

## SIWO-KUL® B10 13.8/15 kV

SIWO-KUL® B10 13.8/15 kV MV high temperature flexible cables designed with a PET braid, PUR varnished

### Description

SIWO-KUL® B10 cables are required when high flexibility and high temperature conditions are present; they are mainly used in medium-voltage motors and generators for connecting stator coils to the terminal box. They are also vital elements for wind converters, transformers, solar power inverters and other MV/LV cabinets. In drives, silicone decreases copper cross-section and gives flexibility for compactness.

SIWO-KUL® B10 13.8/15 kV cables are class 5 single core cables.

This product family is designed with a PET **braid, PUR varnished** providing our customers much flexibility according to their process (VPI...).

For voltage starting 6,6 kV & cross section above 16 mm<sup>2</sup>, Nexans has developed a specific patented extruded semi conductive silicon layer enabling much lower partial discharge and increasing de facto the life time of our cables.



### Construction

- Copper conductor tinned, flexible IEC 60228, class 5
- Tape (up 16 mm<sup>2</sup>)
- Semi-conductive layer (only for 6.6 and 13.8 kV)
- Silicone rubber insulation
- Separator tape
- Protective synthetic yarn braiding, PUR varnished

The **use of silicone rubber**, a high grade corona resistant insulation material, gives the cable **excellent dielectric strength**. The braided synthetic yarn covering, which is applied directly over the insulation, gives the cable, because of its short braiding pitch and high compactness, **an excellent mechanical protection by maintaining good flexibility**.

Operating temperature for continuous service extends from -55°C up to 180°C.

*This product family is also part of our Windlink® offer for Wind turbines*

### Approvals

These cables are UL (Underwriters Laboratories inc.) approved for Appliance Wiring Material (AWM), following styles 3640, 3641, 3642 and 3643, CSA File No.: 036040-0-000.

SIWO-KUL® B10 cables are in compliance with EU directives on the limits of certain metals and waste as defined on ROHS (Restriction of Hazardous Substances) and WEE (Waste from Electrical and Electronic Equipment).









SIWO-KUL® B10 is REACH conform substances benzene, C10-C13).



### Standards

**International** IEC 60092; IEC 60331; IEC 60332-1; IEC 60332-3 Cat.C; IEC 60332-3-24; IEC 60754-1; IEC 60754-2; IEC 61034; IEEE 383; LLOYDS Reg. 91/00126(E1); UIC 895

**National** BSS 6195-T5-C-D-E-F; CSA C22.2 N° 210-05; DIN VDE 0472; NF F 16-101/BF1

							
Halogen free Yes	Operating temp. range -55 .. 180 °C	Chemical resistance Good	Oil resistance Yes	Flame retardant IEC 60332-1	Fire retardant IEC 60332-3	Fire resistant IEC 60331	Gases corrosivity IEC 60754-1, IEC 60754-2

## SIWO-KUL® B10 13.8/15 kV

### Characteristics

Construction characteristics	
Halogen free	Yes
Dimensional characteristics	
Precision of diameter	+/- 0.3 mm
Usage characteristics	
Operating temperature, range	-55 .. 180 °C
Chemical resistance	Good
Oil resistance	Yes
Flame retardant	IEC 60332-1
Fire retardant	IEC 60332-3
Fire resistant	IEC 60331
Gases corrosivity	IEC 60754-1, IEC 60754-2
Smoke density	IEC 61034
Ozone resistance	Yes
U.V resistance	Yes

### Product List

☎=Make to order, 📦=In stock

Nexans ref.	Name	Ope. volt. (kV)	Cross section (mm <sup>2</sup> )	Nom. outer diam. (mm)
☎ 10187643	SIWO-KUL B10 1x6.0 13,8/15kV BK	13.8	6	11.0
📦 10148869	SIWO-KUL B10 1x10 13,8/15kV BK	13.8	10	12.05
📦 10148870	SIWO-KUL B10 1x16 13,8/15kV BK	13.8	16	13.95
📦 10148871	SIWO-KUL B10 1x25 13,8/15kV BK	13.8	25	15.5
📦 10148872	SIWO-KUL B10 1x35 13,8/15kV BK	13.8	35	16.7
📦 10148873	SIWO-KUL B10 1x50 13,8/15kV BK	13.8	50	18.5
📦 10148874	SIWO-KUL B10 1x70 13,8/15kV BK	13.8	70	20.35
📦 10148875	SIWO-KUL B10 1x95 13,8/15kV BK	13.8	95	22.1
📦 10148876	SIWO-KUL B10 1x120 13,8/15kV BK	13.8	120	23.95
📦 10148877	SIWO-KUL B10 1x150 13,8/15kV BK	13.8	150	26.5
📦 10148891	SIWO-KUL B10 1x185 13,8/15kV BK	13.8	185	28.5
📦 10148986	SIWO-KUL B10 1x240 13,8/15kV BK	13.8	240	30.7
📦 10152024	SIWO-KUL B10 1x300 13,8/15kV BK	13.8	300	34.4

☎ = Make to order, 📦 = In stock

### Permissible continuous current carrying capacity 13.8kV

Cables separated: 1D

The values determined from the diagram are based on the following assumptions:

a) Cables separated.

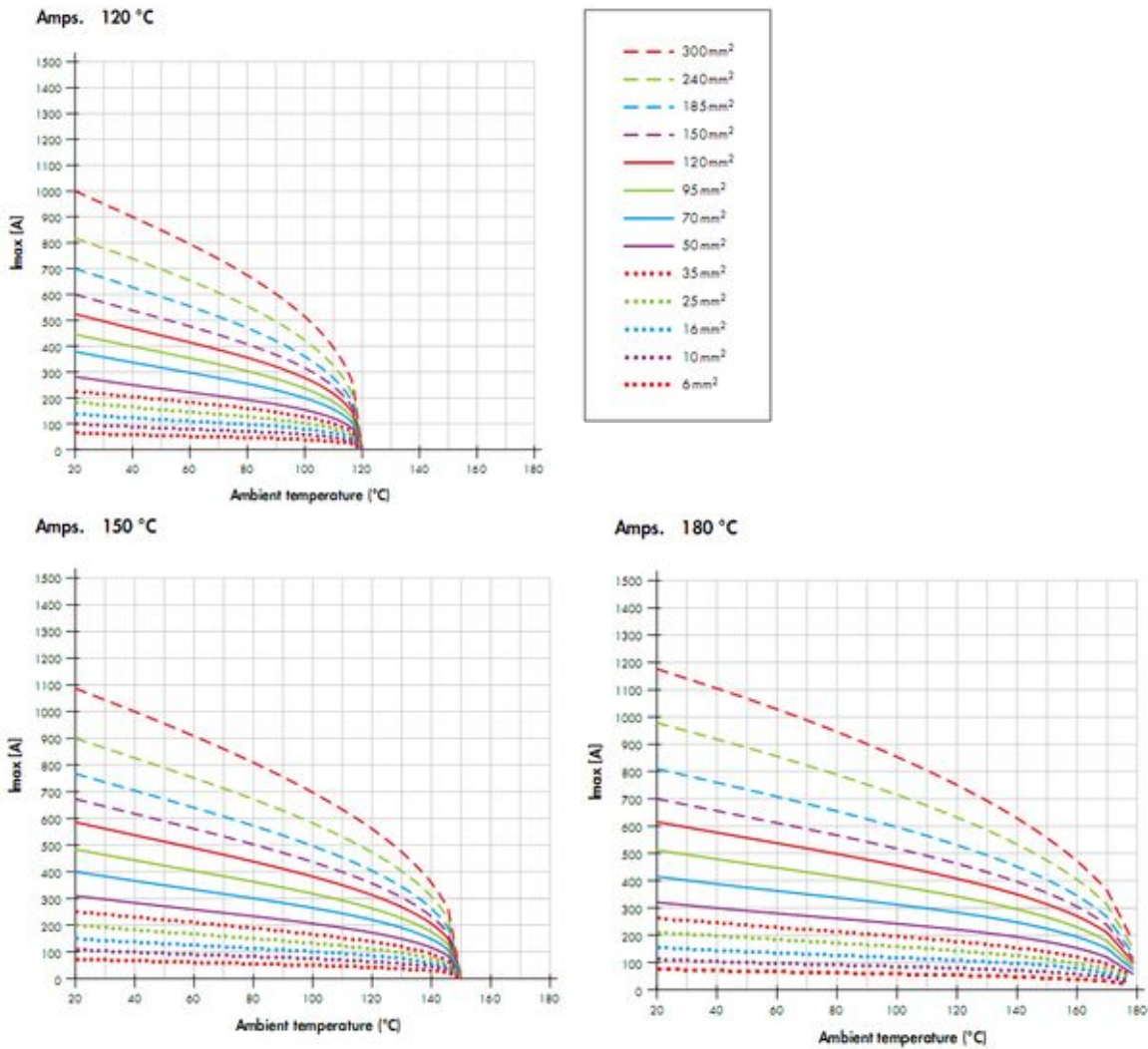
 Space between adjacent cables  $\geq 1 \times d$ .

b) Conductor temperature = See tables below

c) Without additional cooling.

Sufficient natural air flow ensured.

## SIWO-KUL® B10 13.8/15 kV



### Selling information

#### Marking

Our SIWO-KUL® B10 cables have been printed:  
 NEXANS SWITZERLAND SIWO-KUL® B10 + voltage in kV + section in mm<sup>2</sup> + Standards + Meter marks