Engineering . Industry, transport of Energy, Connections

Mastering high currents

ITEC.BAR™

PRODUCT DATA SHEET

P25A

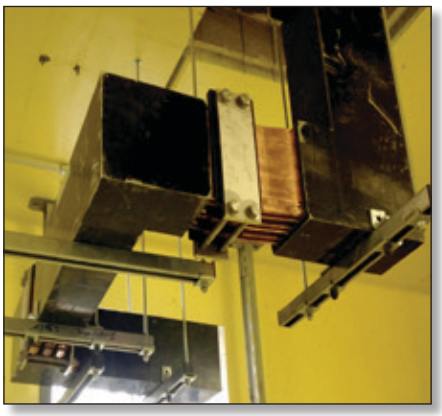
ITEC.BAR™ GP

CAST RESIN INSULATED LOW-VOLTAGE BUS DUCTS

Typical use:

- Aggessive environment
- Floodable areas
- Limmited spaces
- Long distances

High degree of protection
Without maintenance
Low voltage drop



Main features of ITEC.BAR™ GP bus ducts

The **ITEC.BAR™ GP** are made by **inclusion** of the conductor bar in a **polyurthan cast-resin** reinnforced by mineral fibers.

Conductor bars in electrolytic copper Cu-ETP for ITEC.BAR™ GPC **or in aluminium E-AlMgSi** for ITEC.BAR™ GPA.

Thank to this design, the ITEC.BAR™ GP bus ducts present the following **advantages**:

Optimal adaptation to **aggressive environnments:** humidity, corrodent, saline or tropical environments which can corrode copper or aluminium conductors.

Optimal adaptation to **high degrees of protection** (IP 55, 66 et 68).

Reduced overall dimensions.

Coefficient of elasticity of the resin allowing to absorb differential expansions, electrodynamic stresses relative to potential short-circuit currents or shocks during handling for erection.

Easy, efficient and quick connection between elements thanks to **clamped connection**.

Excellent thermal properties: the diffusion of the heat generated in the bars by the current is spread throughout the resin allowing the limitation of the punctual overheating.

Rating current independant of the configuration: vertical, horizontal, flat or on edge position.

High mechanical resistance.

No maintenance: no possibility of screws untightening in cast connections, no internal condensation.

Reduced impedance thanks to the low width between the conductors allowing the long distance transport of high currents with a low voltage drop.

And like all our **ITEC.BAR™ bus ducts**:

- **Customised study** and layout exactly adapted to each project.
- **«Ready to install» supply** with end flexibles connections.

E.ITEC® - SAS with a capital of 90 000 Euros
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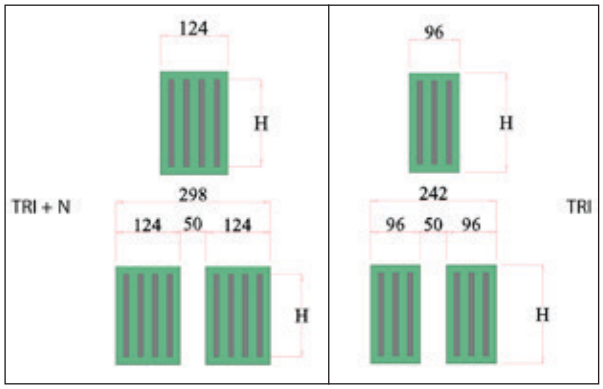
ITEC.BAR™

ITEC.BAR™ GP
Our standardized range



ITEC.BAR™ GPC range: conductors in copper Cu-ETP

Rated current 50 - 60 Hz A	Configu-ration	Phases dimension mm	Phase cross section mm²	Neutral cross section mm²	Dimensions mm L	Dimensions mm H	Linear weight Kg	I_{thr} kA	I_{pk} kA
1250	TRI	80 x 10	800	/	96	110	32	74	> 112
	TRI+N			800	124		43		
1800	TRI	100 x 10	1000	/	96	130	41	66	> 129
	TRI+N			1000	124		54		
2150	TRI	120 x 10	1200	/	96	150	49	67	> 143
	TRI+N			1200	124		64		
2500	TRI	160 x 10	1600	/	96	190	64	111	> 173
	TRI+N			1600	124		84		
3200	TRI	200 x 10	2000	/	96	230	78	107	> 194
	TRI+N			2000	124		103		
4000	TRI	2 x 120 x 10	2400	/	242	150	89	168	> 175
	TRI+N			2400	298		118		
5000	TRI	2 x 160 x 10	3200	/	242	190	117	219	> 228
	TRI+N			3200	204		154		
6000	TRI	2 x 200 x 10	4000	/	242	230	144	268	> 273
	TRI+N			4000	298		191		

ITEC.BAR™ GPA range: conductors in aluminium E-AlMgSi

Rated current 50 - 60 Hz A	Configu-ration	Phases dimension mm	Phase cross section mm²	Neutral cross section mm²	Dimensions mm L	Dimensions mm H	Linear weight Kg	I_{thr} kA	I_{pk} kA
1200	TRI	100 x 10	1000	/	96	130	23	61	> 72
	TRI+N			1000	124		30		
1600	TRI	120 x 10	1200	/	96	150	26	56	> 93
	TRI+N			1200	124		34		
2150	TRI	160 x 10	1600	/	96	190	34	43	> 112
	TRI+N			1600	124		44		
2500	TRI	200 x 10	2000	/	96	230	41	76	> 131
	TRI+N			2000	124		53		
3200	TRI	2 x 120 x 10	2400	/	242	150	45	111	> 114
	TRI+N			2400	298		58		
3800	TRI	2 x 160 x 10	3200	/	242	190	57	165	> 148
	TRI+N			3200	298		75		
4600	TRI	2 x 200 x 10	4000	/	242	230	69	199	> 178
	TRI+N			4000	298		91		

Nota : I_{pk}: rated peak withstand current is the instant mechanical resistance during a three-phase short-circuit.
I_{thr} 1s is the thermal resistance for a period of time during a three-phase short-circuit. These 2 values are depending of the design and cannot be modified.

Installation conditions :
- Altitude lower than 2000 metres
- Average ambiant air température over 24 hours: 35°C, maximum 40°C for 2 hours
- Alternative current, frequency 50 / 60 Hz, rated insulation voltage U_i < 1000 volts

OTHER CURRENTS OR CONFIGURATIONS
MAY BE SUPPLIED ON REQUEST

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