

**CNT204/x**

| Incremental encoder inputs     |                                                                    |                               |
|--------------------------------|--------------------------------------------------------------------|-------------------------------|
| Number                         | 2                                                                  |                               |
| Counter resolution             | 32 bit                                                             |                               |
| Input signals                  | A-, A+, B-, B+, N-, N+                                             |                               |
| Signal evaluation              | 1- / 2- / 4-fold edge evaluation or pulse direction mode           |                               |
| Maximum input frequency        | 1 MHz (RS-422) / 300 kHz (HTL)                                     |                               |
| Input filter                   | 185 kHz to 6 MHz adjustable, default: 6 MHz                        |                               |
| Counter inputs                 |                                                                    |                               |
| Number                         | 4 (2 if INC inputs are used)                                       |                               |
| Counter resolution             | 32 bit                                                             |                               |
| Maximum input frequency        | 20 kHz                                                             |                               |
| Min. pulse length              | 25 µs                                                              |                               |
| Input filter                   | 183 Hz to 46.88 kHz adjustable, disabled by default (fg = 100 kHz) |                               |
| Encoder supply                 | +5 V                                                               | +24 V                         |
| Voltage                        | +5 V                                                               | U <sub>ext</sub> -1 V         |
| Tolerance                      | ±5 %                                                               | Like U <sub>ext</sub>         |
| Max. current/encoder           | 200 mA                                                             | 300 mA                        |
| Residual ripple                | < 150 mV <sub>ss</sub>                                             | Like U <sub>ext</sub>         |
| Short-circuit-proof            | Yes, permanent                                                     | Yes, permanent                |
| External power supply          |                                                                    |                               |
| Power supply                   | 18 V DC to 34 V DC                                                 |                               |
| Current consumption            | 40 mA at 24 V + 1.2 x current consumption of the encoders          |                               |
| Reverse polarity protection    | Yes                                                                |                               |
| Approvals/Certificates         |                                                                    |                               |
| General                        | CE, UKCA, cULus                                                    |                               |
| Marine                         | ABS, BV, DNV, KR, LR, NK, RINA                                     |                               |
| Environmental conditions       | Standard                                                           | ColdClimate (❄)               |
| Operating temperature          | -30 °C to +60 °C                                                   |                               |
| Relative humidity, operation   | 5 % to 95 % noncondensing                                          | 5 % to 95 % with condensation |
| Storage temperature            | -40 °C to +85 °C                                                   |                               |
| Relative humidity, storage     | 5 % to 95 % with condensation                                      |                               |
| Pollution degree (IEC 60664-1) | 2 (noncondensing)                                                  | 2                             |

**Order data**

| Part type designation | Part number | Description                                                                                                                                                           |
|-----------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CNT204/H              | 00010709-10 | Counter module; 2x INC HTL 300 kHz + 2x counter HTL 20 kHz or 4x counter HTL 20 kHz; HTL=24 V; 32 bit; INC A,A/B/N; counter; period; difference, trigger; isolated    |
| CNT204/H CC           | 00016407-10 | Like CNT204/H; ColdClimate (❄)                                                                                                                                        |
| CNT204/R              | 00010709-20 | Counter module; 2x INC RS-422 1 MHz + 2x counter HTL 20 kHz or 4x counter HTL 20 kHz; HTL = 24 V; 32 bit; INC A,A/B/N; counter; period; difference, trigger; isolated |