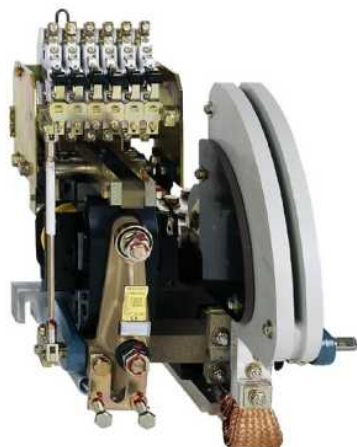


# LC1BL31ED40

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



## 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          | DC                                                                            |
| 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 | 4 NO                                                                          |
| [Uc] control circuit voltage  | 48 V DC                                                                       |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control circuit voltage limits              | 0.85...1.1 Uc operational<br>0.3...0.5 Uc drop-out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [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 W                           | 520 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Hold-in power consumption in W              | 10 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Operating time                              | 20...40 ms opening<br>100...150 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Mechanical durability                       | 1200000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating rate                              | 120 cyc/h at $\leq 55\text{ }^{\circ}\text{C}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Terminals description ISO n°1               | (3-4)P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Height                                      | 486 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Width                                       | 375 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                |        |
|----------------|--------|
| 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 |
|--------|-----------|