

# Product datasheet

Specifications



## bar-mounted contactor - TeSys LC1-BL - 2 poles - AC-1 440V 800 A - coil 48V DC

LC1BL32ED31

⚠ Discontinued on: 18-Nov-2021

⚠ Discontinued

### Main

|                                |                                             |
|--------------------------------|---------------------------------------------|
| Range                          | TeSys                                       |
| Product Name                   | TeSys B                                     |
| Product Or Component Type      | Contactors                                  |
| Device Short Name              | LC1BL                                       |
| Contactors Application         | Motor-heating-lighting                      |
| Utilisation Category           | AC-1                                        |
| Control Circuit Type           | DC                                          |
| Coil Type                      | Standard                                    |
| Poles Description              | 2P                                          |
| Pole Contact Composition       | 2 NO                                        |
| [Ie] Rated Operational Current | 800 A (at <40 °C) AC AC-1 for power circuit |
| Auxiliary Contact Composition  | 3 NO + 1 NC                                 |
| [Uc] Control Circuit Voltage   | 48 V DC                                     |

### Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control Circuit Voltage Limits              | Drop-out: 0.3...0.5 Uc<br>Operational: 0.85...1.1 Uc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Ui] Rated Insulation Voltage               | 1000 V - for power circuit conforming to IEC 60158-1<br>1000 V - for power circuit conforming to IEC 60947-4<br>1500 V - for power circuit conforming to VDE 0110 group C                                                                                                                                                                                                                                                                                                                                                            |
| Mounting Mode                               | Fixed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mounting Support                            | Notched mounting rails<br>Bar support bracket                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Tightening Torque                           | Power circuit: 21 N.m - on bars                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Ue] Rated Operational Voltage              | Power circuit: <= 1000 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Ith] Conventional Free Air Thermal Current | 800 A (at 40 °C) for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Irms Rated Making Capacity                  | 10000 A at 1000 V AC for power circuit conforming to IEC 60158-1<br>10000 A at 1000 V AC for power circuit conforming to IEC 60947-4                                                                                                                                                                                                                                                                                                                                                                                                 |
| Rated Breaking Capacity                     | 10000 A at 440 V for power circuit conforming to IEC 60158-1<br>10000 A at 440 V for power circuit conforming to IEC 60947-4<br>4000 A at 1000 V for power circuit conforming to IEC 60158-1<br>4000 A at 1000 V for power circuit conforming to IEC 60947-4<br>8000 A at 660...690 V for power circuit conforming to IEC 60158-1<br>8000 A at 660...690 V for power circuit conforming to IEC 60947-4<br>9000 A at 500 V for power circuit conforming to IEC 60158-1<br>9000 A at 500 V for power circuit conforming to IEC 60947-4 |

Disclaimer: 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

|                                |                                                                                                                             |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Associated Fuse Rating         | 1000 A gl at <= 440 V for power circuit<br>800 A aM at <= 440 V for power circuit<br>800 A gl at <= 440 V for power circuit |
| Average Impedance              | 0.18 mOhm - lth 800 A 50 Hz for power circuit                                                                               |
| Power Dissipation Per Pole     | 115 W AC-1 - lth 800 A                                                                                                      |
| Inrush Power In W              | 800 W                                                                                                                       |
| Hold-In Power Consumption In W | 20 W                                                                                                                        |
| Operating Time                 | 100...150 ms closing<br>20...40 ms opening                                                                                  |
| Mechanical Durability          | 1200000 cycles                                                                                                              |
| Maximum Operating Rate         | 120 cyc/h 55 °C                                                                                                             |
| Height                         | 486 mm                                                                                                                      |
| Width                          | 475 mm                                                                                                                      |
| Depth                          | 475 mm                                                                                                                      |
| Net Weight                     | 45 kg                                                                                                                       |

## Environment

|                                       |                                                                  |
|---------------------------------------|------------------------------------------------------------------|
| Standards                             | BS 5424<br>IEC 60947-4<br>NF C 63-110<br>IEC 60158-1<br>VDE 0660 |
| Product Certifications                | CSA<br>RINA<br>BV                                                |
| Protective Treatment                  | TC<br>TH                                                         |
| Ambient Air Temperature For Operation | -5...55 °C                                                       |
| Ambient Air Temperature For Storage   | -60...80 °C                                                      |
| Operating Altitude                    | 3000 m without derating                                          |

## Contractual warranty

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