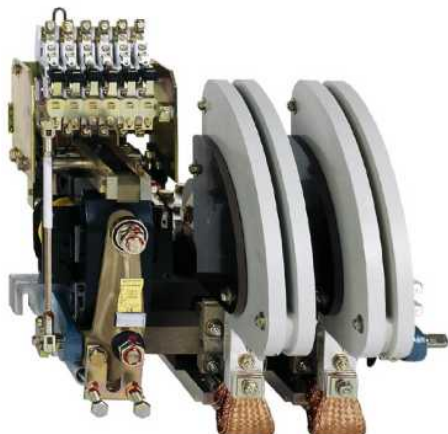


# LC1BL31S13

bar-mounted contactor - TeSys LC1-BL - 1 pole  
- AC-1 440V 800 A - coil 500V AC



## Main

|                               |                                                                               |
|-------------------------------|-------------------------------------------------------------------------------|
| Range of product              | TeSys B                                                                       |
| Product or component type     | Contactor                                                                     |
| Device short name             | LC1BL                                                                         |
| Contactor application         | Motor-heating-lighting                                                        |
| Utilisation category          | AC-1                                                                          |
| Control circuit type          | AC                                                                            |
| Coil type                     | Standard                                                                      |
| Poles description             | 1P                                                                            |
| Pole contact composition      | 1 NO                                                                          |
| [In] rated current            | 800 A ( $\leq 40\text{ }^{\circ}\text{C}$ ) AC network AC-1 for power circuit |
| Auxiliary contact composition | 1 NO + 3 NC                                                                   |
| [Uc] control circuit voltage  | 500 V AC 50...400 Hz                                                          |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control circuit voltage limits              | 0.85...1.1 Uc operational 50...400 Hz<br>0.3...0.5 Uc drop-out 50...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ui] rated insulation voltage               | 1500 V - for power circuit - conforming to VDE 0110 group C<br>1000 V - for power circuit - conforming to IEC 60947-4<br>1000 V - for power circuit - conforming to IEC 60158-1                                                                                                                                                                                                                                                                                                                                                      |
| Mounting mode                               | Fixed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mounting support                            | Bar support bracket<br>Notched mounting rails                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Tightening torque                           | Power circuit: 21 N.m - on bars                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| [Ue] rated operational voltage              | $\leq 1000\text{ V AC } 50/60\text{ Hz}$ for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| [Ith] conventional free air thermal current | 800 A at $\leq 40\text{ }^{\circ}\text{C}$ for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Irms rated making capacity                  | 10000 A at 1000 V AC for power circuit conforming to IEC 60947-4<br>10000 A at 1000 V AC for power circuit conforming to IEC 60158-1                                                                                                                                                                                                                                                                                                                                                                                                 |
| Rated breaking capacity                     | 9000 A at 500 V for power circuit conforming to IEC 60947-4<br>9000 A at 500 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>8000 A at 660...690 V for power circuit conforming to IEC 60158-1<br>4000 A at 1000 V for power circuit conforming to IEC 60947-4<br>4000 A at 1000 V for power circuit conforming to IEC 60158-1<br>10000 A at 440 V for power circuit conforming to IEC 60947-4<br>10000 A at 440 V for power circuit conforming to IEC 60158-1 |
| Associated fuse rating                      | 800 A gI at $\leq 440\text{ V}$ for power circuit<br>800 A aM at $\leq 440\text{ V}$ for power circuit<br>1000 A gI at $\leq 440\text{ V}$ for power circuit                                                                                                                                                                                                                                                                                                                                                                         |
| Average impedance                           | 0.18 mOhm at 50 Hz - Ith 800 A for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Power dissipation per pole                  | 115 W AC-1 - Ith 800 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Inrush power in VA                          | 620 VA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Hold-in power consumption in VA             | 10 VA 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating time                              | 50...100 ms opening<br>100...150 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mechanical durability                       | 1200000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating rate                              | 120 cyc/h at $\leq 55\text{ }^{\circ}\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Height                                      | 486 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Width                                       | 375 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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.

|                |        |
|----------------|--------|
| Depth          | 475 mm |
| Product weight | 32 kg  |

## Environment

|                                       |                                                                  |
|---------------------------------------|------------------------------------------------------------------|
| Standards                             | BS 5424<br>IEC 60158-1<br>IEC 60947-4<br>NF C 63-110<br>VDE 0660 |
| Product certifications                | BV<br>CSA<br>RINA                                                |
| Protective treatment                  | TH<br>TC                                                         |
| Ambient air temperature for operation | -5...55 °C                                                       |
| Ambient air temperature for storage   | -60...80 °C                                                      |
| Operating altitude                    | 3000 m without derating in temperature                           |

## Contractual warranty

|        |           |
|--------|-----------|
| Period | 18 months |
|--------|-----------|