



# MAREL

EUROPE - SERBIA

KATALOG PROIZVODA / PRODUCT CATALOGUE 2026 v3

MAREL

## ISTORIJAT

**P**rivredno društvo MAREL d.o.o. osnovano je 1994. kao porodična trgovina elektromaterijalom. Prateći rastuću potražnju za kablovskom opremom, kao i uzimajući u obzir sopstvenu viziju, privredno društvo MAREL d.o.o. u Januaru 1997. godine pokreće sopstvenu proizvodnju. Prvi proizvod bio je Vijlačna kablovska papučica, koja je proizvedena u porodičnoj garaži. Zahvaljujući visokom kvalitetu proizvoda i dobroj tržišnoj orijentaciji, asortiman se 1998. godine proširio na Bakarne papučice i čaure, dok se 1999. godine proširio i na NN SKS pribor. Broj zaposlenih je od 2, tokom ove dve godine porastao na 10 zaposlenih, a izgrađen je i prvi proizvodni pogon veličine 200 m<sup>2</sup>.

U narednim godinama, privredno društvo MAREL d.o.o. fokusiralo se na razvoj novih proizvoda iz oblasti NN SKS pribora, uključujući prvi model IVS 16-35/35-70mm<sup>2</sup> (poznat i kao 2,5-35/16-95 mm<sup>2</sup> CBS/CT 95). Njegova unapređena verzija, u potpunosti usklađena sa savremenim tržišnim zahtevima, danas je najprodavaniji proizvod. Pored toga, razvijeni su i proizvodi poput zateznih stezaljki PA 1500, nosećih stezaljki PS 1500, kao i zateznih stezaljki PA 25. Godine 2005. celokupan sistem poslovanja je usklađen sa zahtevima standarda ISO 9001. Kao rezultat adekvatnog planiranja i razvoja proizvodnje, 2010. godine realizovan je prvi veliki izvozni ugovor. Od tog trenutka, svaki segment poslovanja privrednog društva MAREL d.o.o. usmeren je na specifične tehničke i tehnološke zahteve koji proizilaze iz različitih delova globalnog tržišta.

Prateći rastuće zahteve tržišta i trendove automatizacije proizvodnje, 2012. godine započeta je izgradnja novih proizvodnih pogona površine 2000 m<sup>2</sup>, a 2015. godine nova fabrika počinje sa radom.

## RAZVOJ I INOVACIJE

Dugogodišnje iskustvo u razvoju i konstrukciji NN SKS opreme rezultiralo je i razvojem opreme za SN izolovane elektrodistribucione vodove, čiji razvoj i usavršavanje čine ključne aspekte našeg trenutnog i budućeg poslovanja.

Ključna karakteristika poslovanja MAREL d.o.o. je dinamičnost, stalna inovacija proizvodnog programa, razvoj savremenog dizajna proizvoda, kao i optimizacija i unapređenje efikasnosti proizvodnih procesa.

Prateći i analizirajući kretanja tržišnih trendova, kao i kroz aktivno učešće na međunarodnim sajmovima u oblasti elektroenergetike, MAREL d.o.o. se, zahvaljujući posvećenosti svih zaposlenih u svakom segmentu poslovanja – od razvoja i istraživanja, marketinga i prezentacije, do proizvodnje, prodaje i tehničke podrške u postprodaji – kontinuirano fokusira na pronalaženje novih tehničkih rešenja za svoje proizvode.

## KVALITET I MEĐUNARODNI STANDARDI

Kvalitet naših proizvoda garantuje njihovu trajnost i pouzdanost u svim vremenskim uslovima, dok precizno tehničko oblikovanje omogućava laku montažu i dugotrajnu upotrebu.

Svi proizvodi kompanije MAREL d.o.o. ispitani su u skladu sa relevantnim međunarodnim standardima EN 50483:2009 - Zahtevi za ispitivanje pribora za niskonaponske vazdušne usnopljene kablove, EN 61238-1:2020 - Stezni i mehanički konektori za energetske kablove: Metode ispitivanja i zahtevi, SRPS EN 61284:2009 - Nadzemni vodovi - Zahtevi i ispitivanja za opremu nadzemnih vodova za napone iznad 45 kV, spojnica nazivnih vodova nižih napona i sličnih spojnica za transformatorske stanice, SRPS EN ISO 1461:2022 - Prevlake cinka nanese toplim postupkom na proizvode od gvožđa i čelika. Ispitivanja su sprovedena u nezavisnoj, akreditovanoj laboratoriji prema standardu SRPS EN ISO/IEC 17025, čime se obezbeđuje pouzdanost, objektivnost i verifikovana usaglašenost proizvoda sa važećim tehničkim zahtevima.

MAREL d.o.o. posluje u skladu sa Integrisanim sistemom menadžmenta kvalitetom (IMS) koji obuhvata sistem menadžmenta kvalitetom (QMS), zaštitu životne sredine (EMS) i zaštitu zdravlja i bezbednosti na radu (OH&S). Ovaj sistem implementiran je u skladu sa zahtevima standarda ISO 9001:2015, ISO 14001:2015 i ISO 45001:2018. IMS se primenjuje u svim funkcijama organizacije prilikom realizacije svih poslovnih aktivnosti.

## DELATNOST I TRŽIŠTA

Danas je osnovna delatnost Privrednog društva MAREL d.o.o. projektovanje, razvoj i proizvodnja elektroenergetske i telekomunikacione opreme, uključujući kablovske papučice i čaure, opremu za NN neizolovane mreže do 1 kV, opremu za NN SKS do 1 kV, kao i ostali kablovski pribor.

Trenutno, privredno društvo MAREL d.o.o. izvozi svoje proizvode u više od 74 zemlje širom sveta. Pored portfolija vezanog za elektroenergetiku, MAREL d.o.o. je prisutan i u sektoru nadzemnih telekomunikacionih mreža, solarnih polja, kao i mreža za napajanje električnih vozila.

## ODRŽIVOST I ODGOVORNOST

MAREL d.o.o., u skladu sa pozitivnom poslovnom praksom, aktivno se posvećuje očuvanju bezbednog i zdravog radnog okruženja, obuci i edukaciji zaposlenih, kao i na povećanju svesti o značaju bezbednosti na radu, negujući pritom odnose sa lokalnom zajednicom i poštujući principe cirkularne ekonomije. U svom poslovanju, MAREL d.o.o. sprovodi kontinuirane investicije u energetske efikasne proizvodne opreme, takođe odgovorno i pravilno upravlja resursima i otpadom, čime doprinosi smanjenju potrošnje energije, implementaciji programa obnovljivih izvora energije i smanjenju emisije CO<sub>2</sub>, odnosno smanjenju svog karbonskog otiska.

## PROIZVODNJA I KAPACITETI

Proizvodni procesi odvijaju se u savremeno opremljenom proizvodnom prostoru površine 3000 m<sup>2</sup>, koji se sastoji od sledećih radnih celina:

- Pogon livnice obojenih metala sa kovačnicom
- Pogon za brizganje termoplastičnih masa
- Pogon preseraja sa radionicom održavanja
- Pogon mehaničke obrade metala sa alatnicom
- Pogon montaže, ambalažiranja i pakovanja
- Pogon obrade metala na CNC strugovima
- Laboratorija za razvojna testiranja i analizu
- Laboratorija za fabrička ispitivanja, procesnu kontrolu i finalnu kontrolu
- Služba magacinskog poslovanja i proizvodnih koordinatora
- Služba prodaje i nabavke
- Služba za ljudske resurse
- Služba razvoja i istraživanja tržišta, novih proizvoda i novih tehnologija
- Služba marketinga i tehničke podrške u postprodaji

## COMPANY HISTORY

**M**AREL was founded in 1994 as a family-owned company engaged in the trade of electrical materials. Following the growing demand for cable accessories and guided by its own business vision, MAREL launched its own production in January 1997. The first product was a Screw-type mechanical cable lug, manufactured in the family garage. Thanks to high product quality and strong market orientation, the product range was expanded in 1998 to include Tubular copper cable lugs and joints, and in 1999 to include LV ABC (Aerial Bundled Cable) accessories. During this two-year period, the number of employees increased from 2 to 10, and the first production facility with an area of 200 m<sup>2</sup> was constructed.

In the following years, MAREL focused on the development of new products in the field of LV ABC accessories, including the first model of IPC 16–35/35–70 mm<sup>2</sup> (also known as 2,5–35/16–95 mm<sup>2</sup> CBS/CT 95). Its improved version, fully aligned with modern market requirements, is today the company's best-selling product. In addition, products such as dead end clamps PA 1500, suspension clamps PS 1500 and anchoring clamps PA 25 were developed. In 2005, the entire business system was aligned with the requirements of the ISO 9001 standard. As a result of adequate planning and production development, the first major export contract was realized in 2010. Since then, every segment of MAREL's operations has been oriented toward specific technical and technological requirements arising from various parts of the global market.

Following increasing market demands and production automation trends, construction of new production facilities with an area of 2,000 m<sup>2</sup> began in 2012, and the new factory started operations in 2015.

## DEVELOPMENT AND INNOVATION

Many years of experience in the development and design of LV ABC accessories have also resulted in the development of accessories for MV insulated distribution lines, whose further development and improvement represent key aspects of our current and future business activities.

A key characteristic of MAREL's operations is dynamism, continuous innovation of the product range, development of modern product design, as well as optimization and improvement of production process efficiency.

By continuously monitoring and analyzing market trends and through active participation in international power trade fairs, MAREL, thanks to dedicated work of all employees in every segment of the business - from research and development, marketing and presentation, to production, sales, and after-sales technical support - remains consistently focused on finding new technical solutions for its products.

## QUALITY AND INTERNATIONAL STANDARDS

The quality of our products guarantees durability and reliability under all weather conditions, while precise technical design enables easy installation and long service life.

All MAREL's products have been tested in accordance with relevant international standards: EN 50483:2009 – Test requirements for low voltage aerial bundled cable accessories, EN 61238-1:2020 – Test methods and requirements for compression and mechanical connectors for power cables, EN 61284:2009 – Overhead lines - Requirements and tests for fittings for overhead lines of nominal voltage above 45 kV, fittings for overhead lines of lower nominal voltage and similar fittings for substations. EN ISO 1461:2022 – Hot dip galvanized coatings on fabricated iron and steel articles. Testings were carried out in an independent, accredited laboratory in accordance with EN ISO/IEC 17025, ensuring reliability, objectivity, and verified compliance of the products with applicable technical requirements.

MAREL operates in accordance with an Integrated Management System (IMS), which includes the Quality Management System (QMS), Environmental Management System (EMS), and Occupational Health and Safety Management System (OH&S). This system has been implemented in compliance with the requirements of ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018, and is applied across all organizational functions and business activities.

## BUSINESS ACTIVITIES AND MARKETS

The core business activity of MAREL is the design, development, and manufacturing of power and telecommunications accessories, including cable lugs and joints, accessories for LV non-insulated networks up to 1 kV, accessories for LV ABC up to 1 kV, as well as other cable accessories.

Currently, MAREL exports its products to more than 74 countries worldwide. In addition to the product portfolio related to power distribution networks, MAREL is also present in the sectors of overhead telecommunications networks, solar power plants, and electric vehicle charging networks.

## SUSTAINABILITY AND RESPONSIBILITY

In accordance with best business practices, MAREL is actively committed to maintaining a safe and healthy working environment, employee training and education, and raising awareness of occupational safety, while fostering strong relationships with the local community and respecting the principles of the circular economy. In its operations, MAREL continuously invests in energy-efficient production equipment and responsibly manages resources and waste, thereby contributing to reduced energy consumption, implementation of renewable energy programs, reduction of CO<sub>2</sub> emissions, and overall reduction of its carbon footprint.

## PRODUCTION AND CAPACITIES

Production processes take place in a modernly equipped manufacturing facility covering an area of 3,000 m<sup>2</sup>, consisting of the following units:

- Non-ferrous die casting plant with forging facility
- Thermoplastic injection molding plant
- Metal fabrication plant with maintenance workshop
- Metal machining plant with mold shop
- Assembly line with packaging
- CNC turning plant
- Laboratory for development testing and analysis
- Laboratory for factory testing, process control, and final inspection
- Warehouse management and production coordination department
- Sales and procurement department
- Human resources department
- Research and development of markets, new products, and new technologies department
- Marketing and after-sales technical support department



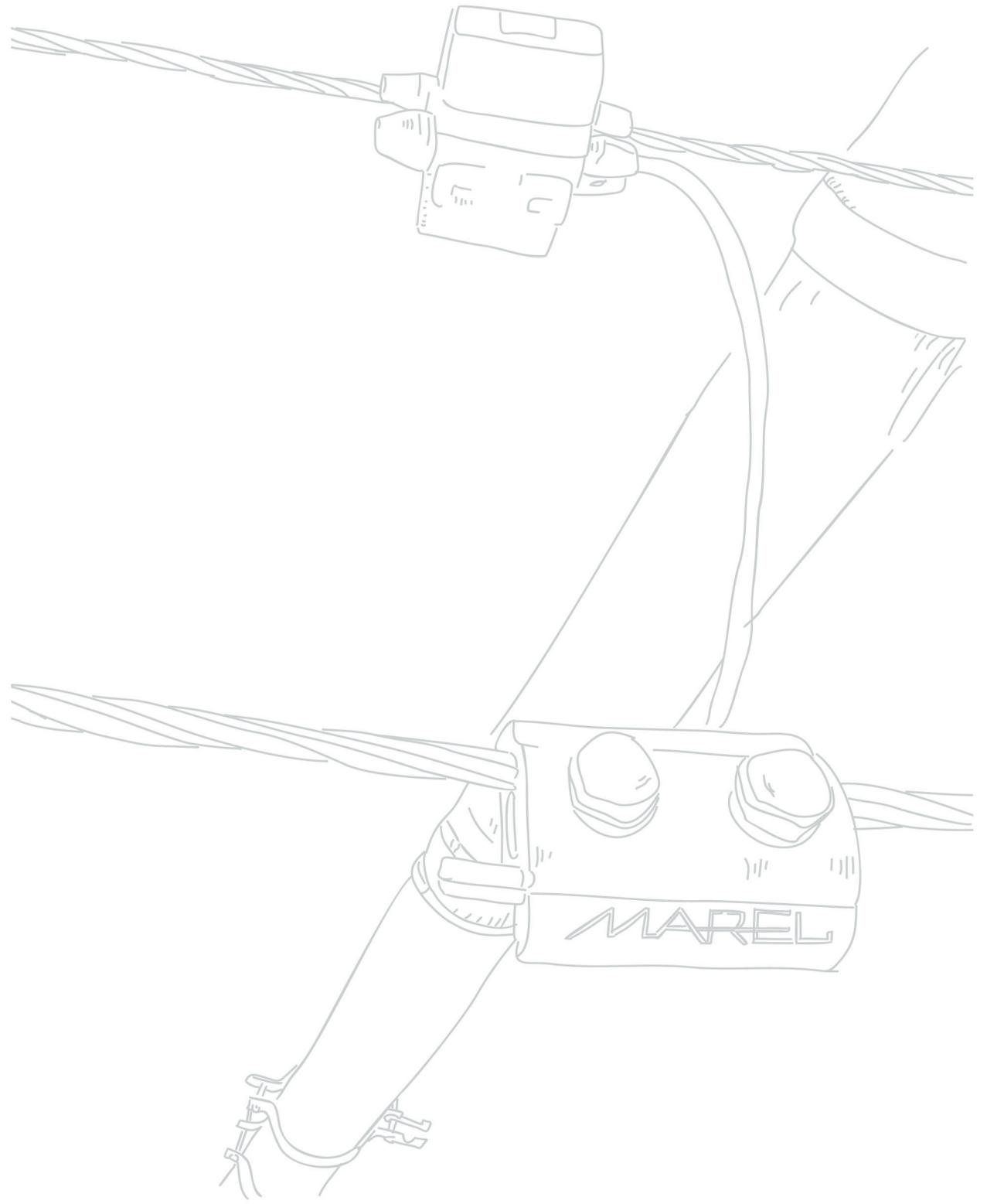
OPREMA ZA NN NEIZOLOVANE  
MREŽE DO 1kV

ACCESSORIES FOR LV NON-INSULATED  
NETWORKS UP TO 1kV

**MAREL**

EUROPE - SERBIA

PRODUCT CATALOGUE 2026 V.3



SRB.

## UNIMAX ALAL STEZALJKA

Koriste se za spajanje dva paralelna neizolovana AL provodnika istih ili različitih preseka.

Provodnici mogu biti od aluminijuma, legure aluminijuma, Al čelična užad za nadzemne vodove ili krajevi SKS-a sa kojih je prethodno uklonjena izolacija.

Svojim tehničkim karakteristikama omogućavaju izradu spoja prema DIN 48072-1.

Izrađene su ekstrudiranjem i unutrašnji žlebovi su nazubljeni, što povećava sigurnost na izvlačenje i omogućava kvalitetan elektrokontakt (žlebovi svojom adekvatnom izradom omogućavaju razbijanje aluminijum oksida sa površine provodnika, tako da se umanjuje prelazni otpor između stezaljke i provodnika).

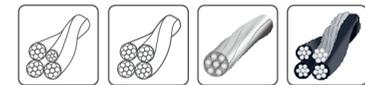
Telo stezaljke je izrađeno od legure aluminijuma velike mehaničke čvrstoće, otporne na koroziju.

Tehničkim karakteristikama omogućava brzu, laku i pouzdanu montažu, uz pomoć samo jednog ključa, bez delova koji mogu da otpadnu pri montaži na visini.



NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplu cinkovanim ili prohromskim (č.4580) vijčanm delovima.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.



ENG.

## PARALLEL ALAI GROOVE CLAMP H-FORM



Napomena: Ovaj proizvod se izrađuje na poseban zahtev korisnika.

Note: This product is made at Customer special request.

Aluminum PG Clamps are designed to connect two parallel bare aluminum conductors of the same or different cross-sections.

The conductors can be made of aluminum (AAC), aluminum alloy (AAAC), aluminum conductors steel reinforced (ACSR) or ends of ABC from which the insulation has been stripped.

Their technical characteristics enable easy formation of joints in accordance with standard DIN 48072-1.

They are made of extrusion profiles and the inside grooves are serrated, which improves mechanical pull-out strength and provides high-quality electrical contact (the grooves are made in such a way that aluminum oxide from the conductor surface is decomposed, which reduces transient resistance between the clamp and the conductor).

The body of the clamp is made of aluminum alloy of high tensile strength and resistance to corrosion.

Its design enables fast, easy and reliable installation, using only one spanner, and there are no parts that can fall off during installation.

Kat.broj Cat.No.	Kod Code	Presek provodnika Al/Al (mm <sup>2</sup> ) Conductor cross-section Al/Al (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg /100 kom. Weight kg /100 pcs
372044	MAI 4-25	4-25	2xM6	34	29	300	4.70
372045	MAI 6-35	6-35	2xM6	34	29	300	4.70
372046	MAI 6-50	6-50	1xM8	23	35	200	4.90
372026	MAI 6-50	6-50	2xM8	46	35	100	9.60
372130	MAI 6-95	6-95	2xM8	50	40	100	12.60
372047	MAI 6-95	6-95	3xM8	82	40	50	19.90
372027	MAI 10-95	10-95	2xM8	50	40	100	12.60
372048	MAI 10-95	10-95	3xM8	82	40	50	19.90
372030	MAI 25-150	25-150	2xM10	56	46,5	50	20.60
372049	MAI 25-150	25-150	3xM10	86	46,5	25	21.00
372034	MAI 50-185	50-185	2xM10	56	46,5	50	20.60
372032	MAI 35-240	35-240	2xM10	66	61	50	33.20
372050	MAI 35-240	35-240	3xM10	96	61	25	48.10



SRB.

## UNIMAX KA AICu STEZALJKA

Koriste se za spajanje jednog Al provodnika i jednog Cu provodnika istih ili različitih preseka. Provodnici mogu biti od aluminijuma, legure aluminijuma Al ili Cu, Al čelična užad za nadzemne vodove ili krajevi SKS-a sa kojih je prethodno uklonjena izolacija. Svojim tehničkim karakteristikama omogućavaju izradu spoja prema DIN 48072-1. Unutrašnji žlebovi su nazubljeni, što povećava sigurnost na izvlačenje i omogućava kvalitetan elektrokontakt (žlebovi svojom adekvatnom izradom omogućavaju razbijanje aluminijum oksida sa površine provodnika, i tako da se umanjuje prelazni otpor između stezaljke i provodnika).

Telo stezaljke je izrađeno od legure aluminijuma velike mehaničke čvrstoće, otporne na koroziju. Tehničkim karakteristikama omogućava brzu, laku i pouzdanu montažu, uz pomoć samo jednog ključa, bez delova koji mogu da otpadnu pri montaži na visini.

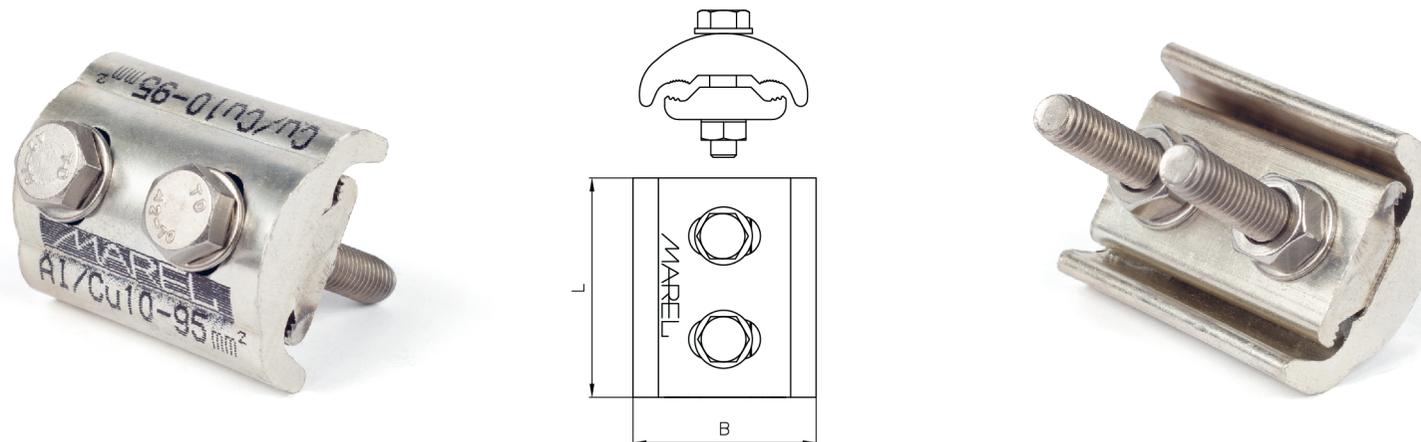
ENG.

## PARALLEL KA AICu GROOVE CLAMP H-FORM

AICu PG Clamps are designed to connect a bare aluminum and a bare copper conductor of the same or different cross-sections. The conductors can be made of aluminum or copper alloy, aluminum conductors steel reinforced (ACSR) or ends of ABC from which the insulation has been stripped. Their technical characteristics enable easy formation of joints in accordance with standard DIN 48072-1.

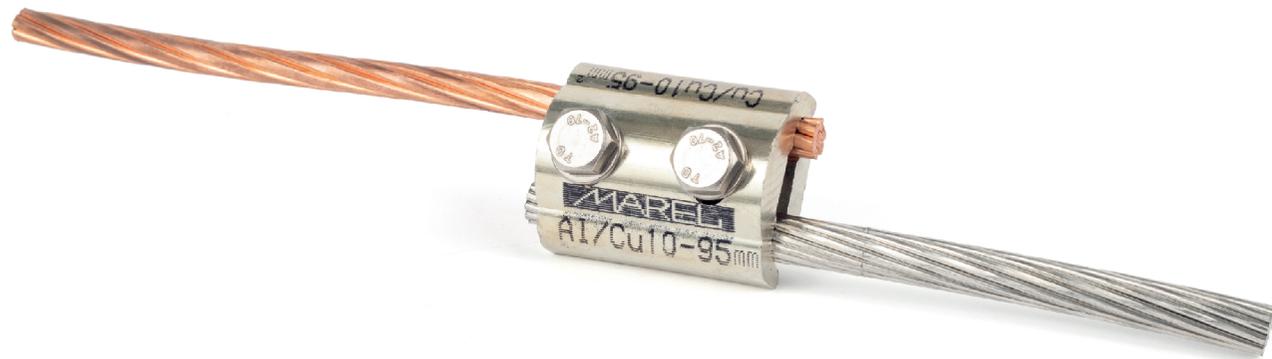
The inside grooves are serrated, which improves mechanical pull-out strength and provides high-quality electrical contact (the grooves are made in such a way that aluminum oxide from the conductor surface is decomposed, which reduces transient resistance between the clamp and the conductor).

The body of the clamp is made of aluminum alloy of high tensile strength and resistance to corrosion. Its design enables fast, easy and reliable installation, using only one spanner, and there are no parts that can fall off during installation.



NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplu cinkovanim ili prohronskim (č.4580) vijčanim delovima.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.



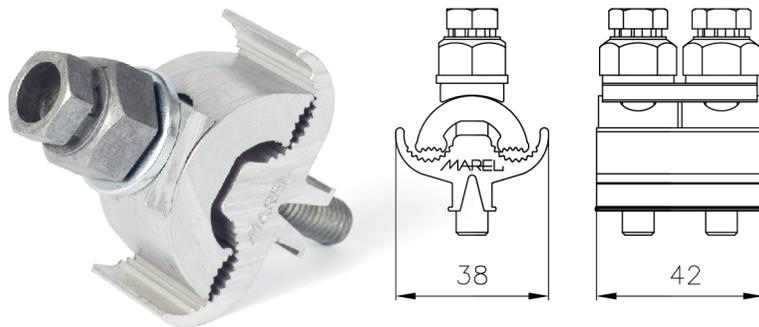
Kat.broj Cat.No.	Kod Code	Presek provodnika Al/Cu;Cu/Cu;Al/Al (mm <sup>2</sup> ) Conductor cross-section Al/Cu;Cu/Cu;Al/Al (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/ 100 kom Weight kg/ 100 pcs
372152	KA AICu 4-25	4-25	2xM6	34	29	300	4.70
372153	KA AICu 6-35	6-35	2xM6	34	29	300	4.70
372146	KA AICu 6-50	6-50	1xM8	23	35	200	4.90
372154	KA AICu 6-50	6-50	2xM8	46	35	100	9.60
372147	KA AICu 6-95	6-95	2xM8	50	40	100	12.60
372155	KA AICu 6-95	6-95	3xM8	82	40	50	19.90
372148	KA AICu 10-95	10-95	2xM8	50	40	100	12.60
372156	KA AICu 10-95	10-95	3xM8	82	40	50	19.90
372149	KA AICu 25-150	25-150	2xM10	56	46,5	50	21.00
372157	KA AICu 25-150	25-150	3xM10	86	46,5	25	20.60
372150	KA AICu 35-240	35-240	2xM10	66	61	50	33.20
372158	KA AICu 35-240	35-240	3xM10	96	61	25	48.10



SRB.

## UNIMAX AL/AL STEZALJKA Master Unimax

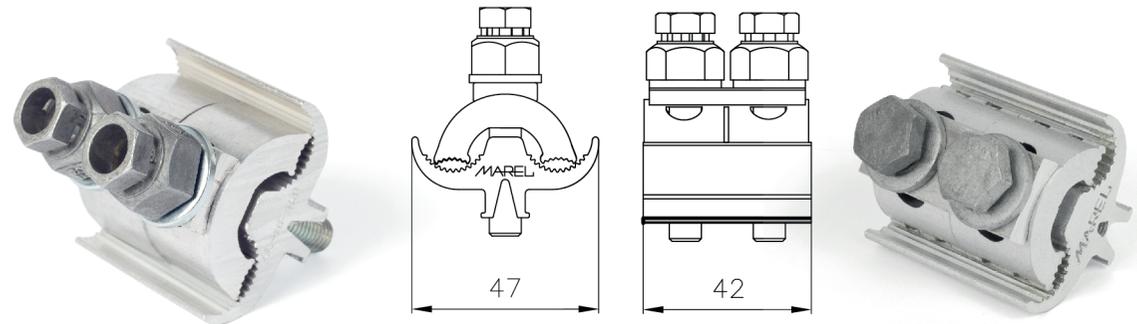
Master Unimax se koristi za spajanje neizolovanih NN ili SN Al provodnika istih ili različitih preseka. Provodnici mogu biti od aluminijuma, legure aluminijuma ili Al čelična užad za nadzemne vodove. Master Unimax je izrađen ekstrudiranjem i unutrašnji žlebovi su nazubljeni, što povećava sigurnost na izvlačenje i omogućava kvalitetan elektrokontakt (žlebovi svojom adekvatnom izradom omogućavaju razbijanje aluminijum oksida sa površine provodnika, tako da se umanjuje prelazni otpor između stezaljke i provodnika). Telo stezaljke je izrađeno od legure aluminijuma velike mehaničke čvrstoće, otporne na koroziju. Šraf na stezaljci ima samokidajuću glavu. Tehničkim karakteristikama omogućava brzu, laku i pouzdanu montažu, bez delova koji mogu da otpadnu pri montaži na visini.



ENG.

## PARALLEL AL/AL GROOVE CLAMP Master Unimax

Master Unimax AL is designed to connect bare LV or MV aluminum conductors of the same or different cross-sections. The conductors can be made of aluminum (AAC), aluminum alloy (AAAC) or aluminum conductors steel reinforced (ACSR). Master Unimax AL is made of extrusion profiles and the inside grooves are serrated, which improves mechanical pull-out strength and provides high-quality electrical contact (the grooves are made in such a way that aluminum oxide from the conductor surface is decomposed, which reduces transient resistance between the clamp and the conductor). The body of the clamp is made of aluminum alloy of high tensile strength and resistance to corrosion. The clamp is equipped with one or two shear head nuts. Its design enables fast, easy and reliable installation and there are no parts that can fall off during installation.



Katbroj  
Cat. No.

Kod  
Code

Presek provodnika Al/Al (mm<sup>2</sup>)  
Conductor cross-section Al/Al (mm<sup>2</sup>)

Br. vijaka  
No. of bolts

Pakovanje (kom)  
Packaging (pcs)

Težina kg/100 kom  
Weight kg/100 pcs

372018

Master Unimax Al 10-95/1

10-95

1 x M8

200

6.50

372019

Master Unimax Al 10-95/2

10-95

2 x M8

100

11.00

372067

Master Unimax Al 16-150/2

16-150

2 x M8

100

12.50

372021

Master Unimax Al 25-150/2

25-150

2 x M8

100

12.50

NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplocinkovanim ili prohrromskim (č.4580) vijčanim delovima.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.



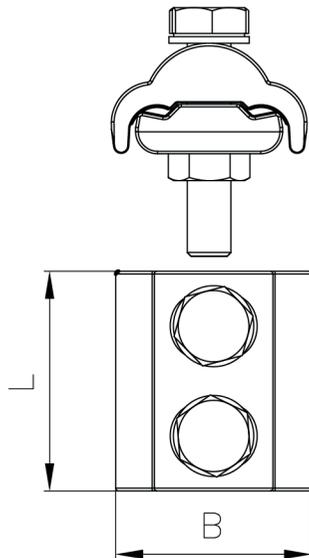
SRB.

## UNIMAX CuCu STEZALJKA

Koriste se za spajanje dva paralelna neizolovana Cu provodnika istih ili različitih preseka. Svojim tehničkim karakteristikama omogućavaju izradu spoja prema DIN 48072-2.

Izrađene su kovanjem i unutrašnji žlebovi su nazubljeni, što povećava sigurnost na izvlačenje i omogućava kvalitetan elektrokontakt.

Telo stezaljke je izrađeno od bakra velike mehaničke čvrstoće, otporne na koroziju. Tehničkim karakteristikama omogućava brzu, laku i pouzdanu montažu, uz pomoć samo jednog ključa, bez delova koji mogu da otpadnu pri montaži na visini.



ENG.

## PARALLEL CuCu GROOVE CLAMP

Copper PG Clamps are designed to connect two parallel bare copper conductors of the same or different cross-sections. Their technical characteristics enable easy formation of joints in accordance with standard DIN 48072-2.

They are made by forging and the inside grooves are serrated, which improves mechanical pull-out strength and provides high-quality electrical contact.

The body of the clamp is made of copper of high tensile strength and resistance to corrosion.

Its design enables fast, easy and reliable installation, using only one spanner, and there are no parts that can fall off during installation.

Kat.broj Cat.No.	Kod Code	Presek provodnika Cu/Cu (mm <sup>2</sup> ) Conductor cross-section Cu/Cu (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom. Weight kg/100 pcs
372071	MCu 4-25	4-25	2xM6	35	29	25	11.60
372072	MCu 6-35	6-35	2xM6	35	29	25	11.60
372076	MCu 6-50	6-50	2xM8	40	36	25	21.00
372073	MCu 16-70	16-70	2xM8	40	36	25	21.00
372074	MCu 50-120	50-120	2xM10	45	43	25	27.80
372075	MCu 35-150	35-150	2xM10	50	50	10	41.90

NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplocinkovanim ili prohronskim (č.4580) vijčanim delovima.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.



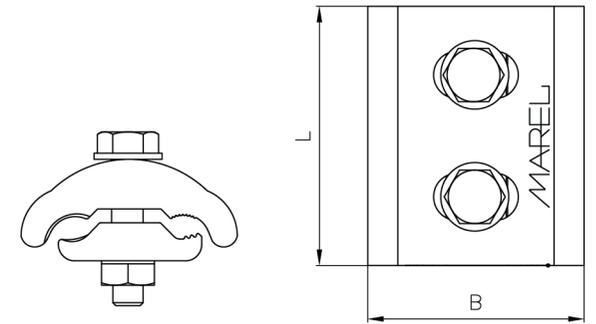
SRB.

## UNIMAX ME AlCu STEZALJKA

Koriste se za spajanje jednog Al provodnika i jednog Cu provodnika istih ili različitih preseka. Provodnici mogu biti od aluminijuma, legure aluminijuma Al ili Cu, Al čelična užad za nadzemne vodove ili krajevi SKS-a sa kojih je prethodno uklonjena izolacija. Svojim tehničkim karakteristikama omogućavaju izradu spoja prema DIN 48072. Izrađene su kovanjem i unutrašnji žlebovi su nazubljeni, što povećava sigurnost na izvlačenje i omogućava kvalitetan elektrokontakt (žlebovi svojom adekvatnom izradom omogućavaju razbijanje aluminijum oksida sa površine provodnika, i tako da se umanjuje prelazni otpor između stezaljke i provodnika). Telo stezaljke je izrađeno od legure aluminijuma velike mehaničke čvrstoće, otporne na koroziju. Tehničkim karakteristikama omogućava brzu, laku i pouzdanu montažu, uz pomoć samo jednog ključa, bez delova koji mogu da otpadnu pri montaži na visini.

NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplo cinkovanim ili prohromskim (č.4580) vijčanim delovima.

# MAREL



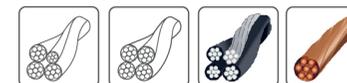
ENG.

## PARALLEL ME AlCu GROOVE CLAMP

ME AlCu Clamps are designed to connect a bare aluminum and a bare copper conductor of the same or different cross-sections. The conductors can be made of aluminum or copper alloy, aluminum conductors steel reinforced (ACSR) or ends of ABC from which the insulation has been stripped. Their technical characteristics enable easy formation of joints in accordance with standard DIN 48072. They are made by forging and the inside grooves are serrated, which improves mechanical pull-out strength and provides high-quality electrical contact (the grooves are made in such a way that aluminum oxide from the conductor surface is decomposed, which reduces transient resistance between the clamp and the conductor). The body of the clamp is made of aluminum alloy of high tensile strength and resistance to corrosion. Its design enables fast, easy and reliable installation, using only one spanner, and there are no parts that can fall off during installation.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.

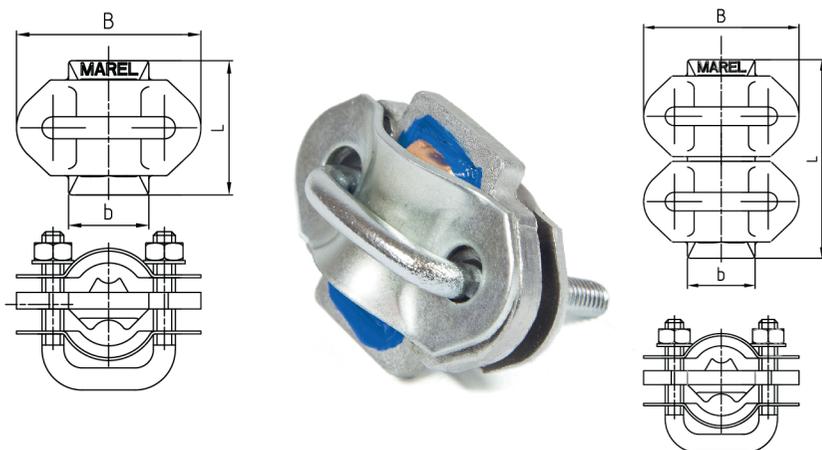
Kat.broj Cat.No.	Kod Code	Presek provodnika Al/Cu (mm <sup>2</sup> ) Conductor cross-section Al/Cu (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom. Weight kg/100 pcs
372126	ME AlCu 6-35	16-70 / 6-35	2xM8	40	41	50	9.80
372129	ME AlCu 6-50	16-70 / 6-50	2xM8	40	41	50	11.00
372127	ME AlCu 6-70	16-70 / 6-70	2xM8	40	41	50	11.00
372128	ME AlCu 10-95	25-150 / 10-95	2xM8	50	44	25	15.00
372130	ME AlCu 25-185	35-200 / 25-185	2xM10	75	50	25	44.00



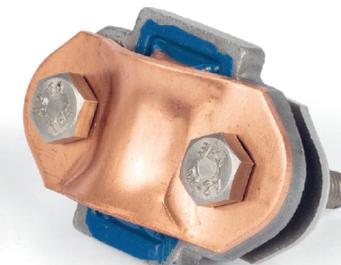
SRB.

## KOMBINOVANA AICu STEZALJKA

Koriste se za spajanje dva paralelna neizolovana provodnika i to kada je glavni vod Al ili Al čelična užad za nadzemne vodove i odvojni vod Cu provodnik. Način izrade garantuje laku, brzu i pouzdanu montažu, uz pomoć samo jednog ključa, bez delova koji mogu da otpadnu pri montaži na visini. Izrađene su od specijalne legure aluminijuma velike mehaničke čvrstoće i dobre elektroprovodljivosti. Bakarni umetak stezaljke je izrađen od elektrolitičkog bakarnog lima i načinom na koji je ugrađen na stezaljku sprečava prodor vlage između bakarnog i aluminijumskog dela, a na taj način onemogućava pojavu elektrolitičke korozije, čime garantuje odličnu elektro provodljivost.



NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplu cinkovanim ili prohrumskim (Č.4580) vijčanim delovima.



ENG.

## BIMETAL AICu GROOVE CLAMP

Bimetal AICu groove clamps are designed to connect two parallel bare conductors when the main line is AAC, AAAC or ACSR and branch line is a copper conductor. Their technical characteristics enable fast, easy and reliable installation using only one spanner and there are no parts that can fall off when working at height. They are made of special aluminum alloy of high tensile strength and good electrical conductivity. The copper insert is made of electrolytic copper sheet and the way it is built into the clamp prevents the penetration of moisture between the copper and aluminum part and in this way prevents the occurrence of electrolytic corrosion, thus guaranteeing excellent electrical conductivity.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.

Kat.broj Cat.No.	Kod Code	Presek provodnika Al/Cu (mm <sup>2</sup> ) Conductor cross-section Al/Cu (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	b (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom. Weight kg/100 pcs
372031	MAICu 6-35	10-35/6-16	1xM6	36	51	22	100	6.40
372038	MAICu 16-70	35-70/16-35	2xM6	60	51	22	50	11.80
372033	MAICu 25-150	25-150/10-25	2xM8	74	64	28	25	26.00



SRB.

## ZAVRŠNA ALAL STEZALJKA

Završne ALAL stezaljke se koriste na krajevima aluminijumskih neizolovanih provodnika i to kako za završavanje vodova, tako i za njihovo nastavljjanje.

Izrađuju se od specifične legure aluminijuma i omogućavaju maksimalno dozvoljeno opterećenje Al čelične užadi za nadzemne vodove. Unutrašnji žlebovi stezaljke su nazubljeni tako da onemogućavaju proklizavanje užeta pod normalnim i maksimalnim dozvoljenim, planiranim opterećenjima. Krivo užlebljeni kanali povećavaju mehanički zateznu čvrstoću i kontakt.

NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplu cinkovanim ili prohromskim (č.4580) vijčanim delovima.

# MAREL



ENG.

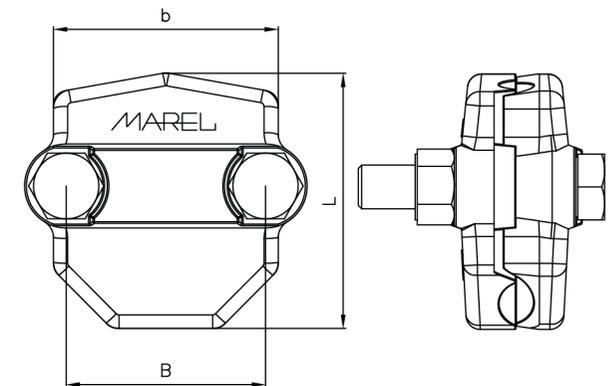
## TERMINAL ALAL CLAMP

Terminal ALAL Clamps are used to terminate or connect bare aluminum conductors.

They are made of specific aluminum alloy and enable maximum allowed load of aluminum conductors steel reinforced (ACSR).

The inside grooves are serrated, which disables slippage of conductors under normal and maximum allowed loads. Curved grooves increase tensile strength and electrical contact.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.



Kat.broj Cat.No.	Kod Code	Presek provodnika Al/Al (mm <sup>2</sup> ) Conductor cross-section Al/Al (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	b (mm)	Prečnik provodnika (mm) Conductor diameter (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom Weight kg/100 pcs
372041	MAIZ 25-35	25-35	2xM8	50	50	37	6,3-8,1	50	13,00
372042	MAIZ 50-70	50-70	2xM10	60	60	47	9,0-11,7	25	28,20
372043	MAIZ 95-120	95-120	2xM12	70	77	62	12,5-14,0	25	41,00



SRB.

## ZAVRŠNA CuCu STEZALJKA

Završne CuCu stezaljke se koriste na krajevima bakarnih neizolovanih provodnika i to kako za završavanje vodova, tako i za njihovo nastavljjanje.

Izrađuju se od legure bakra i omogućavaju maksimalno dozvoljeno opterećenje Cu užeta. Unutrašnji žlebovi stezaljke su nazubljeni tako da onemogućavaju proklizavanje užeta pod normalnim i maksimalnim dozvoljenim, planiranim opterećenjima. Krivo užlebljeni kanali povećavaju mehanički zateznu čvrstoću i kontakt.

NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa toplu cinkovanim ili prohromskim (č.4580) vijčanim delovima.

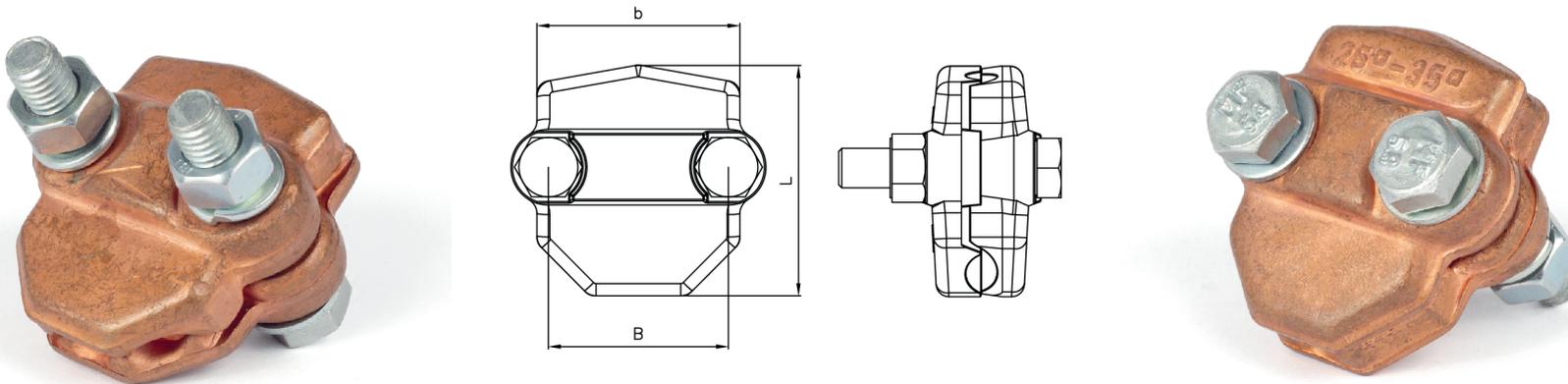
ENG.

## TERMINAL CuCu CLAMP

Terminal CuCu Clamps are designed to terminate or connect bare copper conductors. They are made of copper alloy and enable maximum allowed load of copper conductors. The inside grooves are serrated, which disables slippage of conductors under normal and maximum allowed loads. Curved grooves increase tensile strength and electrical contact.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.

Kat.broj Cat.No.	Kod Code	Presek provodnika Cu/Cu (mm <sup>2</sup> ) Conductor cross-section Cu/Cu (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	b (mm)	Prečnik provodnika (mm) Conductor diameter (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom Weight kg/100 pcs
372141	MCuZ 25-35	25-35	2xM8	50	50	37	6,3-8,1	20	27.40
372142	MCuZ 50-70	50-70	2xM10	60	60	47	9,0-11,7	20	62.60
372143	MCuZ 95-120	95-120	2xM12	70	77	62	12,5-14,0	10	49.90





SRB.

## STRUJNA ALAL STEZALJKA

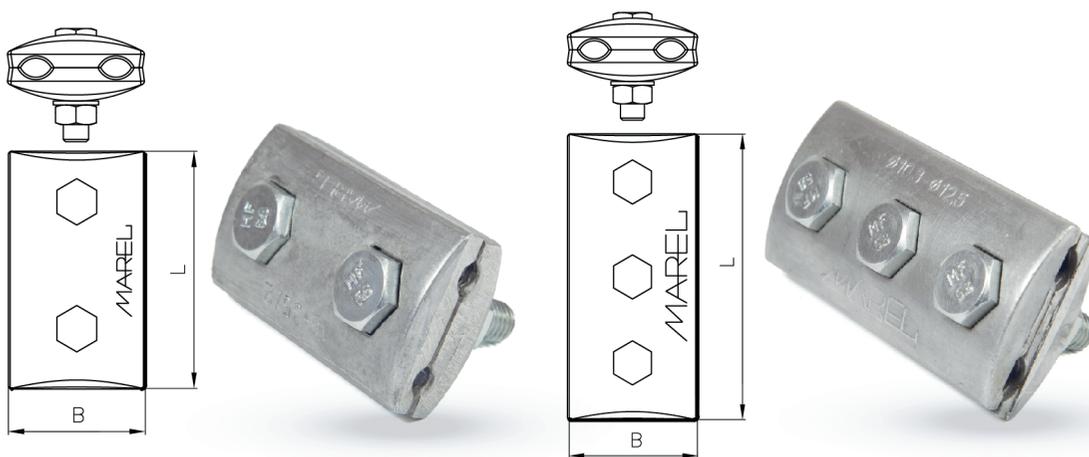
Strujne AlAl stezaljke se koriste pri spajanju paralelnih Al, Al čeličnih užadi za nadzemne vodove ili krajeva NN SKS-a sa kojih je prethodno uklonjena izolacija, istih ili približnih preseka. Svojim tehničkim karakteristikama omogućavaju spoj faznih provodnika na mestima gde se zahteva velika mehanička čvrstoća i ukrućenost spoja (spoj izveden po DIN 48075-1). Strujne AlAl stezaljke izrađujemo livenjem pod pritiskom i njihovi unutrašnji žlebovi su nazubljeni, što povećava sigurnost na izvlačenje i omogućava siguran elektrokontakt (žlebovi svojom adekvatnom izradom omogućavaju razbijanje aluminijum oksida sa površine provodnika i tako umanjuju prelazni otpor između stezaljke i provodnika).

Telo stezaljke je izrađeno od legure aluminijuma velike mehaničke čvrstoće, otporne na koroziju. Tehničkim karakteristikama omogućava laku i brzu montažu i dugu i sigurnu eksploataciju sa veoma malim gubicima na mreži zbog veoma malog prelaznog otpora. Unutrašnji žlebovi su zaštićeni elektrokontaktom mašću.

NAPOMENA: Na zahtev Kupca, stezaljke se mogu isporučivati sa tople cinkovanim ili prohronskim (č.4580) vijčanim delovima.

ENG.

## ALAL GROOVE CLAMP



AlAl Groove Clamps are designed to connect two parallel aluminum conductors (AAC), aluminum alloy conductors (AAAC), aluminum conductors steel reinforced (ACSR) or ends of ABC from which the insulation has been stripped, of the same or similar cross-sections.

Their technical characteristics enable connection of phase conductors at the places where high tensile strength and stiffness of joint is required (connection done in accordance with Standard DIN 48075-1). AlAl Groove Clamps are made by high-pressure die casting and the inside grooves are serrated, which improves mechanical pull-out strength and provides high-quality electrical contact (the grooves are made in such a way that aluminum oxide from the conductor surface is decomposed, which reduces transient resistance between the clamp and the conductor). The body of the clamp is made of aluminum alloy of high tensile strength and resistance to corrosion. Its design enables fast, easy and reliable installation and long-life and safe usage with minor losses on the network due to very low transient resistance. Inside grooves are protected with electrical contact grease.

NOTE: At Customer request the clamps can be delivered with hot-dip galvanized or stainless steel bolts.

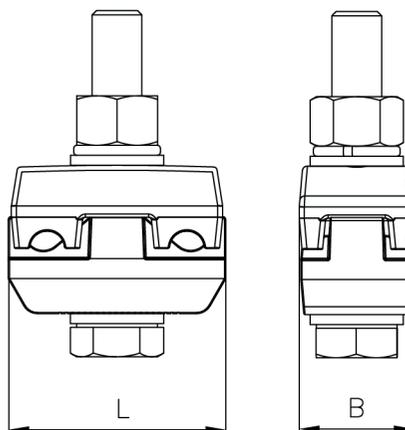
Kat.broj Cat.No.	Kod Code	Presek provodnika Al/Al (mm <sup>2</sup> ) Conductor cross-section Al/Al (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom Weight kg/100 pcs
372051	MAIAIS 16-35/2	16-35	2xM10	72	42	50	21.80
372056	MAIAIS 16-35/3	16-35	3xM10	78	42	50	35.00
372052	MAIAIS 35-50/2	35-50	2xM10	73	42	50	24.00
372057	MAIAIS 35-50/3	35-50	3xM10	91	47	25	29.80
372053	MAIAIS 50-95/3	50-95	3xM10	91	47	25	29.80
372055	MAIAIS 95-120/2	95-120	2xM10	98	56	25	39.20
372054	MAIAIS 95-120/3	95-120	3xM10	98	56	25	46.70



SRB.

## MEPOS STEZALJKA

Mepos stezaljke se koriste za izradu kvalitetnog kontakta između svih vrsti Al ili Cu provodnika i pljosnatih provodnika - bakarnih šina u priključnim ormanima. Kvalitet kontakta je obezbeđen nazubljenim priključnim površinama Mepos stezaljke. Stezaljke su površinski zaštićene galvanskim cinkovanjem i izrađene su postupkom kovanja. Veliku primenu nalaze i na razvodnim pločama u stubovima javne rasvete.



ENG.

## MEPOS CLAMP

MEPOS clamps are designed to establish good electrical contact between all types of aluminum and copper conductors and flat conductors - copper busbars in enclosures. Serrated contact surfaces of MEPOS Clamp secure high-quality electrical contact. The Clamps are made by forging and are zinc plated. They are widely used on switchboards in street lighting poles.

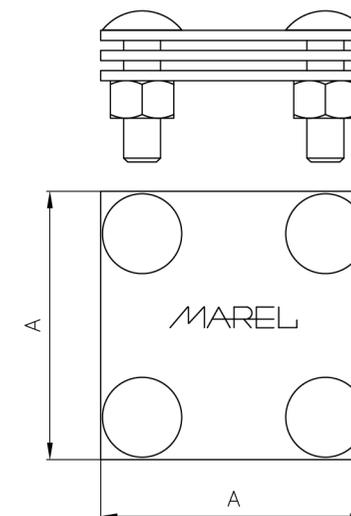
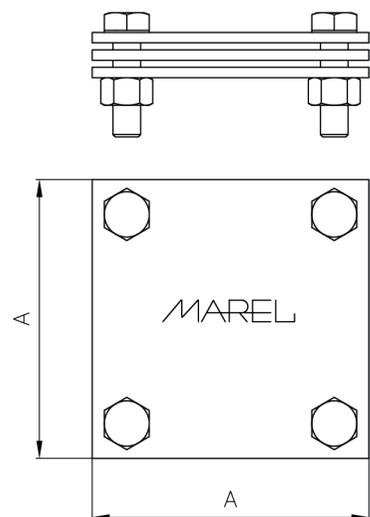
Kat.broj Cat.No.	Kod Code	Presek provodnika (mm <sup>2</sup> ) Conductor cross-section (mm <sup>2</sup> )	Br. vijaka No. of bolts	L (mm)	B (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom Weight kg/100 pcs
374701	MS 16-35	16-35/16-35	1xM8	34	18	25	14.40
374702	MS 16-95	16-35/50-95	1xM8	36	18	25	14.80
374703	MS 50-120	50-95/70-120	1xM10	47	20	25	17.20
374704	MS 50-150	50-150/50-150	1xM10	68	23	10	38.50
374705	MS 70-185	70-150/95-185	1xM12	84	28	10	49.30

SRB.

## UKRSNI KOMAD

Ukrsni komad koristi se za međusobno povezivanje pocinkovanih traka za uzemljenje, pocinkovanih traka za uzemljenje sa okruglim pocinkovanim provodnicima uzemljivača i međusobno povezivanje okruglih pocinkovanih provodnika uzemljivača.

NAPOMENA: Na zahtev Kupca ukrsne komade možemo da izradimo i na taj način da dozvoljavaju pravilan i dugotrajn funkcionalan spoj i u slučajevima kada su uzemljivači izrađeni od bakrnog ili aluminijumskog užeta i potrebno ih je povezati na pocinkovanu traku za uzemljenje ili na sličnu vrstu uzemljivača.



ENG.

## EARTHING SQUARE TAPE CLAMP

Earthing Square Tape Clamp is designed to connect two earthing tapes, two earthing wires or an earthing tape with an earthing wire.

NOTE: At Customer request, earthing square tape clamps can be manufactured in such a way that they allow a proper and long-lasting functional connection even in cases where the earthing devices are made of copper or aluminum wire and need to be connected to a galvanized earthing tape or similar type of earthing device.

Kat.broj Cat. No.	Kod Code (A+A)	Debljina lima (mm) Sheet thickness (mm)	Br. vijaka No. of bolts	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom Weight kg/100 pcs
376061	MTT 60x60/III	2.5	4xM8	25	26.60
376062	MTU 60x60/III	2.5	4xM8	25	26.60
376063	MUU 60x60/III	2.5	4xM8	25	26.60
376064	MTT 80x80/III	3	4xM8	25	50.80
376067	MTT 60x60/III 2mm	2	4xM8	25	24.20
376068	MTT 60x60/III 3mm	3	4xM8	25	28.30

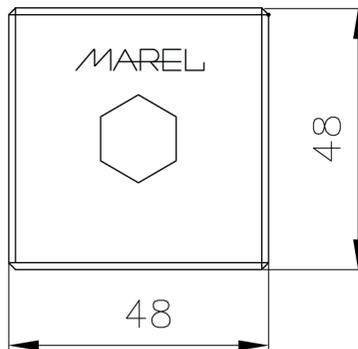
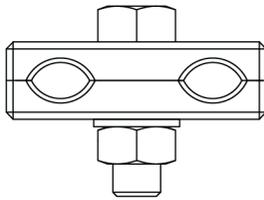
KAT. BR. / CAT.NO. 376160 | KOD / CODE : MSU | STANDARD: EN 62561-1

SRB.

## STEZALJKA ZA UZEMLJENJE

Stezaljka za uzemljenje je namenjena za izradu pouzdanog i veoma čvrstog spoja na uzemljivačima izvedenim trakom ili okruglim provodnicima.

Stezaljka je izrađena od legure mesinga i površinski je zaštićena galvanskim cinkovanjem.



ENG.

## EARTHING CLAMP

Earthing Clamp is designed to establish a reliable and very strong connection between earthing tapes or earthing wires. The Clamp is made of brass and is zinc plated.



KOD / CODE : INN

SRB.

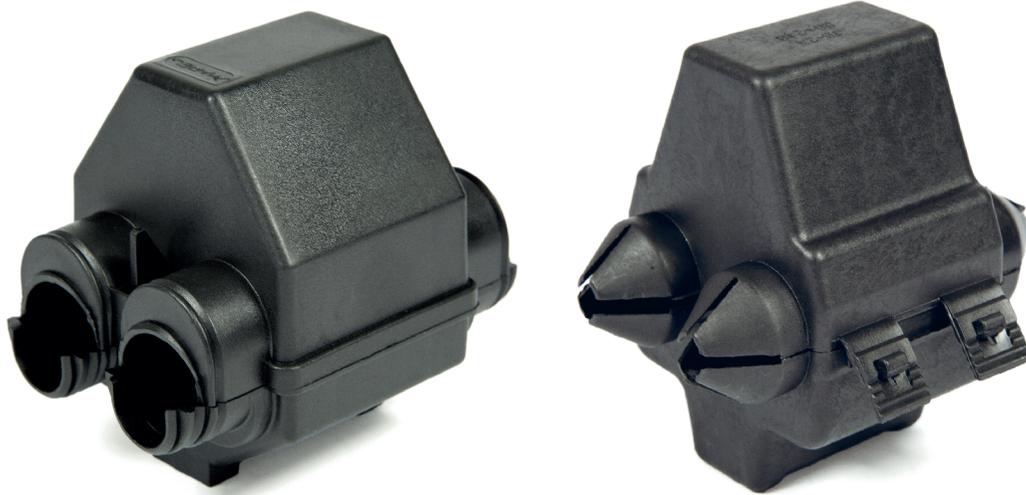
## PLASTIČNO IZOLOVANO KUĆIŠTE

Plastično izolovano kućište se upotrebljava za neizolovane stezaljke MAREL tipa: MAI, MAIAI, MMs, MCu, MEAlCu, MAICu.

Obezbeđuje sigurnu zaštitu od napona dodira.

Otporna je na atmosferske, mehaničke uticaje i UV zračenje, jer je izrađena od materijala velike mehaničke čvrstoće i postojeane strukture u svim vremenskim uslovima.

Kat.broj Cat. No.	Kod Code	Za Marel Unimax stezaljke For Marel PG clamps	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom Weight kg/100 pcs
372131	INN 1	4-25; 6-35; 6-50	25	3.50
372132	INN 2	6-95; 10-95; 25-150	25	4.40
372133	INN 3	35-240	25	7.40

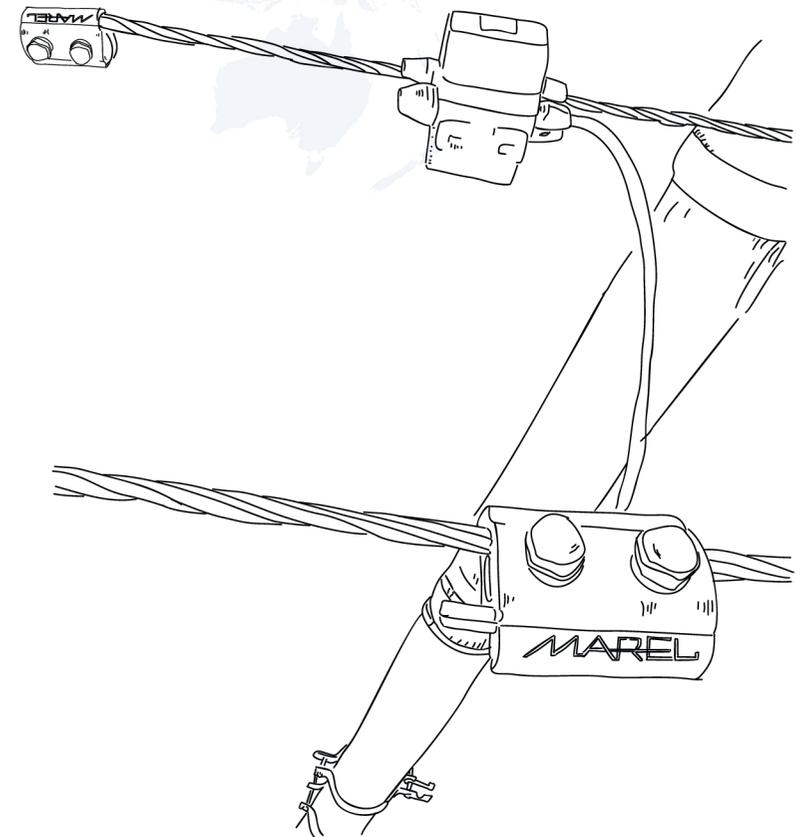


ENG.

## PLASTIC COVER FOR PG CLAMPS

Plastic cover is designed to insulate the following types of MAREL non-insulated clamps: MAI, MAIAI, MMs, MCu, MEAlCu, MAICu. It secures safe protection against touch voltage.

It is resistant to atmospheric and mechanical impacts and UV radiation because it is made of material of high tensile strength and stable structure in all weather conditions.



KOD / CODE : MSK

SRB.

## KLEMA ZA SAJLU

Stežaljka za sajlu ili uža takođe se naziva i Žabica. Koristi se za stezanje svih vrsti sajli. Dimenzija označava prečnik sajle za koju je predviđena.

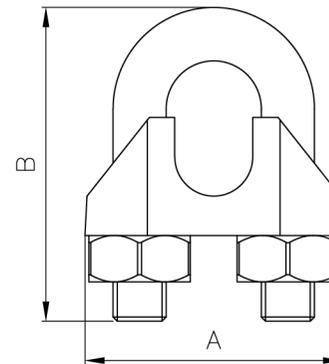
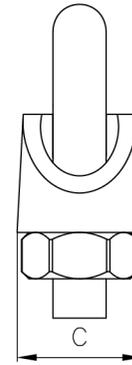
ENG.

## WIRE ROPE CLIP

Wire rope clip, also called Loop clamp, is designed to connect all kinds of wires and ropes.

The dimension shown in the code indicates the diameter of the wire for which it is intended.

# MAREL



Kat.broj Cat. No.	Kod Code	Prečnik sajle (mm) Wire diameter (mm)	A (mm)	B (mm)	C (mm)	Pakovanje (kom) Packaging (pcs)	Težina kg/100 kom Weight kg/100 pcs
376261	MSK 5	5	22	24	10	100	1.80
376262	MSK 6,5	6,5	25	28	12	100	2.40
376263	MSK 8	8	30	34	14	100	3.20
376264	MSK 10	10	35	42	20	100	6.50
376265	MSK 11	11	37	44	20	100	9.40
376266	MSK 13	13	43	55	25	100	14.40
376267	MSK 14	14	45	57	25	100	17.60
376268	MSK 16	16	52	63	28	50	9.10
376269	MSK 19	19	58	75	32	50	11.20
376270	MSK 22	22	64	85	35	50	13.10
376271	MSK 26	26	68	95	38	50	15.30

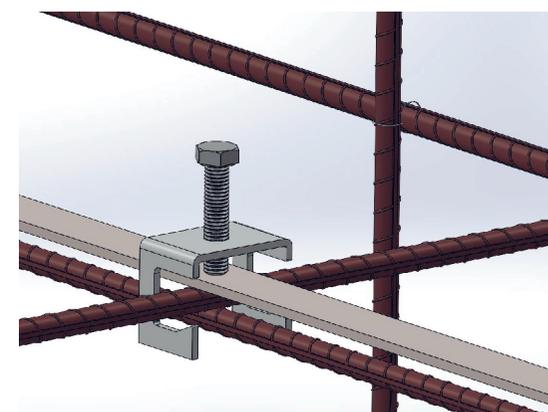
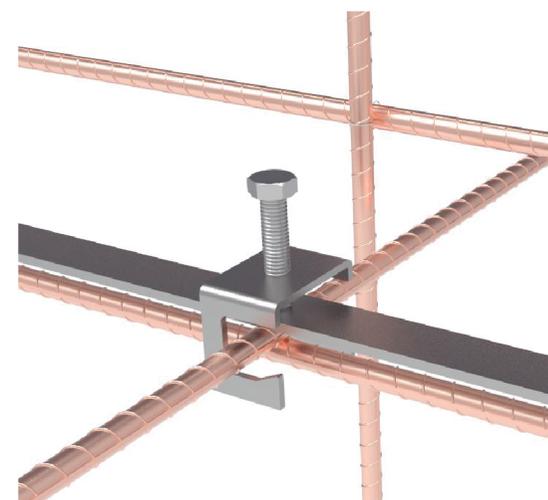
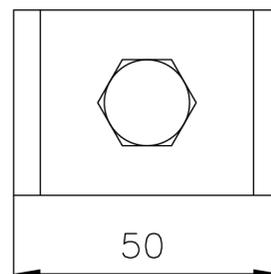
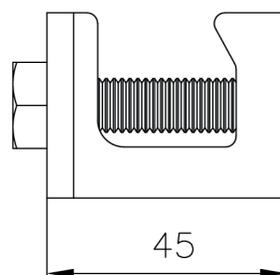
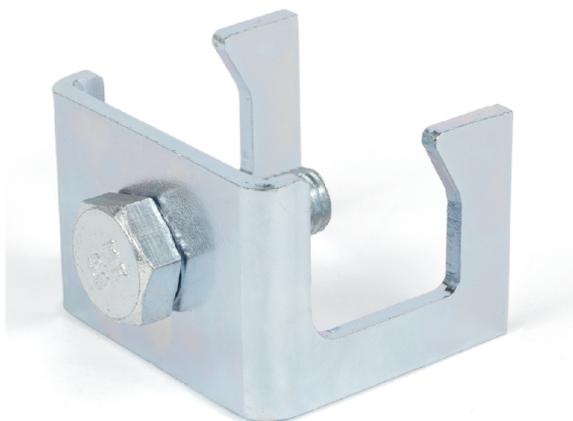
SRB.

## KONTAKTNA STEZALJKA KST

Kontaktna stezaljka KST je pouzdana i trajna veza, ostvorena između pocinkovane trake za uzemljenje i armature budućeg objekta.

Nakon postavljenja, čitav sklop se zaliva betonom i garantuje trajno kvalitetnu zaštitu od prenapona i zaštitu od vazdušnih električnih pražnjenja.

Napomena: Na zahtev Kupca stezaljka može biti izrađena i od prohroma.



ENG.

## TAPE TO REBAR CLAMP KST

Tape to rebar clamp KST is designed to make a reliable and permanent connection between galvanized earthing tape and the reinforcing bars of the future building.

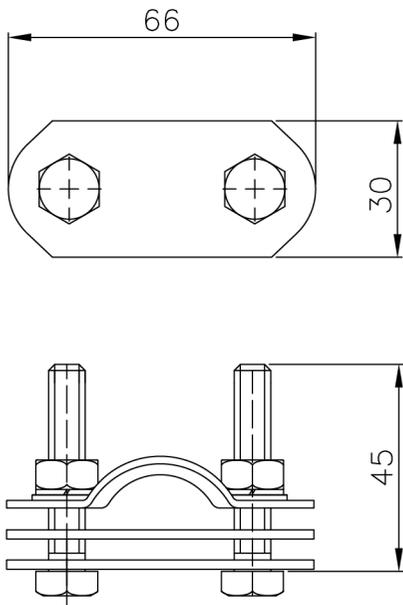
After installation, the entire assembly is poured with concrete, which guarantees permanent high-quality protection against overvoltage and corona discharge.

Note: At Customer request the clamp can be made of stainless steel.

SRB.

## KONTAKTNA STEZALJKA MKS

Konataktna stezaljka MKS se koristi za međusobno povezivanje pocinkovane trake za uzemljenje sa okruglim bakarnim provodnicima uzemljivača i međusobno povezivanje okruglih bakranih provodnika uzemljivača. Sastoji se od dve ili tri pločice dimenzija 66x30 mm i dva vijka M8x45 mm.



ENG.

## CONTACT CLAMP MKS

Contact Clamp MKS is designed to connect a galvanized earthing tape with a copper earthing wire or to connect two copper earthing wires. The Clamp consists of two or three plates 66x30 mm and two bolts M8x45 mm.

Proizvođač MAREL d.o.o. za sve svoje proizvode, a na zahtev Kupca dostavlja pismenu garanciju od minimum 3 godine na kvalitet, funkcionalnost i pouzdanost.

Štampom ovog kataloga, tehničkog priručnika svi ranije objavljeni podaci o našim proizvodima, kataloškim brojevima, tehničkim karakteristikama, prestaju da važe. Proizvođač zadržava pravo da bez prethodne najave izvrši izmene i dopune podataka u katalogu.

**Svi podaci u ovom tehničkom priručniku, katalogu naših proizvoda, odgovaraju našim tehničkim saznanjima i merenjima. Ovaj tehnički priručnik se ne može upotrebiti kao garancija posebnih kvaliteta i zahteva proizvoda u čiji smo kvalitet, trajnost , funkcionalnost i pouzdanost mi kao proizvođači uvreni.**

Na zahtev Kupaca dostavljamo :

- protokole i uverenja o tehničkim ispitivanjima izdatim od strane akreditovane laboratorije;
- pojedinačnu tehničku dokumentaciju za svaki proizvod;
- uputstva za upotrebu.

#### NAPOMENA:

Ovaj katalog nije dozvoljeno menjati niti uklanjati njegove delove. Koristite ga isključivo u originalnom obliku.

At Customer request manufacturer MAREL submits written Guarantee for all their products. It is valid for at least three years and guarantees good quality, functionality and reliability.

Publication of this catalog, technical manual invalidates all previously published data about our products, catalog numbers and technical characteristics. The manufacturer keeps the right to make any changes and updates of the data without previous notice.

**All the data in this technical manual, catalog of our products comply with our technical knowledge and measurements. This technical manual cannot be used as a guarantee of specific qualities and requirements of the products, but we as manufacturers are certain of their good quality, durability, functionality and reliability.**

At Customer request we submit:

- protocols and certificates of technical testings issued by accredited laboratories;
- technical documentation for each single product;
- Instructions manuals.

#### NOTE:

It is not allowed to modify this catalog or have any of its parts removed. Use it only in its original form.



MAREL D.O.O.

Rasinska 5, 37207 Veliko Golovode,  
Krusevac, REPUBLIC OF SERBIA

TEL: +381 (0)37 35-66 262  
(0)37 35-66 266

e-mail: [marel@marel.rs](mailto:marel@marel.rs)

[www.marel.rs](http://www.marel.rs)