

Data Sheet for Article: LTD25030--

Contactor 22kW/400V/50A, coil 24VAC

Size type 2, Product category Power contactor, Rated current 50A, Coil voltage 24V



Technical Data

Size type	2
Product category	Power contactor
Coil voltage	24V
Rated current (A)	50
Standard	IEC EN 60947-4-1 IEC EN 60947-5-1 UL 508
Lifespan, mechanical AC operated	10000000 Operations
Operating frequency, mechanical AC operated	3600 Operations/h
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature Open (°C)	-25 / +60
Ambient temperature Enclosed (°C)	-25 / + 40
Ambient temperature Storage (°C)	-40 / +80
Mech. shock resistance Half-sinusoidal shock 10ms	-
Main contacts NO contact (g)	10
Auxiliary contacts NO contact (g)	7
Auxiliary contacts NC contact (g)	5
Mech. shock resist. Half-sinusoidal shock horizon.	-

Technical Data - continued

Main contacts N/O contact (g)	10
Auxiliary contacts N/O contact (g)	7
Auxiliary contacts N/C contact (g)	5
IP Rating	IP00
When actuated from front (EN 50274)	Finger and back-of-hand proof
Weight (kg)	-
AC-operated	0,87
Terminal cross-section main contact (mm ²)	-
Solid [main cable] (mm ²)	1 x (0,75 - 16) 2 x (0,75 - 16)
Flexible with ferrule [main cable] (mm ²)	1 x (0,75 - 35) 2 x (0,75 - 25)
Stranded [main cable] (mm ²)	1 x (16 - 50) 2 x (16 - 35)
Solid or stranded [main cable] (AWG)	single 14 - 1, double 14 - 2
Band [lamella x width x thickness] (mm)	2 x (6 x 9 x 0.8)
Stripping length [main cable] (mm)	14
Terminal screw [main cable]	M6
Tightening torque [main contact] (Nm)	3,30
Tools [main cable]	-
Philips/Pozidriv screwdriver [main cable]	PZ 2
Standard screwdriver [main cable] (mm)	0,8 x 5,5 1 x 6
Allen wrench [main cable] (mm)	5
Terminal capacity auxiliary contact (mm ²)	-
Solid [auxiliary cables] (mm ²)	1 x (0,75 - 4) 2 x (0,75 - 2,5)
Flexible with ferrule [auxiliary cables] (mm ²)	1 x (0,75 - 2,5) 2 x (0,75 - 2,5)
Solid or stranded [auxiliary cables] (AWG)	18 - 14
Stripping length [auxiliary cables] (mm)	10
Terminal screw [auxiliary cables]	M3,5
Tightening torque [auxiliary contact] (Nm)	1,20
Tools [auxiliary cables]	-
Philips/Pozidriv screwdriver [auxiliary cables]	PZ 2
Standard screwdriver [auxiliary cables]	0,8 x 5,5 1 x 6
Rated impulse withstand voltage [Uimp] (V)	8000
Overvoltage category/pollution degree	III/3
Rated insulation voltage [Ui] (V)	690
Rated operational voltage (V)	690
Safe isolation to EN 61140	-
Between coil and contacts (VAC)	440
Between the contacts (VAC)	440
Making capacity p.f. to IEC/EN 60947 up to 690 V (A)	700
Breaking capacity	-
220 V 230 V (A)	500
380 V 400 V (A)	500

Technical Data - continued

500 V (A)	500
660 V 690 V (A)	320
Short circuit withstand	-
Short-circuit protection maximum fuse	-
Type „2“ coordination 400 V [gG/gL 500 V] (A)	80
Type „2“ coordination 690 V [gG/gL 690 V] (A)	63
Type „1“ coordination 400 V [gG/gL 500 V] (A)	160
Type „1“ coordination 690 V [gG/gL 690 V] (A)	80
AC-1	-
AC-1 Rated operational current	-
Conventional free air therm. current 3pole 50-60Hz	-
Open at 40 °C [I _{th} =I _e] (A)	80
Open at 50 °C [I _{th} =I _e] (A)	71
Open at 55 °C [I _{th} =I _e] (A)	68
Open at 60 °C [I _{th} =I _e] (A)	65
Enclosed [I _{th}] (A)	58
Convent. free air thermal cur. 1 pole Open[I _{th}] (A)	162
Convent. free air thermal cur. 1 pole Enclosed[I _{th}] (A)	145
AC-3	-
AC-3 Rated operational current	-
AC-3 Open, 3-pole: 50 – 60 Hz 220 V 230 V [I _e] (A)	50
AC-3 Open, 3-pole: 50 – 60 Hz 240 V [I _e] (A)	50
AC-3 Open, 3-pole: 50 – 60 Hz 380 V 400 V [I _e] (A)	50
AC-3 Open, 3-pole: 50 – 60 Hz 415 V [I _e] (A)	50
AC-3 Open, 3-pole: 50 – 60 Hz 440 V [I _e] (A)	50
AC-3 Open, 3-pole: 50 – 60 Hz 500 V [I _e] (A)	50
AC-3 Open, 3-pole: 50 – 60 Hz 660 V 690 V [I _e] (A)	32
AC-3 Motor rating	-
AC-3 220 V 230 V [P] (kW)	15,5
AC-3 240V [P] (kW)	17
AC-3 380 V 400 V [P] (kW)	22
AC-3 415 V [P] (kW)	30
AC-3 440 V [P] (kW)	32
AC-3 500 V [P] (kW)	36
AC-3 660 V 690 V [P] (kW)	30
AC-4	-
AC-4 Rated operational current	-
AC-4 Open, 3-pole, 50 – 60 Hz 220 V 230 V [I _e] (A)	21
AC-4 Open, 3-pole, 50 – 60 Hz 240 V [I _e] (A)	21
AC-4 Open, 3-pole, 50 – 60 Hz 380 V 400 V [I _e] (A)	21
AC-4 Open, 3-pole, 50 – 60 Hz 415 V [I _e] (A)	21
AC-4 Open, 3-pole, 50 – 60 Hz 440 V [I _e] (A)	21
AC-4 Open, 3-pole, 50 – 60 Hz 500 V [I _e] (A)	21

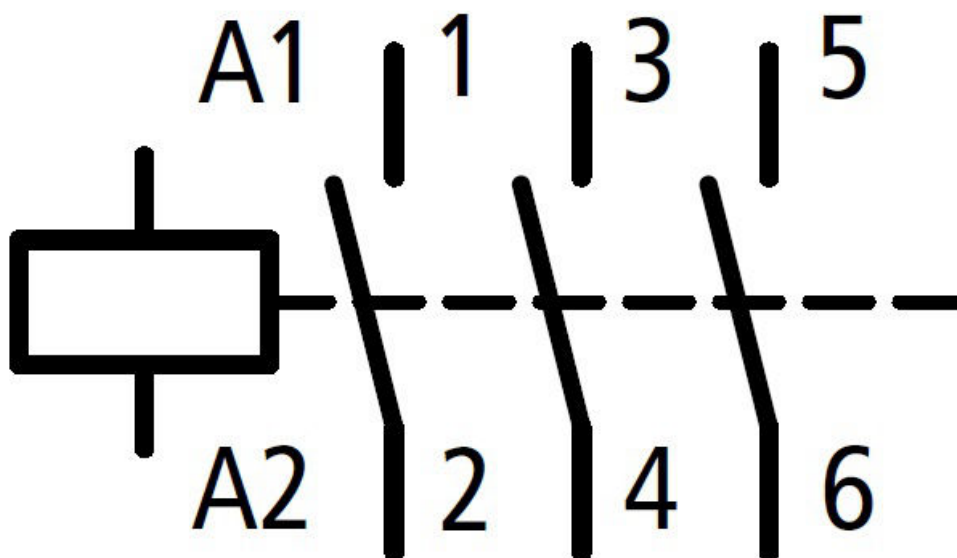
Technical Data - continued

AC-4 Open, 3-pole, 50 – 60 Hz 660 V 690 V [I _e] (A)	17
AC-4 Motor rating	-
AC-4 220 V 230 V [P] (kW)	6
AC-4 240 V [P] (kW)	6,5
AC-4 380 V 400 V [P] (kW)	10
AC-4 415 V [P] (kW)	11
AC-4 440 V [P] (kW)	12
AC-4 500 V [P] (kW)	13
AC-4 660 V 690 V [P] (kW)	14
DC-1	-
DC-1 Rated operational current	-
DC-1 Open	-
60 V [I _e] (A)	60
110 V [I _e] (A)	50
220 V [I _e] (A)	45
Current heat loss	-
3-polig, bei I _{th} [60°] (W)	16,7
Bei I _e nach AC-3/400 V (W)	9,9
Impedance per pole (mΩ)	1,9
Magnet systems	-
Voltage tolerance AC operated [Pick-up] (x U _c)	0,8 - 1,1
Voltage tolerance AC operated [Drop-out] (x U _c)	0,3 - 0,6
Duty factor (% DF)	100
Changeover time at 100 % U _s (Recommended value)	-
Main contacts	-
AC operated closing delay	12 - 18
AC operated opening delay	8 - 13
Arcing time (ms)	10
EMC Emitted interference	according to EN 60947-1
EMC Interference immunity	according to EN 60947-1
Rating data for approved types	-
Rated breaking capacity (kA)	-
Maximum motor rating Three-phase	-
Three-phase 200 V 208 V (HP)	15
Three-phase 230 V 240 V (HP)	20
Three-phase 460 V 480 V (HP)	40
Three-phase 575 V 600 V (HP)	50
Maximum motor rating Single-phase	-
Single-phase 115 V 120 V (HP)	3
Single-phase 230 V 240 V (HP)	10
Maximum motor rating General use (A)	80
Short Circuit Current Rating	-
Basic Rating SCCR (kA)	10

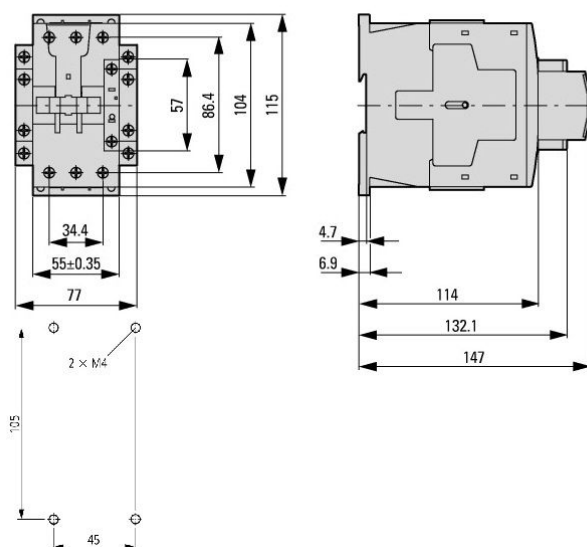
Technical Data - continued

Basic Rating max. Fuse (A)	250
Basic Rating max. CB (A)	250
480 V High Fault SCCR (fuse) (kA)	30/100
480 V High Fault max. Fuse (A)	250/150 Class J
480 V High Fault SCCR (CB) (kA)	65
480 V High Fault max. CB (A)	100
600 V High Fault SCCR (fuse) (kA)	30/100
600 V High Fault max. Fuse (A)	250/150 Class J
600 V High Fault SCCR (CB) (kA)	30
600 V High Fault max. CB (A)	250
Special Purpose Ratings	-
Elec. Discharge Lamps (Ballast) 480V 60Hz 3phase (A)	79
Elec. Discharge Lamps (Ballast) 277V 60Hz 1phase (A)	79
Elec. Discharge Lamps (Ballast) 600V 60Hz 3phase (A)	79
Elec. Discharge Lamps (Ballast) 347V 60Hz 1phase (A)	79
Incandescent Lamps (Tungsten) 480V 60Hz 3phase (A)	74
Incandescent Lamps (Tungsten) 277V 60Hz 1phase (A)	74
Incandescent Lamps (Tungsten) 600V 60Hz 3phase (A)	74
Incandescent Lamps (Tungsten) 347V 60Hz 1phase (A)	74
Resistance Air Heating 480V 60Hz 3phase (A)	79
Resistance Air Heating 277V 60Hz 1phase (A)	79
Resistance Air Heating 600V 60Hz 3phase (A)	79
Resistance Air Heating 347V 60Hz 1phase (A)	79
Refrig. Control (CSA only) LRA 480V 60Hz 3phase (A)	540
Refrig. Control (CSA only) FLA 480V 60Hz 3phase (A)	90
Refrig. Control (CSA only) LRA 600V 60Hz 3phase (A)	420
Refrig. Control (CSA only) FLA 600V 60Hz 3phase (A)	70
Def. Purpose Ratings(100,000 cycles acc.to UL1995)	-
LRA 480V 60Hz 3phase (A)	480
FLA 480V 60Hz 3phase (A)	80
Elevator Control 200V 60Hz 3phase (HP)	10
Elevator Control 200V 60Hz 3phase (A)	32,20
Elevator Control 240V 60Hz 3phase (HP)	15
Elevator Control 240V 60Hz 3phase (A)	42
Elevator Control 480V 60Hz 3phase (HP)	30
Elevator Control 480V 60Hz 3phase (A)	40
Elevator Control 600V 60Hz 3phase (HP)	40
Elevator Control 600V 60Hz 3phase (A)	41

Circuit diagram: Contactor 22kW/400V/50A, coil 24VAC



Dimensioned drawing: Contactor 22kW/400V/50A, coil 24VAC



Dimensioned drawing: Contactor 22kW/400V/50A, coil 24VAC

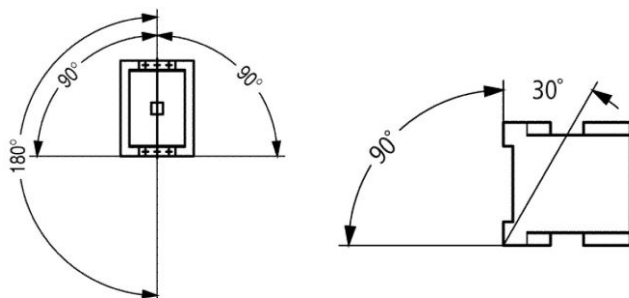


Diagram: Contactor 22kW/400V/50A, coil 24VAC

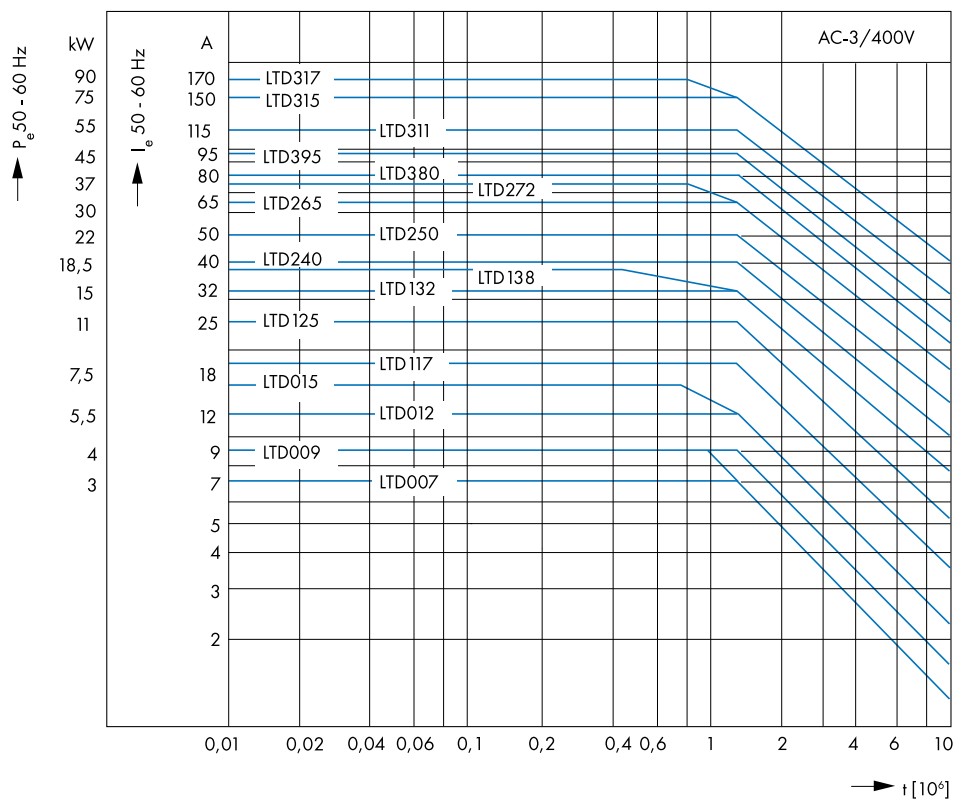


Diagram: Contactor 22kW/400V/50A, coil 24VAC

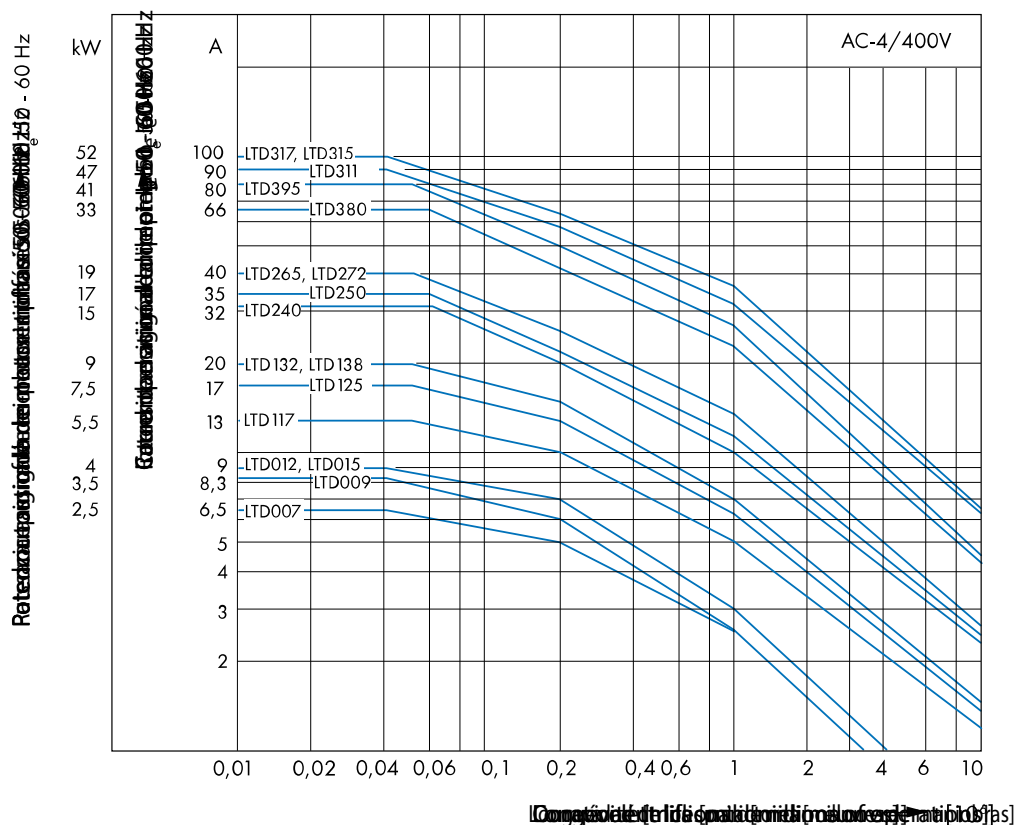
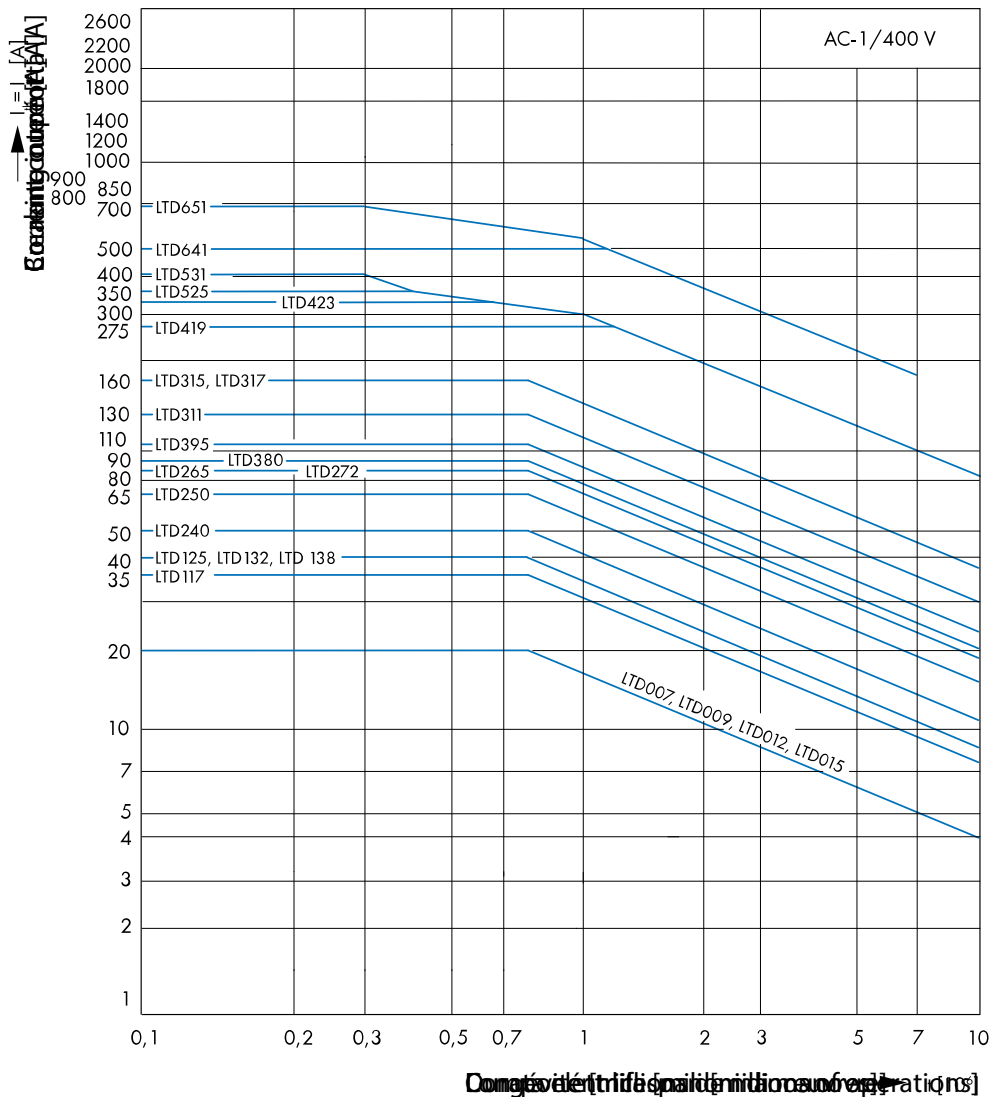


Diagram: Contactor 22kW/400V/50A, coil 24VAC



Article Table

DESCRIPTION	Order No.
Contactor 22kW/400V/50A, coil 24VAC	LTD25030
Size type 2, Product category Power contactor, Rated current 50A, Coil voltage 24V	
Optional Accessories	
RC-suppressor für for contactors size 2-3, 110-240VAC	LTD25030
Size type 3, Coil voltage 127-240V, Accessories Current limiter module	LTD25030
Varistor-suppressor for contactors size 2-3, 24-48VAC	LTD25030
Size type 3, Coil voltage 24-48V, Accessories Current limiter module	LTD25030
Varistor-suppressor for contactors size 2-3, 48-130VAC	LTD25030
Size type 3, Coil voltage 110V, Accessories Current limiter module	LTD25030

Article Table

DESCRIPTION	Order No.
Optional Accessories	
Varistor-suppressor for contactors size 2-3, 130-240VAC Size type 3, Coil voltage 127-240V, Accessories Current limiter module	LTZ30004
Mechanical interlock for contactors size 2 Size type 2, Accessories Locking device	LTZ2W001
Reversing wiring set for contactors size 2 Size type 2, Accessories el. Additional component	LTZ2W002
Connector for contactors size 0-2 Size type 1, Accessories Connection link	LTZ10005
Auxiliary contact for contactor size 2-3, 2 NO Size type 3, Accessories Auxiliary contacts	LTZ3D420
Auxiliary contact for contactor size 2-3, 1 NO 1 NC Size type 3, Accessories Auxiliary contacts	LTZ3D411
Auxiliary contact for contactor size 2-3, 2 NC Size type 3, Accessories Auxiliary contacts	LTZ3D402
Auxiliary contact for contactor size 2-3, 4 NO Size type 3, Accessories Auxiliary contacts	LTZ3D140
Auxiliary contact for contactor size 2-3, 3 NO 1 NC Size type 3, Accessories Auxiliary contacts	LTZ3D131
Auxiliary contact for contactor size 2-3, 2 NO 2 NC Size type 3, Accessories Auxiliary contacts	LTZ3D122
Auxiliary contact for contactor size 2-3, 1 NO 3 NC Size type 3, Accessories Auxiliary contacts	LTZ3D113
Auxiliary contact for contactor size 2-3, 4 NC Size type 3, Accessories Auxiliary contacts	LTZ3D104
Aux contact for contactor S 2-4, 1 NO 1 NC, lateral 1. level Size type 4, Accessories Auxiliary contacts	LTZ3D711
Aux contact for contactor S 2-4, 1 NO 1 NC, lateral 2. level Size type 4, Accessories Auxiliary contacts	LTZ3D811