Power & distribution cables

ARE4H5E / ARE4H5EX / ARE4H51R 12/20kV Italian MV



CEI 20-13 / HD 620 · 8.7/15 kV – 12/20 (24) kV · -25°C to +90°C · Min. bend 15 × OD

CEI 20-13 / HD 620 | 8.7/15–12/20 kV

Application

ARE4H5E / ARE4H5EX / ARE4H51R 12/20kV Italian MV manufactured to CEI 20-13 / HD 620, rated 8.7/15 kV – 12/20 (24) kV and -25°C to +90°C with a 15 × OD minimum bending radius for renewable energy installations.

Typical uses: Power distribution & utility networks, Railways, tunnels & public infrastructure, Process instrumentation & oil/gas skids, Industrial automation & control cabinets, Renewable energy, marine & heavy industry

Construction





Cross-section, not to scale

1	Conductor	1×150 mm² Class 2 Compacted Al
2	Insulation & Core Identification	CEI 20-13 DIX 8 XLPE dielectric (150 mm² Compacted Aluminium)
3	Screen / Bedding / Armour Layer	Semi-conductive longitudinal water-blocking swellable tape + Longitudinally bonded 0.2 mm aluminium foil metallic screen
4	Outer Protective Sheath	Black DMP 2 Polyethylene (PE) outer sheath with red identification stripes (OD 31.2 mm)

Technical data

Typical values

Nominal / reference voltage	8.7/15 kV – 12/20 (24) kV	Conductor & core insulation	1×150 mm² Class 2 Compacted Al · CEI 20-13 DIX 8 XLPE dielectric (150 mm² Compacted Aluminium)
Routine dielectric / continuity test	100% factory drum spark & continuity verified	Operating temperature range	-25°C to +90°C
Short-circuit / peak thermal limit	+160 °C to +250 °C (5 s conductor thermal limit)	Flame & fire performance	CEI 20-13 / HD 620
Minimum bending radius	15 × OD	Screening / armour architecture	Semi-conductive longitudinal water-blocking swellable tape + Longitudinally bonded 0.2 mm aluminium foil metallic screen
Outer sheath material & colour	Black DMP 2 Polyethylene (PE) outer sheath with red identification stripes (OD 31.2 mm)	Standards	CEI 20-13 / HD 620

Sizes

3 standard constructions

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

Part designation	Configuration	Conductor & shield	Insulation / wall	Outer sheath	Outer diameter mm	Min. bend radius mm	Max. conductor resistance @ 20 °C Ω/km	Conductor weight kg/km	Cable weight kg/km	Key electrical / optical rating
ARE4H5E / ARE4H5EX / ARE4H51R 12/20kV Italian MV 3 sizes										
☐ ARE4H5E / ARE4H5EX / ARE4H51R 12/20kV Italian MV (1×150 mm²)	1×150 mm²	Class 2 Compacted Stranded Aluminium	CEI 20-13 DIX 8 XLPE dielectric	Outdoor PE	31.2	468	0.19	610.3	1,606	250 A
☐ ARE4H5E / ARE4H5EX / ARE4H51R 12/20kV Italian MV (1×185 mm²)	1×185 mm²	Class 2 Compacted Stranded Aluminium	CEI 20-13 DIX 8 XLPE dielectric	Outdoor PE	36.8	552	0.15	849.7	2,236	286 A
☐ ARE4H5E / ARE4H5EX / ARE4H51R 12/20kV Italian MV (1×240 mm²)	1×240 mm²	Class 2 Compacted Stranded Aluminium	CEI 20-13 DIX 8 XLPE dielectric	Outdoor PE	43.1	646	0.12	1,162.4	3,059	336 A

– Dimensions and weights are nominal manufacturing targets subject to standard production tolerances.

Standards and approvals

- ✓ CEI 20-13 / HD 620 Compliant
- ✓ EN 10204 3.1 Factory Test Certificate
- ✓ CE, UKCA, RoHS 2 (2011/65/EU) & REACH

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/are4h5e-are4h5ex-are4h51r-12-20kv-italian-mv**

Typical values for this cable type, based on Reference specification per CEI 20-13 / HD 620 (ARE4H5E / ARE4H5EX / ARE4H51R 12/20kV Italian MV). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.