N/C + 1 solid-state output for signalling to PLC

Display

3 LEDs

Supply voltage

~ and --- 24 V
~ 115 V
~ 230 V

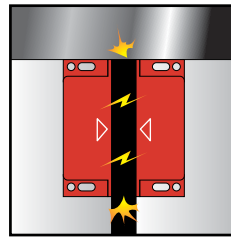
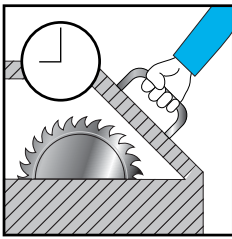
Module type

XPS ECM

XPS ECP

Page

38775/3



For the monitoring of applications requiring safety time delays

For coded magnetic switch monitoring

For 2 max.

For 6 max.



Unlocking of guards after a safety time delay for machines with long rundown time

Shunting contact in association with XPS VN modules for zero speed detection, solenoid valve monitoring, etc.

For monitoring 2 to 6 coded switches, depending on model

EN 954-1 - category 3/ISO 13849-1,
EN/IEC 60204-1,
EN/IEC 60947-5-1

EN 954-1 - category 3/ISO 13849-1,
EN/IEC 60204-1,
EN/IEC 60947-5-1

EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN/IEC 60947-5-1,
EN/IEC 60947-5-3,
DIN V VDE 0801 (1990),
DIN V VDE 0801 A1 (1994)

EN 954-1 - category 4/ISO 13849-1,
EN/IEC 60204-1,
EN 1088/ISO 14119,
EN/IEC 60947-5-1,
EN/IEC 60947-5-3,
DIN V VDE 0801 (1990),
DIN V VDE 0801 A1 (1994)

UL, CSA, BG

UL, CSA, BG

UL, CSA, BIA

UL, CSA, BIA

1 N/O time delayed

1 N/O pulse type

2 N/O

2 N/C + 2 solid-state outputs for signalling to PLC

2 solid-state outputs for signalling to PLC

4 LEDs

3 LEDs

15 LEDs

~ and ~~~ 24 V

~ 115 V

~ 230 V

~~~ 24 V

**XPS TSA**

**XPS TSW**

**XPS DMB**

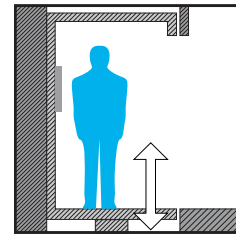
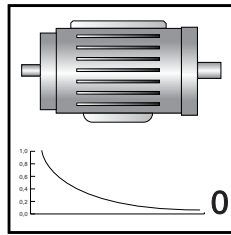
**XPS DME**

38785/3

38793/3



Applications



**Modules**

**For zero speed detection of a.c. or d.c. motors which produce a remanent voltage in their windings due to residual magnetism**

**For lift control**



**Functions**

Detecting the stopping of the motor by measuring the remanent voltage in the stator windings (compatible with electronic motor control devices such as: variable speed drives, d.c. injection brakes, etc.)

Checks the height of the cabin when it stops at a landing in order to compensate for any difference generated by variation of the load in the cabin

**Conformity to standards**

EN 954-1 - category 3/ISO 13849-1, EN/IEC 60204-1, EN/IEC 60947-5-1, EN 50082-2

EN 954-1 - category 4/ISO 13849-1, EN 81-1, EN 81-2, EN/IEC 60947-5-1, EN 50082-2, EN 12015, EN 12016

**Product certifications**

UL, CSA, BG

UL, CSA, TÜV

**Number of circuits**

Safety

---

Additional

1 N/O + 1 N/C

---

2 solid-state outputs for signalling to PLC

2 N/O

**Display**

4 LEDs

4 LEDs

**Supply voltage**

⎓ 24 V  
 ~ 115 V  
 ~ 230 V

~ or ⎓ 24 V  
 ~ 115 V  
 ~ 230 V

**Module type**

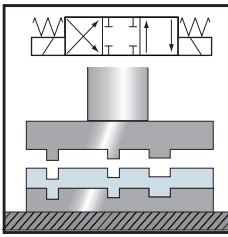
**XPS VNE**

**XPS DA**

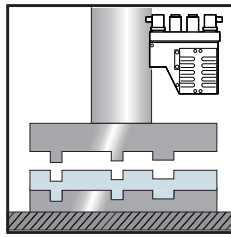
**Page**

38777/3

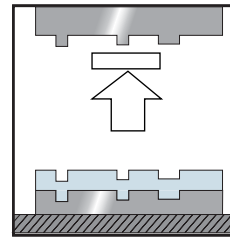
38778/2



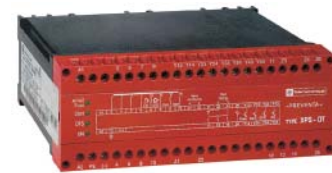
**For dynamic monitoring of hydraulic valves on linear presses**



**For dynamic monitoring of double-bodied solenoid valves**



**For safety stop at top dead centre with automatic overtravel monitoring and control**



Dynamic monitoring of the position of the valve pistons of the hydraulic safety system on linear presses. Dangerous movements of the machine are allowed when the correct change of signal occurs

Dynamic monitoring of double-bodied safety solenoid valves on eccentric presses. The device prevents engagement of the clutch and engages the brake if a fault occurs in the solenoid valve

Automatic monitoring of the stopping distance at each cycle + maintain open function for eccentric presses

EN 954-1 - category 4/ISO 13849-1,  
EN/IEC 60204-1,  
EN/IEC 60947-5-1,  
EN 693,  
EN 50082-2

EN 954-1 - category 4/ISO 13849-1,  
EN/IEC 60204-1,  
EN/IEC 60947-5-1,  
EN 692,  
EN 50082-2

EN 954-1 - category 4/ISO 13849-1,  
EN/IEC 60204-1,  
EN/IEC 60947-5-1,  
EN 692,  
EN 50082-2

UL, CSA

UL, CSA

UL, CSA

2 N/O + 1 N/C

1 N/O + 1 N/C

3 N/O

–

4 solid-state outputs for signalling to PLC

8 LEDs

– 24 V

– 24 V  
~ 115 V  
~ 230 V

–  
~ 115 V  
~ 230 V

**XPS PVT**

**XPS PVK**

**XPS OT**

38740/3

38760/2

38773/4