

## B&R · B&R System 2005

# 3AI775.6

### System 2005 8-Channel 0–20 mA Analog Input Module

Exact-model official B&R product evidence found

#### Technical specifications

|                              |                                                                  |
|------------------------------|------------------------------------------------------------------|
| Analog inputs                | 8                                                                |
| Input type                   | Differential                                                     |
| Nominal range                | 0 to 20 mA                                                       |
| Permitted input range        | -50 to +50 mA                                                    |
| Input load                   | 50 $\Omega$                                                      |
| Converter resolution         | 12 bit                                                           |
| Conversion time              | Less than 1 ms for all channels; less than 1.5 ms with averaging |
| Conversion modes             | Cyclic with optional averaging, direct, or software-timed        |
| Software timing              | 2 to 65.535 ms                                                   |
| Basic accuracy               | $\pm 0.1\%$ at 25°C                                              |
| Interrupt output             | INT                                                              |
| Channel-to-PLC isolation     | Yes                                                              |
| Channel-to-channel isolation | No                                                               |
| Power consumption            | 24 V: 3.5 W; 5 V: 1.0 W; total 4.5 W                             |
| Diagnostics                  | Module software and converter LED                                |
| Required terminal block      | 1 x TB170 ordered separately                                     |
| B&R ID code                  | \$81                                                             |
| Degree of protection         | IP20                                                             |
| Operating temperature        | 0 to 60°C                                                        |
| Certifications               | CE, UKCA, cULus E115267                                          |
| Dimensions (H x W x D)       | 16.5 x 4.0 x 11.0 cm                                             |

#### Documented role

B&R 3AI775.6 is a System 2005 analog input module with eight differential 0 to 20 mA channels and 12-bit conversion.

It acquires current-loop process signals using cyclic, direct or software-timed conversion modes and provides converter diagnostics.

#### Applications

- Acquiring 0–20 mA pressure, flow and level transmitters
- Fast multichannel process measurement with optional averaging
- Replacing legacy current-input hardware while preserving scaling, timing and alarm behavior

#### Selection note

B&R 3AI775.6 must be matched by complete material number, compatible System 2005 station or CPU, slot and terminal map, power and field wiring, saved project and connected devices. Back up the configuration and perform a controlled functional test after replacement.