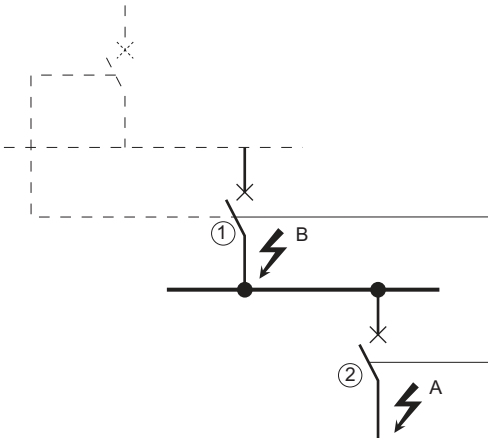


DB126385



## Operating principle

- A fault occurs at point A.  
Downstream device no. 2 clears the fault and sends a signal to upstream device no. 1, which maintains the short-time tripping delay  $t_{sd}$  or the ground-fault tripping delay  $t_g$  to which it is set.
- A fault occurs at point B.  
Upstream device no. 1 detects the fault. In the absence of a signal from a downstream device, the set time delay is not taken into account and the device trips according to the zero setting. If it is connected to a device further upstream, it sends a signal to that device, which delays tripping according to its  $t_{sd}$  or  $t_g$  setting.

**Note:** On device no. 1, the  $t_{sd}$  and  $t_g$  tripping delays must not be set to zero because this would make discrimination impossible.

## Connections between control units

A logic signal (0 or 5 volts) can be used for zone selective interlocking between the upstream and downstream circuit breakers equipped with:

- Micrologic 5.0 A, 6.0 A, 7.0 A
- Micrologic 5.0 E, 6.0 E
- Micrologic 5.0 P, 6.0 P, 7.0 P
- Micrologic 5.0 H, 6.0 H, 7.0 H.

An interface is available for connection to previous generations of trip units.

### Important

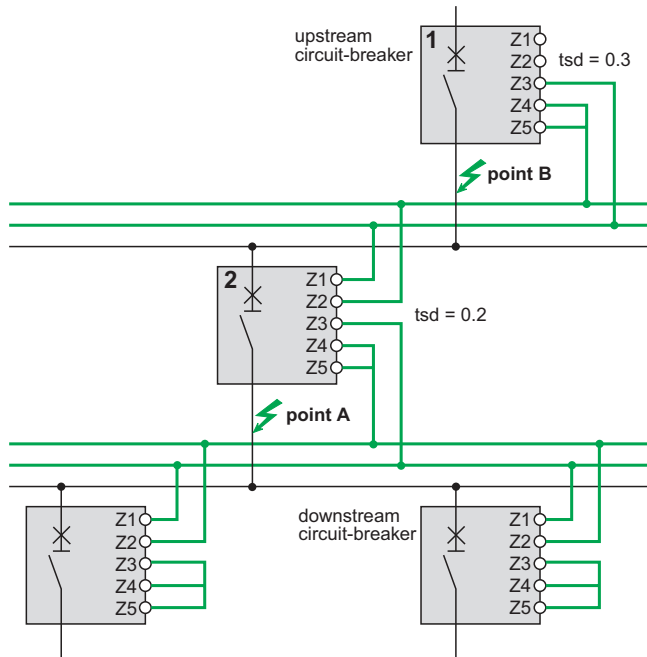
If the protection function is not used on circuit breakers equipped for ZSI protection, a jumper must be installed to short terminals Z3, Z4 and Z5.  
If the jumper is not installed, the short-time and ground-fault tripping delays are set to zero, whatever the position of the adjustment dial.

Terminals Z1 to Z5 correspond to the identical indications on the circuit-breaker terminal blocks.

## Wiring

- Maximum impedance:  $2.7 \Omega / 300 \text{ m}$
- Capacity of connectors:  $0.4$  to  $2.5 \text{ mm}^2$
- Wires: single or multicore
- Maximum length:  $3000 \text{ m}$
- Limits to device interconnection:
  - the common ZSI - OUT (Z1) and the output ZSI - OUT (Z2) can be connected to a maximum of 10 upstream devices;
  - a maximum of 100 downstream devices may be connected to the common ZSI - IN (Z3) and to an input ZSI - IN CR (Z4) or GF (Z5).

DB119703



## Test

The portable test kit may be used to check the wiring and operation of zone selective interlocking between a number of circuit breakers.