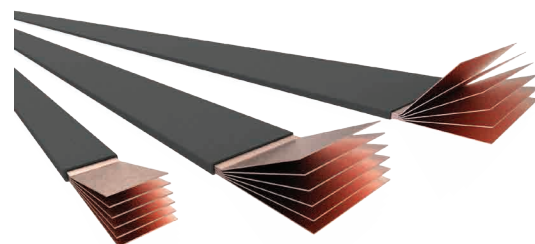


# INSULATED FLEXIBLE BARS

## Bare copper – standard length 2 mt.

Single strip	Cu-ETP UNI EN 1652
Self extinguishing	UL 94 V0 black PVC insulation
Operating voltage	1000 V AC – 1500 V DC
Operating temperature	-40/+105 °C
Dielectric strenght	20 kV/mm
Insulation thickness	1,6 - 2 mm
Halogen free / Silicon Insulation	on demand
Special bar length	on demand
Tin-plated Copper	on demand



### Referred to ambient temperature of 35°C following DIN 43671 norm

Current load is referred to: conductor temperature = > temperature rise  $\Delta T$  + ambient temperature of 35°C

### Using bars in parallel please apply a derating coefficient $K^*$

Example:	40x1x5 In at $\Delta T$ 50°C	= 736 A
	for n° 2 bars 40x1x5 in parallel In	= 736 A x 1,72 = 1265 A
	for n° 3 bars 40x1x5 in parallel In	= 736 A x 2,25 = 1656 A

### Short circuit current (Icc) for Insulated flexible bars parameters :

One flexible element per phase

Initial temperature: 105 °C	Maximal operating temperature of the conductor
Final temperature: 160 °C	Temperature limit of the insulation material PVC in accordance with IEC 60724 if cross section < 300mm <sup>2</sup>
Final temperature: 140 °C	Temperature limit of the insulation material PVC in accordance with IEC 60724 if cross section > 300mm <sup>2</sup>

### Icc: value of short circuit current in kA - t = 1 s (duration of short circuit in seconds)

Approval:



Bare Copper code	Width mm		Thick. mm		Strips n°	Cross Section mm <sup>2</sup>	Current Load			K *		Icc kA
							$\Delta T$ 30°C	$\Delta T$ 50°C	$\Delta T$ 70°C	n° 2	n° 3	
IFB 09-2	9	x	0,8	x	2	14,4	95 A	130 A	157 A	1,72	2,25	1,25
IFB 09-3	9	x	0,8	x	3	21,6	119 A	162 A	195 A	1,72	2,25	1,88
IFB 09-6	9	x	0,8	x	6	43,2	176 A	240 A	290 A	1,72	2,25	3,75
IFB 13-6	13	x	0,5	x	6	39	174 A	237 A	288 A	1,72	2,25	3,40
IFB 16-2	15,5	x	0,8	x	2	24,8	140 A	192 A	234 A	1,72	2,25	2,15
IFB 16-4	15,5	x	0,8	x	4	49,6	205 A	279 A	339 A	1,72	2,25	4,31
IFB 16-6	15,5	x	0,8	x	6	74,4	257 A	350 A	424 A	1,72	2,25	6,47
IFB 16-10	15,5	x	0,8	x	10	124	345 A	470 A	570 A	1,72	2,25	10,78
IFB 20-2	20	x	1	x	2	40	193 A	263 A	319 A	1,72	2,25	3,48
IFB 20-3	20	x	1	x	3	60	240 A	326 A	396 A	1,72	2,25	5,22
IFB 20-4	20	x	1	x	4	80	280 A	381 A	463 A	1,72	2,25	6,96
IFB 20-5	20	x	1	x	5	100	316 A	430 A	523 A	1,72	2,25	8,70

# INSULATED FLEXIBLE BARS

Bare Copper	Width		Thick.		Strips	Cross Section	Current Load			K *		Icc
code	mm		mm		n°	mm <sup>2</sup>	ΔT 30°C	ΔT 50°C	ΔT 70°C	n° 2	n° 3	kA
IFB 20-6	20	x	1	x	6	120	350 A	477 A	580 A	1,72	2,25	10,43
IFB 20-8	20	x	1	x	8	160	412 A	562 A	683 A	1,72	2,25	13,91
IFB 20-10	20	x	1	x	10	200	470 A	640 A	776 A	1,72	2,25	17,40
IFB 24-2	24	x	1	x	2	48	223 A	303 A	368 A	1,72	2,25	4,17
IFB 24-3	24	x	1	x	3	72	276 A	375 A	456 A	1,72	2,25	6,26
IFB 24-4	24	x	1	x	4	96	322 A	438 A	532 A	1,72	2,25	8,35
IFB 24-5	24	x	1	x	5	120	363 A	494 A	600 A	1,72	2,25	10,43
IFB 24-6	24	x	1	x	6	144	402 A	547 A	664 A	1,72	2,25	12,52
IFB 24-8	24	x	1	x	8	192	470 A	641 A	779 A	1,72	2,25	16,7
IFB 24-10	24	x	1	x	10	240	534 A	727 A	883 A	1,72	2,25	20,87
IFB 32-2	32	x	1	x	2	64	280 A	382 A	463 A	1,72	2,25	5,57
IFB 32-3	32	x	1	x	3	96	346 A	470 A	572 A	1,72	2,25	8,35
IFB 32-4	32	x	1	x	4	128	402 A	548 A	668 A	1,72	2,25	11,13
IFB 32-5	32	x	1	x	5	160	453 A	617 A	749 A	1,72	2,25	13,91
IFB 32-6	32	x	1	x	6	192	500 A	680 A	826 A	1,72	2,25	16,7
IFB 32-8	32	x	1	x	8	256	583 A	793 A	963 A	1,72	2,25	22,26
IFB 32-10	32	x	1	x	10	320	657 A	894 A	1085 A	1,72	2,25	22,5
IFB 40-2	40	x	1	x	2	80	337 A	458 A	556 A	1,72	2,25	6,96
IFB 40-3	40	x	1	x	3	120	415 A	565 A	686 A	1,72	2,25	10,44
IFB 40-4	40	x	1	x	4	160	480 A	655 A	796 A	1,72	2,25	13,91
IFB 40-5	40	x	1	x	5	200	540 A	736 A	894 A	1,72	2,25	17,39
IFB 40-6	40	x	1	x	6	240	594 A	809 A	982 A	1,72	2,25	20,87
IFB 40-8	40	x	1	x	8	320	690 A	939 A	1140 A	1,72	2,25	22,5
IFB 40-10	40	x	1	x	10	400	774 A	1053 A	1279 A	1,65	2,12	28,12
IFB 50-3	50	x	1	x	3	150	498 A	679 A	824 A	1,72	2,25	13,04
IFB 50-4	50	x	1	x	4	200	577 A	786 A	954 A	1,72	2,25	17,39
IFB 50-5	50	x	1	x	5	250	645 A	880 A	1058 A	1,72	2,25	21,1
IFB 50-6	50	x	1	x	6	300	709 A	965 A	1170 A	1,65	2,12	21,74
IFB 50-8	50	x	1	x	8	400	818 A	1114 A	1352 A	1,65	2,12	28,12
IFB 50-10	50	x	1	x	10	500	914 A	1244 A	1510 A	1,72	2,12	35,15
IFB 63-3	63	x	1	x	3	189	604 A	823 A	998 A	1,65	2,12	16,44
IFB 63-4	63	x	1	x	4	252	698 A	960 A	1153 A	1,65	2,12	21,92
IFB 63-5	63	x	1	x	5	315	779 A	1050 A	1288 A	1,65	2,12	22,14
IFB 63-6	63	x	1	x	6	378	852 A	1159 A	1408 A	1,65	2,12	26,57
IFB 63-8	63	x	1	x	8	504	978 A	1332 A	1617 A	1,65	2,12	35,43
IFB 63-10	63	x	1	x	10	630	1088 A	1480 A	1796 A	1,65	2,12	44,29
IFB 80-3	80	x	1	x	3	240	729 A	1005 A	1220 A	1,65	2,12	20,88
IFB 80-4	80	x	1	x	4	320	850 A	1158 A	1405 A	1,65	2,12	22,5
IFB 80-5	80	x	1	x	5	400	947 A	1289 A	1565 A	1,65	2,12	28,12

# INSULATED FLEXIBLE BARS

Bare Copper	Width		Thick.		Strips	Cross Section	Current Load			K *		Icc
code	mm		mm		n°	mm <sup>2</sup>	$\Delta T$ 30°C	$\Delta T$ 50°C	$\Delta T$ 70°C	n° 2	n° 3	kA
IFB 80-6	80	x	1	x	6	480	1032 A	1404 A	1705 A	1,65	2,12	33,74
IFB 80-8	80	x	1	x	8	640	1179 A	1504 A	1948 A	1,65	2,12	44,99
IFB 80-10	80	x	1	x	10	800	1305 A	1776 A	2156 A	1,65	2,12	56,24
IFB 100-4	100	x	1	x	4	400	1089 A	1480 A	1799 A	1,6	2,02	29,55
IFB 100-5	100	x	1	x	5	500	1135 A	1545 A	1878 A	1,6	2,02	35,15
IFB 100-6	100	x	1	x	6	600	1235 A	1680 A	2040 A	1,6	2,02	42,18
IFB 100-8	100	x	1	x	8	800	1404 A	1912 A	2320 A	1,6	2,02	56,24
IFB 100-10	100	x	1	x	10	1000	1550 A	2110 A	2562 A	1,6	2,02	70,3
IFB 100-12	100	x	1	x	12	1200	1680 A	2267 A	2776 A	1,6	2,02	84,36
IFB 120-4	120	x	1	x	4	480	1135 A	1544 A	1875 A	1,6	2,02	33,98
IFB 120-5	120	x	1	x	5	600	1358 A	1848 A	2244 A	1,6	2,02	40,42
IFB 120-6	120	x	1	x	6	720	1420 A	1932 A	2345 A	1,6	2,02	48,5
IFB 120-8	120	x	1	x	8	960	1614 A	2198 A	2668 A	1,5	1,95	64,68
IFB 120-10	120	x	1	x	10	1200	1848 A	2490 A	3053 A	1,5	1,95	80,85

## PREFORMED INSULATED FLEXIBLE BARS

on demand

