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



# Main

| Range of product             | OsiSense XCC                        |
|------------------------------|-------------------------------------|
| Encoder type                 | Single turn absolute encoder        |
| Device short name            | XCC                                 |
| Product specific application | -                                   |
| Diameter                     | 2.28 in (58 mm)                     |
| Shaft diameter               | 0.55 in (14 mm)                     |
| Shaft type                   | Through shaft                       |
| Resolution                   | 8192 points                         |
| Electrical connection        | 1 male connector M23 radial 12 pins |
| Output stage                 | Type SG                             |
| Type of output stage         | SSI 13-bit gray                     |
| [Us] rated supply voltage    | 1130 V DC                           |
| Enclosure material           | Zamak                               |
|                              |                                     |

Complementary

| Complementary            |  |
|--------------------------|--|
| Shaft tolerance          | H7   |
| Residual ripple          | 500 mV   |
| Maximum revolution speed | 6000 rpm   |
| Shaft moment of inertia  | 0.01 lb.in² (22 g.cm²)                               |
| Torque value             | 0.05 lbf.in (0.006 N.m)                              |
| Maximum load             | 2 daN axial<br>5 daN radial                          |
| Output frequency         | 1001000 kHz  |
| Current consumption      | 0100 mA no-load                                      |
| Protection type          | Short-circuit protection Reverse polarity protection |
| Maximum output current   | 20 mA  |
| Physical interface       | R\$422   |
| Output level             | High level: 2 V minimum 20 mA                        |
| Surge withstand          | 1 kV level 2 IEC 61000-4-5                           |
| Base material            | Aluminium  |
| Shaft material           | Stainless steel                                      |
| Type of ball bearings    | 6803ZZ   |
| Product weight           | 0.95 lb(US) (0.43 kg)                                |
|                          |  |

### Environment

| Marking                               | CE   |                     |  |  |  |  |  |  |
|---------------------------------------|--|---------------------|--|--|--|--|--|--|
| Ambient air temperature for operation | -4194 °F (-2090 °C)  | -4194 °F (-2090 °C) |  |  |  |  |  |  |
| Ambient air temperature for storage   | -22185 °F (-3085 °C)   |                     |  |  |  |  |  |  |
| IP degree of protection               | IP65 IEC 60529   |                     |  |  |  |  |  |  |
| Vibration resistance                  | 10 gn (102000 Hz) IEC 60068-2-6  |                     |  |  |  |  |  |  |
| Shock resistance                      | 30 gn (11 ms) IEC 60068-2-27   |                     |  |  |  |  |  |  |
| Resistance to electrostatic discharge | 4 kV contact discharge level 3 IEC 61000-4-2<br>8 kV air discharge level 3 IEC 61000-4-2 |                     |  |  |  |  |  |  |

| Resistance to electromagnetic fields | 9.14 V/yd (10 V/m) level 3 IEC 61000-4-3  |  |  |  |  |  |
|--------------------------------------|---|--|--|--|--|--|
| Resistance to fast transients        | 1 kV signal ports level 3 IEC 61000-4-4<br>2 kV power ports level 3 IEC 61000-4-4 |  |  |  |  |  |

### Ordering and shipping details

| Category              | 21581 - ENCODERS, XCC |  |  |  |  |  |
|-----------------------|-----------------------|--|--|--|--|--|
| Discount Schedule     | DS2                   |  |  |  |  |  |
| GTIN                  | 003389119015547       |  |  |  |  |  |
| Nbr. of units in pkg. | 1                     |  |  |  |  |  |
| Package weight(Lbs)   | 0.950000000000007     |  |  |  |  |  |
| 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               | Di-isodecyl 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 www.p65warnings.ca.gov  |  |  |  |  |  |  |

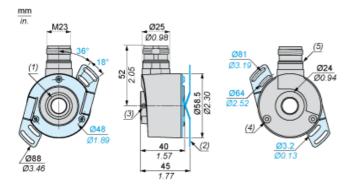
### Contractual warranty

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

### Product data sheet **Dimensions Drawings**

## XCC2514TS81SG

### **Dimensions**



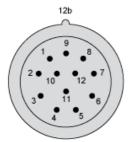
- Through shaft, Ø 14 (H7) (1)
- (2) Flexible mounting kit, 1 x XCCRF5N mounted
- 2 HC M4 x 4 locking screws
- (4) (5) Hole for M3 x 6 self-threading screw
- Nitrile seal

## XCC2514TS81SG

### Wiring Diagram

### M23, 12-pin Connector, Anticlockwise Connections

Male Connector on Encoder



| Pin number    | 1   | 2      | 3     | 4 | 5             | 6 | 7 | 8   | 9 | 10     | 11    | 12 |
|---------------|-----|--------|-------|---|---------------|---|---|-----|---|--------|-------|----|
| Signal Supply | 0 V | Data + | Clk + | R | Direction (1) | R | R | + V | R | Data - | Clk – | R  |

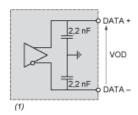
(1) Clockwise direction, 5 to 0 V

T: Anticlockwise direction, 5 to + V

R = Reserved (do not connect)

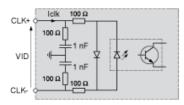
#### **Technical Description**

### RS 422 Data Output



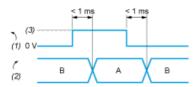
(1) Idata = 20 mA |VOD| > 2 V

### Isolated Clock Input



VID maximum: 5 V Iclk maximum: 15 mA

### **DIRECTION Input**



A: Anticlockwise B: Clockwise

(1) DIRECTION input

(2) DIRECTION of counting

(3) V supply

# **Mouser Electronics**

**Authorized Distributor** 

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Schneider Electric: XCC2514TS81SG