LC1DT25P7
TeSys D contactor - 4P(4 NO) - AC-1-<= 440 V 25 A - 230 V AC $50 / 60 \mathrm{~Hz}$ coil


| 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 |
| Pole contact composition | 4 NO |
| [Ue] rated operational voltage | <= 690 V AC $25 \ldots 400 \mathrm{~Hz}$ for power circuit <=300 V DC for power circuit |
| [le] rated operational current | $25 \mathrm{~A}\left(<=60^{\circ} \mathrm{C}\right)$ at $<=440$ V AC AC-1 for power circuit |
| Control circuit type | AC 50/60 Hz |
| [Uc] control circuit voltage | 230 V AC 50/60 Hz |
| Auxiliary contact composition | $1 \mathrm{NO}+1 \mathrm{NC}$ |
| [Uimp] rated impulse withstand voltage | Conforming to IEC 60947 |
| Overvoltage category | III |
| [lth] conventional free air thermal current | 25 A at $<=60^{\circ} \mathrm{C}$ for power circuit 10 A at $<=60^{\circ} \mathrm{C}$ for signalling circuit |
| Irms rated making capacity | 250 A at 440 V for power circuit conforming to IEC 60947 <br> 140 A AC for signalling circuit conforming to IEC 60947-5-1 <br> 250 A DC for signalling circuit conforming to IEC 60947-5-1 |
| Rated breaking capacity | 250 A at 440 V for power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand current | $105 \mathrm{~A}<=40^{\circ} \mathrm{C} 10$ s power circuit $210 \mathrm{~A}<=40^{\circ} \mathrm{C} 1$ s power circuit $30 \mathrm{~A}<=40^{\circ} \mathrm{C} 10 \mathrm{~min}$ power circuit $61 \mathrm{~A}<=40^{\circ} \mathrm{C} 1 \mathrm{~min}$ power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit |
| Associated fuse rating | 25 A gG at <= 690 V coordination type 2 for power circuit <br> 40 A gG at <= 690 V coordination type 1 for power circuit <br> 10 A gG for signalling circuit conforming to IEC 60947-5-1 |
| Average impedance | 2.5 mOhm at 50 Hz - Ith 25 A for power circuit |
| [Ui] rated insulation voltage | 600 V for power circuit certifications CSA <br> 600 V for power circuit certifications UL <br> 690 V for power circuit conforming to IEC 60947-4- <br> 1 <br> 690 V for signalling circuit conforming to IEC <br> 60947-1 <br> 600 V for signalling circuit certifications CSA <br> 600 V for signalling circuit certifications UL |
| Electrical durability | 0.8 Mcycles $25 \mathrm{~A} \mathrm{AC-1} \mathrm{at} \mathrm{Ue}<=440 \mathrm{~V}$ |
| Power dissipation per pole | 1.56 W AC-1 |
| Protective cover | With |
| Mounting support | Plate <br> Rail |


| Standards | UL 508 <br> 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 |
| :---: | :---: |
| Product certifications | BV <br> CCC <br> CSA <br> DNV <br> GL <br> GOST <br> LROS (Lloyds register of shipping) <br> RINA <br> UL |
| Connections - terminals | Control circuit : screw clamp terminals 2 cable(s) <br> $1 . .2 .5 \mathrm{~mm}^{2}$ - cable stiffness: flexible - with cable end <br> Power circuit : screw clamp terminals 1 cable(s) <br> $1 . .4 \mathrm{~mm}^{2}$ - cable stiffness: flexible - with cable end <br> Control circuit : screw clamp terminals 1 cable(s) <br> $1 . .4 \mathrm{~mm}^{2}$ - cable stiffness: flexible - without cable end <br> Control circuit : screw clamp terminals 2 cable(s) <br> $1 . .4 \mathrm{~mm}^{2}$ - cable stiffness: flexible - without cable end <br> Control circuit : screw clamp terminals 1 cable(s) <br> $1 . .4 \mathrm{~mm}^{2}$ - cable stiffness: flexible - with cable end <br> Control circuit : screw clamp terminals 1 cable(s) <br> $1 . . .4 \mathrm{~mm}^{2}$ - cable stiffness: solid - without cable end <br> Control circuit : screw clamp terminals 2 cable(s) <br> $1 . . .4 \mathrm{~mm}^{2}$ - cable stiffness: solid - without cable end <br> Power circuit : screw clamp terminals 1 cable(s) <br> $1 . .4 \mathrm{~mm}^{2}$ - cable stiffness: flexible - without cable end <br> Power circuit : screw clamp terminals 2 cable(s) <br> $1 . .4 \mathrm{~mm}^{2}$ - cable stiffness: flexible - without cable end <br> Power circuit : screw clamp terminals 2 cable(s) <br> $1 . .2 .5 \mathrm{~mm}^{2}$ - cable stiffness: flexible - with cable end <br> Power circuit : screw clamp terminals 1 cable(s) <br> $1 . . .4 \mathrm{~mm}^{2}$ - cable stiffness: solid - without cable end <br> Power circuit : screw clamp terminals 2 cable(s) <br> $1 . . .4 \mathrm{~mm}^{2}$ - cable stiffness: solid - without cable end |
| Tightening torque | Power circuit : 1.7 N.m - on screw clamp terminals - with screwdriver flat $\varnothing 6$ mm <br> Power circuit : 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 <br> Control circuit : 1.7 N.m - on screw clamp terminals - with screwdriver flat $\varnothing 6 \mathrm{~mm}$ Control circuit : 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 |
| Operating time | $4 \ldots 19 \mathrm{~ms}$ opening $12 . . .22 \mathrm{~ms}$ closing |
| Safety reliability level | B10d $=1369863$ cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d $=20000000$ cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 15 Mcycles |
| Operating rate | $3600 \mathrm{cyc} / \mathrm{h}$ at $<=60^{\circ} \mathrm{C}$ |

## Complementary

| Coil technology | Without built-in suppressor module |
| :--- | :--- |
| Control circuit voltage limits | $0.3 \ldots 0.6 \mathrm{Uc}$ drop-out at $60^{\circ} \mathrm{C}, \mathrm{AC} 50 / 60 \mathrm{~Hz}$ |
|  | $0.8 \ldots 1.1 \mathrm{Uc}$ operational at $60^{\circ} \mathrm{C}, \mathrm{AC} 50 \mathrm{~Hz}$ |
| Inrush power in VA | $0.85 \ldots . .1 .1 \mathrm{Uc}$ operational at $60^{\circ} \mathrm{C}, \mathrm{AC} 60 \mathrm{~Hz}$ |


| Hold-in power consumption in VA | 7.5 VA at $20^{\circ} \mathrm{C}(\cos \phi 0.3) 60 \mathrm{~Hz}$ <br>  <br> 7 VA at $20^{\circ} \mathrm{C}(\cos \phi 0.3) 50 \mathrm{~Hz}$ |
| :--- | :--- |
| Heat dissipation | $2 \ldots .3 \mathrm{~W}$ at $50 / 60 \mathrm{~Hz}$ |
| Auxiliary contacts type | Type mechanically linked (1 NO +1 NC) conforming to IEC 60947-5-1 <br>  <br> Type mirror contact (1 NC) conforming to IEC 60947-4-1 |
| Signalling circuit frequency | $25 \ldots 400 \mathrm{~Hz}$ |
| Minimum switching current | 5 mA for signalling circuit |
| Minimum switching voltage | 17 V for signalling circuit |
| Non-overlap time | 1.5 ms on de-energisation (between NC and NO contact) |
|  | 1.5 ms on energisation (between NC and NO contact) |
| Insulation resistance | $>10 \mathrm{MOhm}$ for signalling circuit |

## 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 | $-5 \ldots 60^{\circ} \mathrm{C}$ |
| ambient air temperature for storage | $-60 \ldots .80^{\circ} \mathrm{C}$ |
| permissible ambient air temperature around the device | $-40 \ldots .0^{\circ} \mathrm{C}$ at Uc |
| operating altitude | 3000 m without derating |
| fire resistance | $850^{\circ} \mathrm{C}$ conforming to IEC $60695-2-1$ |
| flame retardance | V1 conforming to UL 94 |
| mechanical robustness | Vibrations contactor open $2 \mathrm{Gn}, 5 \ldots . .300 \mathrm{~Hz}$ |
|  | Vibrations contactor closed $4 \mathrm{Gn}, 5 \ldots 300 \mathrm{~Hz}$ |
|  | Shocks contactor open 10 Gn for 11 ms |
| height | Shocks contactor closed 15 Gn for 11 ms |
| width | 85 mm |
| depth | 45 mm |
| product weight | 92 mm |

Offer Sustainability

| Sustainable offer status | Green Premium product |
| :--- | :--- |
| RoHS (date code: YYWW) | Compliant - since 0702 - Schneider Electric declaration of conformity |
| REACh | Reference not containing SVHC above the threshold |
| Product environmental profile | Available |
| Product end of life instructions | Available |

