

# XCC1406PR03K

incremental encoder Ø 40 - solid shaft 6 mm -  
360 points - push-pull

Product availability: Non-Stock - Not normally stocked in distribution facility



## Main

|                              |                          |
|------------------------------|--------------------------|
| Range of product             | OsiSense XCC             |
| Encoder type                 | Incremental encoder      |
| Encoder name                 | XCC                      |
| Product specific application | -                        |
| Diameter                     | 1.57 in (40 mm)          |
| Shaft diameter               | 0.24 in (6 mm)           |
| Shaft type                   | Solid shaft              |
| Resolution                   | 360 points               |
| Output stage                 | Type K                   |
| Type of output stage         | Driver push-pull         |
| Electrical connection        | Cable radial shielded    |
| Cable length                 | 6.56 ft (2 m)            |
| Cable composition            | 8 x 0.14 mm <sup>2</sup> |
| [Us] rated supply voltage    | 11...30 V DC             |
| Enclosure material           | Zamak<br>Aluminium       |

## Complementary

|                          |                                                                                |
|--------------------------|--------------------------------------------------------------------------------|
| Shaft tolerance          | G7                                                                             |
| Cable outer diameter     | 0.24 in (6 mm)                                                                 |
| Residual ripple          | 500 mV                                                                         |
| Maximum revolution speed | 9000 rpm                                                                       |
| Shaft moment of inertia  | 0 lb.in <sup>2</sup> (10 g.cm <sup>2</sup> )                                   |
| Torque value             | 0.02 lbf.in (0.002 N.m)                                                        |
| Maximum load             | 1 daN axial<br>2 daN radial                                                    |
| Output frequency         | 100 kHz                                                                        |
| Number of channels       | 3                                                                              |
| Current consumption      | 0...75 mA (no-load)                                                            |
| Protection type          | Reverse polarity protection<br>Short-circuit protection                        |
| Maximum output current   | 40 mA                                                                          |
| Output level             | Low level: 1.5 V maximum (20 mA)<br>High level: V supply - 3 V minimum (20 mA) |
| Surge withstand          | 1 kV, level 2 conforming to IEC 61000-4-5                                      |
| Base material            | Zamak<br>Aluminium                                                             |
| Shaft material           | Stainless steel<br>Aluminium                                                   |
| Type of ball bearings    | 688AZZ1                                                                        |
| Product weight           | 0.78 lb(US) (0.355 kg)                                                         |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

|                                       |                                                                                                                          |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Marking                               | CE                                                                                                                       |
| Ambient air temperature for operation | -4...176 °F (-20...80 °C)                                                                                                |
| Ambient air temperature for storage   | -22...185 °F (-30...85 °C)                                                                                               |
| IP degree of protection               | IP54 conforming to IEC 60529                                                                                             |
| Vibration resistance                  | 10 gn (f = 10...500 Hz) conforming to IEC 60068-2-6                                                                      |
| Shock resistance                      | 30 gn 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  | 9.14 V/yd (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        |

## Ordering and shipping details

|                       |                       |
|-----------------------|-----------------------|
| Category              | 21581 - ENCODERS, XCC |
| Discount Schedule     | DS2                   |
| GTIN                  | 00785901986065        |
| Nbr. of units in pkg. | 1                     |
| Package weight(Lbs)   | 0.75                  |
| Returnability         | N                     |
| Country of origin     | FR                    |

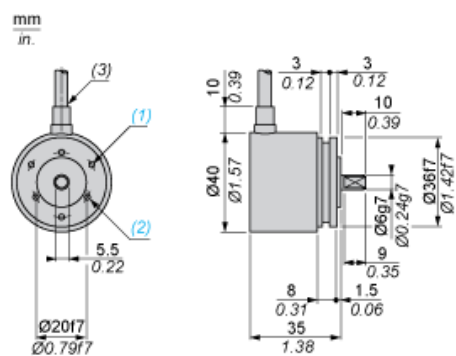
## Offer Sustainability

|                            |                                                                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                                       |
| California proposition 65  | WARNING: This product can expose you to chemicals including:                                                                                                                                            |
| - - - - - Substance 1      | Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and                                                                                                             |
| - - - - - Substance 2      | Diisodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.                                                                               |
| - - - - - More information | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                                                                                                           |

## Contractual warranty

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

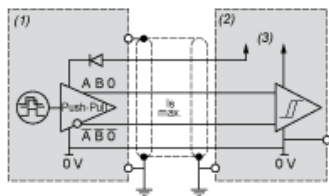
## Dimensions



- (1) 3 holes M3 x 0.5 at 120° on 28 PCD, depth: 5 mm
- (2) 3 holes M3 x 0.5 at 120° on 24 PCD, depth: 5 mm
- (3) Ø 6 cable, length 2 m, minimum bend radius: 30 mm

Wiring Diagram

Type K Output Stage



- (1) Encoder
- (2) Processing
- (3) Supply 11 V/30 V

Wiring Diagram

Cable Connections

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

- BN = Brown  
RD = Red  
VT = Violet  
BU = Blue  
YE = Yellow  
OG = Orange  
GN = Green  
BK = Black

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