# Product data sheet Characteristics

# XCC1406TR11R

incremental encoder Ø 40 - through shaft 6 mm - 1024 points - 5V RS422



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| Range of product             | OsiSense XCC          |  |  |  |
|------------------------------|-----------------------|--|--|--|
| Encoder type                 | Incremental encoder   |  |  |  |
| Encoder name                 | XCC                   |  |  |  |
| Product specific application | -                     |  |  |  |
| Diameter                     | 40 mm                 |  |  |  |
| Shaft diameter               | 6 mm                  |  |  |  |
| Shaft type                   | Through shaft         |  |  |  |
| Resolution                   | 1024 points           |  |  |  |
| Output stage                 | Type R                |  |  |  |
| Type of output stage         | Driver 5V, RS422      |  |  |  |
| Electrical connection        | Cable radial shielded |  |  |  |
| Cable length                 | 2 m                   |  |  |  |
| Cable composition            | 8 x 0.14 mm²          |  |  |  |
| [Us] rated supply voltage    | 5 V DC                |  |  |  |
| Supply voltage limits        | 4.55.5 V DC           |  |  |  |
| Enclosure material           | Aluminium<br>Zamak    |  |  |  |

### Complementary

|                          |                                  | <u> </u>                              |
|--------------------------|----------------------------------|---------------------------------------|
| Shaft tolerance          | H7                               |                                       |
| Cable outer diameter     | 6 mm                             | 9                                     |
| Residual ripple          | 200 mV                           |                                       |
| Maximum revolution speed | 9000 rpm                         |                                       |
| Shaft moment of inertia  | 5 g.cm <sup>2</sup>              |                                       |
| Torque value             | 0.0025 N.m                       |                                       |
| Maximum load             | 1 daN axial<br>2 daN radial      | <u> </u>                              |
| Output frequency         | 100 kHz                          |                                       |
| Number of channels       | 3                                |                                       |
| Current consumption      | 0100 mA (no-load)                | ـــــــــــــــــــــــــــــــــــــ |
| Maximum output current   | 40 mA                            |                                       |
| Output level             | Low level: 0.5 V maximum (20 mA) | . <u>.</u><br><u></u>                 |
|                          |                                  |                                       |

#### High level: 2.5 V minimum (20 mA)

| Surge withstand       | 1 kV, level 2 conforming to IEC 61000-4-5 |
|-----------------------|---|
| Base material         | Aluminium<br>Zamak                        |
| Shaft material        | Aluminium<br>Stainless steel              |
| Type of ball bearings | 688AZZ1                                   |
| Product weight        | 0.405 kg                                  |

#### Environment

| Marking                               | CE   |  |  |  |
|---------------------------------------|--|--|--|--|
| Ambient air temperature for operation | -2080 °C   |  |  |  |
| Ambient air temperature for storage   | -3085 °C   |  |  |  |
| IP degree of protection               | IP52 conforming to IEC 60529   |  |  |  |
| Vibration resistance                  | 0 gn (f = 10500 Hz) conforming to IEC 60068-2-6  |  |  |  |
| Shock resistance                      | 0 gn for 11 ms conforming to IEC 60068-2-27  |  |  |  |
| Resistance to electrostatic discharge | 4 kV (contact discharge) level 3 conforming to IEC 61000-4-2<br>8 kV (air discharge) level 3 conforming to IEC 61000-4-2 |  |  |  |
| Resistance to electromagnetic fields  | 10 V/m level 3 conforming to IEC 61000-4-3   |  |  |  |
| Resistance to fast transients         | 1 kV (signal ports) level 3 conforming to IEC 61000-4-4<br>2 kV (power ports) level 3 conforming to IEC 61000-4-4        |  |  |  |

### Offer Sustainability

| RoHS (date code: YYWW) | Compliant - since 0701 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity |
|------------------------|---|
| REACh                  | Reference not containing SVHC above the threshold   |
|                        | Reference not containing SVHC above the threshold   |

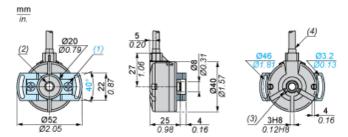
### Contractual warranty

| Warranty period | 18 months |
|-----------------|-----------|
|-----------------|-----------|

# Product data sheet **Dimensions Drawings**

# XCC1406TR11R

#### **Dimensions**



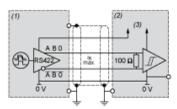
- (1) (2) (3) (4) 2 M4 holes at 120° for cross-headed screws on 30 PCD, depth: 6 mm Through shaft,  $\varnothing$  6 (H7)
- 2 M2 x 3 flat cross-headed locking screws
- Ø 6 cable, length 2 m, minimum bend radius: 30 mm

## Product data sheet Connections and Schema

# XCC1406TR11R

### Wiring Diagram

### Type R Output Stage



- Encoder Processing Supply 5 V (1) (2) (3)

# XCC1406TR11R

### Wiring Diagram

#### **Cable Connections**

| Wire colour   | BN             | RD | VT | BU | YE | OG             | GN | BK |
|---------------|----------------|----|----|----|----|----------------|----|----|
| Signal Supply | A <sup>-</sup> | +V | 0  | 0- | В  | B <sup>-</sup> | А  | 0V |

BN = Brown

RD = Red

VT = Violet

BU = Blue

YE = Yellow

OG = Orange

GN = Green

BK = Black