

Influence of temperature on the operation

Devices	Characteristics influenced by temperature	Temperature		
		Min.	Max.	
C60H-DC, C60, C120, NG125, C60PV-DC circuit breakers	Tripping on overload	-30°C	+70°C	
DPN circuit breakers	Tripping on overload	-25°C	+70°C	
iK60 circuit breakers	Tripping on overload	-25°C	+60°C	
iC60a/N/H/L circuit breakers	Tripping on overload	-35°C	+70°C	
Circuit breakers	With Vigi (AC)	-5°C	+60°C	
	With Vigi (A, S/I)	-25°C	+60°C	
Reflex iC60	Tripping on overload	-25°C	+60°C	
iC60N/H RCBO, iC60H2 RCBO	Tripping on overload	-15°C	+60°C	
C60NA-DC, SW60PV-DC, C120NA-DC switch-disconnectors	Maximum operating current	-25°C	+70°C	
iID K residual current circuit breakers	Maximum operating current	-5°C	+60°C	
iID residual current circuit breakers	AC	-5°C	+60°C	
	A, S/I	-25°C	+60°C	
Switches	iSW (Acti 9 design)	-25°C	+60°C	
	iSW	-20°C	+50°C	
	iSW-NA	-35°C	+70°C	
Protection auxiliaries	None	-35°C	+70°C	
RCA, ARA control auxiliaries	None	-25°C	+60°C	
iCT contactors	Installation conditions	-5°C	+60°C	
iTL impulse relays	None	-20°C	+50°C	
Linergy DS	Cat. no. 04040	Maximum operating current	-25°C	+60°C
	Cat. no. 04041			
Linergy FH		Maximum operating current	-25°C	+60°C
iCT, iTL auxiliaries		None	-20°C	+50°C
Linergy DX		Maximum operating current	-25°C	+60°C
Linergy FM	Cat. no. 04000	Maximum operating current	-25°C	+60°C

Note: the temperature considered is the temperature viewed through the device.

Circuit breakers

High temperatures

- A rise in temperature causes lowering of the thermal threshold (tripping on overload).
 - Protection is still ensured: the tripping threshold remains lower than the current acceptable by the cable (I_2)
 - To prevent nuisance tripping, it should be checked that this threshold remains higher than the maximum operating current (I_B) of the circuit, defined by:
 - the rated load currents,
 - the coefficients of expansion and simultaneity of use.
- If the temperature is sufficiently high for the tripping threshold to become lower than the operating current I_B , switchboard ventilation should be provided for.

Low temperatures

- A fall in temperature increases the thermal tripping threshold of the circuit breaker.
- There is no risk of nuisance tripping: the threshold remains higher than the maximum operating current of the circuit (I_B) demanded by the loads.
- It should be checked that the cable remains suitably protected, i.e. that its acceptable current (I_2) is higher than the values shown in the following tables (in amperes).

When the ambient temperature could vary within a broad range, both these aspects must be taken into account:

- the difference between the maximum operating current of the circuit (I_B) and the tripping threshold of the circuit breaker for the minimum ambient temperature,
- the difference between the strength of the cable (I_2) and the maximum tripping threshold of the circuit breaker for the maximum ambient temperature.

Influence of ambient temperature (cont.)

Maximum permissible current

- The maximum current allowed to flow through the device depends on the ambient temperature in which it is placed.
- The ambient temperature is the temperature inside the enclosure or switchboard in which the devices are installed.
- The reference temperature is in a halftone colour for the different devices.

■ When several devices operating simultaneously are mounted side by side in a small enclosure, a temperature rise in the enclosure results in a reduction in the operating current. A reduction coefficient of 0.8 will then have to be assigned to the rating (already derated, if applicable, depending on the ambient temperature).

■ Example:

Depending on the ambient temperature and the method of installation, the table below shows how to determine, for an iC60, the operating currents not to be exceeded for ratings 25 A, 32 A and 40 A (reference temperature 50°C).

Operating current not to be exceeded (A)							
Installation conditions (IEC 60947-2)		iC60 alone			Several iC60 in the same enclosure (calculate with the reduction coefficient indicated below)		
Ambient temperature (°C)		35°C	50°C	65°C	35°C	50°C	65°C
Type	Nominal rating (A)	Actual rating (A)					
iC60	25	26.35	25	23.57	26.35 x 0.8 = 21	25 x 0.8 = 20	23.57 x 0.8 = 19
	32	34	32	29.9	34 x 0.8 = 27	32 x 0.8 = 25.6	29.9 x 0.8 = 24
	40	42.5	40	37.34	42.5 x 0.8 = 34	40 x 0.8 = 32	37.34 x 0.8 = 30

Household (IEC 60898-1)

DPN derating table (IEC 60898-1)

DPN		Ambient temperature (°C)																			
Rating	Curve	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	+65	+70
1A	B, C, D	1.51	1.47	1.43	1.39	1.35	1.3	1.26	1.21	1.16	1.11	1.06	1	0.94	0.88	0.81	0.73	0.65	0.55	0.43	0.27
2A	B, C, D	2.47	2.43	2.39	2.35	2.31	2.27	2.23	2.18	2.14	2.09	2.05	2	1.95	1.9	1.85	1.8	1.74	1.69	1.63	1.57
3A	B, C, D	3.74	3.68	3.62	3.55	3.49	3.42	3.36	3.29	3.22	3.15	3.07	3	2.92	2.85	2.76	2.68	2.6	2.51	2.42	2.32
4A	B, C, D	4.9	4.82	4.75	4.67	4.59	4.51	4.43	4.35	4.26	4.18	4.09	4	3.91	3.81	3.72	3.62	3.52	3.41	3.3	3.19
6A	B, C, D	7.04	6.95	6.86	6.77	6.68	6.59	6.49	6.4	6.3	6.2	6.1	6	5.9	5.79	5.68	5.57	5.46	5.35	5.23	5.11
10A	B	11.7	11.6	11.4	11.3	11.1	11	10.8	10.7	10.5	10.3	10.2	10	9.8	9.7	9.5	9.3	9.1	8.9	8.7	8.5
10A	C, D	12.1	12	11.8	11.6	11.4	11.2	11	10.8	10.6	10.4	10.2	10	9.8	9.6	9.3	9.1	8.9	8.6	8.4	8.1
13A	B	15.4	15.2	15	14.8	14.6	14.4	14.1	13.9	13.7	13.5	13.2	13	12.8	12.5	12.3	12	11.8	11.5	11.2	11
13A	C, D	15.5	15.3	15.1	14.9	14.6	14.4	14.2	14	13.7	13.5	13.3	13	12.8	12.5	12.2	12	11.7	11.4	11.1	10.8
16A	B, C	18.8	18.5	18.3	18.1	17.8	17.6	17.3	17.1	16.8	16.5	16.3	16	15.7	15.4	15.2	14.9	14.6	14.3	14	13.6
16A	D	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.1	16.8	16.6	16.3	16	15.7	15.4	15.1	14.8	14.5	14.2	13.9	13.5
20A	B	23.4	23.1	22.8	22.5	22.2	21.9	21.6	21.3	21	20.7	20.3	20	19.7	19.3	19	18.6	18.3	17.9	17.5	17.1
20A	C, D	23.6	23.3	23	22.7	22.4	22	21.7	21.4	21	20.7	20.4	20	19.6	19.3	18.9	18.5	18.1	17.7	17.3	16.9
25A	B, C, D	29.2	28.8	28.5	28.1	27.8	27.4	27	26.6	26.2	25.8	25.4	25	24.6	24.2	23.7	23.3	22.8	22.4	21.9	21.4
32A	B, C, D	37.8	37.3	36.8	36.3	35.8	35.3	34.7	34.2	33.7	33.1	32.6	32	31.4	30.8	30.2	29.6	29	28.4	27.7	27
40A	B, C, D	47.7	47	46.4	45.7	45	44.3	43.7	43	42.2	41.5	40.8	40	39.2	38.4	37.6	36.8	36	35.1	34.2	33.3

iK60 derating table. B curve (IEC 60898-1)

iK60	Ambient temperature (°C)																		
Rating	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	
1A	1.19	1.17	1.15	1.14	1.12	1.11	1.09	1.07	1.05	1.04	1.02	1	0.98	0.96	0.94	0.92	0.9	0.88	
2A	2.45	2.41	2.37	2.34	2.3	2.26	2.22	2.17	2.13	2.09	2.04	2	1.95	1.91	1.86	1.81	1.76	1.71	
3A	3.69	3.63	3.57	3.51	3.45	3.39	3.33	3.27	3.2	3.14	3.07	3	2.93	2.86	2.78	2.71	2.63	2.55	
4A	4.92	4.84	4.77	4.69	4.61	4.53	4.44	4.36	4.27	4.18	4.09	4	3.91	3.81	3.71	3.61	3.5	3.39	
6A	7.44	7.32	7.2	7.07	6.95	6.82	6.69	6.56	6.42	6.29	6.14	6	5.85	5.7	5.54	5.38	5.22	5.04	
10A	11.9	11.8	11.6	11.4	11.3	11.1	10.9	10.8	10.6	10.4	10.2	10	9.8	9.6	9.4	9.2	9	8.8	
16A	19	18.7	18.5	18.2	18	17.7	17.4	17.1	16.9	16.6	16.3	16	15.7	15.4	15.1	14.8	14.5	14.1	
20A	23.5	23.2	22.9	22.6	22.3	22	21.7	21.4	21	20.7	20.4	20	19.7	19.3	18.9	18.6	18.2	17.8	
25A	29.1	28.8	28.4	28	27.7	27.3	26.9	26.6	26.2	25.8	25.4	25	24.6	24.2	23.8	23.3	22.9	22.5	
32A	37.9	37.4	36.9	36.4	35.9	35.3	34.8	34.3	33.7	33.2	32.6	32	31.4	30.8	30.2	29.6	28.9	28.3	
40A	47.4	46.7	46.1	45.5	44.8	44.2	43.5	42.8	42.1	41.4	40.7	40	39.3	38.5	37.7	37	36.2	35.3	
50A	59.9	59.1	58.2	57.4	56.5	55.6	54.7	53.8	52.9	52	51	50	49	48	46.9	45.9	44.8	43.6	
63A	76.4	75.3	74.1	73	71.8	70.6	69.4	68.2	66.9	65.6	64.3	63	61.6	60.3	58.8	57.4	55.9	54.3	

iK60 derating table. C curve (IEC 60898-1)

iK60	Ambient temperature (°C)																		
Rating	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	
1A	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1	1	1	0.98	0.96	0.94	0.92	0.9	0.88	
2A	2.4	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2	2	1.95	1.91	1.86	1.81	1.76	1.71	
3A	3.7	3.6	3.6	3.5	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3	2.93	2.86	2.78	2.71	2.63	2.55	
4A	4.9	4.8	4.8	4.7	4.6	4.5	4.4	4.4	4.3	4.2	4.1	4	3.91	3.81	3.71	3.61	3.5	3.39	
6A	7.4	7.3	7.2	7.1	6.9	6.8	6.7	6.6	6.4	6.3	6.1	6	5.85	5.7	5.54	5.38	5.22	5.04	
10A	12.4	12.2	12	11.8	11.6	11.4	11.2	10.9	10.7	10.5	10.2	10	9.8	9.5	9.2	9	8.7	8.4	
16A	19.4	19.1	18.8	18.5	18.2	17.9	17.6	17.3	17	16.7	16.3	16	15.7	15.3	14.9	14.6	14.2	13.8	
20A	24	23.6	23.3	23	22.6	22.3	21.9	21.5	21.2	20.8	20.4	20	19.6	19.2	18.8	18.3	17.9	17.5	
25A	30	29.5	29.1	28.7	28.3	27.8	27.4	26.9	26.4	26	25.5	25	24.5	24	23.5	22.9	22.4	21.8	
32A	38.8	38.2	37.7	37.1	36.5	35.9	35.3	34.6	34	33.3	32.7	32	31.3	30.6	29.9	29.1	28.4	27.6	
40A	47.4	46.7	46.1	45.5	44.8	44.2	43.5	42.8	42.1	41.4	40.7	40	39.3	38.5	37.7	37	36.2	35.3	
50A	59.9	59.1	58.2	57.4	56.5	55.6	54.7	53.8	52.9	51.9	51	50	49	48	46.9	45.9	44.8	43.6	
63A	76.4	75.3	74.1	73	71.8	70.6	69.4	68.2	66.9	65.6	64.3	63	61.6	60.3	58.8	57.4	55.9	54.3	

Tertiary/Industry (IEC 60947-2) (cont.)

C60H-DC derating table (IEC 60947-2)

C60H-DC Rating	Ambient temperature (°C)																				
	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	+65	+70
0.5A	0.63	0.62	0.61	0.6	0.59	0.58	0.56	0.55	0.54	0.53	0.51	0.5	0.49	0.47	0.46	0.44	0.43	0.41	0.39	0.38	0.36
1A	1.18	1.17	1.15	1.14	1.12	1.1	1.09	1.07	1.05	1.04	1.02	1	0.98	0.96	0.94	0.92	0.9	0.88	0.86	0.84	0.82
2A	2.54	2.5	2.45	2.41	2.36	2.31	2.26	2.21	2.16	2.11	2.06	2	1.94	1.88	1.82	1.76	1.7	1.63	1.56	1.48	1.41
3A	3.78	3.71	3.65	3.58	3.51	3.45	3.38	3.3	3.23	3.16	3.08	3	2.92	2.84	2.75	2.66	2.57	2.48	2.38	2.27	2.17
4A	5.08	4.99	4.9	4.81	4.71	4.62	4.52	4.42	4.32	4.22	4.11	4	3.89	3.77	3.65	3.53	3.4	3.27	3.13	2.98	2.83
5A	6	5.92	5.83	5.74	5.66	5.57	5.48	5.39	5.29	5.2	5.1	5	4.9	4.8	4.69	4.58	4.47	4.36	4.24	4.12	4
6A	7.26	7.15	7.04	6.94	6.83	6.71	6.6	6.48	6.37	6.25	6.12	6	5.87	5.74	5.61	5.47	5.33	5.19	5.04	4.89	4.73
10A	12.6	12.4	12.2	11.9	11.7	11.5	11.3	11	10.8	10.5	10.3	10	9.7	9.5	9.2	8.9	8.6	8.3	7.9	7.6	7.2
13A	15.5	15.3	15.1	14.9	14.6	14.4	14.2	14	13.7	13.5	13.3	13	12.8	12.5	12.2	12	11.7	11.4	11.1	10.8	10.5
15A	18.6	18.3	18	17.7	17.4	17.1	16.7	16.4	16.1	15.7	15.4	15	14.6	14.3	13.9	13.5	13	12.6	12.2	11.7	11.2
16A	19.4	19.1	18.9	18.6	18.3	18	17.6	17.3	17	16.7	16.3	16	15.7	15.3	14.9	14.6	14.2	13.8	13.4	13	12.5
20A	24.1	23.7	23.4	23	22.7	22.3	21.9	21.6	21.2	20.8	20.4	20	19.6	19.2	18.7	18.3	17.9	17.4	16.9	16.4	15.9
25A	30.4	29.9	29.5	29	28.5	28.1	27.6	27.1	26.6	26.1	25.5	25	24.5	23.9	23.3	22.7	22.1	21.5	20.9	20.2	19.6
30A	37.4	36.7	36.1	35.5	34.9	34.2	33.5	32.9	32.2	31.5	30.7	30	29.2	28.5	27.7	26.8	26	25.1	24.2	23.2	22.3
32A	38.5	37.9	37.4	36.8	36.2	35.7	35.1	34.5	33.9	33.3	32.6	32	31.4	30.7	30	29.3	28.6	27.9	27.1	26.3	25.5
40A	48.9	48.2	47.4	46.7	45.9	45.1	44.3	43.5	42.6	41.8	40.9	40	39.1	38.2	37.2	36.2	35.2	34.2	33.1	32	30.8
50A	59.9	59.1	58.3	57.4	56.5	55.6	54.7	53.8	52.9	52	51	50	49	48	46.9	45.9	44.8	43.6	42.5	41.3	40.1
63A	78.2	76.9	75.6	74.3	73	71.7	70.3	68.9	67.5	66	64.5	63	61.4	59.8	58.2	56.5	54.7	52.9	51.1	49.1	47.1

C60PV-DC derating table (IEC 60947-2)

C60PV-DC Rating	Ambient temperature (°C)																				
	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	+65	+70
1A	1.18	1.17	1.15	1.14	1.12	1.1	1.09	1.07	1.05	1.04	1.02	1	0.98	0.96	0.94	0.92	0.9	0.88	0.86	0.84	0.82
2A	2.54	2.5	2.45	2.41	2.36	2.31	2.26	2.21	2.16	2.11	2.06	2	1.94	1.88	1.82	1.76	1.7	1.63	1.56	1.48	1.41
3A	3.78	3.71	3.65	3.58	3.51	3.45	3.38	3.3	3.23	3.16	3.08	3	2.92	2.84	2.75	2.66	2.57	2.48	2.38	2.27	2.17
5A	6	5.92	5.83	5.74	5.66	5.57	5.48	5.39	5.29	5.2	5.1	5	4.9	4.8	4.69	4.58	4.47	4.36	4.24	4.12	4
8A	9.64	9.5	9.36	9.22	9.08	8.93	8.78	8.63	8.48	8.32	8.16	8	7.83	7.67	7.49	7.31	7.13	6.95	6.76	6.56	6.36
10A	12.6	12.4	12.2	11.9	11.7	11.5	11.2	11	10.8	10.5	10.3	10	9.7	9.4	9.2	8.9	8.6	8.2	7.9	7.6	7.2
13A	15.5	15.3	15.1	14.8	14.6	14.4	14.2	14	13.7	13.5	13.2	13	12.7	12.5	12.2	12	11.7	11.4	11.1	10.8	10.5
15A	18.6	18.3	18	17.7	17.4	17.1	16.7	16.4	16.1	15.7	15.4	15	14.6	14.3	13.9	13.5	13	12.6	12.2	11.7	11.2
16A	19.4	19.1	18.9	18.6	18.3	18	17.6	17.3	17	16.7	16.3	16	15.7	15.3	14.9	14.6	14.2	13.8	13.4	13	12.5
20A	24.1	23.7	23.4	23	22.7	22.3	21.9	21.6	21.2	20.8	20.4	20	19.6	19.2	18.7	18.3	17.9	17.4	16.9	16.4	15.9
25A	30.4	29.9	29.5	29	28.5	28.1	27.6	27.1	26.6	26.1	25.5	25	24.5	23.9	23.3	22.7	22.1	21.5	20.9	20.2	19.6

C120 derating table (IEC 60947-2)

C120 Rating	Ambient temperature (°C)																				
	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	+65	+70
10A	14.5	14.3	14	13.8	13.5	13.3	13	12.7	12.5	12.2	11.9	11.6	11.3	11	10.7	10.3	10	9.7	9.3	8.9	8.5
16A	21.2	21	20.7	20.4	20.1	19.8	19.4	19.1	18.8	18.5	18.2	17.8	17.5	17.1	16.8	16.4	16	15.6	15.2	14.8	14.4
20A	27	26.6	26.3	25.9	25.5	25	24.6	24.2	23.8	23.3	22.9	22.4	22	21.5	21	20.5	20	19.5	18.9	18.4	17.8
25A	33.7	33.3	32.8	32.3	31.8	31.3	30.8	30.2	29.7	29.1	28.6	28	27.5	26.9	26.3	25.6	25	24.4	23.7	23	22.3
32A	42.7	42.1	41.5	40.9	40.3	39.7	39	38.4	37.7	37.1	36.4	35.7	35	34.3	33.5	32.8	32	31.2	30.4	29.6	28.7
40A	54.8	54	53.2	52.4	51.5	50.7	49.8	48.9	48	47.1	46.1	45.2	44.2	43.2	42.1	41.1	40	38.9	37.7	36.6	35.3
50A	69.1	68.1	67	65.9	64.8	63.7	62.6	61.5	60.3	59.1	57.9	56.7	55.4	54.1	52.8	51.4	50	48.6	47.1	45.5	43.9
63A	87.1	85.8	84.5	83.1	81.8	80.4	78.9	77.5	76	74.5	73	71.4	69.8	68.2	66.5	64.8	63	61.2	59.3	57.4	55.4
80A	103.7	102.4	101	99.7	98.3	96.9	95.5	94.1	92.6	91.1	89.6	88.1	86.5	84.9	83.3	81.7	80	78.3	76.5	74.7	72.9
100A	137.6	135.5	133.5	131.4	129.2	127.1	124.8	122.6	120.3	118	115.6	113.1	110.6	108.1	105.5	102.8	100	97.2	94.2	91.2	88.1
125A	174.6	171.9	169.2	166.4	163.6	160.7	157.8	154.9	151.8	148.7	145.6	142.4	139.1	135.7	132.2	128.7	125	121.2	117.3	113.3	109.1

Tertiary/Industry (IEC 60947-2) (cont.)

NG125 derating table (IEC 60947-2)

NG125	Ambient temperature (°C)																				
Rating	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60	+65	+70
10 A	13.7	13.5	13.2	13	12.8	12.5	12.3	12	11.7	11.5	11.2	10.9	10.6	10.3	10	9.7	9.4	9	8.7	8.3	7.9
16 A	20.3	20.1	19.8	19.5	19.2	18.9	18.6	18.3	18	17.7	17.4	17	16.7	16.4	16	15.7	15.3	14.9	14.5	14.1	13.7
20 A	26	25.6	25.3	24.9	24.5	24	23.6	23.2	22.8	22.3	21.9	21.4	21	20.5	20	19.5	19	18.5	17.9	17.4	16.8
25 A	33.8	33.2	32.7	32.1	31.5	30.9	30.3	29.7	29.1	28.4	27.8	27.1	26.4	25.7	25	24.3	23.5	22.7	21.9	21	20.1
32 A	41.2	40.6	40	39.4	38.8	38.2	37.5	36.9	36.2	35.6	34.9	34.2	33.5	32.7	32	31.2	30.5	29.7	28.8	28	27.1
40 A	53.5	52.7	51.8	51	50.1	49.1	48.2	47.3	46.3	45.3	44.3	43.3	42.2	41.1	40	38.9	37.7	36.5	35.2	33.9	32.5
50 A	66.3	65.2	64.2	63.1	62.1	61	59.8	58.7	57.5	56.4	55.1	53.9	52.6	51.3	50	48.6	47.2	45.8	44.3	42.7	41.1
63 A	83.4	82.1	80.8	79.5	78.1	76.8	75.4	73.9	72.5	71	69.5	67.9	66.3	64.7	63	61.3	59.5	57.7	55.8	53.9	51.8
80 A	100.4	99.1	97.8	96.4	95	93.6	92.2	90.8	89.3	87.8	86.3	84.8	83.2	81.6	80	78.3	76.6	74.9	73.1	71.3	69.4
100 A	133.4	131.3	129.1	127	124.8	122.5	120.2	117.9	115.5	113.1	110.6	108	105.4	102.7	100	97.2	94.3	91.3	88.2	85	81.6
125 A	165.2	162.7	160.1	157.5	154.8	152.1	149.3	146.5	143.6	140.7	137.7	134.6	131.5	128.3	125	121.6	118.1	114.6	110.9	107	103.1

Tertiaire/Industrie (IEC 60947-3)

SW60-DC derating table (IEC 60947-3)

SW60PV-DC	Ambient temperature (°C)											
Rating	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+60	+70
50 A	63	61	60	58	56	54	52	50	48	46	41	35

C60NA-DC derating table (IEC 60947-3)

C60NA-DC	Ambient temperature (°C)											
Rating	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+60	+70
50 A	63	61	60	58	56	54	52	50	48	46	41	35

C120NA-DC derating table (IEC 60947-3)

C120NA-DC	Ambient temperature (°C)											
Rating	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+60	+70
100 A	113	111	110	108	106	104	102	100	98	96	91	85

Tertiary/Industry (IEC 61009-1)

iC60H2 RCBO derating table (IEC 61009-1)

iC60H2 RCBO	Ambient temperature (°C)															
Rating	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60
10 A	12.3	12.2	12	11.8	11.7	11.5	11.3	11.1	11	10.8	10.6	10.4	10.2	10	9.8	9.6
16 A	19.6	19.4	19.1	18.8	18.6	18.3	18	17.8	17.5	17.2	16.9	16.6	16.3	16	15.7	15.4
20 A	24.9	24.6	24.2	23.9	23.5	23.2	22.8	22.4	22	21.6	21.2	20.8	20.4	20	19.6	19.1
25 A	30.2	29.8	29.5	29.1	28.7	28.3	27.9	27.5	27.1	26.7	26.3	25.9	25.4	25	24.6	24.1
32 A	37.9	37.5	37.1	36.7	36.2	35.8	35.3	34.9	34.4	33.9	33.5	33	32.5	32	31.5	31

iC60N/H RCBO derating table (IEC 61009-1)

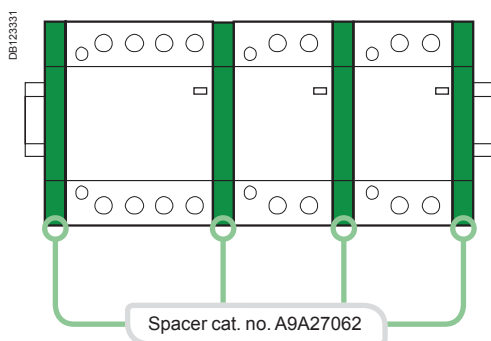
iC60N/H RCBO	Ambient temperature (°C)															
Rating	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+55	+60
6 A	8.3	8.15	7.99	7.83	7.67	7.50	7.33	7.16	6.98	6.79	6.6	6.41	6.21	6	5.78	5.56
10 A	12.9	12.7	12.5	12.3	12.1	11.9	11.6	11.4	11.2	11	10.7	10.5	10.3	10	9.7	9.5
16 A	20.9	20.6	20.3	19.9	19.6	19.2	18.8	18.4	18.1	17.7	17.3	16.9	16.4	16	15.6	15.1
20 A	26.3	25.9	25.4	25	24.5	24.1	23.6	23.1	22.6	22.1	21.6	21.1	20.6	20	19.4	18.8
25 A	31.5	31	30.6	30.1	29.6	29.2	28.7	28.2	27.7	27.2	26.6	26.1	25.6	25	24.4	23.8
32 A	39.2	38.7	38.2	37.7	37.2	36.6	36.1	35.5	35	34.4	33.8	33.2	32.6	32	31.4	30.7
40 A	50.2	49.5	48.8	48	47.3	46.5	45.8	45	44.2	43.4	42.6	41.7	40.9	40	39.1	38.2
45 A	55.5	54.7	54	53.2	52.5	51.7	50.9	50.1	49.3	48.5	47.6	46.8	45.9	45	41.9	41

Switches

■ In all cases, the switches are correctly protected against overloads by a circuit breaker with a lower or equal rating, operating at the same ambient temperature.

iCT contactors

In the case of contactor mounting in an enclosure for which the interior temperature is in a range between 50°C and 60°C, it is necessary to use a spacer, cat. no. A9A27062, between each contactor.



Linery DS, Linery DX, Linery FH, Linery FM

In all cases, quick distribution blocks (Linery DS: cat. no. 04040, 04041), screw distribution blocks, horizontal comb busbars and quick device feeders (Linery FM: cat. no. 04000) are correctly protected against overloads by a circuit breaker with a lower or equal rating, operating at the same ambient temperature.