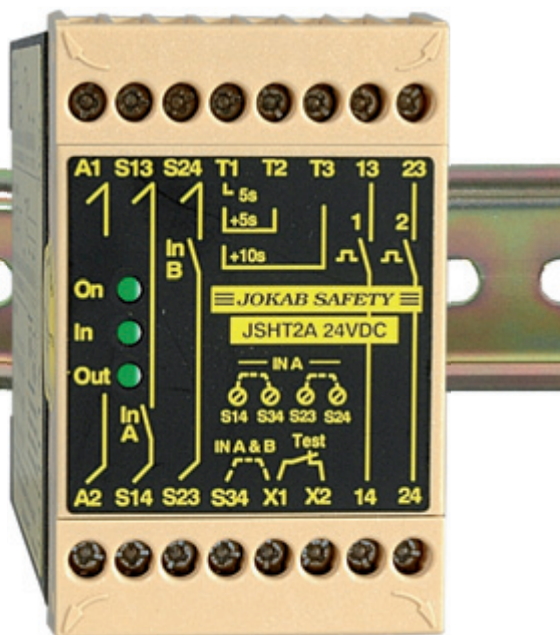


Safety timer JSHT2



The JSHT2A/B/C closes two independent relay outputs during a guaranteed maximum period of time when the inputs are closed.

Time bypassing

Sensors detect the autocarrier and are connected to the JSHT2 which supervises the sensors and bypasses the light beam for a maximum predetermined time.

Inching

Inching applications require safety outputs to be closed for a predetermined maximum period of time, allowing the machine to move only a short distance each time the inching control is activated. For each new motion the inching control e.g. PB or pedal must be released and activated again.

Operation

When the inputs close the output contacts close. The output contacts open when the input opens or when the time period has expired. The time is hardwire selectable on the terminals T1, T2 and T3. The time given is the maximum time. Single or dual channel operation is also hardwire selectable.

Regulations and standards

The JSHT2A/B is designed and approved in accordance with appropriate directives and standards. Examples of such are 98/37/EC, EN ISO 12100-1/-2, EN 60204-1, EN 954-1/EN ISO 13849-1.

Approvals:



Safety relay for:

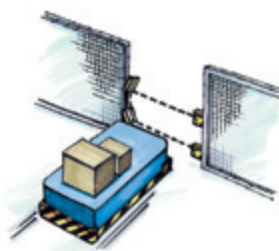
Time bypassing
Inching

Features:

- Hardwire time selection
0.2 – 40 s
- Selectable single or dual channel input
- Test input
- Width 45 mm
- LED indication for supply, inputs and outputs
- 1+1 NO relay outputs
- Supply 24 VDC, 24, 48, 115 or 230 VAC
- Quick release connector blocks

Connection examples

For examples of how our safety relays can solve various safety problems, please see the section "Connection examples".



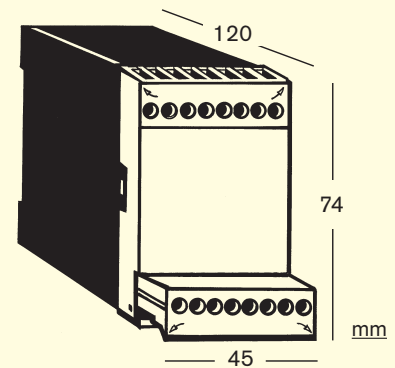
Light beam being bypassed only for the time it takes the autocarrier to pass.



Shaft only turns a small amount each time the PB is pressed.

Technical data - JSHT2 A/B/C

Manufacturer:	JOKAB SAFETY AB, Sweden
Colour:	Black and Beige
Power supply:	24 VDC \pm 15 % 24/48/115/230 VAC \pm 15 %, 50 - 60 HZ
Power consumption:	< 3 VA
Max Input Wire res. at nom voltage/channel:	100/200 Ohm (1 Channel/ 2 Channel)
Response time at activation:	< 30 ms
Response time at deactivation:	< 15 ms
Selectable time(\pm 15 % at nom. v.):	JSHT2A: 0.2 - 0.5 - 0.7 - 1.0 sec JSHT2B: 5 - 10 - 15 - 20 sec JSHT2C: 5 - 15 - 30 - 40 sec
Relay outputs:	2 x 1 NO
Maximum switching capacity res. load AC:	4A/250 VAC/1000 VA
Maximum switching capacity res. load DC:	4A/24 VDC/100 W
Max. total switching capacity:	8A distributed on all contacts
Minimum load:	10mA/10 V (if load on contact has not exceeded 100 mA)
Contact material:	AgCuNi
Terminals (Max. screw torque 1 Nm):	Single strand: 1 x 4 mm ² , 2 x 1,5 mm ² Conductor with socket contact: 1 x 2,5 mm ² , 2 x 1 mm ²
Mounting:	35 mm DIN-rail
Protection class enclosure/terminals:	IP 20/IP 40 IEC 60529
Operating temperature range:	-10°C - +55°C
Air and creep distance:	4 kV/2 IEC 60664-1
LED indication:	Electrical Supply, Inputs, Outputs
Weight:	24 VDC: 310 g. 24/48/115/230 VAC: 410 g.

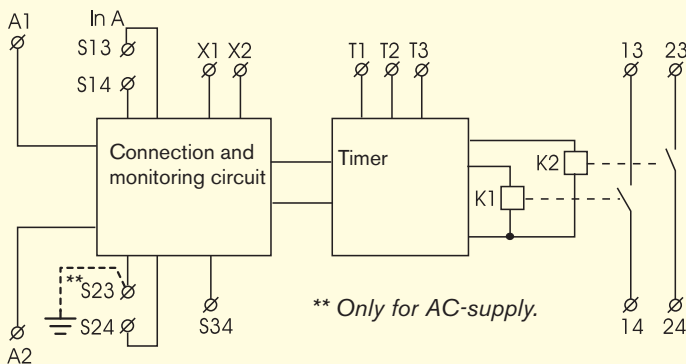


Connector blocks are detachable (without cables having to be disconnected)

Article number/Ordering data

10-012-00	JSHT2A 24DC
10-012-02	JSHT2A 24AC
10-012-03	JSHT2A 48 AC
10-012-04	JSHT2A 115 AC
10-012-05	JSHT2A 230 AC
10-012-10	JSHT2B 24DC
10-012-12	JSHT2B 24AC
10-012-13	JSHT2B 48 AC
10-012-14	JSHT2B 115 AC
10-012-15	JSHT2B 230 AC
10-012-20	JSHT2C 24DC

Technical description - JSHT2 A/B/C



The electrical supply is connected across A1 and A2. The internal supervising circuit is activated directly when the supply is on. The inputs A and B must both be opened and then closed. Thereafter K1 and K2 are activated and the outputs close. K1 and K2 are activated for hardwired selected time

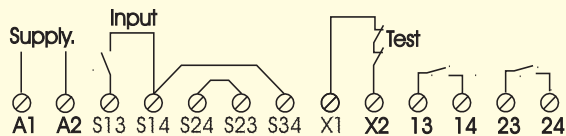
(set by connections on the terminals T1, T2 and T3). If there is a short circuit between the inputs or the inputs are opened again before the set time period has expired the outputs will open. In order to close the outputs again both the inputs have to be opened and both internal relays K1 and

K2 deactivated (controlled by the supervising circuit) and then the inputs closed again.

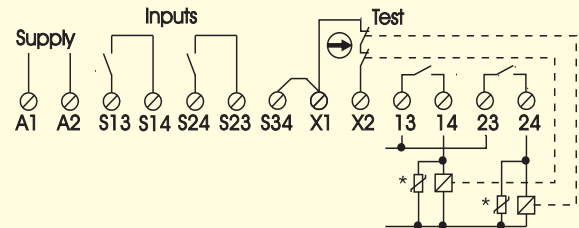
By external hardwire connectors the JSHT2 can be made to operate from either single or dual channel inputs. See figure below.

Electrical connection - JSHT2 A/B/C

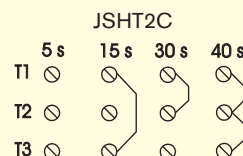
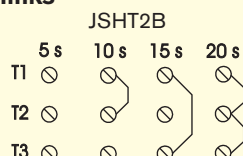
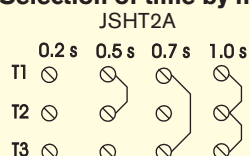
Connection for single channel input



Connection for dual channel input



Selection of time by hardwire links



* It is recommended that all switched loads are adequately suppressed and/or fused in order to provide additional protection for the safety contacts. In the figure the monitoring of two contactors in the test input is shown.