

# 3-pole contactors CTX<sup>3</sup>

## 9 A to 100 A industrial contactors



Technical characteristics and coordination with circuit breakers **p. 26-27**  
 Dimensions **p. 54-55**




Conform to IEC 60947-1, IEC 60947-4-1




Can be equipped with RTX<sup>3</sup> thermal relays add-on auxiliary contact blocks, time delay blocks, capacitor switching units and CTX<sup>3</sup> interlocking







Pack	Cat.Nos	CTX <sup>3</sup> 22			Pack	Cat.Nos	CTX <sup>3</sup> 40		
		With integrated auxiliary contacts Power terminals: screw terminals					With integrated auxiliary contacts Power terminals: screw terminals		
		<b>9 A</b>					<b>32 A</b>		
	Screw terminals	Max. operating current AC 3	Control Voltage	Integrated auxiliary contacts		Screw terminals	Max. operating current AC 3	Control Voltage	Integrated auxiliary contacts
1	4160 80	9 A	24 V~	1 NO + 1 NC	1	4161 20	32 A	24 V~	2 NO + 2 NC
1	4160 81	9 A	24 V=	1 NO + 1 NC	1	4161 21	32 A	24 V=	2 NO + 2 NC
1	4160 82	9 A	48 V~	1 NO + 1 NC	1	4161 22	32 A	48 V~	2 NO + 2 NC
1	4160 83	9 A	48 V=	1 NO + 1 NC	1	4161 23	32 A	48 V=	2 NO + 2 NC
1	4160 84	9 A	110 V~	1 NO + 1 NC	1	4161 24	32 A	110 V~	2 NO + 2 NC
1	4160 86	9 A	230 V~	1 NO + 1 NC	1	4161 26	32 A	230 V~	2 NO + 2 NC
1	4160 88	9 A	380 V~	1 NO + 1 NC	1	4161 28	32 A	380 V~	2 NO + 2 NC
1	4160 89	9 A	415 V~	1 NO + 1 NC	1	4161 29	32 A	415 V~	2 NO + 2 NC
		<b>12 A</b>					<b>40 A</b>		
1	4160 90	12 A	24 V~	1 NO + 1 NC	1	4161 30	40 A	24 V~	2 NO + 2 NC
1	4160 91	12 A	24 V=	1 NO + 1 NC	1	4161 31	40 A	24 V=	2 NO + 2 NC
1	4160 92	12 A	48 V~	1 NO + 1 NC	1	4161 32	40 A	48 V~	2 NO + 2 NC
1	4160 93	12 A	48 V=	1 NO + 1 NC	1	4161 33	40 A	48 V=	2 NO + 2 NC
1	4160 94	12 A	110 V~	1 NO + 1 NC	1	4161 34	40 A	110 V~	2 NO + 2 NC
1	4160 96	12 A	230 V~	1 NO + 1 NC	1	4161 36	40 A	230 V~	2 NO + 2 NC
1	4160 98	12 A	380 V~	1 NO + 1 NC	1	4161 38	40 A	380 V~	2 NO + 2 NC
1	4160 99	12 A	415 V~	1 NO + 1 NC	1	4161 39	40 A	415 V~	2 NO + 2 NC
		<b>18 A</b>					<b>CTX<sup>3</sup> 65</b>		
1	4161 00	18 A	24 V~	1 NO + 1 NC			With integrated auxiliary contacts		
1	4161 01	18 A	24 V=	1 NO + 1 NC			<b>50 A</b>		
1	4161 02	18 A	48 V~	1 NO + 1 NC			Max. operating current AC 3		
1	4161 03	18 A	48 V=	1 NO + 1 NC			Control Voltage		
1	4161 04	18 A	110 V~	1 NO + 1 NC			Integrated auxiliary contacts		
1	4161 06	18 A	230 V~	1 NO + 1 NC	1	4161 40	50 A	24 V~	2 NO + 2 NC
1	4161 08	18 A	380 V~	1 NO + 1 NC	1	4161 41	50 A	24 V=	2 NO + 2 NC
1	4161 09	18 A	415 V~	1 NO + 1 NC	1	4161 42	50 A	48 V~	2 NO + 2 NC
		<b>22 A</b>			1	4161 43	50 A	48 V=	2 NO + 2 NC
1	4161 10	22 A	24 V~	1 NO + 1 NC	1	4161 44	50 A	110 V~	2 NO + 2 NC
1	4161 11	22 A	24 V=	1 NO + 1 NC	1	4161 46	50 A	230 V~	2 NO + 2 NC
1	4161 12	22 A	48 V~	1 NO + 1 NC	1	4161 48	50 A	380 V~	2 NO + 2 NC
1	4161 13	22 A	48 V=	1 NO + 1 NC	1	4161 49	50 A	415 V~	2 NO + 2 NC
1	4161 14	22 A	110 V~	1 NO + 1 NC			<b>65 A</b>		
1	4161 16	22 A	230 V~	1 NO + 1 NC	1	4161 60	65 A	24 V~	2 NO + 2 NC
1	4161 18	22 A	380 V~	1 NO + 1 NC	1	4161 61	65 A	24 V=	2 NO + 2 NC
1	4161 19	22 A	415 V~	1 NO + 1 NC	1	4161 62	65 A	48 V~	2 NO + 2 NC
					1	4161 63	65 A	48 V=	2 NO + 2 NC
					1	4161 64	65 A	110 V~	2 NO + 2 NC
					1	4161 66	65 A	230 V~	2 NO + 2 NC
					1	4161 68	65 A	380 V~	2 NO + 2 NC
					1	4161 69	65 A	415 V~	2 NO + 2 NC





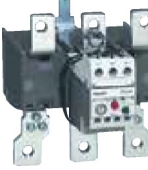
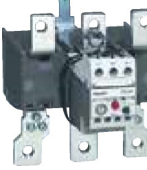
## 3-pole contactors CTX<sup>3</sup> and thermal overload relays RTX<sup>3</sup>

### technical characteristics

												
Contactor		CTX <sup>3</sup> mini				CTX <sup>3</sup> 22				CTX <sup>3</sup> 40		
	Size	-				2				3		
	Terminals type	screw				screw				screw		
	Rated operational voltage, U <sub>e</sub>	690 V				690 V				690 V		
	Rated insulation voltage, U <sub>i</sub>	690 V				690 V				1000 V		
	Rated frequency	50/60 Hz				50/60 Hz				50/60 Hz		
	Rated impulse withstand voltage, U <sub>imp</sub>	6 kV				6 kV				8 kV		
	Max. operating rate in operation cycle per hour (AC-3)	1800				1200				1800		
Durability in millions of operations	Mechanical	12				15				12		
	Electrical	1				2.5				2		
	Type	6 A	9 A	12 A	16 A	9 A	12 A	18 A	22 A	32 A	40 A	
Current and power	AC-1	Thermal current (A)	20	20	20	20	25	25	40	40	50	60
		AC-3	200/240 V (kW)	1.5	2.2	3	4	2.5	3.5	4.5	5.5	7.5
	(A)		7	9	12	15	11	13	18	22	32	40
		380/440 V (kW)	2.2	4	5.5	7.5	4	5.5	7.5	11	15	18.5
		(A)	6	9	12	16	9	12	18	22	32	40
		500/550 V (kW)	3	3.7	4	5.5	4	7.5	7.5	15	18.5	22
		(A)	5	6	7	9	7	12	13	20	28	32
		690 V (kW)	3	4	4	4	4	7.5	7.5	15	18.5	22
(A)		4	5	5	5	5	9	9	18	20	23	
UL rating 50/60 Hz	Continuous current (A)	20	20	20	20	25	25	40	40	50	60	
		Single phase	110/220 V (HP)	1/2	1/2	1	-	0.5	0.75	1	2	2
	220/240 V (HP)		1	1.5	2	-	1.5	2	3	3	5	7.5
	Three phase	200/208 V (HP)	-	-	-	-	2	3	5	7.5	7.5	15
		220/240 V (HP)	1.5	3	3	-	3	5	7.5	10	10	15
		440/480 V (HP)	3	5	7.5	-	5	7.5	10	15	20	30
		550/600 V (HP)	3	5	7.5	-	7.5	10	15	20	25	30
		NEMA size	00	00	00	0	00	00	0	1	1	1
Weight and size	AC control	Weight (kg)	0.17				0.34				0.4	
		Size (W x H x D) (mm)	45 x 58 x 57				45 x 73.5 x 87.4				45 x 83 x 90	
	DC control	Weight (kg)	0.23				0.41				0.6	
		Size (W x H x D) (mm)	45 x 58 x 69				45 x 73.5 x 103.6				45 x 83 x 117.1	
	Integrated auxiliary contacts	1 NO or 1 NC				1 NO + 1 NC				2 NO + 2 NC		
Add on auxiliary block	Side mounting	Yes				Yes				Yes		
	Front mounting	Yes				Yes				Yes		

											
Thermal overload relay		RTX <sup>3</sup> mini				RTX <sup>3</sup> 40				RTX <sup>3</sup> 40	
	Standard RTX <sup>3</sup>	screw				screw				screw	
	Differential RTX <sup>3</sup>	screw				screw				screw	
	Rated operational voltage, U <sub>e</sub>	690 V				690 V				690 V	
	Rated insulation voltage, U <sub>i</sub>	690 V				690 V				690 V	
	Rated impulse withstand voltage, U <sub>imp</sub>	6 kV				6 kV				6 kV	
	Trip class	10 A				10 A				10 A	
	Setting	0.1 to 16 A				0.1 to 40 A				0.1 to 40 A	
Weight and size	Weight (kg)	0.1				0.17				0.17	
	Size (W x H x D) (mm)	45 x 73 x 63				45 x 75 x 90				45 x 75 x 90	

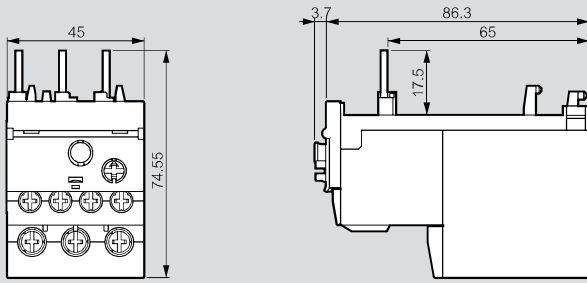
														
CTX <sup>®</sup> 65		CTX <sup>®</sup> 100			CTX <sup>®</sup> 150		CTX <sup>®</sup> 225		CTX <sup>®</sup> 400			CTX <sup>®</sup> 800		
4		5			6		7		8			9		
screw or cage		screw or cage			screw or cage		screw		screw			screw		
690 V		690 V			690 V		690 V		690 V			690 V		
1000 V		1000 V			1000 V		1000 V		1000 V			1000 V		
50/60 Hz		50/60 Hz			50/60 Hz		50/60 Hz		50/60 Hz			50/60 Hz		
8 kV		8 kV			8 kV		8 kV		8 kV			8 kV		
1800		1800			1200		1200		1200			1200		
12		12			5		5		5		2.5		2.5	
2		2			1		1		1		0.5		0.5	
50 A	65 A	75 A	85 A	100 A	130 A	150 A	185 A	225 A	265 A	330 A	400 A	500 A	630 A	800 A
70	100	110	135	160	160	210	230	275	300	350	450	580	660	900
15	18.5	22	25	30	37	45	55	75	80	90	125	147	190	220
55	65	75	85	105	130	150	185	225	265	330	400	500	630	800
22	30	37	45	55	60	75	90	132	147	160	200	265	330	440
50	65	75	85	105	130	150	185	225	265	330	400	500	630	800
30	33	37	45	55	60	70	110	132	147	160	225	265	330	500
43	60	64	75	85	90	100	180	200	225	280	350	400	500	720
30	33	37	45	55	55	55	110	140	160	200	250	300	400	500
28	35	42	45	65	60	60	120	150	185	225	300	380	420	630
70	100	110	135	160	160	210	230	275	300	350	450	580	660	900
3	5	5	7.5	10	10	15	15	15	-	-	-	-	-	-
10	15	15	15	20	20	25	30	40	-	-	-	-	-	-
20	25	25	30	30	40	40	60	60	75	100	125	150	200	200
25	30	30	40	40	40	50	60	75	100	125	150	200	250	300
40	50	50	60	75	75	100	125	150	200	250	300	400	500	600
50	60	60	75	75	75	75	125	150	200	250	300	400	500	600
2	2	2	3	3	3	4	4	4	5	5	5	6	6	7
0.9		1.6			2.4		5.4		9.2			22.4		
55 × 106 × 119		70 × 140 × 135.8			95 × 158 × 130.3		138 × 203 × 185.1		163 × 243 × 204.4			285 × 312 × 245.3		
1.2		2.6			2.4		5.4		9.2			22.4		
55 × 106 × 146.4		70 × 140 × 172.3			95 × 158 × 130.3		138 × 203 × 185.1		163 × 243 × 204.4			285 × 312 × 245.3		
2 NO + 2 NC		2 NO + 2 NC			2 NO + 2 NC		2 NO + 2 NC		2 NO + 2 NC			2 NO + 2 NC		
Yes		Yes			Yes		Yes		Yes			Yes		
Yes		Yes			Yes		No		No			No		

														
RTX <sup>®</sup> 65		RTX <sup>®</sup> 100			RTX <sup>®</sup> 150		RTX <sup>®</sup> 225		RTX <sup>®</sup> 400			RTX <sup>®</sup> 800		
screw		screw			screw		screw		screw			screw		
cage		cage			cage		cage		cage			cage		
690 V		690 V			690 V		690 V		690 V			690 V		
690 V		690 V			690 V		690 V		690 V			690 V		
6 kV		6 kV			6 kV		6 kV		6 kV			6 kV		
10 A		10 A			10 A		10 A		10 A			10 A		
9 to 65 A		18 to 100 A			45 to 150 A		65 to 240 A		85 to 400 A			200 to 800 A		
0.31/0.33		0.48/0.5			0.67		2.5		2.6			11.5		
55 × 81 × 100		70 × 97 × 110			95 × 109 × 113		147 × 141 × 184		151 × 171 × 198			360 × 530 × 212		

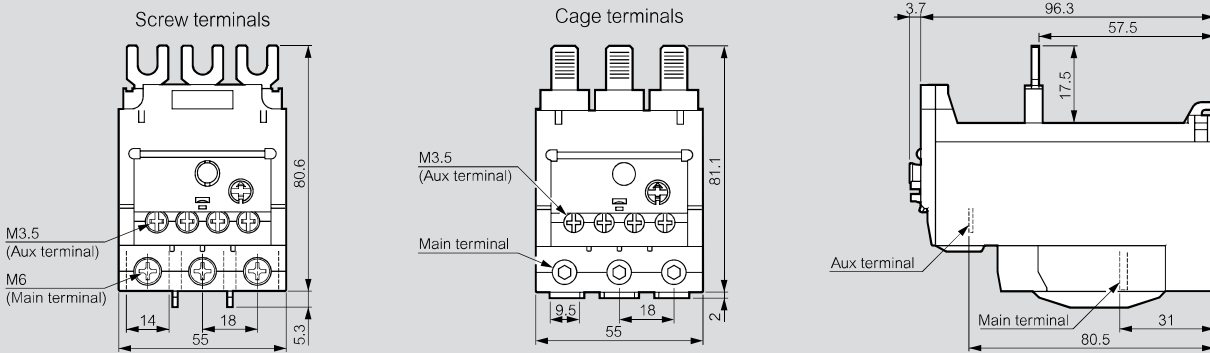
# Thermal relays RTX<sup>3</sup> - screw type terminals and cage terminals

## dimensions

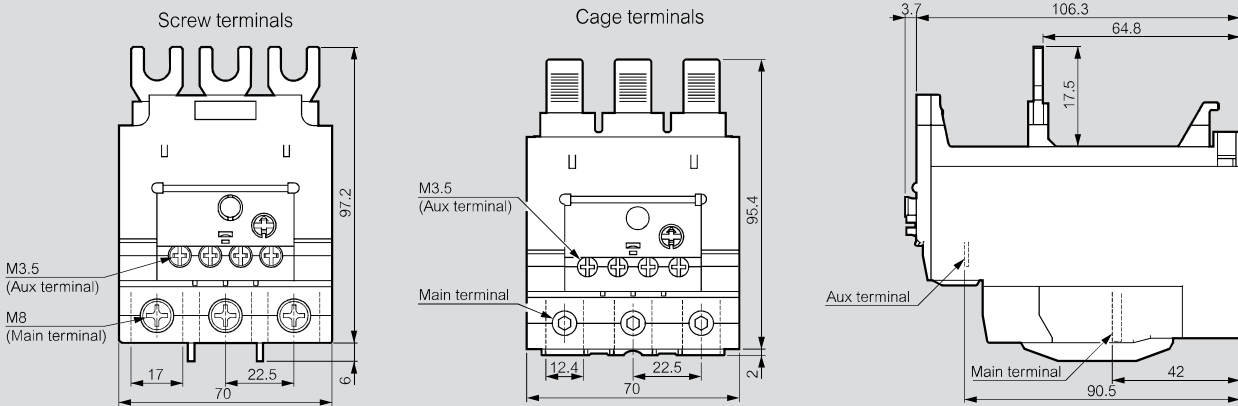
### RTX<sup>3</sup> 40



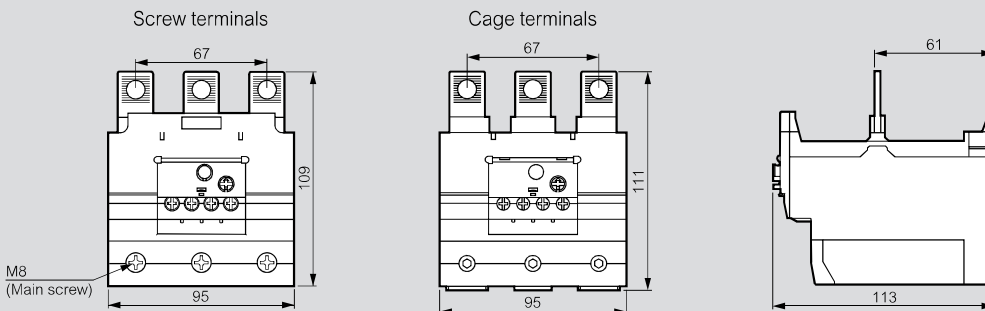
### RTX<sup>3</sup> 65



### RTX<sup>3</sup> 100



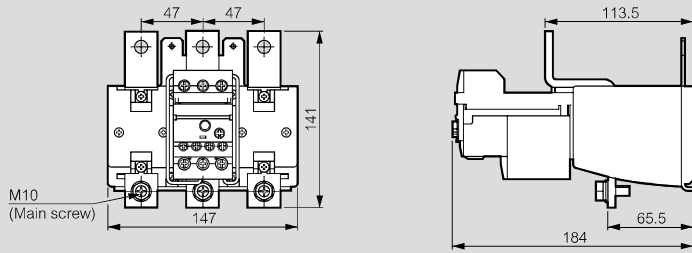
### RTX<sup>3</sup> 150



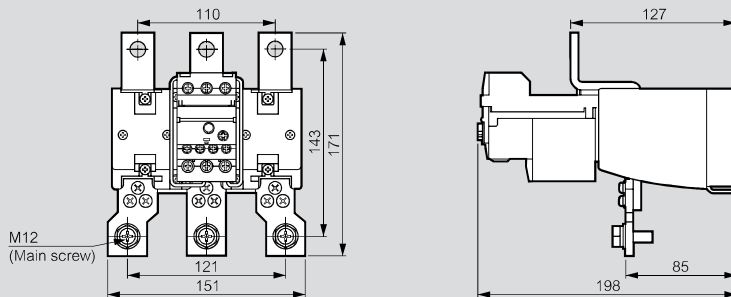
# Thermal relays RTX<sup>3</sup> - screw type terminals and cage terminals

dimensions (continued)

## RTX<sup>3</sup> 225



## RTX<sup>3</sup> 400



## RTX<sup>3</sup> 800

