

# Product datasheet

Specifications



## bar-mounted contactor - TeSys LC1-BL - 4 poles - AC-1 440V 800 A - coil 220V DC

LC1BL34MD31

⚠ Discontinued on: 1 Aug 2024

⚠ Discontinued

### Main

|                                |                                             |
|--------------------------------|---------------------------------------------|
| Range                          | TeSys                                       |
| Product name                   | TeSys B                                     |
| Product or component type      | Contactor                                   |
| Device short name              | LC1BL                                       |
| Contactor application          | Motor-heating-lighting                      |
| Utilisation category           | AC-1                                        |
| Control circuit type           | DC                                          |
| Coil type                      | Standard                                    |
| Poles description              | 4P                                          |
| Pole contact composition       | 4 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   | 220 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                            | Bar support bracket<br>Notched mounting rails                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 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              | 1400 W                                                                                                                      |
| Hold-in power consumption in W | 47 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                          | 790 mm                                                                                                                      |
| Depth                          | 475 mm                                                                                                                      |
| Net weight                     | 72 kg                                                                                                                       |

## Environment

|                                       |                                                                  |
|---------------------------------------|------------------------------------------------------------------|
| Standards                             | IEC 60158-1<br>NF C 63-110<br>IEC 60947-4<br>BS 5424<br>VDE 0660 |
| Product certifications                | RINA<br>BV<br>CSA                                                |
| 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                                          |



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |