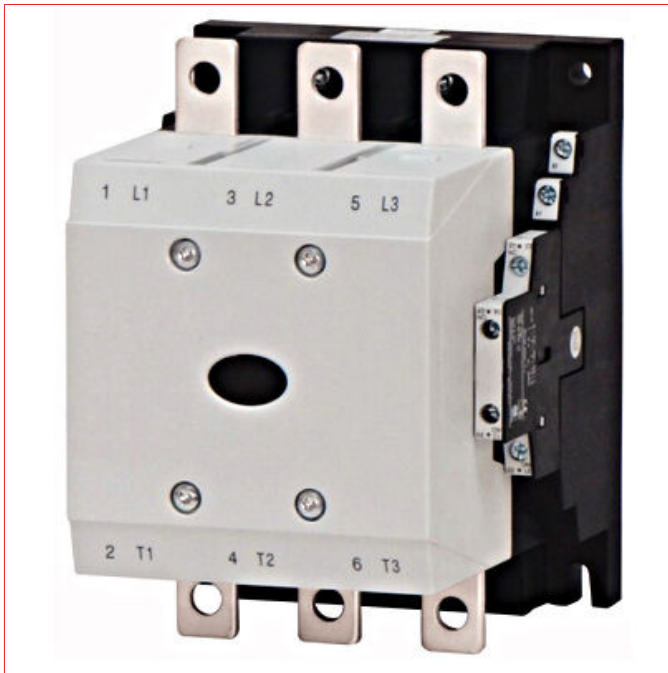


Data Sheet for Article: LTD42353--

Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC

Size 4



Technical Data

Size type	4
Product category	Power contactor
Included auxiliary contacts	2 NO + 2 NC
Coil voltage	230V
Rated current (A)	225
Standard	IEC EN 60947-4-1 IEC EN 60947-5-1 UL 508
Lifespan, mechanical AC operated	10000000 Operations
Operating frequency, mechanical AC operated	3000 Operations/h
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature Open (°C)	-40 / +60
Ambient temperature Enclosed (°C)	-40 / +40
Ambient temperature Storage (°C)	-40 / +80
Mech. shock resistance Half-sinusoidal shock 10ms	-
Main contacts NO contact (g)	10

Technical Data - continued

Auxiliary contacts NO contact (g)	10
Auxiliary contacts NC contact (g)	8
Mech. shock resist. Half-sinusoidal shock horizon.	-
IP Rating	IPO0
Protection against direct contact	-
When actuated from front (EN 50274)	Finger and back-of-hand proof with terminal shroud or terminal block
Weight (kg)	-
AC-operated	3,54
Terminal cross-section main contact (mm ²)	-
Flexible with cable lug (mm ²)	50 - 185
Stranded with cable lug (mm ²)	70 - 185
Solid or stranded [main cable] (AWG)	2/0 - 250 MCM
Band [lamella x width x thickness] (mm)	Fixing with flat cable terminal or cable terminal blocks See terminal capacity for cable terminal blocks
Busbar Width (mm)	32
Terminal screw [main cable]	M10
Tightening torque [main contact] (Nm)	24
Tools [main cable]	-
Terminal capacity auxiliary contact (mm ²)	-
Solid [auxiliary cables] (mm ²)	1 x (0,75 - 2,5) 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
Terminal screw [auxiliary cables]	M3,5
Tightening torque [auxiliary contact] (Nm)	1,20
Tools [auxiliary cables]	-
Philips/Pozidriv screwdriver [auxiliary cables]	PZ 2
Rated impulse withstand voltage [Uimp] (V)	8000
Overvoltage category/pollution degree	III/3
Rated insulation voltage [Ui] (V)	1000
Rated operational voltage (V)	1000
Safe isolation to EN 61140	-
Between coil and contacts (VAC)	500
Between the contacts (VAC)	500
Making capacity p.f. to IEC/EN 60947 up to 690 V (A)	2700
Breaking capacity	-
220 V 230 V (A)	2250
380 V 400 V (A)	2250
500 V (A)	2250
660 V 690 V (A)	2250
1000 V (A)	760
Short circuit withstand (kA)	-
Short-circuit protection maximum fuse	-
Type „2“ coordination 400 V [gG/gL 500 V] (A)	315

Technical Data - continued

Type „2“ coordination 690 V [gG/gL 690 V] (A)	250
Type „2“ coordination 1000 V [gG/gL 1000 V] (A)	160
Type „1“ coordination 400 V [gG/gL 500 V] (A)	400
Type „1“ coordination 690 V [gG/gL 690 V] (A)	315
Type „1“ coordination 1000 V [gG/gL 1000 V] (A)	200
AC-1	-
AC-1 Rated operational current	-
Conventional free air therm. current 3pole 50-60Hz	-
Open at 40 °C [I _{th} =I _e] (A)	386
Open at 50 °C [I _{th} =I _e] (A)	345
Open at 55 °C [I _{th} =I _e] (A)	329
Open at 60 °C [I _{th} =I _e] (A)	315
Enclosed [I _{th}] (A)	275
Convent. free air thermal cur. 1pole Open[I _{th}] (A)	707
Convent. free air thermal cur. 1pole Enclosed[I _{th}] (A)	636
AC-3	-
AC-3 Rated operational current	-
AC-3 Open, 3-pole: 50 – 60 Hz 220 V 230 V [I _e] (A)	225
AC-3 Open, 3-pole: 50 – 60 Hz 240 V [I _e] (A)	225
AC-3 Open, 3-pole: 50 – 60 Hz 380 V 400 V [I _e] (A)	225
AC-3 Open, 3-pole: 50 – 60 Hz 415 V [I _e] (A)	225
AC-3 Open, 3-pole: 50 – 60 Hz 440 V [I _e] (A)	225
AC-3 Open, 3-pole: 50 – 60 Hz 500 V [I _e] (A)	225
AC-3 Open, 3-pole: 50 – 60 Hz 660 V 690 V [I _e] (A)	160
AC-3 Open, 3-pole, 50 - 60 Hz 1000 V [I _e] (A)	76
AC-3 Motor rating	-
AC-3 220 V 230 V [P] (kW)	70
AC-3 240V [P] (kW)	75
AC-3 380 V 400 V [P] (kW)	110
AC-3 415 V [P] (kW)	132
AC-3 440 V [P] (kW)	138
AC-3 500 V [P] (kW)	160
AC-3 660 V 690 V [P] (kW)	150
AC-3 1000 V [P] (kW)	108
AC-4	-
AC-4 Rated operational current	-
AC-4 Open, 3-pole, 50 – 60 Hz 220 V 230 V [I _e] (A)	164
AC-4 Open, 3-pole, 50 – 60 Hz 240 V [I _e] (A)	164
AC-4 Open, 3-pole, 50 – 60 Hz 380 V 400 V [I _e] (A)	164
AC-4 Open, 3-pole, 50 – 60 Hz 415 V [I _e] (A)	164
AC-4 Open, 3-pole, 50 – 60 Hz 440 V [I _e] (A)	164
AC-4 Open, 3-pole, 50 – 60 Hz 500 V [I _e] (A)	164
AC-4 Open, 3-pole, 50 – 60 Hz 660 V 690 V [I _e] (A)	120

Technical Data - continued

AC-4 Open, 3-pole, 50 - 60 Hz 1000 V [Ie] (A)	55
AC-4 Motor rating	-
AC-4 220 V 230 V [P] (kW)	51
AC-4 240 V [P] (kW)	54
AC-4 380 V 400 V [P] (kW)	90
AC-4 415 V [P] (kW)	96
AC-4 440 V [P] (kW)	102
AC-4 500 V [P] (kW)	116
AC-4 660 V 690 V [P] (kW)	110
AC-4 1000 V [P] (kW)	77
Condensor operation	-
Indiv. Compens., rated op. current of 3-phase cap.	-
Open up to 525 V (A)	220
Open 690 V (A)	133
Max. inrush current peak (x Ie)	30
Component lifespan (x 10 ⁶)	0,1
Max. operating frequency (S/h)	200
DC-1	-
DC-1 Rated operational current	-
DC-1 Open	-
Current heat loss	-
3-polig, bei Ith [60°] (W)	45
Bei Ie nach AC-3/400 V (W)	23
Magnet systems	-
Voltage tolerance Us	190 - 240 V 50/60 Hz
Voltage tolerance AC operated [Pick-up] (x Uc)	0,8 x Us min - 1,15 x Us max
Voltage tolerance AC operated [Drop-out] (x Uc)	0,25 x Us min - 0,6 x Us max
Power consumption	-
of the coil in a cold state and 1.0 x Us	-
Note on power consumption	Control transformer with $u_k \leq 10\%$
Pull-in power (VA)	210
Pull-in power (W)	180
Sealing power (VA)	2,6
Sealing power (W)	2,1
Duty factor (% DF)	100
Changeover time at 100 % Us (Recommended value)	-
Main contacts	-
AC operated closing delay	60
AC operated opening delay	40
Behaviour in marginal and transitional conditions	-
Sealing	-
Voltage interruptions	-
(0 ... 0.2 x Uc min) \leq 10 ms	Time is bridged successfully

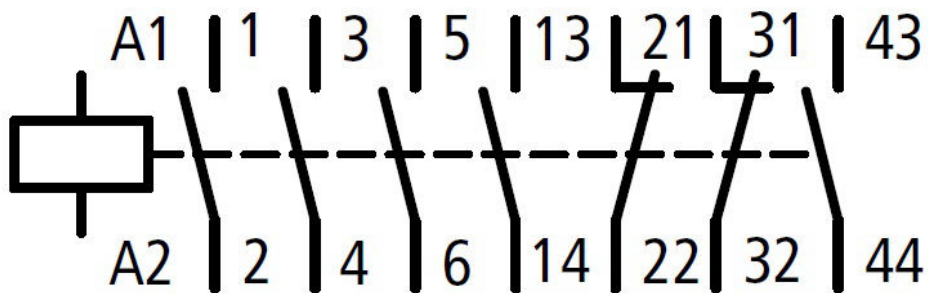
Technical Data - continued

(0 ... 0.2 x U _{c min}) > 10 ms	Drop-out of the contactor
Voltage drops	-
(0.2 ... 0.6 x U _{c min}) ≤ 12 ms	Time is bridged successfully
(0.2 ... 0.6 x U _{c min}) > 12 ms	Drop-out of the contactor
(0.6 ... 0.7 x U _{c min})	Contactors remains switched on
Excess voltage	-
(1.15 ... 1.3 x U _{c max})	Contactors remains switched on
Pick-up phase	-
(0 ... 0.7 x U _{c min})	Contactors does not switch on
(0.7 x U _{c min} ... 1.15 x U _{c max})	Contactors switches on with certainty
Admiss. cont. resistance of contact actuating A11 (mΩ)	500
EMC Emitted interference	This product is designed for operation in industrial environments (environment A). Its use in residential environments (environment B) may cause radio-frequency interference, requiring additional noise suppression measures.
Rating data for approved types	-
Rated breaking capacity (kA)	-
Maximum motor rating Three-phase	-
Three-phase 200 V 208 V (HP)	60
Three-phase 230 V 240 V (HP)	75
Three-phase 460 V 480 V (HP)	150
Three-phase 575 V 600 V (HP)	200
Maximum motor rating General use (A)	250
Auxiliary contacts	-
Pilot Duty AC operated	A600
Pilot Duty DC operated	P300
General Use AC (V)	600
General Use AC (A)	15
General Use DC (V)	250
General Use DC (A)	1
Short Circuit Current Rating	-
Basic Rating SCCR (kA)	10
Basic Rating max. Fuse (A)	700
Basic Rating max. CB (A)	600
480 V High Fault SCCR (fuse) (kA)	100
480 V High Fault max. Fuse (A)	600 Class J
480 V High Fault SCCR (CB) (kA)	65
480 V High Fault max. CB (A)	350
600 V High Fault SCCR (fuse) (kA)	100
600 V High Fault max. Fuse (A)	600 Class J
600 V High Fault SCCR (CB) (kA)	50
600 V High Fault max. CB (A)	350
Def. Purpose Ratings(100,000 cycles acc.to UL1995)	-

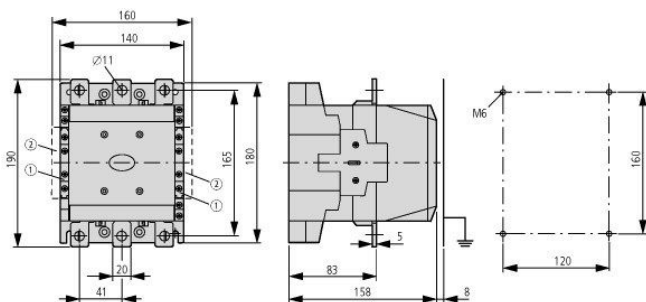
Technical Data - continued

LRA 480V 60Hz 3phase (A)	2016
FLA 480V 60Hz 3phase (A)	336
LRA 600V 60Hz 3phase (A)	1680
FLA 600V 60Hz 3phase (A)	280

Circuit diagram: Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC



Dimensioned drawing: Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC



- ① LTZ5D711--
- ② LTZ5D811--

Dimensioned drawing: Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC

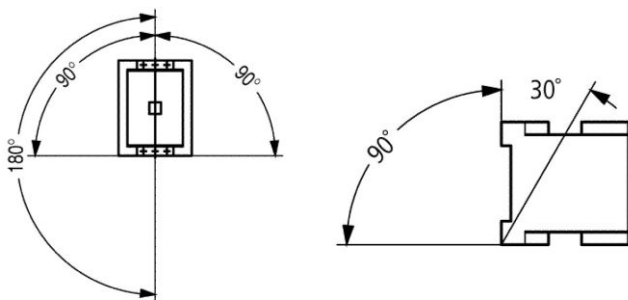


Diagram: Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC

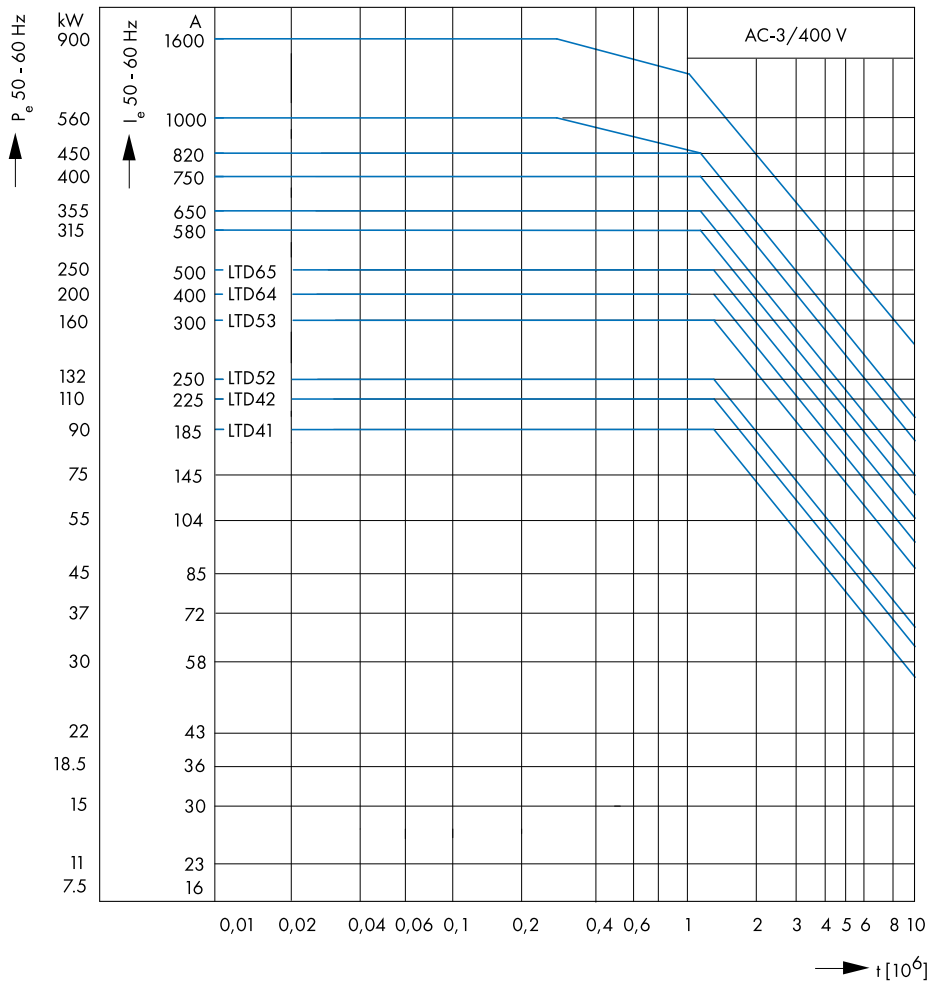


Diagram: Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC

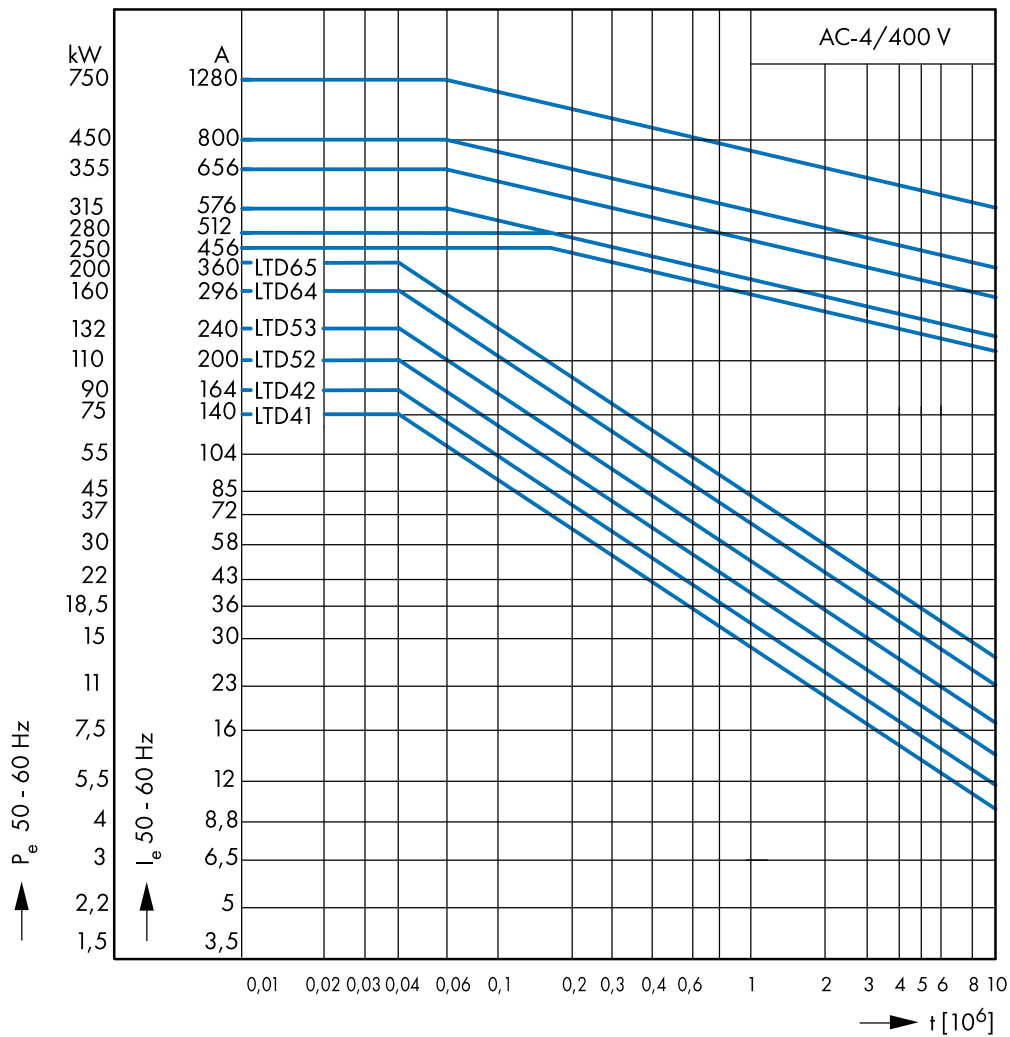


Diagram: Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC

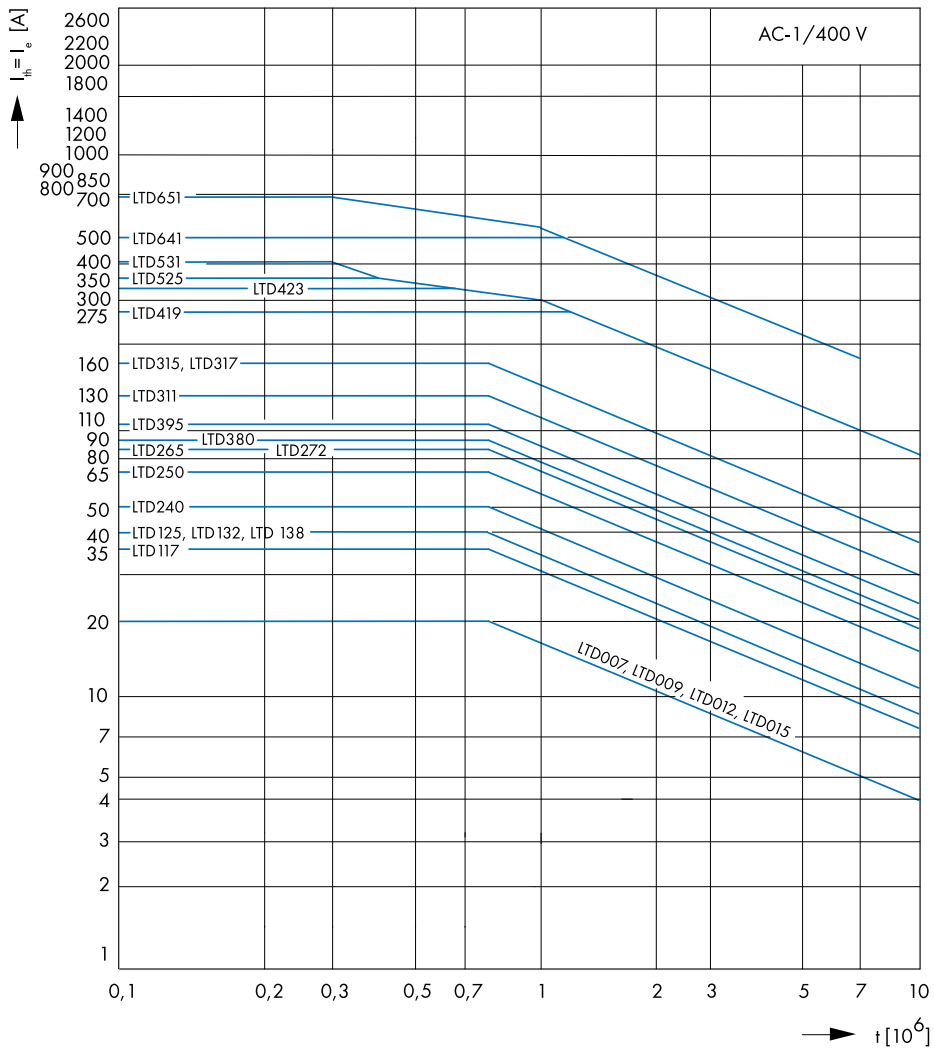
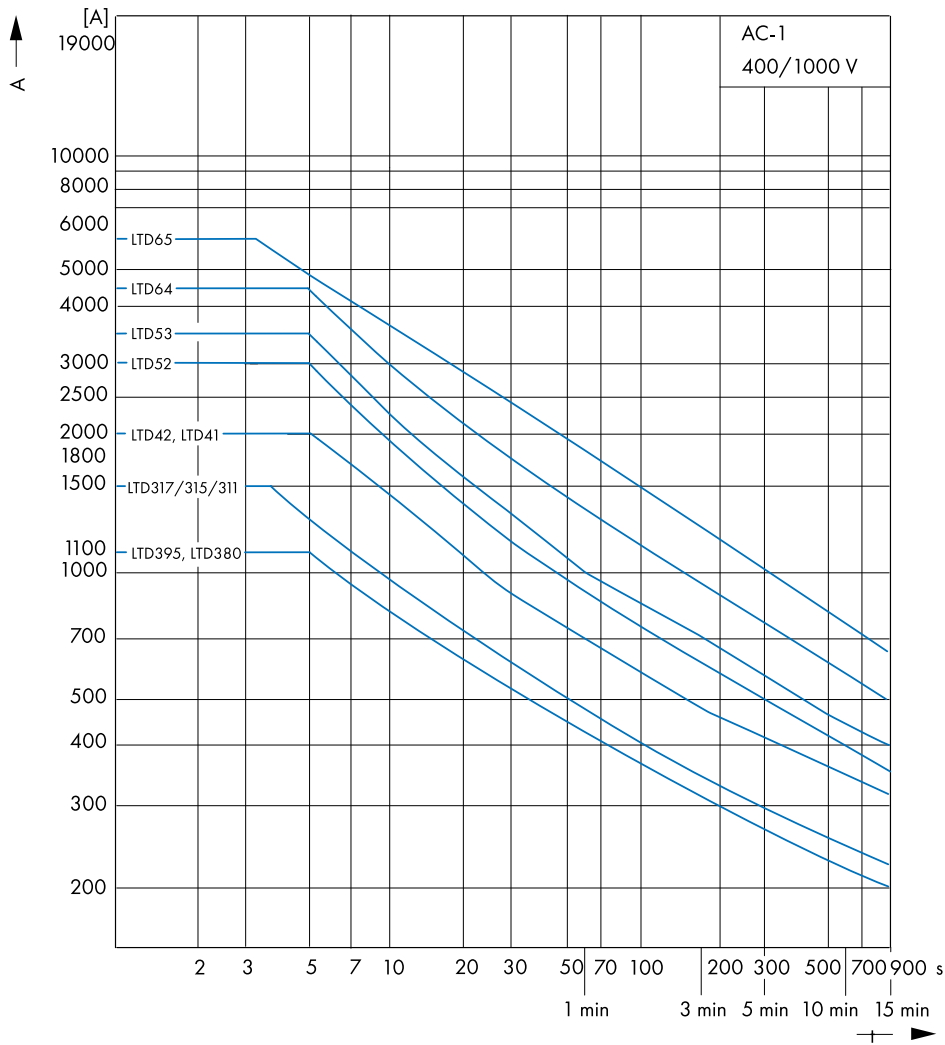


Diagram: Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC



Article Table

DESCRIPTION	Order No.
Contactor 110kW/400V/225A, 2 NO + 2 NC, coil 230VAC Size 4	LTD42353
Optional Accessories	
Terminal shroud for contactor size 4 f. connection lugs, 1 pcs Size 4	LTZ40001
Cable terminal block for contactor size 4 Size 4	LTZ40002
Mechanical interlock for contactors size 4-6 Size 4	LTZ4W001
Aux contact for contactor S 2-4, 1 NO 1 NC, lateral 1. level Size 3	LTZ3D711
Aux contact for contactor S 2-4, 1 NO 1 NC, lateral 2. level Size 3	LTZ3D811