

Data Sheet for Article: LTD12513--

# Contactors 11kW/400V/25A, 1 NO, coil 230VAC

Size 1



## Technical Data

Standards	EN 60947-4-1, EN 60947-5-1, IEC 60947-4-1, IEC 60947-5-1, UL 508
Lifespan, mechanical AC operated	10000000 Operations
Operating frequency, mechanical AC operated	5000 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.	-
Main contacts N/O contact (g)	6,9
Auxiliary contacts N/O contact (g)	5,3
Auxiliary contacts N/C contact (g)	3,5

## Technical Data - continued

IP Rating	IPO0
Protection against direct contact	-
When actuated from front (EN 50274)	Finger and back-of-hand proof
Weight (kg)	-
AC-operated	0,43
Terminal cross-section main contact (mm <sup>2</sup> )	-
Solid [main cable] (mm <sup>2</sup> )	1 x (0,75 - 16)   2 x (0,75 - 10)
Flexible with ferrule [main cable] (mm <sup>2</sup> )	1 x (0,75 - 16)   2 x (0,75 - 10)
Stranded [main cable] (mm <sup>2</sup> )	1 x 16
Solid or stranded [main cable] (AWG)	single 18 - 6, double 18 - 8
Stripping length [main cable] (mm)	10
Terminal screw [main cable]	M5
Tightening torque [main contact] (Nm)	3,2
Tools [main cable]	-
Philips/Pozidriv screwdriver [main cable]	PZ 2
Standard screwdriver [main cable] (mm)	0,8 x 5,5 1 x 6
Terminal capacity auxiliary contact (mm <sup>2</sup> )	-
Solid [auxiliary cables] (mm <sup>2</sup> )	1 x (0,75 - 4)   2 x (0,75 - 2,5)
Flexible with ferrule [auxiliary cables] (mm <sup>2</sup> )	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)	350
Breaking capacity	-
220 V 230 V (A)	250
380 V 400 V (A)	250
500 V (A)	250
660 V 690 V (A)	150
Short circuit withstand (kA)	-
Short-circuit protection maximum fuse	-

## Technical Data - continued

Type „2“ coordination 400 V [gG/gL 500 V] (A)	35
Type „2“ coordination 690 V [gG/gL 690 V] (A)	35
Type „1“ coordination 400 V [gG/gL 500 V] (A)	100
Type „1“ coordination 690 V [gG/gL 690 V] (A)	50
AC-1	-
AC-1 Rated operational current	-
Conventional free air therm. current 3pole 50-60Hz	-
Open at 40 °C [I <sub>th</sub> =I <sub>e</sub> ] (A)	45
Open at 50 °C [I <sub>th</sub> =I <sub>e</sub> ] (A)	43
Open at 55 °C [I <sub>th</sub> =I <sub>e</sub> ] (A)	42
Open at 60 °C [I <sub>th</sub> =I <sub>e</sub> ] (A)	40
Enclosed [I <sub>th</sub> ] (A)	36
Convent. free air thermal cur. 1pole Open[I <sub>th</sub> ] (A)	100
Convent. free air thermal cur. 1pole Enclosed[I <sub>th</sub> ] (A)	90
AC-3	-
AC-3 Rated operational current	-
AC-3 Open, 3-pole: 50 – 60 Hz 220 V 230 V [I <sub>e</sub> ] (A)	25
AC-3 Open, 3-pole: 50 – 60 Hz 240 V [I <sub>e</sub> ] (A)	25
AC-3 Open, 3-pole: 50 – 60 Hz 380 V 400 V [I <sub>e</sub> ] (A)	25
AC-3 Open, 3-pole: 50 – 60 Hz 415 V [I <sub>e</sub> ] (A)	25
AC-3 Open, 3-pole: 50 – 60 Hz 440 V [I <sub>e</sub> ] (A)	25
AC-3 Open, 3-pole: 50 – 60 Hz 500 V [I <sub>e</sub> ] (A)	25
AC-3 Open, 3-pole: 50 – 60 Hz 660 V 690 V [I <sub>e</sub> ] (A)	15
AC-3 Motor rating	-
AC-3 220 V 230 V [P] (kW)	7,5
AC-3 240V [P] (kW)	8,5
AC-3 380 V 400 V [P] (kW)	11
AC-3 415 V [P] (kW)	14,5
AC-3 440 V [P] (kW)	15,5
AC-3 500 V [P] (kW)	17,5
AC-3 660 V 690 V [P] (kW)	14
AC-4	-
AC-4 Rated operational current	-
AC-4 Open, 3-pole, 50 – 60 Hz 220 V 230 V [I <sub>e</sub> ] (A)	13
AC-4 Open, 3-pole, 50 – 60 Hz 240 V [I <sub>e</sub> ] (A)	13
AC-4 Open, 3-pole, 50 – 60 Hz 380 V 400 V [I <sub>e</sub> ] (A)	13
AC-4 Open, 3-pole, 50 – 60 Hz 415 V [I <sub>e</sub> ] (A)	13
AC-4 Open, 3-pole, 50 – 60 Hz 440 V [I <sub>e</sub> ] (A)	13
AC-4 Open, 3-pole, 50 – 60 Hz 500 V [I <sub>e</sub> ] (A)	13
AC-4 Open, 3-pole, 50 – 60 Hz 660 V 690 V [I <sub>e</sub> ] (A)	10
AC-4 Motor rating	-
AC-4 220 V 230 V [P] (kW)	3,5
AC-4 240 V [P] (kW)	4

## Technical Data - continued

AC-4 380 V 400 V [P] (kW)	6
AC-4 415 V [P] (kW)	6,5
AC-4 440 V [P] (kW)	7
AC-4 500 V [P] (kW)	8
AC-4 660 V 690 V [P] (kW)	8,5
DC-1	-
DC-1 Rated operational current	-
DC-1 Open	-
60 V [I <sub>e</sub> ] (A)	40
110 V [I <sub>e</sub> ] (A)	40
220 V [I <sub>e</sub> ] (A)	40
Current heat loss	-
3-polig, bei I <sub>th</sub> [60°] (W)	10,8
Bei I <sub>e</sub> nach AC-3/400 V (W)	4,2
Impedance per pole (mΩ)	2,7
Magnet systems	-
Voltage tolerance AC operated [Pick-up] (x U <sub>c</sub> )	0,8 - 1,1
Voltage tolerance AC operated [Drop-out] (x U <sub>c</sub> )	0,3 - 0,6
50 Hz [Pick-up] (VA)	52
50 Hz [Sealing] (VA)	7,1
50 Hz [Sealing] (W)	2,1
60 Hz [Pick-up] (VA)	67
60 Hz [Sealing] (VA)	8,7
60 Hz [Sealing] (W)	2,1
Duty factor (% DF)	100
Changeover time at 100 % U <sub>s</sub> (Recommended value)	-
Main contacts	-
AC operated closing delay	16 - 22
AC operated opening delay	8 - 14
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)	7,50
Three-phase 230 V 240 V (HP)	10
Three-phase 460 V 480 V (HP)	15
Three-phase 575 V 600 V (HP)	20
Maximum motor rating Single-phase	-
Single-phase 115 V 120 V (HP)	2
Single-phase 230 V 240 V (HP)	5
Maximum motor rating General use (A)	40

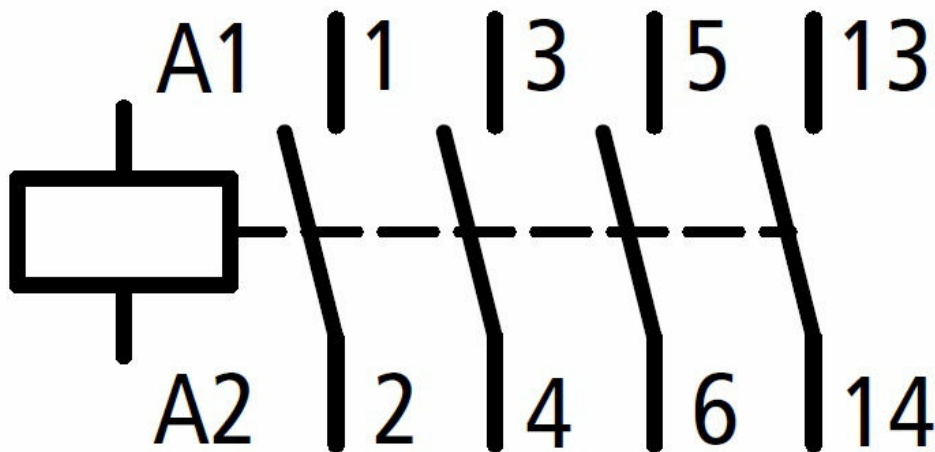
## Technical Data - continued

Auxiliary contacts	-
Pilot Duty AC operated	A600
Pilot Duty DC operated	P300
General Use AC (V)	600
General Use AC (A)	10
General Use DC (V)	250
General Use DC (A)	1
Short Circuit Current Rating	-
Basic Rating SCCR (kA)	5
Basic Rating max. Fuse (A)	125
Basic Rating max. CB (A)	125
480 V High Fault SCCR (fuse) (kA)	10/100
480 V High Fault max. Fuse (A)	125/70 Class J
480 V High Fault SCCR (CB) (kA)	10/65
480 V High Fault max. CB (A)	50/32
600 V High Fault SCCR (fuse) (kA)	10/100
600 V High Fault max. Fuse (A)	125/100 Class J
600 V High Fault SCCR (CB) (kA)	10/22
600 V High Fault max. CB (A)	50/32
Special Purpose Ratings	-
Elec. Discharge Lamps (Ballast) 480V 60Hz 3phase (A)	40
Elec. Discharge Lamps (Ballast) 277V 60Hz 1 phase (A)	40
Elec. Discharge Lamps (Ballast) 600V 60Hz 3phase (A)	40
Elec. Discharge Lamps (Ballast) 347V 60Hz 1 phase (A)	40
Incandescent Lamps (Tungsten) 480V 60Hz 3phase (A)	40
Incandescent Lamps (Tungsten) 277V 60Hz 1 phase (A)	40
Incandescent Lamps (Tungsten) 600V 60Hz 3phase (A)	40
Incandescent Lamps (Tungsten) 347V 60Hz 1 phase (A)	40
Resistance Air Heating 480V 60Hz 3phase (A)	40
Resistance Air Heating 277V 60Hz 1 phase (A)	40
Resistance Air Heating 600V 60Hz 3phase (A)	40
Resistance Air Heating 347V 60Hz 1 phase (A)	40
Refrig. Control (CSA only) LRA 480V 60Hz 3phase (A)	240
Refrig. Control (CSA only) FLA 480V 60Hz 3phase (A)	40
Refrig. Control (CSA only) LRA 600V 60Hz 3phase (A)	180
Refrig. Control (CSA only) FLA 600V 60Hz 3phase (A)	30
Def. Purpose Ratings(100,000 cycles acc.to UL1995)	-
LRA 480V 60Hz 3phase (A)	150
FLA 480V 60Hz 3phase (A)	25
Elevator Control 200V 60Hz 3phase (HP)	3
Elevator Control 200V 60Hz 3phase (A)	11
Elevator Control 240V 60Hz 3phase (HP)	5
Elevator Control 240V 60Hz 3phase (A)	15,20

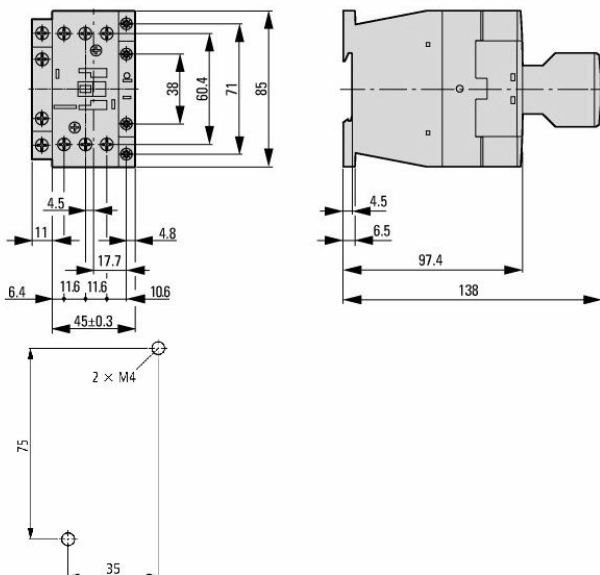
## Technical Data - continued

Elevator Control 480V 60Hz 3phase (HP)	10
Elevator Control 480V 60Hz 3phase (A)	14
Elevator Control 600V 60Hz 3phase (HP)	15
Elevator Control 600V 60Hz 3phase (A)	17

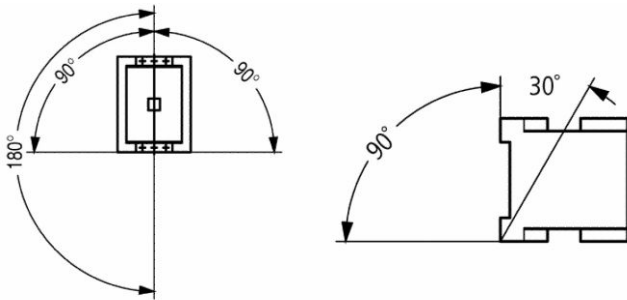
## Circuit diagram: Contactor 11kW/400V/25A, 1 NO, coil 230VAC



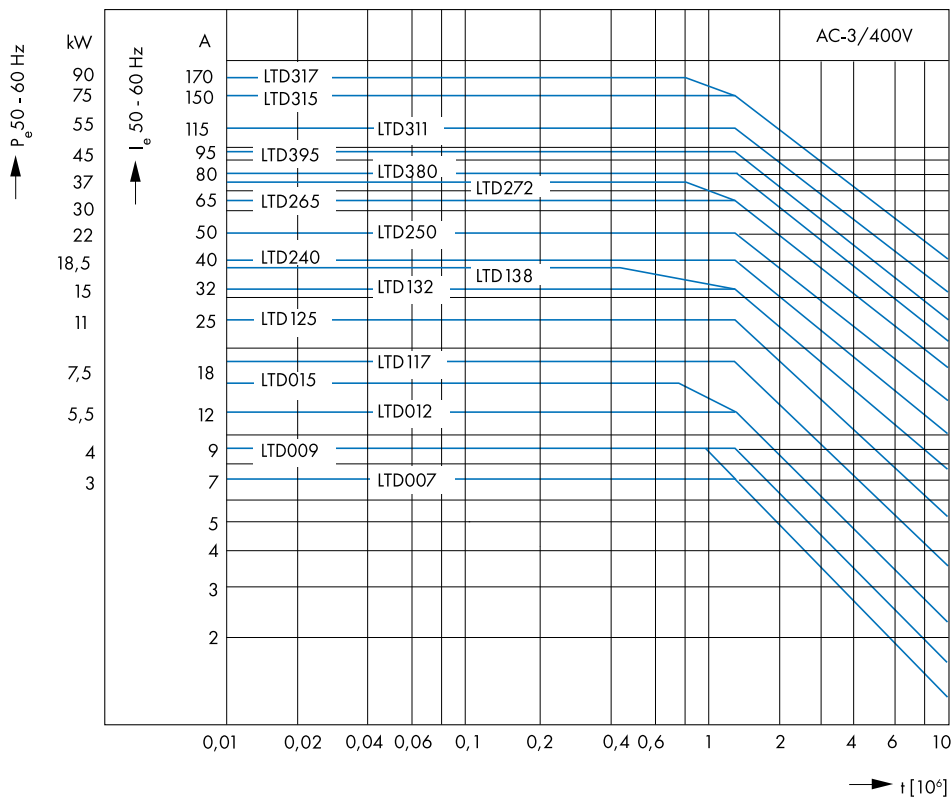
## Dimensioned drawing: Contactor 11kW/400V/25A, 1 NO, coil 230VAC



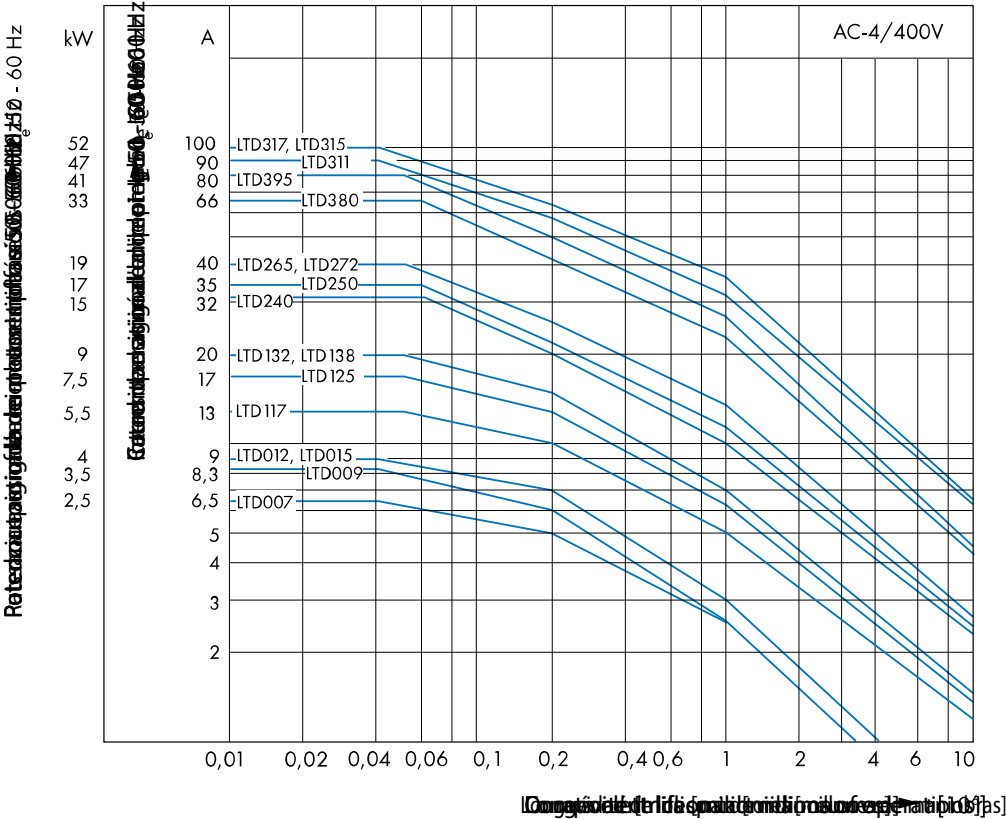
**Dimensioned drawing: Contactor 11kW/400V/25A, 1 NO, coil 230VAC**



**Diagram: Contactor 11kW/400V/25A, 1 NO, coil 230VAC**

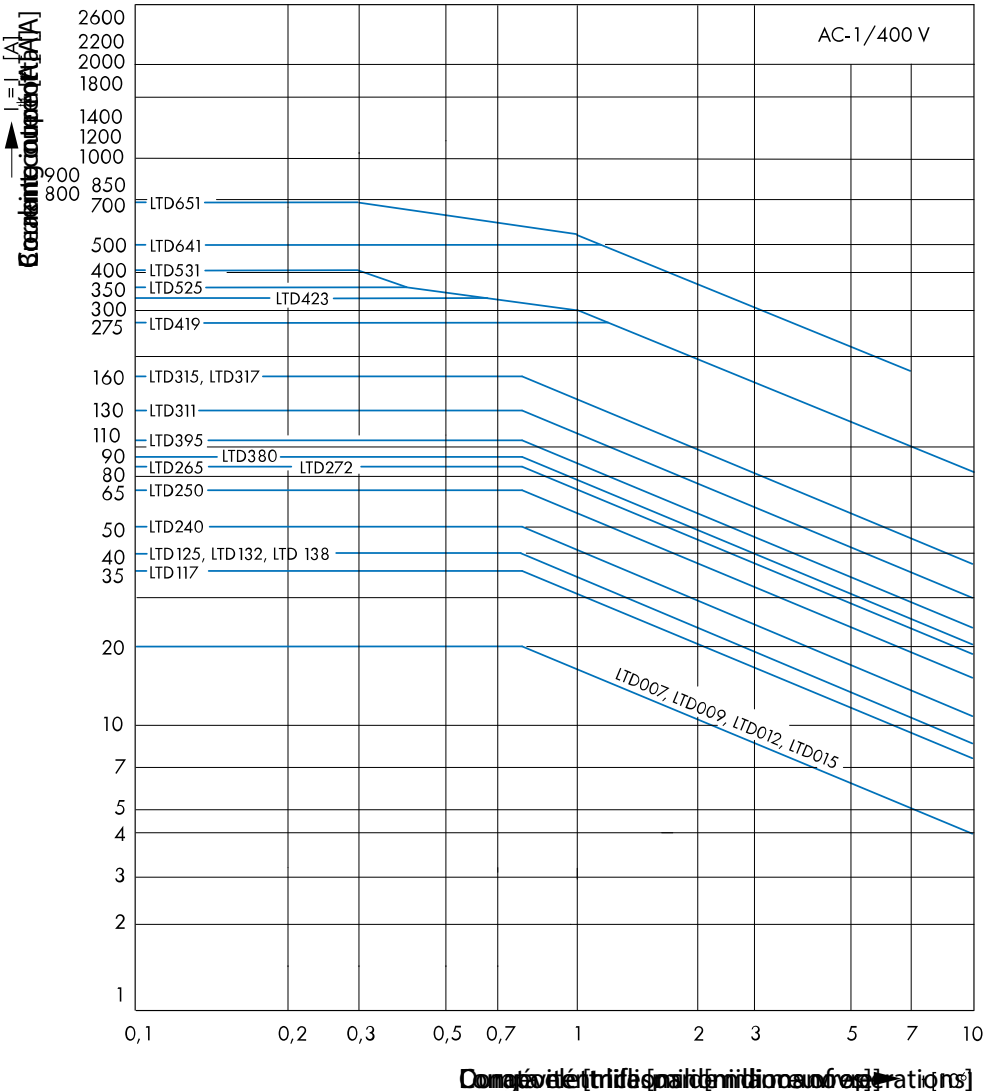


**Diagram: Contactor 11kW/400V/25A, 1 NO, coil 230VAC**





**Diagram: Contactor 11kW/400V/25A, 1 NO, coil 230VAC**



## Article Table

DESCRIPTION	Order No.
Contacteur 11kW/400V/25A, 1 NO, coil 230VAC Size 1	LTD 12513
<b>Optional Accessories</b>	
RC-suppressor for contactors size 0, 110-240VAC Size 0	LZ00001
Connector for contactors BGO and MSS BE5 Size 0	LZ00005
Varistor-suppressor for contactors size 0, 24-48VAC Size 0	LZ00002
Varistor-suppressor for contactors size 0, 130-240VAC Size 0	LZ00004
Mechanical interlock for contactors size 1 Size 1	LZ1W001
Reversing wiring set for contactors size 1 Size 1	LZ1W002
Connector for contactors size 0-2 Size 1	LZ10005
Auxiliary contact for contactor size 0-1, 1 NO 1 NC Size 0	LZ0D311
Auxiliary contact for contactor size 0-1, 2 NC Size 0	LZ0D302
Auxiliary contact for contactor size 0-1, 2 NO 2 NC Size 0	LZ0D222
Auxiliary contact for contactor size 0-1, 3 NO 1 NC Size 0	LZ0D231
Connector for contactors size 1 and MSS BE5 Size 1	LZ10006
RC-suppressor for contactors size 1, 110-240VAC Size 1	LZ10001
Varistor-suppressor for contactors size 1, 130-240VAC Size 1	LZ10004
	LZ100033
Varistor-suppressor for contactors size 1, 24-48VAC Size 1	LZ10002