

# LC1D65008S5

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - ≤  
440 V 80 A - 500 V AC 50 Hz coil

Price\* : 338.78 GBP



## Main

|                                             |                                                                                                                                                                |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                       | TeSys                                                                                                                                                          |
| Product name                                | TeSys D                                                                                                                                                        |
| Product or component type                   | Contactor                                                                                                                                                      |
| Device short name                           | LC1D                                                                                                                                                           |
| Contactor application                       | Resistive load                                                                                                                                                 |
| Utilisation category                        | AC-1                                                                                                                                                           |
| Poles description                           | 4P                                                                                                                                                             |
| Power pole contact composition              | 2 NO + 2 NC                                                                                                                                                    |
| [Ue] rated operational voltage              | Power circuit: ≤ 690 V AC 25...400 Hz<br>Power circuit: ≤ 300 V DC                                                                                             |
| [Ie] rated operational current              | 80 A (at <60 °C) at ≤ 440 V AC AC-1 for power circuit                                                                                                          |
| Control circuit type                        | AC at 50 Hz                                                                                                                                                    |
| [Uc] control circuit voltage                | 500 V AC 50 Hz                                                                                                                                                 |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947                                                                                                                                   |
| Overvoltage category                        | III                                                                                                                                                            |
| [Ith] conventional free air thermal current | 80 A (at 60 °C) for power circuit                                                                                                                              |
| Irms rated making capacity                  | 1000 A at 440 V for power circuit conforming to IEC 60947                                                                                                      |
| Rated breaking capacity                     | 1000 A at 440 V for power circuit conforming to IEC 60947                                                                                                      |
| [Icw] rated short-time withstand current    | 520 A 40 °C - 10 s for power circuit<br>900 A 40 °C - 1 s for power circuit<br>110 A 40 °C - 10 min for power circuit<br>260 A 40 °C - 1 min for power circuit |
| Associated fuse rating                      | 125 A gG at ≤ 690 V coordination type 1 for power circuit<br>125 A gG at ≤ 690 V coordination type 2 for power circuit                                         |
| Average impedance                           | 1.5 mOhm - Ith 80 A 50 Hz for power circuit                                                                                                                    |
| [Ui] rated insulation voltage               | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Power circuit: 690 V conforming to IEC 60947-4-1                                    |
| Electrical durability                       | 1.4 Mcycles 80 A AC-1 at Ue ≤ 440 V                                                                                                                            |
| Power dissipation per pole                  | 9.6 W AC-1                                                                                                                                                     |
| Safety cover                                | Without                                                                                                                                                        |
| Mounting support                            | Plate                                                                                                                                                          |

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

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          | Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Standards                | CSA C22.2 No 14<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product certifications   | GOST<br>GL<br>CCC<br>UL<br>CSA<br>BV<br>LROS (Lloyds register of shipping)<br>DNV<br>RINA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Connections - terminals  | Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> flexible without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> flexible without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> flexible with cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> flexible with cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> solid without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> solid without cable end |
| Tightening torque        | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm<br>Power circuit: 5 N.m - on screw clamp terminals - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating time           | 4...19 ms opening<br>12...26 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mechanical durability    | 6 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Maximum operating rate   | 3600 cyc/h 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Complementary

|                                 |                                                                                             |
|---------------------------------|---------------------------------------------------------------------------------------------|
| Coil technology                 | Without built-in suppressor module                                                          |
| Control circuit voltage limits  | Operational: 0.8...1.1 Uc AC 50 Hz (at 60 °C)<br>Drop-out: 0.3...0.6 Uc AC 50 Hz (at 60 °C) |
| Inrush power in VA              | 160 VA 50 Hz cos phi 0.75 (at 20 °C)                                                        |
| Hold-in power consumption in VA | 15 VA 50 Hz cos phi 0.3 (at 20 °C)                                                          |
| Heat dissipation                | 4...5 W at 50 Hz                                                                            |

## Environment

|                                                       |                                                                                                                                                                                    |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection                               | IP20 front face conforming to IEC 60529                                                                                                                                            |
| Protective treatment                                  | TH conforming to IEC 60068-2-30                                                                                                                                                    |
| Pollution degree                                      | 3                                                                                                                                                                                  |
| Ambient air temperature for operation                 | -5...60 °C                                                                                                                                                                         |
| Ambient air temperature for storage                   | -60...80 °C                                                                                                                                                                        |
| Permissible ambient air temperature around the device | -40...70 °C at Uc                                                                                                                                                                  |
| Operating altitude                                    | 3000 m without                                                                                                                                                                     |
| Fire resistance                                       | 850 °C conforming to IEC 60695-2-1                                                                                                                                                 |
| Flame retardance                                      | V1 conforming to UL 94                                                                                                                                                             |
| Mechanical robustness                                 | Vibrations contactor open: 2 Gn, 5...300 Hz<br>Vibrations contactor closed: 4 Gn, 5...300 Hz<br>Shocks contactor closed: 15 Gn for 11 ms<br>Shocks contactor open: 10 Gn for 11 ms |
| Height                                                | 127 mm                                                                                                                                                                             |

|                |         |
|----------------|---------|
| Width          | 85 mm   |
| Depth          | 125 mm  |
| Product weight | 1.45 kg |

#### Contractual warranty

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