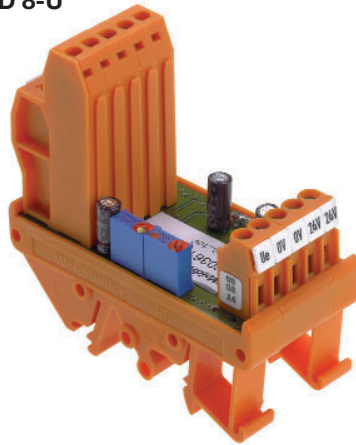


8-Bit Digital/Analog Converters

RS/D 8-U

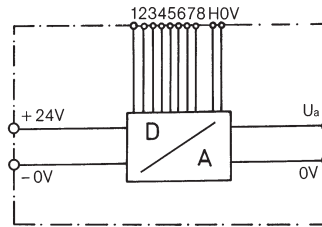


RS/D 8-I



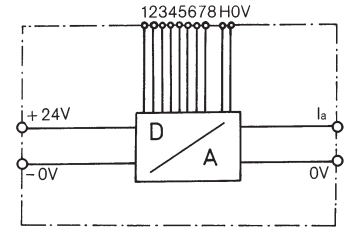
Block diagram

Pin assignment



Block diagram

Pin assignment



| Ordering data | Type | Part No. | Type | Part No. | Type | Part No. | Type | Part No. |
|--------------------------|----------------------------------------------------------------------|------------|----------------------------------------------------------------------|------------|----------------------------------------------------------------------|------------|----------------------------------------------------------------------|------------|
| | RS/D 8-U | 1123361001 | RS/D 8-U | 1160761001 | RS/D 8-I | 1165861001 | RS/D 8-I | 1169261001 |
| Technical data | | | | | | | | |
| Input signal | 8 Bit (1 Bit prefix) | | 8 Bit | | 8 Bit | | 8 Bit | |
| Max. input voltage | 5...24 V (typ. 24 V) | | 5...24 V (typ. 24 V) | | 5...24 V (typ., max. 30 V) \triangleq H | | 5...24 V (type., max. 30 V) \triangleq H | |
| Max. input current | 2.5 mA | | 2.5 mA | | | | | |
| Input resistance | 50 k Ω per input | | 50 k Ω per input | | 50 k Ω per input | | 50 k Ω per input | |
| Prefix | MSB: H \triangleq positive, L \triangleq negative | | | | | | | |
| Resolution | 78 mV c 1 LSB | | 39 mV \triangleq 1 LSB | | 78 μ A \triangleq 1 LSB | | 62.5 μ A \triangleq 1 LSB | |
| Output signal | -10 V...+10 V | | 0...10 V | | 0...20 mA | | 4...20 mA | |
| Output current | \leq 10 mA max. current | | \leq 10 mA | | 0...20 mA (as source) | | 4...20 mA (as source) | |
| Offset | \leq 20 mV | | \leq 20 mV | | max. 0.08 mA | | 4 mA | |
| Load resistance | \geq 1 k Ω | | \geq 1 k Ω | | \leq 500 Ω | | \leq 500 Ω | |
| Transmission error | \pm 1 LSB | | \pm 1 LSB | | \pm 1 LSB | | \pm 1 LSB | |
| Conversion time | \leq 30 μ s | | \leq 30 μ s | | \leq 30 μ s | | \leq 30 μ s | |
| Supply | 24 V-, \pm 20%, 25 mA (plus output current) | | 24 V-, \pm 20%, 25 mA (plus output current) | | 24 V-, \pm 20%, 25 mA (plus output current) | | 24 V-, \pm 20%, 25 mA (plus output current) | |
| Connection arrangement | | | | | | | | |
| | Terminal 1 | LSB | Terminal 1 | LSB | Terminal 1 | LSB | Terminal 1 | LSB |
| | : | : | : | : | : | : | : | : |
| | Terminal 8 | MSB | Terminal 8 | MSB | Terminal 8 | MSB | Terminal 8 | MSB |
| | Terminal 9 | Hold | Terminal 9 | Hold | Terminal 9 | Hold | Terminal 9 | Hold |
| | Terminal 10 | 0 V | Terminal 10 | 0 V | Terminal 10 | 0 V | Terminal 10 | 0 V |
| | Hold function: | | Hold function: | | Hold function: | | Hold function: | |
| | High \triangleq +24 V \triangleq storage of last converted value | | High \triangleq +24 V \triangleq storage of last converted value | | High \triangleq +24 V \triangleq storage of last converted value | | High \triangleq +24 V \triangleq storage of last converted value | |
| | Low \triangleq 0 V \triangleq free conversion | | Low \triangleq 0 V \triangleq free conversion | | Low \triangleq 0 V \triangleq free conversion | | Low \triangleq 0 V \triangleq free conversion | |
| Storage temperature | -40°C...+85°C | | -40°C...+85°C | | -40°C...+85°C | | -40°C...+85°C | |
| Operating temperature | 0°C...+50°C | | 0°C...+50°C | | 0°C...+50°C | | 0°C...+50°C | |
| EMC EN 50 081-1/50 082-2 | | | | | | | | |