

Industrial Contactors CTX³ 4P 40A - 900A

Cat. N°(s) : 4 164 26/36/46/56/66/76/86/96/ 4 165 06/16/26

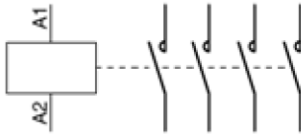


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1. DESCRIPTION - USE

. Remote control of a load by the mean of a switch.

Symbol:



Technology :

. Electromagnetic contactor.

2. RANGE

Number of Poles:

. Four pole (4P).

Rated current Ie (AC-1):

. 40A, 60A, 100A, 135A, 165A, 250A, 330A, 420A, 500A, 750A, 900A.

Rated Voltage / Frequency:

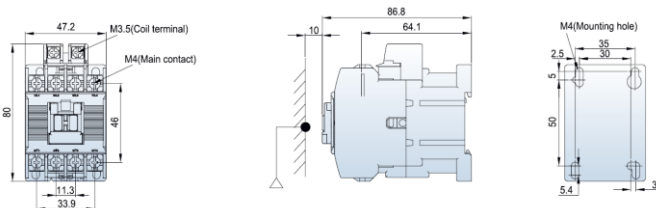
. 690 V, 50 / 60 Hz with standard tolerances.

Rated control circuit voltage Uc:

. 230 [V~].

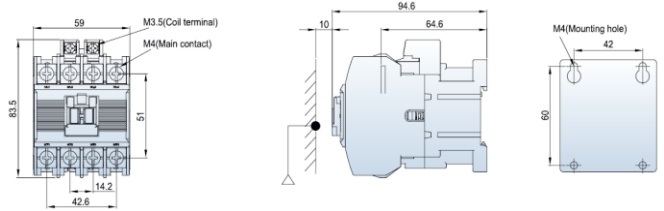
3. OVERALL DIMENSIONS

. CTX³ Contactor 22 4P 40 IA1.



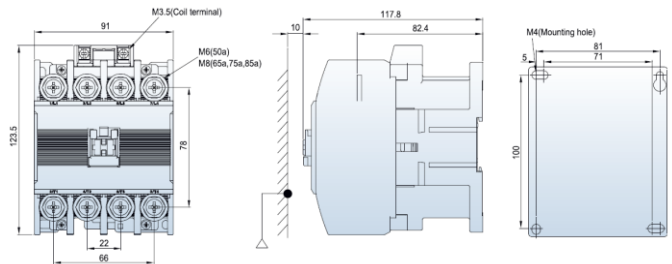
3. OVERALL DIMENSIONS (continued)

. CTX³ Contactor 40 4P 60 [A].



. CTX³ Contactor 65 4P 100 [A].

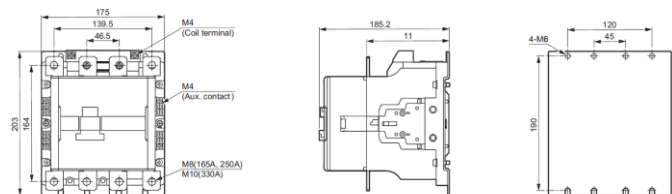
. CTX³ Contactor 85 4P 135 [A].



. CTX³ Contactor 130 4P 165 [A].

. CTX³ Contactor 150 4P 250 [A].

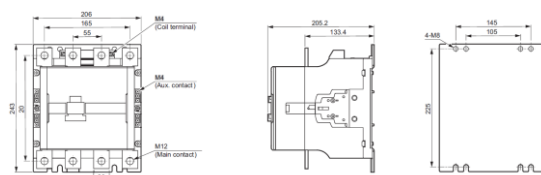
. CTX³ Contactor 225 4P 330 [A].



3. OVERALL DIMENSIONS (continued)

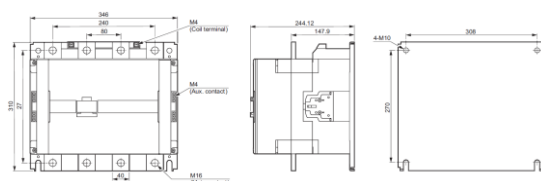
. CTX³ Contactor 330 4P 420 [A].

. CTX³ Contactor 400 4P 500 [A].



. CTX³ Contactor 630 4P 750 [A].

. CTX³ Contactor 800 4P 900 [A].



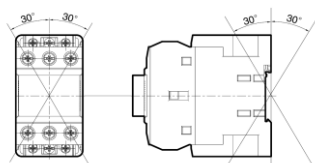
4. INSTALLATION - CONNECTION

Fixing:

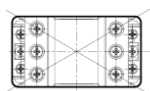
. Clip-on mounting on 35 [mm] rail DIN up to 135 [A], or screw fixing.

Operating position:

. ± 30 [°] possible, in relation to normal vertical mounting plane.

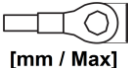


. For Contactors CTX³ 4P from 40 to 135 [A] only :



. In lateral position (+/- 90°) : derating of number of operations per hour by 20%.

Wire size and tightening torque:

Frame size	Terminal screw	 [mm / Max]	Size of wire [mm ²]	Connecting torque Max [lb.In]
	Contactor			Contactor
4 164 26	M4	9.6	2.5~10	15~22.5
4 164 36	M5	12.8	10~16	26~39
4 164 46	M6	14	16~35	45~67.5
4 164 56	M8	17	25~50	100~150
4 164 66	M8	17	35~70	100~150
4 164 76	M8	17	35~95	100~150
4 164 86	M10	25	50~150	150~225
4 164 96, 4 165 06	M12	30	95~240	250~375
4 165 16, 4 165 26	M16	40	185~480	600~1200

4. INSTALLATION - CONNECTION *(continued)*

Type of conductors:

- Conductor type = 65/75°C Cu-wire only.
(CTX³ 4P 22, 40, 85).
- Conductor type = 75°C Cu stranded wire.
(CTX³ 4P 225, 400, 800).

Supply:

- Either from the top or the bottom.

Tools required:

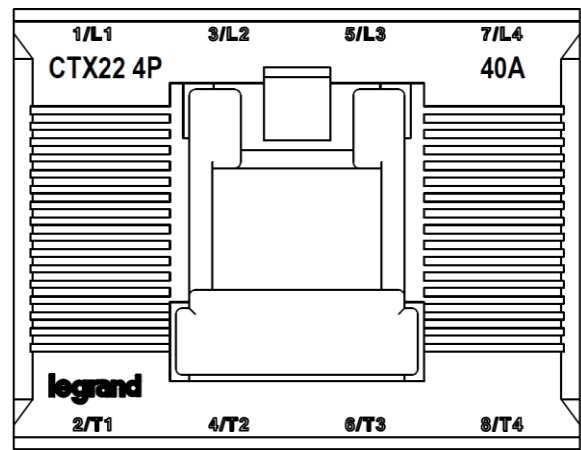
- Pozidriv N°2 screwdriver recommended.
- Pozidriv N°3 screwdriver recommended for CTX³ 4P 100A /135A.
- Flat screwdriver Ø5 to Ø6 [mm] Maximum.
- Flat spanner for M10 bolt (for CTX³ 4P 165A / 250A / 330A).
- Flat spanner for M12 bolt (for CTX³ 4P 420A / 500A).
- Flat spanner for M16 bolt (for CTX³ 4P 750A / 900A).

5. GENERAL CHARACTERISTICS

Front side:

- By dark grey laser or pad printing:
 - Brand: Legrand
 - Range: CTX + frame
 - Rated current (in A)
 - Marking power terminals
 - Marking auxiliary terminals when required

CTX³ 22 4P 40 [A]: (Example of marking)



Left side:

- By identification label: (referring to IEC standard)

AC1		IEC/EN 60947		VDE0660		BS5424	
V AC	240	440	550	690			
kW	15	27	35	44			
A	40	40	40	40			
	1PH		3PH				
V AC	120	240	208	240	480	600	
UL HP	2	3	7.5	7.5	10	15	

Uc	230V	Ith = 40A
Us	195.5-253V	Ui = 690V
AC Ref	4 164 26	Uimp = 6kV

This device meets/exceeds NEMA/EEMAC requirements Aux Cont.: A600 P600
 Continuous current: 32A
 When protected by 40A time delay fuses.
 Short circuit IKA RMS Sym.: 600V Max. Break all lines.
 AWG 12-8 80/75°C Cu wire only.
 Torque: 20 lb.in. 79611636018

Upper side: when applicable

- By dark grey laser or pad printing:

- Control voltage (Uc)
- Frequency (f)
- Terminals identification

Lower side: when applicable

- By dark grey laser or pad printing:

- Control voltage (Uc)
- Frequency (f)
- Terminals identification

5. GENERAL CHARACTERISTICS (continued)

Rated operational voltage:

. U_e = 690 [V] for all products.

Frequency limit:

. 25/400 [Hz].

Degree of pollution:

. 3, in accordance with IEC / EN 60 947-4-1.

Rated impulse voltage and rated insulation voltage:

Type of products	Rated impulse voltage (U _{imp})	Rated insulation voltage (U _i)
CTX ³ 22 - 40 [A]	6 [kV]	690 [V]
CTX ³ 40 - 60 [A]		
CTX ³ 65 - 100 [A]	8 [kV]	1 000 [V]
CTX ³ 85 - 135 [A]		
CTX ³ 130 - 165 [A]		
CTX ³ 150 - 250 [A]		
CTX ³ 225 - 330 [A]		
CTX ³ 330 - 420 [A]		
CTX ³ 400 - 500 [A]		
CTX ³ 630 - 750 [A]		
CTX ³ 800 - 900 [A]		

Overvoltage category:

. Category III.

5. GENERAL CHARACTERISTICS (continued)

Mechanical and electrical endurance:

Type of products	Mechanical endurance (in millions of operations)	Electrical endurance (in millions of operations)	Maxi operating rate in operating cycles per hour (AC3)	
CTX ³ 22 40 [A]	15	1	1800	
CTX ³ 40 60 [A]			1800	
CTX ³ 65 100 [A]	12		1800	
CTX ³ 85 135 [A]			1800	
CTX ³ 130 165 [A]	5	0.8	1200	
CTX ³ 150 250 [A]			1200	
CTX ³ 225 330 [A]			1200	
CTX ³ 330 420 [A]	2.5		0.5	1200
CTX ³ 400 500 [A]				1200
CTX ³ 630 750 [A]				1200
CTX ³ 800 900 [A]		1200		

. In lateral position, refer to the instructions of the paragraph "Operating position" of the technical data sheet.

Example : For the CTX³ 22 40 [A], 1800 becomes 1440 (derating of 20% Maximum number of operations per hours).

Weight:

Type of products	AC Control
CTX ³ 22 - 40 [A]	0.4 [kg]
CTX ³ 40 - 60 [A]	0.59 [kg]
CTX ³ 65 - 100 [A]	1.2 [kg]
CTX ³ 85 - 135 [A]	
CTX ³ 130 - 165 [A]	5.6 [kg]
CTX ³ 150 - 250 [A]	
CTX ³ 225 - 330 [A]	
CTX ³ 330 - 420 [A]	9.9 [kg]
CTX ³ 400 - 500 [A]	
CTX ³ 630 - 750 [A]	26.3 [kg]
CTX ³ 800 - 900 [A]	

5. GENERAL CHARACTERISTICS *(continued)*

Ambient operating temperature:

. Min. = -40°C. Max. = +55°C (AC type).

Derating of products depending on the ambient temperature:

		Ambient temperature			
		≤ 40 [°C] ≤ 104 [°F]	≤ 55 [°C] ≤ 131 [°F]	≤ 65 [°C] ≤ 149 [°F]	≤ 70 [°C] ≤ 158 [°F]
CTX ³ 4P 22 - 40A	Operational current (AC1) [A]	40	40	32	28
CTX ³ 4P 40 - 60A		60	60	50	42
CTX ³ 4P 65 - 100A		100	100	80	70
CTX ³ 4P 85 - 135A		135	135	108	94
CTX ³ 4P 130 - 165A		160	160	128	112
CTX ³ 4P 150 - 250A		230	230	185	165
CTX ³ 4P 225 - 330A		300	300	240	210
CTX ³ 4P 330 - 420A		350	350	280	245
CTX ³ 4P 400 - 500A		450	450	360	315
CTX ³ 4P 630 - 750A		660	660	530	465
CTX ³ 4P 800 - 900A		900	900	720	630

Ambient storage temperature:

. Min. = -50°C. Max. = +80°C.

Degree of protection: (In accordance with IEC 60 529 standard)

. IP20 (with terminal cover unit only).

Flame resistance:

. Conforming to UL = V0.

. Conforming to IEC 695-2-1 = 960 [°C].

5. GENERAL CHARACTERISTICS *(continued)*

Maximum operating altitude:

. 3000 [m].

High altitude application:

. Rated compensation coefficient at altitudes of more than 1000[m]:

Type	ANSI C37 30-1971			BS2692 PT1-1971/IEC Pub.282-1-1985			
	Rated insulation voltage	Rated current flow of current	Surrounding temperature	Voltage resistance test voltage	Rated insulation voltage	Rated current flow current	Temperature rise
1000	1.00	1.00	1.00	1.0	1.0	1.0	1.0
1200	0.98	0.995	0.992	↑ proportional	↑ proportional	↑ proportional	↑ proportional
1500	0.95	0.99	0.980	1.05	0.95	0.99	0.98
1800	0.92	0.985	0.968	↑ proportional	↑ proportional	↑ proportional	↑ proportional
2100	0.89	0.98	0.956				
2400	0.86	0.97	0.944				
2700	0.83	0.965	0.932				
3000	0.80	0.96	0.920				
3600	0.75	0.95	0.896	/	/	/	/
4200	0.70	0.935	0.872				
4800	0.65	0.925	0.848				
5400	0.61	0.91	0.824				
6000	0.56	0.90	0.800				

Shock resistance: (1/2 sine wave = 11 [ms])

. Opened = 8 [g].

. Closed = 10 [g].

Vibration resistance: (Conforming to IEC68-2-6; 5...300 [Hz])

. Opened = 2 [g].

. Closed = 4 [g].

5. GENERAL CHARACTERISTICS *(continued)*

Rated control circuit voltage U_c:

- . CTX³ Contactor 22 4P 40 [A].
- . CTX³ Contactor 40 4P 60 [A].

AC	50/60 [Hz]	230 [V]
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- . CTX³ Contactor 65 4P 100 [A].
- . CTX³ Contactor 85 4P 135 [A].

AC	50/60 [Hz]	230 [V]
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- . CTX³ Contactor 130 4P 165 [A].
- . CTX³ Contactor 150 4P 250 [A].
- . CTX³ Contactor 225 4P 330 [A].

Nominal (ordering) voltage	AC - 50/60 [Hz]	DC
100/200 [V]	100-240 [V]	100-220 [V]

- . CTX³ Contactor 330 4P 420 [A].
- . CTX³ Contactor 400 4P 500 [A].

Nominal (ordering) voltage	AC - 50/60 [Hz]	DC
100/200 [V]	100-240 [V]	100-220 [V]

- . CTX³ Contactor 630 4P 750 [A].
- . CTX³ Contactor 800 4P 900 [A].

Nominal (ordering) voltage	AC - 50/60 [Hz]	DC
200 [V]	200-240 [V]	200-220 [V]

Coil power dissipation:

Type CTX ³ 4P	40 [A]	60 [A]	100 [A]	135 [A]	165 [A]	250 [A]	320 [A]	420 [A]	500 [A]	750 [A]	900 [A]
Coil consumption Inrush [W]	95	95	225	225	298	298	380	571	571	1000	1000
Coil consumption Hold [W]	9	9	17	17	12,3	12,3	11,6	14	14	29	29
Power dissipation [W]	2	2	5	5	4,4	4,4	4,7	5	5	7,8	7,8

Lifetime of the coil supplied permanently:

- . No limit.

Rated control supply voltage U_s:

- . U_s = 85% - 110% U_c.

5. GENERAL CHARACTERISTICS *(continued)*

Rating: In accordance with IEC 60 947 and IEC 60 947-4-1

. For Contactor CTX³ 4P 40-900[A]

- Rated short-time withstand current, (*I_{cw}*)
- Rated making capacity - AC3
- Rated breaking capacity - AC3

Contactor type		CTX ³ 4P 22 - 40[A]	CTX ³ 4P 40 - 60[A]	CTX ³ 4P 65 - 100[A]	CTX ³ 4P 85 - 135[A]	CTX ³ 4P 130 - 165[A]	CTX ³ 4P 150 - 250[A]
I_{cw} Rated short-time withstand current (IEC 60 947)	1 [s] [A]	400	600	1050	1200	1320	2000
	10 [s] [A]	186	260	700	800	900	1500
	30 [s] [A]	130	160	380	450	500	1000
	1 [min] [A]	90	100	270	350	400	800
	3 [min] [A]	60	70	200	270	270	520
	10 [min] [A]	50	55	120	170	180	350
	≥ 15 [min] [A]	45	50	100	150	160	320

Contactor type		CTX ³ 4P 22 - 40[A]	CTX ³ 4P 40 - 60[A]	CTX ³ 4P 65 - 100[A]	CTX ³ 4P 85 - 135[A]	CTX ³ 4P 130 - 165[A]	CTX ³ 4P 150 - 250[A]
According to IEC 60 947-4-1 (AC3)	Rated making capacity	220	400	650	850	1050	1850
	Rated breaking capacity	176	320	520	650	840	1480

Contactor type		CTX ³ 4P 225 - 330[A]	CTX ³ 4P 330 - 420[A]	CTX ³ 4P 400 - 500[A]	CTX ³ 4P 630 - 750[A]	CTX ³ 4P 800 - 900[A]
I_{cw} Rated short-time withstand current (IEC 60 947)	1 [s] [A]	3500	4000	4600	7000	7500
	10 [s] [A]	2400	3000	4400	6400	7000
	30 [s] [A]	1500	2500	2974	4500	4900
	1 [min] [A]	1100	1700	1846	3500	3800
	3 [min] [A]	800	1000	1313	2200	2500
	10 [min] [A]	600	620	760	1550	1550
	≥ 15 [min] [A]	500	553	699	1300	1300

Contactor type		CTX ³ 4P 225 - 330[A]	CTX ³ 4P 330 - 420[A]	CTX ³ 4P 400 - 500[A]	CTX ³ 4P 630 - 750[A]	CTX ³ 4P 800 - 900[A]
According to IEC 60 947-4-1 (AC3)	Rated making capacity	2650	3300	4000	6300	8000
	Rated breaking capacity	2120	2650	3200	5040	6400

5. GENERAL CHARACTERISTICS *(continued)*

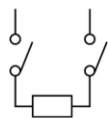
Rating: In accordance with CE (IEC) and UL 508 certifications - $\theta \leq 55 [^{\circ}\text{C}]$ *(continued)*

. For Contactor CTX³ 4P 40, 60, 100 and 135 [A].

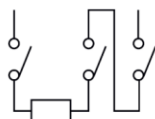
Contactor type			CTX ³ 22 - 40 [A]		CTX ³ 40 - 60 [A]		CTX ³ 65 - 100 [A]		CTX ³ 85 - 135 [A]	
			[kW]	[A]	[kW]	[A]	[kW]	[A]	[kW]	[A]
AC duty	AC1	200 / 240 [V]	15	40	22	60	37	100	51	135
		380 / 440 [V]	27	40	42	60	70	100	95	135
		500 / 550 [V]	35	40	52	60	88	100	120	135
		690 [V]	44	40	66	60	110	100	150	135
	AC3	200 / 240 [V]	5.5	22	11	40	18.5	65	25	85
		380 / 440 [V]	11	22	18.5	40	30	65	45	85
		lth	-	40	-	60	-	100	-	135
DC1 duty	2 pole in series	110 [V]	-	15	-	25	-	35	-	50
		220 [V]	-	10	-	12	-	15	-	35
	3 pole in series	110 [V]	-	20	-	27	-	40	-	60
		220 [V]	-	12	-	15	-	30	-	40
	4 pole in series	110 [V]	-	20	-	30	-	50	-	70
		220 [V]	-	15	-	22	-	35	-	50

Contactor type			CTX ³ 22 - 40 [A]		CTX ³ 40 - 60 [A]		CTX ³ 65 - 100 [A]		CTX ³ 85 - 135 [A]	
			[hp]	[A]	[hp]	[A]	[hp]	[A]	[hp]	[A]
UL Rating (50 / 60 [Hz])	200 / 240 [V]	7.5	-	10	-	20	-	30	-	
	440 / 480 [V]	10	-	25	-	40	-	50	-	
	550 / 600 [V]	15	-	25	-	40	-	50	-	
	lth	-	32	-	50	-	80	-	100	

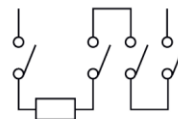
. Wiring diagrams



2pole for DC contact



3pole for DC contact



4pole for DC contact

5. GENERAL CHARACTERISTICS *(continued)*

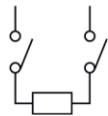
Rating: In accordance with CE (IEC) and UL 508 certifications - $\theta \leq 55 [^{\circ}\text{C}]$ *(continued)*

. For Contactor CTX³ 4P 165, 250 and 320 [A].

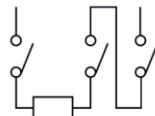
Contactor type			CTX ³ 130 - 165 [A]		CTX ³ 150 - 250 [A]		CTX ³ 225 - 330 [A]	
			[kW]	[A]	[kW]	[A]	[kW]	[A]
AC duty	AC1	200 / 240 [V]	60	165	76	250	100	330
		380 / 440 [V]	110	165	142	250	185	330
		500 / 550 [V]	137	165	180	250	230	330
		690 [V]	170	165	225	250	290	330
	AC3	200 / 240 [V]	37	125	45	150	75	225
		380 / 440 [V]	60	120	75	150	132	225
		Ith	-	165	-	250	-	330
DC1 duty	2 pole in series	110 [V]	-	80	-	100	-	150
		220 [V]	-	50	-	100	-	150
	3 pole in series	110 [V]	-	90	-	150	-	225
		220 [V]	-	60	-	150	-	225
	4 pole in series	110 [V]	-	100	-	150	-	225
		220 [V]	-	80	-	150	-	225

Contactor type		CTX ³ 130 - 165 [A]		CTX ³ 150 - 250 [A]		CTX ³ 225 - 330 [A]	
		[hp]	[A]	[hp]	[A]	[hp]	[A]
UL Rating (50 / 60 [Hz])	200 / 240 [V]	40	-	50	-	75	-
	440 / 480 [V]	75	-	100	-	150	-
	550 / 600 [V]	75	-	100	-	150	-
	Ith	-	160	-	210	-	275

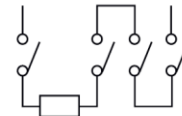
. Wiring diagrams



2pole for DC contact



3pole for DC contact



4pole for DC contact

5. GENERAL CHARACTERISTICS *(continued)*

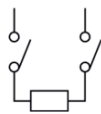
Rating: In accordance with CE (IEC) and UL 508 certifications - $\theta \leq 55 [^{\circ}\text{C}]$ *(continued)*

. For Contactor CTX³ 4P 420, 500, 750 and 900.

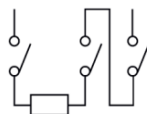
Contactor type			CTX ³ 330 - 420 [A]		CTX ³ 400 - 500 [A]		CTX ³ 630 - 750 [A]		CTX ³ 800 - 900 [A]	
			[kW]	[A]	[kW]	[A]	[kW]	[A]	[kW]	[A]
AC duty	AC1	200 / 240 [V]	135	420	160	500	255	750	310	900
		380 / 440 [V]	250	420	300	500	470	750	570	900
		500 / 550 [V]	315	420	375	500	590	750	710	900
		690 [V]	390	420	470	500	740	750	900	900
	AC3	200 / 240 [V]	90	330	125	400	190	630	220	800
		380 / 440 [V]	160	330	200	400	330	630	440	800
lth		-	420	-	500	-	750	-	900	
DC1 duty	2 pole in series	110 [V]	-	200	-	200	-	630	-	630
		220 [V]	-	200	-	200	-	630	-	630
	3 pole in series	110 [V]	-	330	-	400	-	630	-	800
		220 [V]	-	330	-	400	-	630	-	800
	4 pole in series	110 [V]	-	330	-	400	-	630	-	800
		220 [V]	-	330	-	400	-	630	-	800

Contactor type		CTX ³ 330 - 420 [A]		CTX ³ 400 - 500 [A]		CTX ³ 630 - 750 [A]		CTX ³ 800 - 900 [A]	
		[hp]	[A]	[hp]	[A]	[hp]	[A]	[hp]	[A]
UL Rating (50 / 60 [Hz])	200 / 240 [V]	125	-	150	-	250	-	300	-
	440 / 480 [V]	250	-	300	-	500	-	600	-
	550 / 600 [V]	250	-	300	-	500	-	600	-
	lth	-	350	-	450	-	660	-	900

. Wiring diagrams



2pole for DC contact



3pole for DC contact



4pole for DC contact

5. GENERAL CHARACTERISTICS (continued)

Making and Breaking conditions according to application categories:

Category	Durability conditions						Occasional operation						
	Making			Breaking			Making			Breaking			
	I/I	U/U	Cos θ or L/R [ms]	I/I	U/U	Cos θ or L/R [ms]	I/I	U/U	Cos θ or L/R [ms]	I/I	U/U	Cos θ or L/R [ms]	
Magnetic contactors for AC circuit switching													
AC-1	1	1	0.95	1	1	0.95	1.5	1.05	0.8	1.5	1.05	0.8	
AC-2	2.5	1	0.65	2.5	1	0.65	4	1.05	0.65	4	1.05	0.65	
AC-3	$I \leq 17$ [A]	6	1	0.65	1	0.17	0.65	10	1.05	0.45	8	1.05	0.45
	$17 < I \leq 100$ [A]	6	1	0.35	1	0.17	0.35	10	1.05	0.45	8	1.05	0.45
	$I > 100$ [A]	6	1	0.35	1	0.17	0.35	10	1.05	0.35	8	1.05	0.35
AC-4	$I \leq 17$ [A]	6	1	0.65	6	1	0.65	12	1.05	0.45	10	1.05	0.45
	$17 < I \leq 100$ [A]	6	1	0.35	6	1	0.35	12	1.05	0.45	10	1.05	0.45
	$I > 100$ [A]	6	1	0.35	6	1	0.35	12	1.05	0.35	10	1.05	0.35
Magnetic contactors for DC circuit switching													
DC-1	1	1	1	1	1	1	1.5	1.05	1	1.5	1.05	1	
DC-3	2.5	1	2	2.5	1	2	4	1.05	2.5	4	1.05	2.5	
DC-5	2.5	1	7.5	2.5	1	7.5	4	1.05	15	4	1.05	15	

Operational current when connected in parallel:

	2 pole in parallel	3 pole in parallel	4 pole in parallel
K	1.6	2.25	2.8

5. GENERAL CHARACTERISTICS *(continued)*

Selection guide for electrical durability:

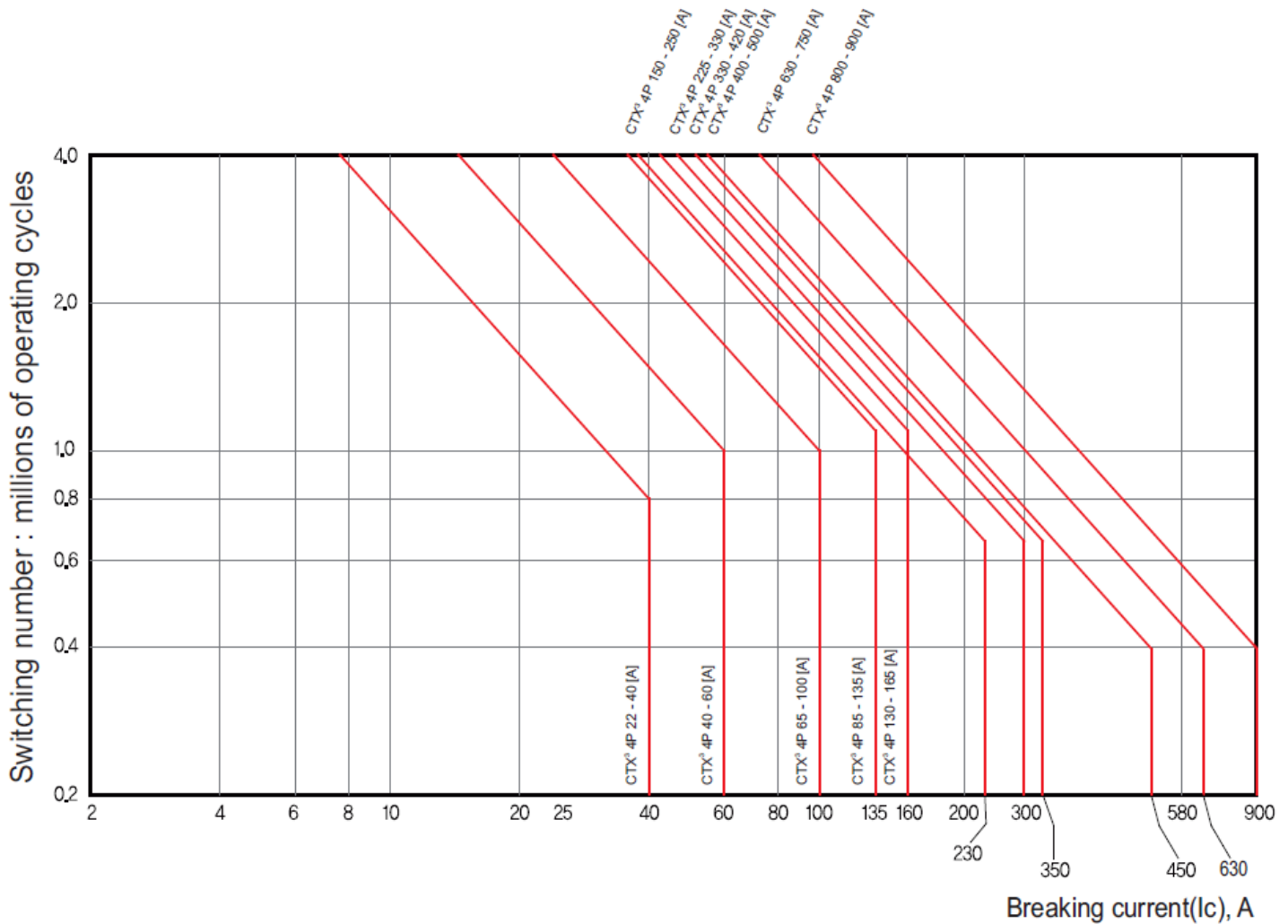
. For Contactor CTX³ 4P 40-900[A]

- Category AC-1
- Operational voltage : less than AC 440 [V]
- Power factor : more than 0.95
- It follows when it is applied to resistance load such as heating resistance

Category	Making and Breaking capacity		Electric switching durability	
	Making	Breaking	Making	Breaking
AC-1	1.5 I _e , 1.1 U _e Cos Ø 0.95	1.5 I _e , 1.1 U _e Cos Ø 0.95	I _e , U _e Cos Ø 0.95	I _e , U _e Cos Ø 0.95

. With:

- I_e : Rated operational current
- U_e : Rated voltage
- Cos Ø : Power factor

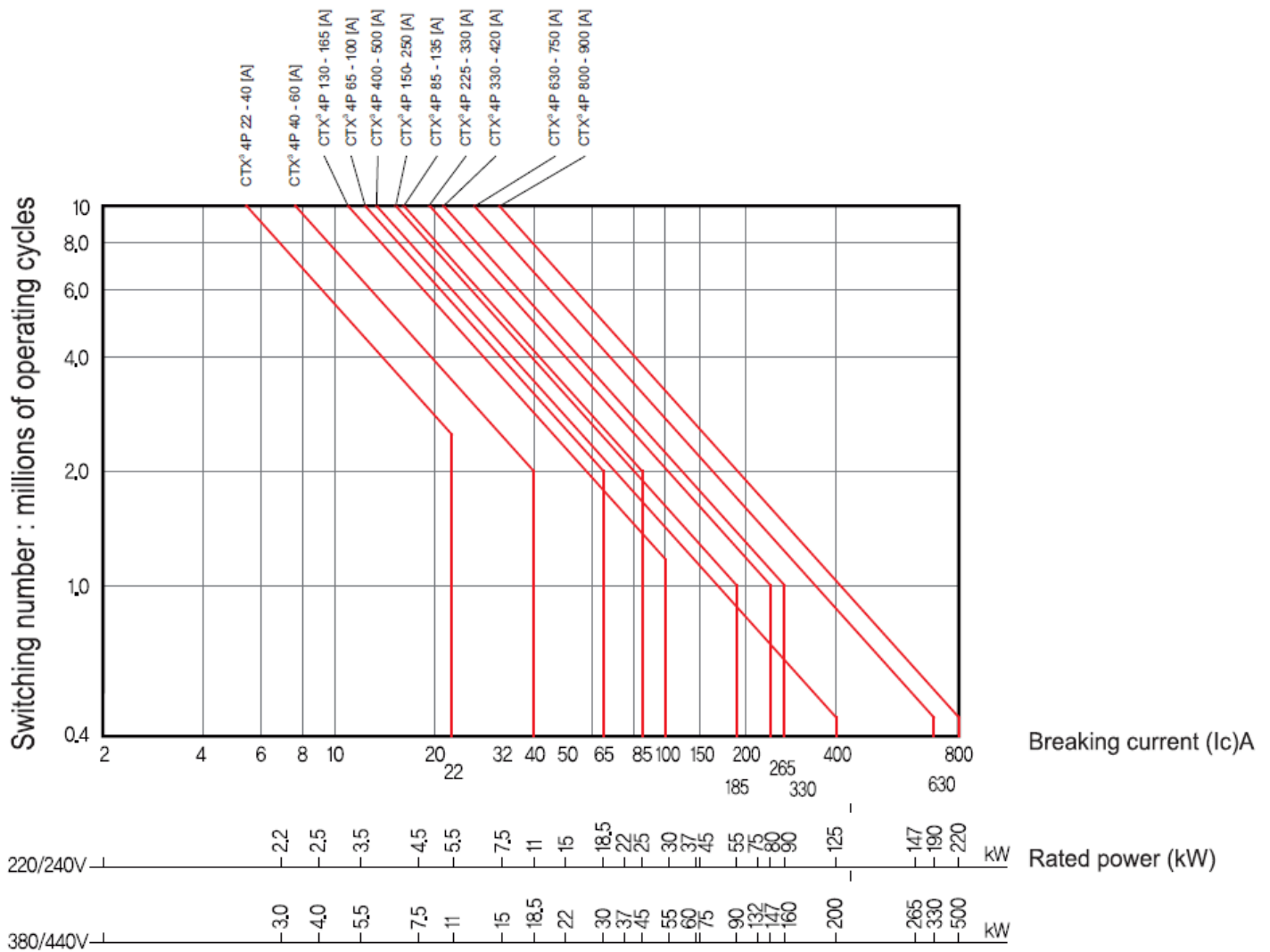


5. GENERAL CHARACTERISTICS (continued)

Selection guide for electrical durability: (continued)

. For Contactor CTX³ 4P 40-900[A]

- Category AC-3
- Operational voltage : less than 440 [V]

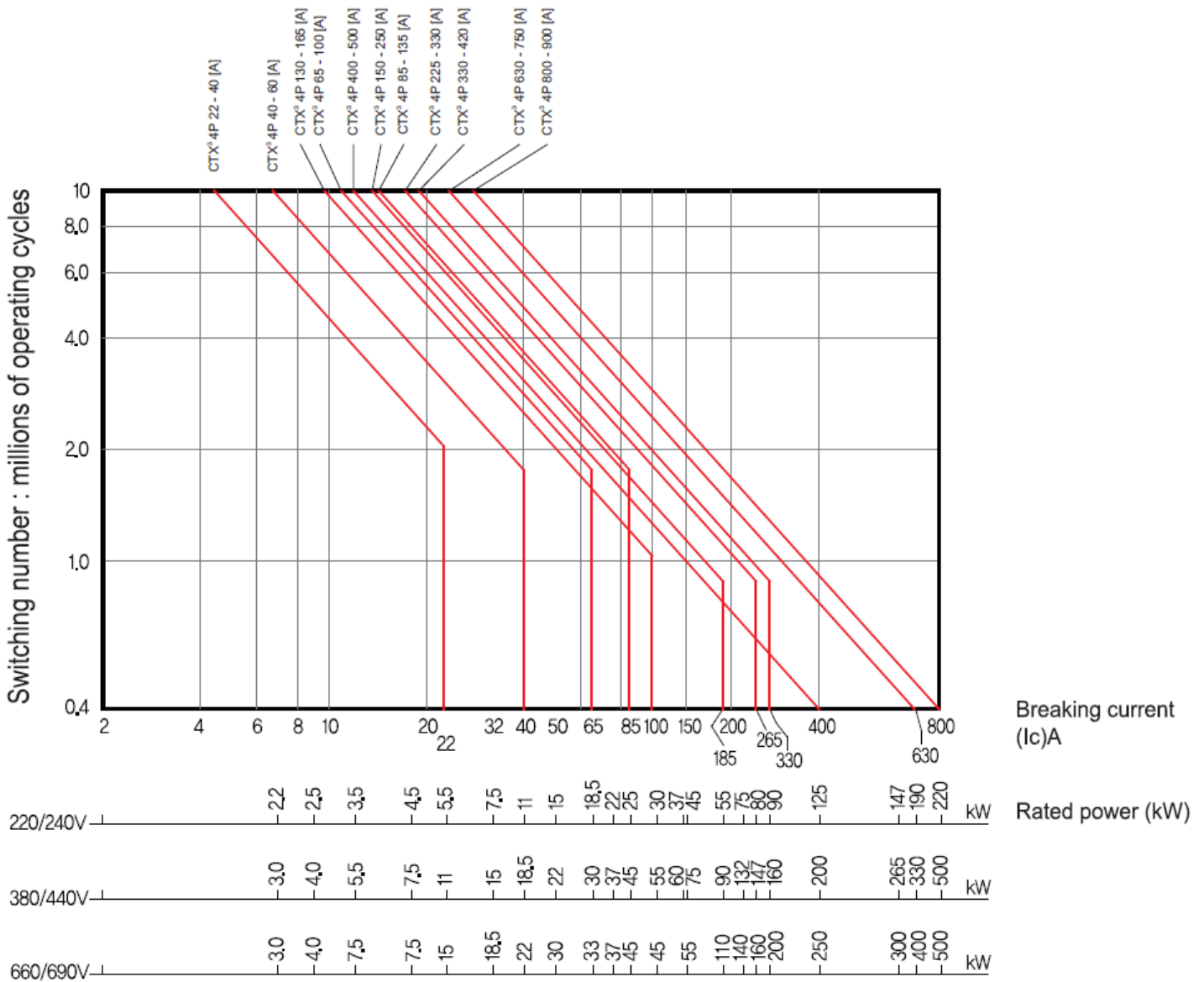


5. GENERAL CHARACTERISTICS (continued)

Selection guide for electrical durability: (continued)

. For Contactor CTX³ 4P 40~900[A]

- Category AC-3
- Operational voltage : less than AC660/690 [V]

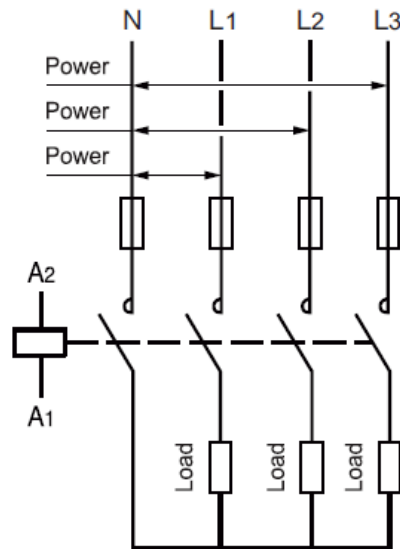


5. GENERAL CHARACTERISTICS (continued)

Heating circuit:

. Switching, control, protection

- 3 phases switching: (Controlled circuit by 3 poles of contactor)



. Component selection according to switching power

- 3 phases switching: (Controlled circuit by 3 poles of contactor)

Contactor type		CTX ³ 4P 22	CTX ³ 4P 40	CTX ³ 4P 65	CTX ³ 4P 85	CTX ³ 4P 130
		40 [A]	60 [A]	100 [A]	135 [A]	165 [A]
Maximum power [kW]	220 / 240 [V]	8	19	24	34	34
	380 / 415 [V]	15.5	32	41	59	59
	660 / 690 [V]	27	57	72	105	105

Contactor type		CTX ³ 4P 150	CTX ³ 4P 225	CTX ³ 4P 330	CTX ³ 4P 400	CTX ³ 4P 630	CTX ³ 4P 800
		250 [A]	330 [A]	420 [A]	500 [A]	750 [A]	900 [A]
Maximum power [kW]	220 / 240 [V]	82	103	130	149	268	389
	380 / 415 [V]	143	179	225	256	464	672
	660 / 690 [V]	220	275	345	395	710	1030

5. GENERAL CHARACTERISTICS (continued)

Switching the primaries of 3 phase LV / LV transformers: In accordance with IEC 947-4-1 (Table VII b).

. Selection of Contactors

- Maximum ambient temperature : +55 [°C]

Contactor type		CTX ³ 4P 22	CTX ³ 4P 40	CTX ³ 4P 65	CTX ³ 4P 85	CTX ³ 4P 130	CTX ³ 4P 150	CTX ³ 4P 225
		40 [A]	60 [A]	100 [A]	135 [A]	165 [A]	250 [A]	330 [A]
Closing maximum operational power [kVA]	220 / 240 [V]	6.1	16	18	19.3	24.1	40	50.7
	380 / 400 [V]	10.2	27	31	32.1	40.2	66.6	84.5
	415 / 440 [V]	11.2	32	36	35.4	44.2	73.3	92.9
	500 [V]	12.8	36	40	40.2	50.2	83.3	105.6
	660 / 690 [V]	17.6	48	53	55.5	69.3	115	142.5
Maximum permissible closing peak current - [A]		420	1250	1400	1550	1650	2900	3800

Contactor type		CTX ³ 4P 330	CTX ³ 4P 400	CTX ³ 4P 630	CTX ³ 4P 800
		420 [A]	500 [A]	750 [A]	900 [A]
Closing maximum operational power [kVA]	220 / 240 [V]	64.5	74.8	114.7	179.6
	380 / 400 [V]	112	130.3	191.2	288.2
	415 / 440 [V]	123.2	149.4	210.3	323.1
	500 [V]	140	169.7	249.4	367.2
	660 / 690 [V]	173.5	200.8	329.9	411.11
Maximum permissible closing peak current - [A]		5000	6300	9000	12000

Control and signalling transformers:

. Transformer sizing for contactors coil supply

$$P_{\text{inrush}} = 0.8 (\Sigma P_m + \Sigma P_r + P_a)$$

. With:

. ΣP_m = Sum of all contactors holding powers.

. ΣP_r = Sum of all indicators light powers.

. P_a = Inrush power of the largest contactor.

Power terminals heat dissipation:

CTX ³ 4P	40 [A]	60 [A]	100 [A]	135 [A]	165 [A]	250 [A]	330 [A]	420 [A]	500 [A]	750 [A]	900 [A]
AC-1 le 440 [V]	22	40	65	85	105	180	265	300	400	630	800
Power dissipation [W]	1.7	5.6	3	5.1	7.7	1.1	24	32	56	69	112

5. GENERAL CHARACTERISTICS (continued)

Coordination: Type 2 (continued)

. According to IEC 60947-4-1

Motor		Circuit-breaker				Contactor	Test	
Rated power (kW)	Rated current (A)	Type	Rated current (A)	Magnetic threshold (A)	Reference	Type	Rated conditionnal short-circuit current I _q (kA)	Voltage (V)
5,5	11	DX ³ -MA	12,5	160	4 098 91	4 164 26	15	400
6,3	13	DX ³ -MA	16	200	4 098 92	4 164 26	15	400
7,5	15	DX ³ -MA	16	200	4 098 92	4 164 26	15	400
10	20	DX ³ -MA	25	320	4 098 93	4 164 26	15	400
11	22	DX ³ -MA	25	320	4 098 93	4 164 26	15	400
18,5	35	DX ³ -MA	40	500	4 098 94	4 164 36	10	400
20	38	DX ³ -MA	40	500	4 098 94	4 164 36	10	400
30	57	DX ³ -MA	63	880	4 098 95	4 164 46	10	400
31,5	59	DX ³ -MA	63	880	4 098 95	4 164 46	10	400

Motor		Circuit-breaker				Contactor	Test	
Rated power (kW)	Rated current (A)	Type	Rated current (A)	Magnetic threshold (A)	Reference	Type	Conditional short-circuit current I _q (kA)	Voltage (V)
5.5	11.5	DPX ³ 160	16	400	4 200 90	4 164 36	36	400
7,5	15.5	DPX ³ 160	16	400	4 200 90	4 164 36	36	400
15	29	DPX ³ 160	40	400	4 200 92	4 164 56	36	400
16	31	DPX ³ 160	40	400	4 200 92	4 164 56	36	400
18,5	35	DPX ³ 160	40	400	4 200 92	4 164 56	36	400
20	38	DPX ³ 160	40	400	4 200 92	4 164 56	36	400
37	68	DPX ³ 160	100	1000	4 200 95	4 164 66	36	400
40	74	DPX ³ 160	100	1000	4 200 95	4 164 66	36	400
45	82	DPX ³ 160	100	1000	4 200 95	4 164 66	36	400
50	92	DPX ³ 160	100	1000	4 200 95	4 164 66	36	400
55	102	DPX ³ 160	125	1250	4 200 96	4 164 76	36	400
63	115	DPX ³ 160	125	1250	4 200 96	4 164 76	36	400

5. GENERAL CHARACTERISTICS (continued)

Coordination: Type 2 (continued)

. According to IEC 60947-4-1

Motor		Circuit-breaker				Contactor	Test	
Rated power (kW)	Rated current (A)	Type	Rated current (A)	Magnetic threshold (A)	Référence	Type	Conditional short-circuit current I _q (kA)	Voltage (V)
22	41	DPX ³ 160	63	220 - 630	4 201 33	4 164 46	50	400
25	47	DPX ³ 160	63	220 - 630	4 201 33	4 164 56	50	400
40	74	DPX ³ 250	100	350 - 1000	4 206 15	4 164 66	50	400
45	82	DPX ³ 250	100	350 - 1000	4 206 15	4 164 66	50	400
50	92	DPX ³ 250	100	350 - 1000	4 206 15	4 164 66	50	400
55	102	DPX ³ 250	100	350 - 1000	4 206 15	4 164 76	50	400
63	115	DPX ³ 250	160	560 - 1600	4 206 17	4 164 76	50	400
110	204	DPX ³ 250	250	900 - 2500	4 206 19	4 164 86	50	400
150	262	DPX ³ 630	320	1600 - 3200	4 220 34	4 164 96	50	400
160	282	DPX ³ 630	320	1600 - 3200	4 220 34	4 164 96	50	400
200	350	DPX ³ 630	400	2000 - 3200	4 220 35	4 165 06	50	400
220	387	DPX ³ 630	400	1600 - 3200	4 220 35	4 165 06	50	400
250	440	DPX ³ 630	500	1600 - 3200	4 220 36	4 165 16	50	400

5. GENERAL CHARACTERISTICS *(continued)*

Coordination: Type 2 *(continued)*

. According to IEC 60947-4-1

Motor		Circuit-breaker				Contactor	Test	
Rated power (kW)	Rated current (A)	Type	Rated current (A)	Magnetic threshold (A)	Référence	Type	Conditional short-circuit current I _q (kA)	Voltage (V)
18,5	34	DPX ³ 160	40	140 - 400	4 201 32	4 164 46	30	440
20	37	DPX ³ 160	40	140 - 400	4 201 32	4 164 46	30	440
25	45	DPX ³ 160	63	220 - 630	4 201 33	4 164 56	30	440
40	71	DPX ³ 250	100	350 - 1000	4 206 15	4 164 66	50	440
45	78	DPX ³ 250	100	350 - 1000	4 206 15	4 164 66	50	440
50	88	DPX ³ 250	100	350 - 1000	4 206 15	4 164 66	50	440
55	98	DPX ³ 250	100	350 - 1000	4 206 15	4 164 76	50	440
63	110	DPX ³ 250	160	560 - 1600	4 206 17	4 164 76	50	440
90	157	DPX ³ 250	160	560 - 1600	4 206 17	4 164 86	50	440
150	244	DPX ³ 630	320	1600 - 3200	4 220 34	4 165 06	50	440
160	260	DPX ³ 630	320	1600 - 3200	4 220 34	4 165 06	50	440
200	330	DPX ³ 630	400	1600 - 3200	4 220 35	4 165 16	50	440
220	355	DPX ³ 630	400	1600 - 3200	4 220 35	4 165 16	50	440
250	405	DPX ³ 630	500	1600 - 3200	4 220 36	4 165 26	50	440

5. GENERAL CHARACTERISTICS *(continued)*

Lighting circuit selection guid:

. Incandescent lamp:

- Incandescent lamp, halogen lamp

Contactor (4P)	P [W]	60	75	100	150	200	300	500	750	1000
	I [A]	0.27	0.34	0.45	0.68	0.91	1.36	2.27	3.41	4.55
CTX ³ 22 40A	Maximum number of lamp according to P [W]	62	49	37	25	19	12	7	5	4
CTX ³ 40 60A		117	93	70	47	35	23	14	9	7
CTX ³ 65 100A		217	173	130	87	65	43	26	17	13
CTX ³ 85 135A		283	227	170	113	85	57	34	23	17
CTX ³ 130 165A		317	253	190	127	95	63	38	25	19
CTX ³ 150 250A		700	560	420	280	210	140	84	56	42
CTX ³ 225 330A		883	707	530	353	265	177	106	71	53
CTX ³ 330 420A		1000	800	600	400	300	200	120	80	60
CTX ³ 400 500A		1267	1013	760	507	380	253	152	101	76
CTX ³ 630 750A		2333	1867	1400	933	700	467	280	187	140
CTX ³ 800 900A		3033	2427	1820	1213	910	607	364	243	182

- Mixed lighting

Contactor (4P)	P [W]	100	160	250	500	1000
	I [A]	0.45	0.73	1.14	2.27	4.55
CTX ³ 22 40A	Maximum number of lamp according to P [W]	37	23	15	7	4
CTX ³ 40 60A		70	44	28	14	7
CTX ³ 65 100A		130	81	52	26	13
CTX ³ 85 135A		170	106	68	34	17
CTX ³ 130 165A		190	119	76	38	19
CTX ³ 150 250A		420	263	168	84	42
CTX ³ 225 330A		530	331	212	106	53
CTX ³ 330 420A		600	375	240	120	60
CTX ³ 400 500A		760	475	304	152	76
CTX ³ 630 750A		1400	875	560	280	140
CTX ³ 800 900A		1820	1138	728	364	182

5. GENERAL CHARACTERISTICS *(continued)*

Lighting circuit selection guide: *(continued)*

. Fluorescent lamp with starter:

- Single fitting

Contactor (4P)	Type	Not compensated					With AC compensation (parallel connection)				
	P [W]	20	40	65	80	110	20	40	65	80	110
	I [A]	0.39	0.45	0.70	0.80	1.20	0.17	0.26	0.42	0.52	0.72
	C [μF]	-	-	-	-	-	5	5	7	7	16
CTX ³ 22 40A	Maximum number of lamp according to P [W]	53	46	30	26	17	123	80	50	40	29
CTX ³ 40 60A		112	97	62	55	36	258	169	104	84	61
CTX ³ 65 100A		143	124	80	70	46	329	215	133	107	77
CTX ³ 85 135A		205	177	114	100	66	470	367	190	153	111
CTX ³ 130 165A		205	177	114	100	66	470	367	190	153	111
CTX ³ 150 250A		492	426	274	240	160	1128	738	456	368	266
CTX ³ 225 330A		614	532	342	300	200	1412	922	570	462	332
CTX ³ 330 420A		696	604	388	340	226	1600	1046	648	522	378
CTX ³ 400 500A		882	764	490	430	286	2024	1322	818	662	478
CTX ³ 630 750A		1612	1398	698	786	524	3700	2418	1498	1210	874
CTX ³ 800 900A		2096	1817	907	1022	681	4810	3143	1947	1573	1136

- Twin fitting

Contactor (4P)	Type	Not compensated					With AC compensation (parallel connection)				
	P [W]	2x20	2x40	2x65	2x80	2x110	2x20	2x40	2x65	2x80	2x110
	I [A]	2x0.22	2x0.41	2x0.67	2x0.82	2x1.1	2x0.13	2x0.24	2x0.39	2x0.48	2x0.65
CTX ³ 22 40A	Maximum number of lamp according to P [W]	2x46	2x24	2x14	2x12	2x8	2x80	2x42	2x26	2x20	2x16
CTX ³ 40 60A		2x100	2x52	2x32	2x26	2x15	2x168	2x90	2x56	2x44	2x32
CTX ³ 65 100A		2x126	2x68	2x40	2x34	2x24	2x214	2x116	2x70	2x58	2x42
CTX ³ 85 135A		2x180	2x96	2x58	2x48	2x36	2x306	2x166	2x102	2x82	2x60
CTX ³ 130 165A		2x180	2x96	2x58	2x48	2x36	2x306	2x166	2x102	2x82	2x60
CTX ³ 150 250A		2x436	2x234	2x142	2x116	2x86	2x738	2x400	2x246	2x200	2x146
CTX ³ 225 330A		2x544	2x292	2x178	2x146	2x108	2x922	2x500	2x308	2x250	2x184
CTX ³ 330 420A		2x618	2x332	2x202	2x166	2x124	2x1046	2x566	2x348	2x282	2x208
CTX ³ 400 500A		2x782	2x420	2x256	2x210	2x156	2x1322	2x716	2x440	2x358	2x264
CTX ³ 630 750A		2x1430	2x766	2x468	2x384	2x286	2x2418	2x1370	2x806	2x654	2x484
CTX ³ 800 900A		2x1859	2x995	2x608	2x499	2x371	2x3143	2x1781	2x1047	2x850	2x629

5. GENERAL CHARACTERISTICS *(continued)*

Lighting circuit selection guide: *(continued)*

. Fluorescent lamp without starter:

- Single fitting

Contactor (4P)	Type	Not compensated					With AC compensation (parallel connection)				
	P [W]	20	40	65	80	110	20	40	65	80	110
	I [A]	0.39	0.45	0.70	0.80	1.20	0.17	0.26	0.42	0.52	0.72
	C [μF]	-	-	-	-	-	5	5	7	7	16
CTX ³ 22 40A	Maximum number of lamp according to P [W]	48	38	26	22	15	110	72	45	36	26
CTX ³ 40 60A		112	97	62	55	36	258	169	104	84	61
CTX ³ 65 100A		130	101	70	58	40	294	193	121	98	70
CTX ³ 85 135A		186	145	100	84	57	421	275	173	140	101
CTX ³ 130 165A		186	145	100	84	57	421	275	173	140	101
CTX ³ 150 250A		446	348	240	202	130	1010	662	416	336	242
CTX ³ 225 330A		558	438	300	252	170	1252	828	522	420	304
CTX ³ 330 420A		632	494	340	286	194	1462	936	590	476	344
CTX ³ 400 500A		800	524	430	362	246	1810	1186	748	604	434
CTX ³ 630 750A		1462	1144	786	662	448	3310	2168	1366	1104	796
CTX ³ 800 900A		1901	1487	1022	861	582	4303	2818	1776	1435	1035

- Twin fitting

Contactor (4P)	Type	Not compensated					With AC compensation (parallel connection)				
	P [W]	2x20	2x40	2x65	2x80	2x110	2x20	2x40	2x65	2x80	2x110
	I [A]	2x0.22	2x0.41	2x0.67	2x0.82	2x1.1	2x0.13	2x0.24	2x0.39	2x0.48	2x0.65
CTX ³ 22 40A	Maximum number of lamp according to P [W]	2x42	2x22	2x12	2x10	2x8	2x74	2x40	2x24	2x18	2x14
CTX ³ 40 60A		2x88	2x46	2x28	2x22	2x16	2x156	2x84	2x50	2x40	2x30
CTX ³ 65 100A		2x112	2x58	2x36	2x30	2x20	2x200	2x106	2x64	2x52	2x38
CTX ³ 85 135A		2x160	2x84	2x52	2x42	2x30	2x234	2x152	2x92	2x74	2x54
CTX ³ 130 165A		2x160	2x84	2x52	2x42	2x30	2x234	2x152	2x92	2x74	2x54
CTX ³ 150 250A		2x384	2x204	2x126	2x102	2x74	2x686	2x368	2x222	2x180	2x132
CTX ³ 225 330A		2x480	2x254	2x156	2x128	2x92	2x856	2x462	2x278	2x226	2x166
CTX ³ 330 420A		2x544	2x288	2x178	2x146	2x104	2x970	2x522	2x316	2x256	2x188
CTX ³ 400 500A		2x688	2x366	2x226	2x184	2x132	2x1228	2x662	2x400	2x324	2x238
CTX ³ 630 750A		2x1258	2x668	2x414	2x338	2x242	2x2246	2x1210	2x730	2x592	2x436
CTX ³ 800 900A		2x1698	2x901	2x558	2x456	2x326	2x3032	2x1633	2x985	2x799	2x588

5. GENERAL CHARACTERISTICS *(continued)*

Lighting circuit selection guide: *(continued)*

. Sodium vapor lamp:

- Low pressure sodium vapor lamps

Contactor (4P)	Type	Not compensated							With AC compensation (parallel connection)						
	P [W]	35	55	90	135	150	180	200	35	55	90	135	150	180	200
	I [A]	1.2	1.6	2.4	3.1	3.2	3.3	3.4	0.3	0.4	0.6	0.9	1	1.2	1.3
	C [μF]	-	-	-	-	-	-	-	17	17	25	36	36	36	36
CTX ³ 22 40A	Maximum number of lamp according to P [W]	12	9	6	4	4	4	4	50	37	25	-	-	-	-
CTX ³ 40 60A		27	20	13	10	10	10	9	110	82	55	36	33	27	25
CTX ³ 65 100A		35	26	17	13	13	12	12	140	105	70	46	42	35	32
CTX ³ 85 135A		50	37	25	19	18	18	17	200	150	100	66	60	50	46
CTX ³ 130 165A		50	37	25	19	18	18	17	200	150	100	66	60	50	46
CTX ³ 150 250A		140	104	70	54	52	50	48	560	420	280	186	168	140	128
CTX ³ 225 330A		174	130	88	68	66	64	62	700	524	350	232	210	174	162
CTX ³ 330 420A		198	148	98	76	74	72	70	792	594	396	264	238	198	182
CTX ³ 400 500A		250	188	124	96	94	90	88	1002	752	502	334	300	250	208
CTX ³ 630 750A		496	372	248	192	186	180	174	1982	1488	992	660	694	496	458
CTX ³ 800 900A		724	543	362	280	272	263	254	2894	2172	1448	964	1013	724	669

- High pressure sodium vapor lamps

Contactor (4P)	Type	Not compensated					With AC compensation (parallel connection)				
	P [W]	3.5	5.5	90	135	150	3.5	55	90	135	150
	I [A]	1.2	1.6	2.4	3.1	3.2	0.3	0.4	0.6	0.9	1
	C [μF]	-	-	-	-	-	17	17	25	36	36
CTX ³ 22 40A	Maximum number of lamp according to P [W]	7	4	3	1	1	17	-	-	-	-
CTX ³ 40 60A		17	10	6	3	2	39	23	15	8	6
CTX ³ 65 100A		22	13	8	4	3	50	30	19	10	7
CTX ³ 85 135A		31	18	12	6	4	71	42	27	15	10
CTX ³ 130 165A		31	18	12	6	4	71	42	27	15	10
CTX ³ 150 250A		88	52	34	18	14	200	120	76	42	30
CTX ³ 225 330A		110	66	42	24	18	250	150	94	54	38
CTX ³ 330 420A		124	74	48	26	20	282	170	108	60	42
CTX ³ 400 500A		158	94	60	34	24	358	214	136	76	54
CTX ³ 630 750A		312	186	118	68	48	708	424	270	152	108
CTX ³ 800 900A		452	270	171	99	70	1027	615	392	220	157

5. GENERAL CHARACTERISTICS *(continued)*

Lighting circuit selection guide: *(continued)*

. Mercury lamp:

- High pressure mercury vapor lamps

Contactor (4P)	Type	Not compensated							With AC compensation (parallel connection)						
	P [W]	50	80	125	250	400	700	1000	35	55	90	135	150	185	200
	I [A]	0.54	0.81	1.20	2.30	4.10	6.80	9.90	0.30	0.45	0.67	1.30	2.30	3.80	5.50
	C [μF]	-	-	-	-	-	-	-	10	10	10	18	25	40	60
CTX ³ 22 40A	Maximum number of lamp according to P [W]	27	18	12	6	3	2	1	50	33	22	11	6	-	-
CTX ³ 40 60A		61	40	27	14	8	4	3	110	73	49	25	14	8	6
CTX ³ 65 100A		77	51	34	17	10	6	4	140	93	62	32	18	11	7
CTX ³ 85 135A		111	74	49	26	14	8	6	200	133	89	46	26	15	10
CTX ³ 130 165A		111	74	49	26	14	8	6	200	133	89	46	26	15	10
CTX ³ 150 250A		310	206	140	72	40	24	17	560	372	250	128	72	44	30
CTX ³ 225 330A		388	258	174	90	50	30	20	700	466	312	162	90	54	38
CTX ³ 330 420A		440	294	198	102	58	34	24	792	528	354	182	102	62	42
CTX ³ 400 500A		556	372	250	130	72	44	30	1002	668	448	232	130	78	54
CTX ³ 630 750A		1102	734	496	258	144	88	60	1982	1322	888	458	258	156	108
CTX ³ 800 900A		1609	1072	724	377	210	128	88	2894	1930	1296	669	377	228	158

- Metal iodide lamps

Contactor (4P)	Type	Not compensated				With AC compensation (parallel connection)			
	P [W]	35	55	90	100	35	55	90	100
	I [A]	1.2	1.6	2.4	3.2	0.3	0.4	0.6	1
	C [μF]	-	-	-	-	17	17	25	36
CTX ³ 22 40A	Maximum number of lamp according to P [W]	6	4	1	-	-	-	-	-
CTX ³ 40 60A		13	9	3	1	23	16	6	-
CTX ³ 65 100A		16	11	4	2	30	21	7	-
CTX ³ 85 135A		24	16	6	3	42	30	11	5
CTX ³ 130 165A		24	16	6	3	42	30	11	5
CTX ³ 150 250A		66	46	18	8	120	84	32	14
CTX ³ 225 330A		84	58	22	12	150	104	40	18
CTX ³ 330 420A		94	66	24	14	170	118	44	20
CTX ³ 400 500A		120	84	32	16	214	150	56	26
CTX ³ 630 750A		238	164	62	30	424	298	112	52
CTX ³ 800 900A		347	239	91	44	619	435	164	76

6. CONFORMITIES AND APPROVALS

Compliance to standards:

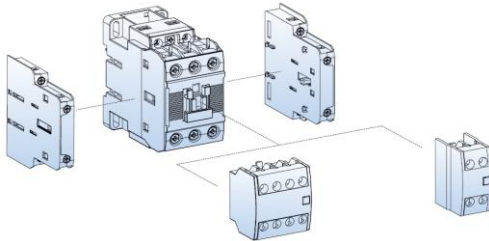
. Standards references: IEC/EN 60 947-1, IEC/EN 60 947-4-1 and UL 508.

. Certifications: CE, UL.

7. AUXILIARIES AND ACCESSORIES

Auxiliaries:

Installation principle:



Rating:

Type		CTX ³ Auxiliary contact side (2P)	CTX ³ Auxiliary front side (2P & 4P)	
Rated operation voltage (Ue)		600 [V]	600 [V]	
Rated insulation voltage (Ui)		600 [V]	600 [V]	
Rated impulse withstand voltage (Uimp)		6 [kV]	6 [kV]	
Rated frequency		50 / 60 [Hz]	50 / 60 [Hz]	
Contact sensibility	Voltage	DC 17 [V]	DC 24 [V]	
	Current	DC 5 [mA]	DC 10 [mA]	
Rated thermal current (Ith, AC 12 duty)		10 [A]	16 [A]	
Rated operation current	AC 15 duty	120 [V]	6 [A]	6 [A]
		240 [V]	3 [A]	3 [A]
		380 [V]	1.9 [A]	1.9 [A]
		480 [V]	1.5 [A]	1.5 [A]
		500 [V]	1.4 [A]	1.4 [A]
	DC 13 duty	600 [V]	1.2 [A]	1.2 [A]
		125 [V]	1.1 [A]	1.1 [A]
		250 [V]	0.55 [A]	0.55 [A]
		400 [V]	0.31 [A]	0.31 [A]
		500 [V]	0.27 [A]	0.27 [A]
Rated short-time withstand current	1 [s]	100 [A]	-	
	0.5 [s]	125 [A]	-	
	0.1 [s]	145 [A]	-	
Electrical lifetime (mil. operations)	AC 15 duty	220 [V]	0.25	0.25
		440 [V]	0.25	0.25
	DC 13 duty	220 [V]	0.25	0.25
		440 [V]	0.25	0.25
Maximum operating cycles per hour		1800	1800	
Conductor size (solid, stranded)	[AWG]	18~10	18~10	
	[mm²]	1~2.5	1~2.5	

. Minimum current of Auxiliary contactor is DC 17 [V] 5 [mA].

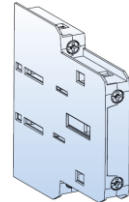
7. AUXILIARIES AND ACCESSORIES (continued)

Auxiliaries: (continued)

CTX³ auxiliary contact side: weight = 0.53 [kg]
- 1NO + 1NC (cat n° 4 168 59)



1NO + 1NC



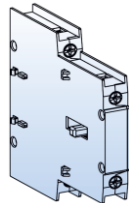
. Normally closed (NC) auxiliary contact meet the requirements of mirror contacts in IEC 60 947-4-1 (Annex F).

. For Contactors CTX³ 4P from 165 to 900 [A].

CTX³ auxiliary contact side: weight = 0.53 [kg]
- 1NO + 1NC (cat n° 4 168 49)

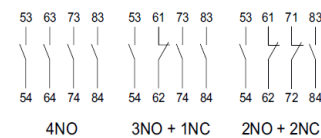


1NO + 1NC

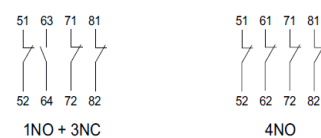


. For Contactors CTX³ 4P from 40 to 135 [A].

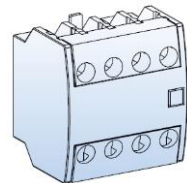
CTX³ auxiliary contact front: weight = 0.50 [kg]
- 4NO (cat n° 4 168 53).
- 3NO + 1NC (cat n° 4 168 54).
- 2NO + 2NC (cat n° 4 168 55).
- 1NO + 3NC (cat n° 4 168 56).
- 4NC (cat n° 4 168 57)



4NO 3NO + 1NC 2NO + 2NC

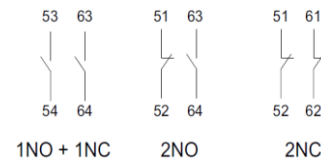


1NO + 3NC 4NO

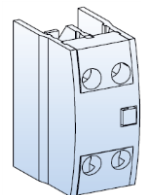


. For Contactors CTX³ 4P from 40 to 135 [A].

CTX³ auxiliary contact front: weight = 0.28 [kg]
- 1NO + 1NC (cat n° 4 168 50).
- 2NO (cat n° 4 168 51).
- 2NC (cat n° 4 168 52)



1NO + 1NC 2NO 2NC



. For Contactors CTX³ 4P from 40 to 135 [A].

7. AUXILIARIES AND ACCESSORIES (continued)

Auxiliaries: (continued)

Maximum combination of Auxiliaries:

Type of products	CTX ³ Auxiliary contact side (2P)	CTX ³ Auxiliary front side (2P)	CTX ³ Auxiliary front side (4P)
CTX ³ 4P 40 [A]	1 (on one side)	-	1
	1 (on one side)	1	-
	2 (on both sides)	-	-
CTX ³ 4P 60~165 [A]	2 (1 on both sides)	-	1
	2 (1 on both sides)	1	-
	4 (2 on both sides)	-	-
CTX ³ 4P 250A~900 [A]	4 (2 on one sides)	-	-

Making Breaking conditions according to application categories: According to IEC/EN 60 947-4-1

Category	Normal operation						Occasional operation					
	Making			Breaking			Making			Breaking		
	I	U	Cos Ø	I	U	Cos Ø	I	U	Cos Ø	I	U	Cos Ø
AC-14	6 I _e	U _e	0.3	I _e	U _e	0.3	6 I _e	1.1 U _e	0.7	6 I _e	1.1 U _e	0.7
AC-15	10 I _e	U _e	0.3	I _e	U _e	0.3	10 I _e	1.1 U _e	0.3	10 I _e	1.1 U _e	0.3
DC-13	I _e	U _e	6P	I _e	U _e	6P	1.1 I _e	1.1 U _e	6P	I _e	1.1 U _e	6P

. With:

. I = Inserted and breaking current express symmetric element value such as mean square of DC or AC.

. I_e = Rated current.

. U = Voltage recovery.

. U_e = Rated operation voltage.

- Cos Ø = Power factor

. The value 6P [W] is based on real axis, P = 50 [W], in other words it indicates the most magnetic load up to maximum limit of 6P = 300 [ms] = L/R. The upper load of this consists of smaller loads in parallel. Therefore 300 [ms] is the maximum limit regardless of rated current value.

7. AUXILIARIES AND ACCESSORIES *(continued)*

Accessories:

- Mechanical interlock unit CTX³:** weight = 0.04 [kg]
- Mechanical interlock unit (cat n° 4 168 79)



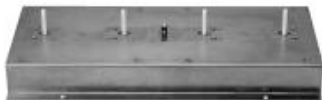
- . For Contactors CTX³ 4P from 40 to 135 [A].

- Mechanical interlock unit CTX³:**
- Mechanical interlock unit (Cat n° 4 168 87)
- Weight = 0.09 [kg]



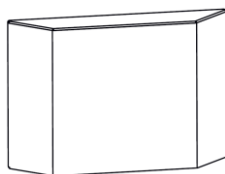
- . For Contactors CTX³ 4P from 165 to 400 [A].

- Mechanical interlock unit CTX³:**
- Mechanical interlock unit (cat n° 4 168 89)
- Weight = 15.2 [kg]



- . For Contactors CTX³ 4P from 750 to 900 [A].
. Mechanical association permitted for equivalent size contactors only.

- CTX³ Safety front cover:**
- CTX³ Safety front cover from 40 - 135 [A]
(cat n° 4 168 40)
. For CTX³ 4P from 40 to 135 [A].
- CTX³ Safety front cover from 165 - 900 [A]
(cat n° 4 168 41)
. For CTX³ 4P from 165 to 900 [A].



7. AUXILIARIES AND ACCESSORIES *(continued)*

Accessories: *(continued)*

Terminal cover unit:

- Terminal cover unit CTX³ 4P from 165 to 330 [A]
(cat n° 4 168 45)
- Terminal cover unit CTX³ 4P from 420 to 500 [A]
(cat n° 4 168 46)
- Terminal cover unit CTX³ 4P from 750 to 900 [A]
(cat n° 4 168 47)



Installation software:

- . XL PRO³