

## A.19 TC520 - System Status Collector

General status collector

System backplane signal inputs RUN, LIVE, BAT, PFail

Four general-purpose inputs 24 V

One FANFAIL input

One external system clock SYNC input

Two relay outputs controlled by RUN signal (Processor Modules A and B).

### Description

TC520 is positioned in a controller subrack to interface with the backplane bus.

The module collects status information from around the system. Inputs from the backplane bus of the Advant Controller as well as the module front connector are treated.

The information is then distributed on a transmit-only serial link.

This serial link is available on the backplane to all main CPUs for listening only.

To achieve external synchronization of the Advant Controller system calendar clock, the “minute pulse” is connected to TC520. The signal is separately distributed on the bus backplane to the processor module(s).

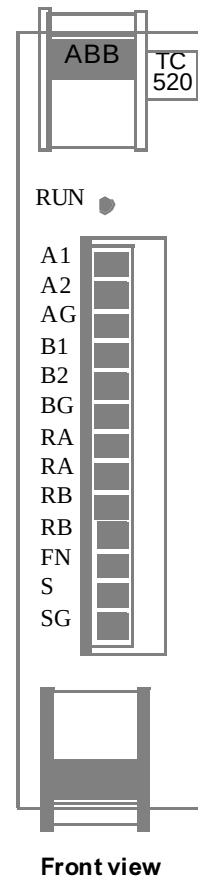
The module also makes a RUN-signal controlled relay contact externally available. As long as the RUN-signal is active, the relay contact is closed.

Inputs, except the SYNC input, are filtered digitally by software.

TC520 is totally autonomous, that is, it cannot be affected by an outside user. The status of all inputs is reported, regardless of whether the inputs are connected or not.

The application of the inputs A1, A2, B1, B2 is configured in the controller data base. Error state with respect to electrical signal level is defined by the application. See the controller configuration/installation chapters.

For the input FN (FANFAIL), the logic high level 24 V is applied as the error state.



### Technical Data

#### Indicators

LED RUN (green) on module front indicates module running normally.

Table A-8. Electrical Data, Front connected Input/Output Signals

| Pin id | Signal name              |                | Signal<br>“0”                                                                                                                    | Signal<br>“1” | Isolation    | Filter<br>Hw/Sw | Pulse<br>length | Trigg<br>flank |
|--------|--------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|-----------------|-----------------|----------------|
|        | Standard                 | Applic.        |                                                                                                                                  |               |              |                 |                 |                |
| 1, A1  | STATUSA1                 | IO24VA or “F1” | -50 to +2 V                                                                                                                      | +12 to +60 V  | Opto         | 1ms/100ms       | > 100ms         | Positive       |
| 2, A2  | STATUSA2                 | IO24VB or “F2” |                                                                                                                                  |               |              |                 |                 |                |
| 3, AG  | COMMONA (ref. to A1, A2) |                |                                                                                                                                  |               |              |                 |                 |                |
| 4, B1  | STATUSB1                 | “F3”           |                                                                                                                                  |               |              |                 |                 |                |
| 5, B2  | STATUSB2                 | “F4”           |                                                                                                                                  |               |              |                 |                 |                |
| 6, BG  | COMMONB (ref. to B1, B2) |                |                                                                                                                                  |               |              |                 |                 |                |
| 7, RA  | RUN A1                   |                | Relay contact: Max. 250 V a.c. or d.c.<br>Max. 8 A resistive load<br>Contact opening time max. 8 ms<br>( For processor module A) |               |              |                 |                 |                |
| 8, RA  | RUN A2                   |                |                                                                                                                                  |               |              |                 |                 |                |
| 9, RB  | RUN B1                   |                | Relay contact: As above<br>(For processor module B)                                                                              |               |              |                 |                 |                |
| 10, RB | RUN B2                   |                |                                                                                                                                  |               |              |                 |                 |                |
| 11, FN | FANFAIL                  |                | -50 to +2 V                                                                                                                      | +12 to +60 V  | Ref. chassis | 1ms/100ms       | > 100 ms        | Positive       |
| 12, S  | SYNCIN                   |                |                                                                                                                                  |               | Opto         | 1 ms/ -- ms     | > 10 ms         | Positive       |
| 13, SG | COMM.SYNC                |                |                                                                                                                                  |               |              |                 |                 |                |

#### Power Supply

5 V d.c. typical 50 mA  
Power loss (heat) typical 0.25 W

#### Mechanical Data

Module size: 6 SU, 6 mp ("half height")  
Weight: 0.23 kg (0.5 lbs.)

#### Block Diagram

