

# Instruction manual

AQ-300 series

## Trip Circuit Supervision

# AQ-300 Trip Circuit Supervision

Instruction manual

Version: 1.01 EN

<b>Revision</b>	<b>1.00</b>
Date	9.06.2014
Approved by	TV
Changes	N/A
<b>Revision</b>	<b>1.01</b>
Date	24.06.2021
Approved by	TV
Changes	Added document ID.

TABLE OF CONTENTS

1	Introduction .....	4
2	3-wire TRIP+ wiring methods .....	5
3	2-wire TRIP+ wiring methods .....	6
4	Reference information .....	8

# 1 INTRODUCTION

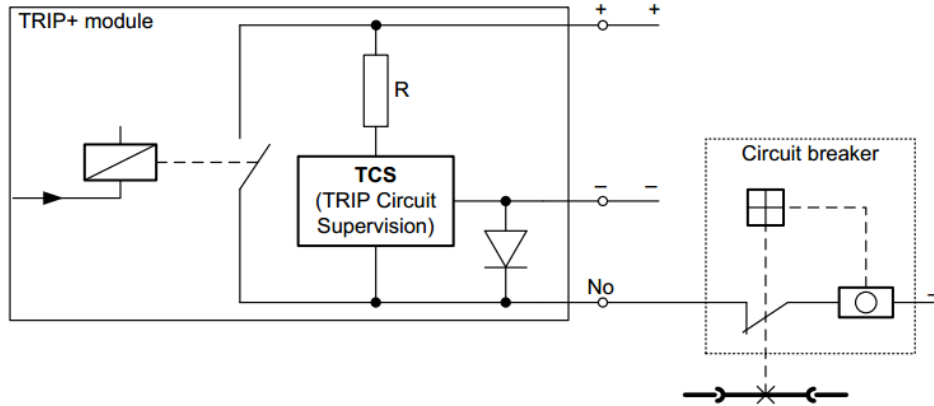
All four fast acting trip contacts contain build-in trip circuit supervision function. The output voltage of the circuit is 5V(+1V). The pickup resistance is 2.5kohm(+1kohm).

Our TRIP+ modules are improved to switch DC circuits. Using reversed polarity or AC voltage can cause the damage of the internal circuits.

## 2 3-WIRE TRIP+ WIRING METHODS

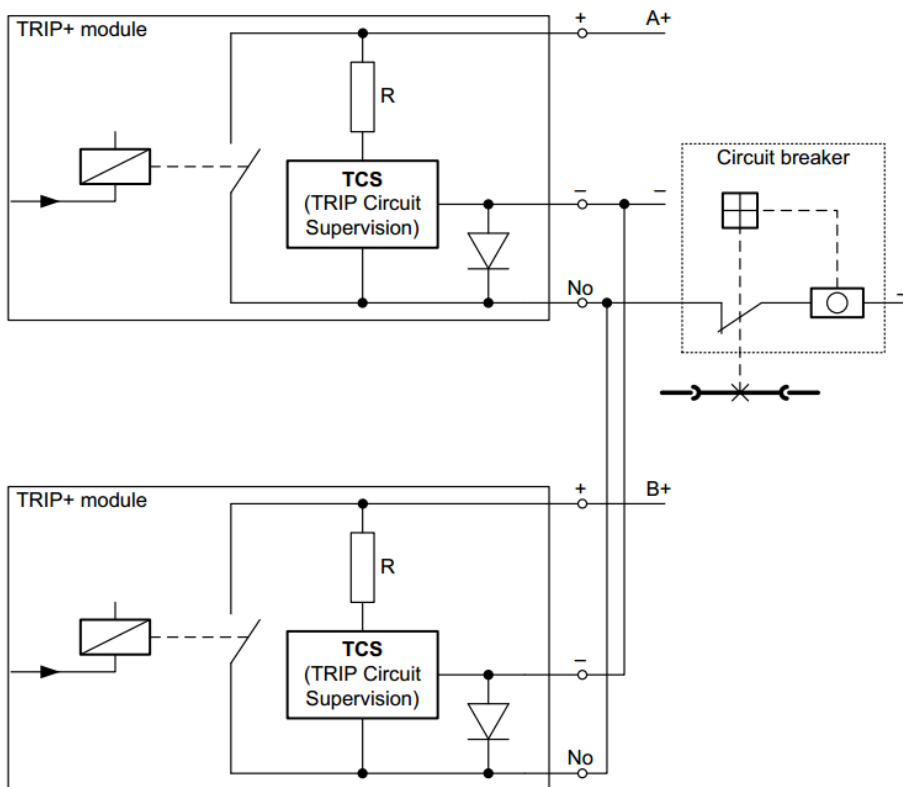
In normal use the injected current from the normally open contact (No) is 1.5 mA. The voltage of this point is maximized at 15 V by a zener-diode.

Figure 2-1 3-wire TRIP wiring



It is possible to use parallel connected TRIP+ modules. In this case the negative contacts must be common. The injected current from the “No” contacts is 3 mA.

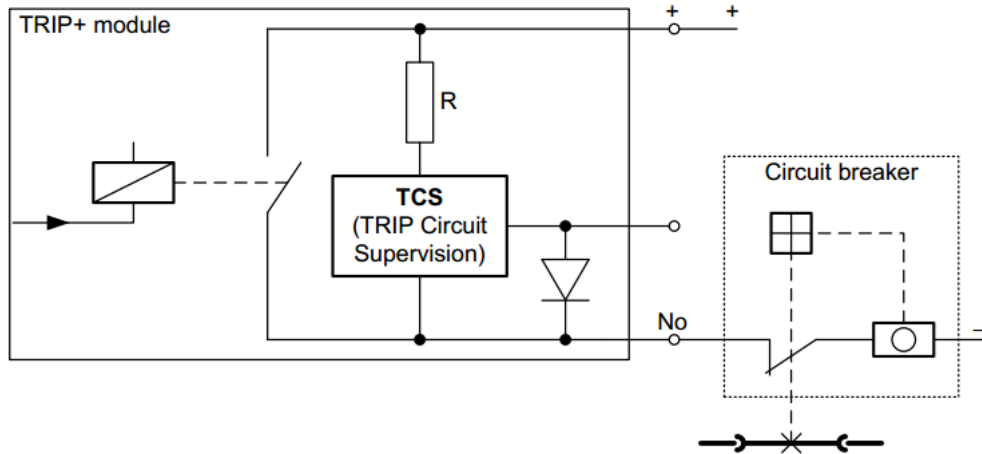
Figure 2-2 3-wire TRIP+ wiring using parallel connected TRIP+ modules



### 3 2-WIRE TRIP+ WIRING METHODS

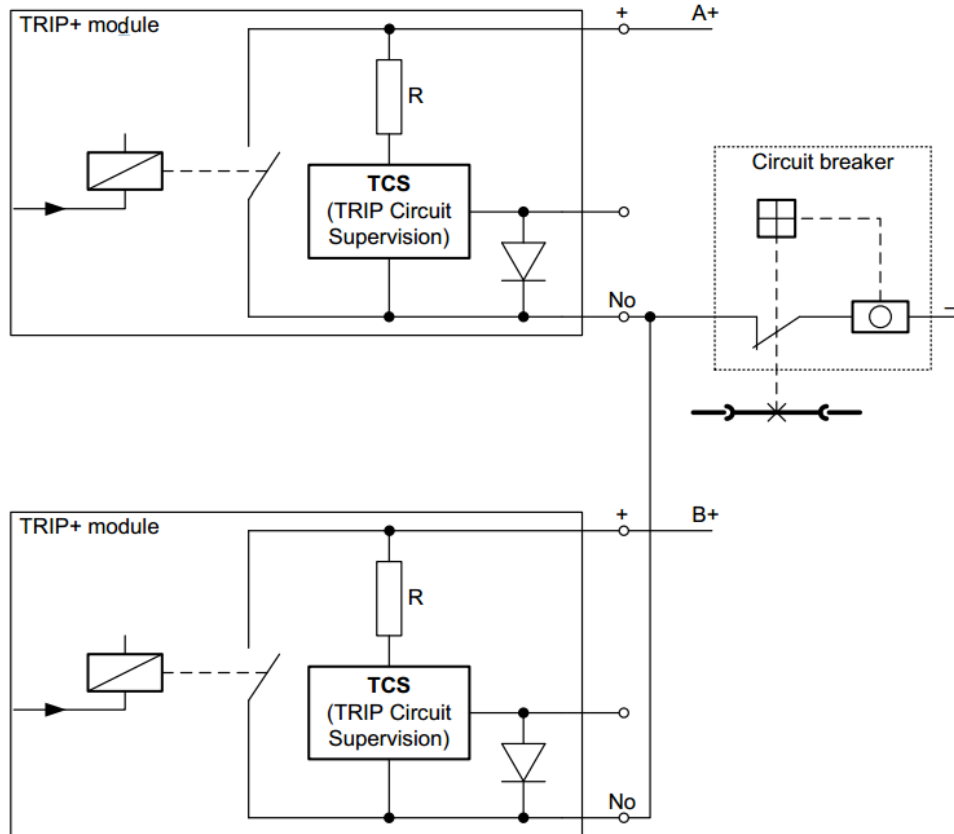
If it is necessary, you can also wire the TRIP+ modules using only the “+” and the “No” contacts. The injected current from the normally open contact (No) is 1.5 mA.

Figure 3-1 2-wire TRIP+ wiring



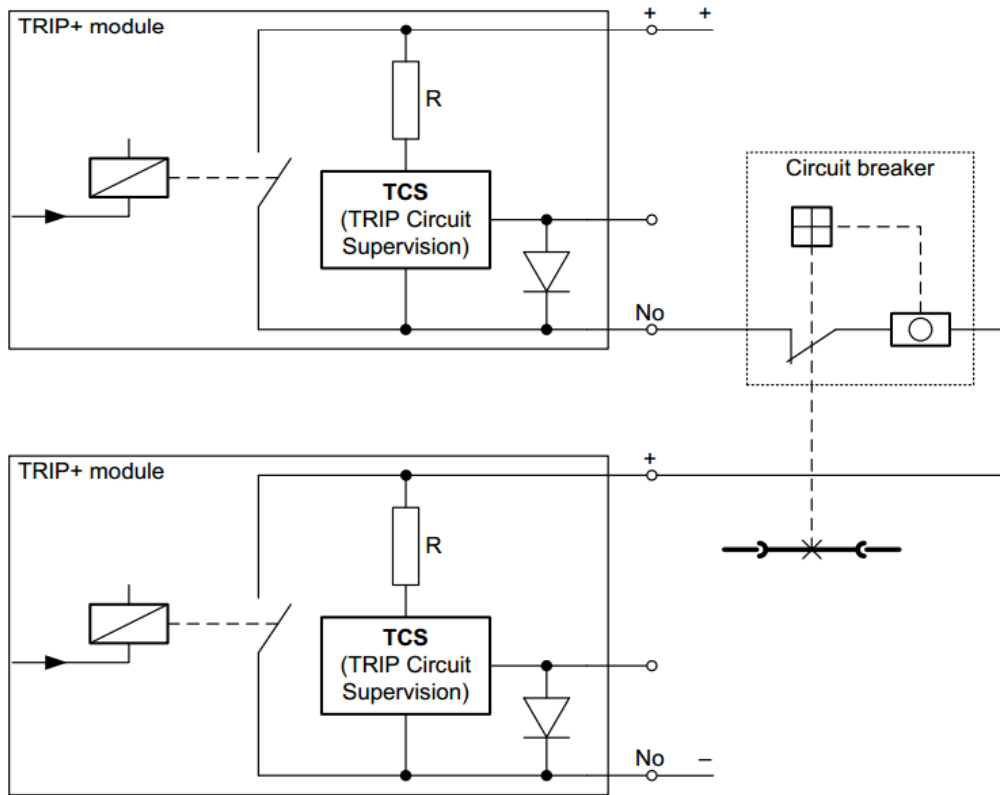
It is possible to use parallel connected TRIP+ modules. The injected current from the “No” contacts is 3 mA.

Figure 3-2 2-wire TRIP+ wiring using parallel connected TRIP+ modules



If the circuit breaker needs two-pole switching TRIP+ modules can be connected series.

Figure 3-3 2-wire TRIP+ wiring using series connected TRIP+ modules.



## 4 REFERENCE INFORMATION

### Manufacturer information

Arcteq Relays Ltd. Finland

### Visiting and postal address:

Kvartsikatu 2 A 1  
65300 Vaasa, Finland

### Contacts:

Phone, general and commercial issues (office hours GMT +2): +358 10 3221 370

Fax: +358 10 3221 389

url: [www.arcteq.fi](http://www.arcteq.fi)

email sales: [sales@arcteq.fi](mailto:sales@arcteq.fi)

technical support: <https://support.arcteq.fi>

**Arcteq support line:** +358 10 3221 388 EET 9:00 – 17:00.