



CHKCU Substation & British MGM 109 / 118 Mining Feeders

10-CHKCU / 22-CHKCU / 35-CHKCU

CHKCU Compact-Substation

NF M 82-376 / IEC 60502-2 6/10 kV (10-CHKCU), 12/20 kV (22-CHKCU) & 18/30 kV (35-CHKCU)



10-CHKCU · 22-CHKCU · 35-CHKCU

6/10 kV · 12/20 kV · 18/30 kV

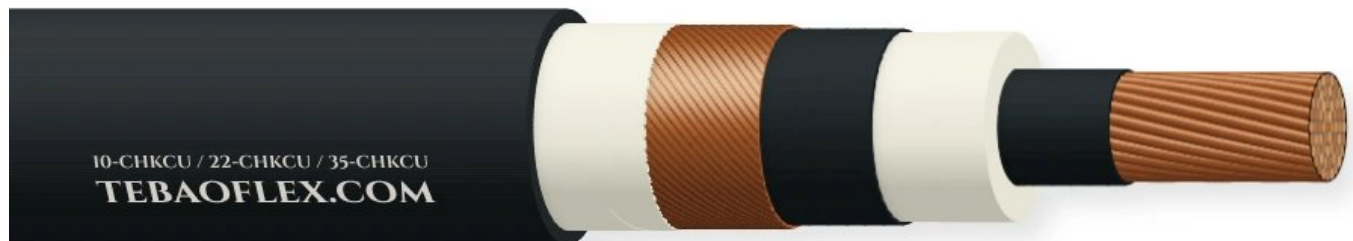
Class 5 Tinned Cu · EPR / PCP

Application

10-CHKCU / 22-CHKCU / 35-CHKCU Compact-Substation Connection Cable is the French AFNOR NF M 82-376 / UTE C 33 flexible single-core medium-voltage elastomer jumper cable across 6/10(12) kV (10-CHKCU), 12/20(24) kV (22-CHKCU), and 18/30(36) kV (35-CHKCU)

Typical uses: Prefabricated MV/LV compact substations, Mobile skid & container substations, Wind-turbine tower & nacelle MV drops, Quarry, tunneling & mine MV transformers

Construction



Cross-section, not to scale

1	Class 5 flexible tinned copper	IEC 60228 Class 5
2	Triple-extruded Semi-Con + 90 °C HV-EPR	NF M 82-376 / IEC 60502-2
3	Flexible tinned copper metallic screen	
4	Separator tape	IEC 60502-2
5	Heavy-duty polychloroprene (PCP) sheath	EN 50363-2-1 EM2

Technical data

Typical values

Rated voltage U0/U (Um)	10-CHKCU: 6/10(12) kV · 22-CHKCU: 12/20(24)	Routine 5-min AC test voltage	21 kV (10-CHKCU) · 42 kV (22-CHKCU) · 63 kV
Partial discharge (PD) level	≤ 10 pC at 1.73 × U0	Max. conductor operating temp.	+90 °C continuous · +250 °C short-circuit
Lightning impulse withstand	75 kV (10-CHKCU) · 125 kV (22-CHKCU) · 170	Operating temperature range	-25 °C to +80 °C ambient (-40 °C fixed)
Minimum installation temp.	-20 °C	Min. bending radius	6 × D fixed inside substation kiosk · 10 ×
Max. tensile pulling load	15 N/mm ² of copper cross-section	Oil & transformer fluid resistance	EN 60811-404 mineral oil & synthetic ester
Flame & ozone resistance	IEC 60332-1-2 flame retardant · EN	Standards	NF M 82-376 / UTE C 33 / IEC 60502-2

Sizes

7 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Cores × Size	Main cross-section	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
Standard 10-CHKCU / 22-CHKCU / 35-CHKCU configurations 7 sizes						
☐ 10-CHKCU 6/10 kV 1 × 35 mm ²	1 × 35 mm ² (6/10 kV)	35.0 mm ²	24.5	495	890	147
☐ 10-CHKCU 6/10 kV 1 × 95 mm ²	1 × 95 mm ² (6/10 kV)	95.0 mm ²	30.2	1,110	1,620	181
☐ 22-CHKCU 12/20 kV 1 × 35 mm ²	1 × 35 mm ² (12/20 kV)	35.0 mm ²	28.8	530	1,160	173
☐ 22-CHKCU 12/20 kV 1 × 50 mm ²	1 × 50 mm ² (12/20 kV)	50.0 mm ²	30.5	685	1,360	183
☐ 22-CHKCU 12/20 kV 1 × 95 mm ²	1 × 95 mm ² (12/20 kV)	95.0 mm ²	34.6	1,150	1,920	208
☐ 35-CHKCU 18/30 kV 1 × 95 mm ²	1 × 95 mm ² (18/30 kV)	95.0 mm ²	40.2	1,220	2,440	241
☐ 35-CHKCU 18/30 kV 1 × 150 mm ²	1 × 150 mm ² (18/30 kV)	150.0 mm ²	44.0	1,790	3,120	264

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per NF C 33-226 / NF M 82-376 / IEC 60502-2 (10-CHKCU / 22-CHKCU / 35-CHKCU).

Electrical & ampacity

7 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Iz free air A	Iz tray / duct A	Isc (1 s) kA	Voltage drop mV/A/m	Dielectric test V
1 × 35 mm ² (6/10 kV)	0.56	198	178	5.01	1.12	21,000
1 × 95 mm ² (6/10 kV)	0.21	365	328	13.59	0.43	21,000
1 × 35 mm ² (12/20 kV)	0.56	198	178	5.01	1.12	42,000
1 × 50 mm ² (12/20 kV)	0.39	245	220	7.15	0.81	42,000
1 × 95 mm ² (12/20 kV)	0.21	365	328	13.59	0.43	42,000
1 × 95 mm ² (18/30 kV)	0.21	365	328	13.59	0.43	63,000
1 × 150 mm ² (18/30 kV)	0.13	480	432	21.45	0.29	63,000

– Conductor DC resistance at +20 °C per IEC 60228 and reference current ratings at 30 °C ambient per NF C 33-226 / NF M 82-376 / IEC 60502-2 (10-CHKCU / 22-CHKCU / 35-CHKCU).

Standards and approvals

- ✓ NF M 82-376 / UTE C 33
- ✓ IEC 60502-2
- ✓ EN 50180 / EN 50181

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/chkcu-compact-substation-connection-cable



Typical values for this cable type, based on NF C 33-226 / NF M 82-376 / IEC 60502-2 (10-CHKCU / 22-CHKCU / 35-CHKCU). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.