

Electrical Distribution

Housing





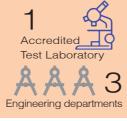
The French Group Michaud, has been designing, qualifying, producing and selling electrical equipment and connection systems for over 60 years.











* Accréditation n° 1-0579 portée disponible sur www.cofrac.fr

From R&D
to after-sales service,
Michaud Export,
as a Michaud
subsidiary, has full
mastery
of its value chain,
ensuring high-level

quality and service



MIRELEC

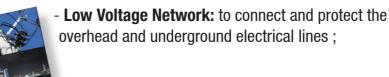
worldwide.

Mirelec is a Michaud brand, dedicated to low voltage electrical distribution equipment.

The brand offers european quality products and solutions at a price matching emerging markets expectations.



According to the international standards, **Michaud Export** designs and develops energy distribution solutions. The product range is focused on two fields of expertise:



 Energy Controlling: to manage and offer easy access to electricity.



Michaud Export

in a few words:

Reliability
Support
Adaptability
Quality
Innovation
Expertise
Reactivity
Experience
LISTENING



As a **technical expert in low-voltage networks**, Michaud focuses R&D on innovative solutions.

Thanks to an **engineering Department dedicated to international business**, Michaud Export provides support to Power Utilities in their grid expansion projects.

From protection to connections, many **innovative solutions** are already used in major Power Utilities around the world.



Supplier of electrical equipment

From MV/LV transformer substation to the end customer, Michaud Export offers all **electrical equipment for the construction & maintenance** of overhead and underground lines.

In addition to low-voltage networks, Michaud Export also offers solutions for residential electrical distribution and smart metering.

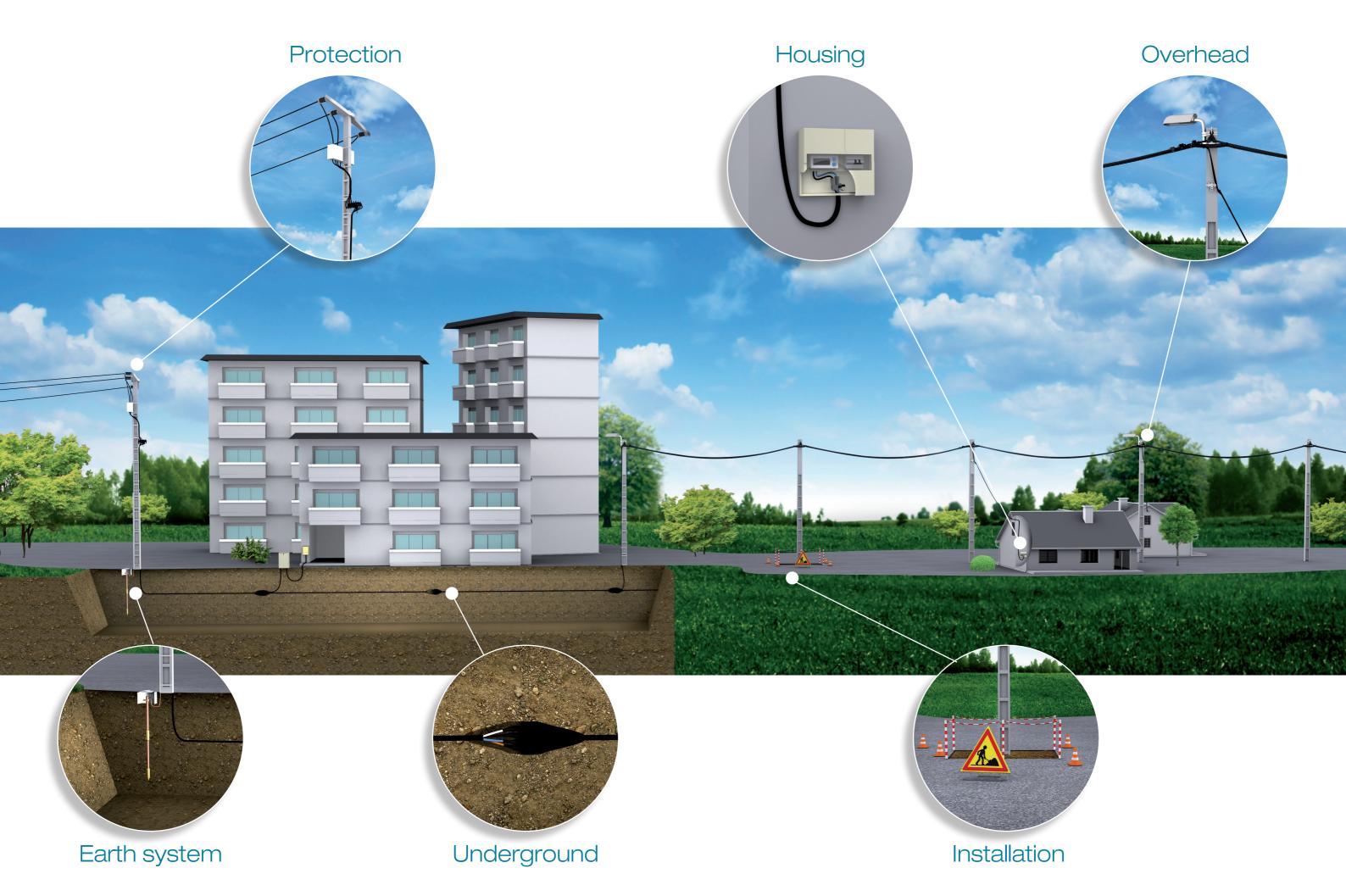








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Smart Meter Equipment

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Universal flexible linking cable

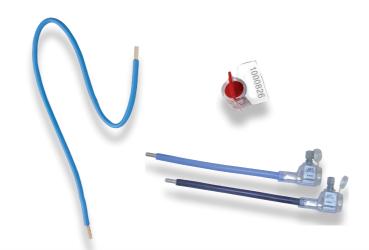
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Specialised in electrical distribution, **MICHAUD** develops its expertise with the arrival of Smart Meter, offering solutions for the counting environment and protection.





Evolution in the housing field: Smart Meter

Due to the evolution of european specifications for Smart Meter systems, it is necessary to assist meters manufacturers or distribution networks operators.

The Smart Meters roll out requires an adaptation of residential installations. MICHAUD invests to make the change easier by developing solutions suitable for current installations and ready to receive new counting solutions.

Thanks to its expertise and engineering, MICHAUD proposes custom-made solutions to better suit the project.

The benefits



Anticipate facilitate and transition towards Smart Meter



Reduce intervention time as well as electricity supply cut



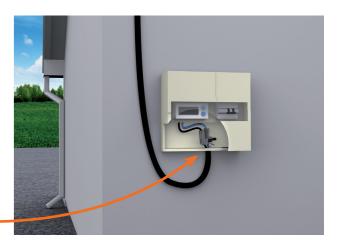
Minimise roll-out cost

Adaptation to new counting systems

In this scalable environment, the development of **universal solutions** enables better preparation for change according to evolution of Smart Meter technology.

Thanks to its skills and its expertise, MICHAUD was a pioneer regarding the design of insulation piercing end connector. It is a solution for universal connection between service cable and board terminals enabling to realise safe connection between aluminium and copper.





Caracteristics

Connection between the aluminium service cable and the copper board terminal.

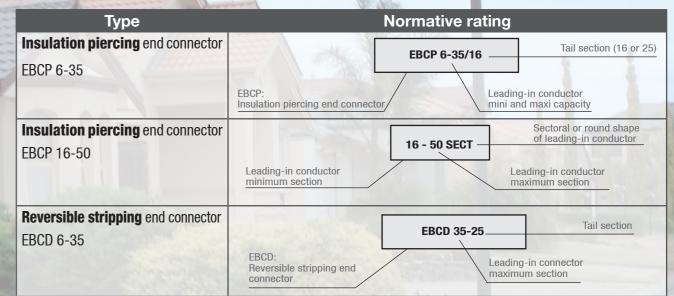
Cable tail flexibility and small end connector bulk.

Possible tail extension.

Assets

- → No electrolytic corrosion phenomenon
- Easier fitter work in confined space
- **+** Easy renovation

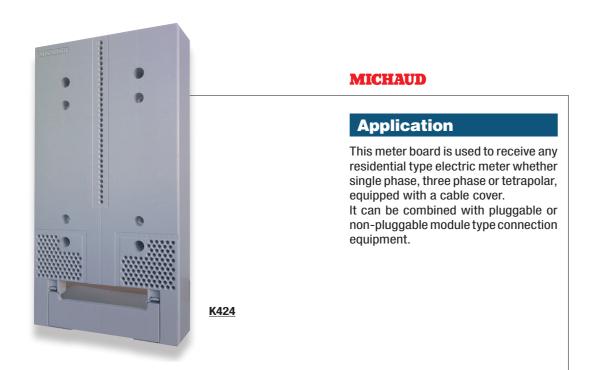
Available end connectors types



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Low Voltage Energy Smart Meter Equipment

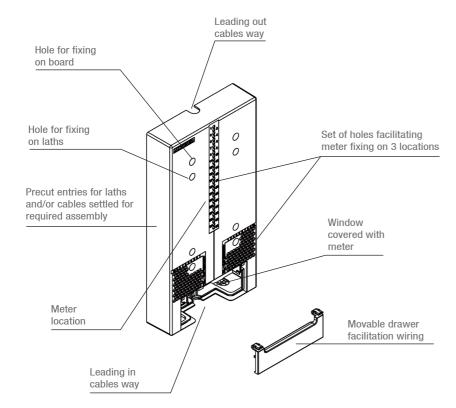
Universal meter board and accessories

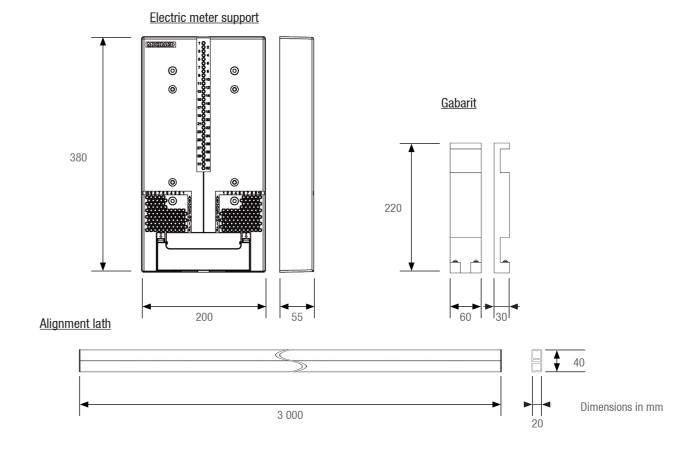


Description

- The assembly is made of grey synthetic self-extinguishing materials (RAL 9035).
- The board is equipped with a removable clipped cover which is dismountable to make equipment wiring easier.
- The board is vertically fixed to a flat surface and possibly by means of alignment laths (see Accessories).
- When equipped with a tetrapolar meter, the board is IP4X on the front face and IK4.

The board is used to fix meters that meet the criteria of the **DIN 43857** standard.



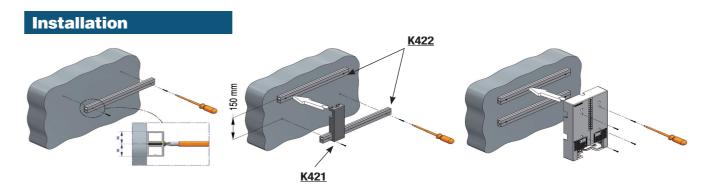


Code	Designation	Weight (kg)	Sales unit
K424	SUPPORT FOR ELECTRIC METER + COVER	0.500	10
K425	COVER (FOR ELECTRIC METER SUPPORT)	0.080	1

Accessories

Code	Designation	Weight (kg)	Sales unit
K422	ALIGNMENT LATH (Length 3m)	1.500	6
K421	GABARIT FOR ALIGNMENT LATH	0.320	1

Comment: if the supporting wall is uneven, the meter board can be mounted using alignment laths. The laths are made from grey PVC. The gabarit makes it easier to assemble the laths and guarantee a centre-to-centre distance of 150mm between laths.



Meter circuit-breaker board



MICHAUD

Application

This board is designed to accommodate the single phase electronic meter and the circuit-breaker.

It defines the boundary between the energy distributor and the installer private domain.

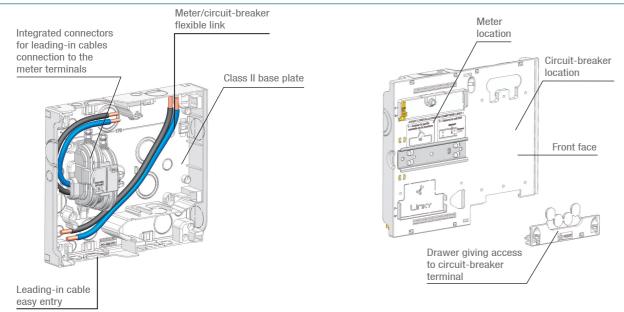
The cover is optional.

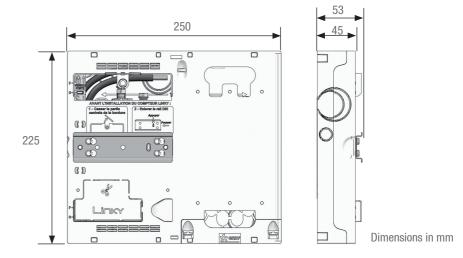
P475



Description

- The assembly is made of white synthetic self-extinguishing materials (RAL 9010).
- The front face is equipped with a fixing rail for installing the meter and windows for conductors to run through. It can be dismantled for easier wiring of the devices. The rail can be removed for installing the meter.
- The board is equipped with connectors fixed to the bottom, designed to receive the leading-in cables from the top or the bottom. The terminals use insulation piercing technology and shear heads.
- Connectors have a IPXXB protection degree after installation. The system integrates 16mm² copper links which length enables the connection of any meters with terminals at the top or bottom.
- The terminals downstream of the circuit-breaker are accessible via a drawer in the lower part.
- The meter board can be covered with the P474. The cover is equipped with a board fixing to be attached on the board and a swivel window on the front face to access the meter and circuit breaker.





Code	Designation	Weight (kg)	Sales unit
P475	METER AND CIRCUIT-BREAKER BOARD	0.920	1
P474	COVER FOR METER AND CIRCUIT-BREAKER BOARD	0.340	1

Variants:

Meter circuit-breaker board for three phase electronic meter.



Code	Designation	Weight (kg)	Sales unit
R092	250x550 PANEL FOR THREE PHASE METER + CIRCUIT-BREAKER + COVER	3.080	1
R041	250x550 PANEL FOR THREE PHASE METER + CIRCUIT-BREAKER WITHOUT LOGO	1.920	1
R112	COVER FOR 250x550 PANEL	1.160	1
R043	330x330 PANEL FOR THREE PHASE METER + CIRCUIT-BREAKER WITHOUT LOGO	2.500	1
R139	COVER FOR 330x330 PANEL	1.200	1

Low Voltage Energy Smart Meter Equipment

AMM concentrator data supply kit



MICHAUD

Application

This kit is designed for the installation of an AMM (Automatic Meter Management) data concentrator in a LV/MV transformer or on a pole depending on the type of network (underground or overhead). These products supply and protect the concentrator.



P070

Description

data supply kit (K716)

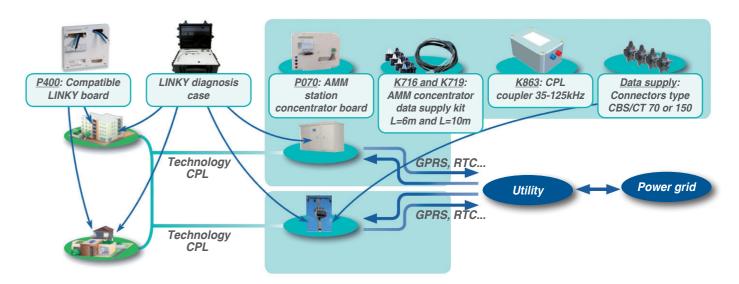
To facilitate the use and management, these products are supplied in packs:

For LV/MV underground stations: Pack Alim L6000 + AMM station connector board

This pack comprises the following elements:

- 1 AMM station concentrator board (P070) of dimensions 377x281 equipped with:
- 1 DIN rail on which a three phase cutout is fixed
- 4 links 2.5mm² for the cutout and concentrator connection through a pluggable service end. The concentrator board is delivered with 3 fuses cartridges size 10.3x38, gauge 2A, a neutral tube and 3 screws pre-screwed on the connector board ensuring the concentrator fixing.
- 1 AMM concentrator data supply kit L=6M (K716) or L=10M (K719) comprising:
- 3 phase connectors and 1 neutral insulation piercing connector with integrated removable fuse protection (3P+1N), 3 fuses size 10x38, rated 10A and a neutral tube.
- 1 connection link of 6 or 10 meters (depending on the type) between connectors and the concentrator board cutout. It is equipped with quick connection plug on the connectors side end.

Installation



* LINKY: French electricity board Erdf electronic Smart Meter. For the references P400 and K863, contact us.

Code	Designation	Weight (kg)	Sales unit
K716	AMM CONCENTRATOR DATA SUPPLY KIT + LINKING CABLE L=6m	2.000	1
K719	AMM CONCENTRATOR DATA SUPPLY KIT + LINKING CABLE L=10m	2.400	1
P070	AMM STATION CONCENTRATOR BOARD	1.350	1

Accessories



Modular distribution box

Projecting





Description

- The assembly is made of synthetic materials passing the incandescent wire resistance test at 750°C.
- The cover is white (RAL 9010) and offers a IP30/IK05 protection degree.
- The distribution boxes with 6 and 9 modules are delivered with an IP2X earth system terminal offering 7 inlets/outlets including connection terminals of 16mm² section maximum.
- The distribution boxes with 1 up to 6 modules can be opened using a clip. The distribution box with 9 modules uses screws.

This distribution box meets the criteria of the NF C 61-910 specification.

Code	Designation	Height (mm)	Length (mm)	Depth (mm)	Weight (kg)	Sales unit
Q591	DISTRIBUTION BOX WITH 1 MODULE	140	30	70	0.080	1
Q592	DISTRIBUTION BOX WITH 2 MODULES	141	48	70	0.100	1
Q594	DISTRIBUTION BOX WITH 4 MODULES	142	84	70	0.140	1
Q596	DISTRIBUTION BOX WITH 6 MODULES	180	120	70	0.250	1
Q599	DISTRIBUTION BOX WITH 9 MODULES	180	190	70	0.360	1

Integrable



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Application

This integrable modular distribution box is designed to be equipped with devices that protect the customer installation.

<u>U636</u>

<u>U637</u>

Description

- Several box widths are available: 8, 12, 24 (2 rows of 12) and 36 (3 rows of 12) modules.
- The cover is white and the door is transparent.
- The opening and closing system is ergonomic and the door is reversible.
- The distribution box offers IP40 protection degree (protection against penetration of body superior or equal to 1mm).
- The use temperature range goes from -25°C up to 60°C.
- Used materials are without halogen.

Code	Designation	Height (mm)	Length (mm)	Depth (mm)	Weight (kg)	Sales unit
U635	INTEGRATED MODULAR BOX - 8 MODULES	90	240	90	0.485	20
U636	INTEGRATED MODULAR BOX - 12 MODULES	260	330	90	0.825	10
U637	INTEGRATED MODULAR BOX - 24 MODULES (12x2)	420	330	100	1.655	10
U638	INTEGRATED MODULAR BOX - 36 MODULES (12x3)	570	330	100	2.325	10

Smart Meter Equipment

Cutout cabinet





Bipolar 10A



MICHAUD

Application

The cabinet is part of the installation check board. It ensures the connection individual principal cutout function. It is designed to receive fuse cartridges size 10.3x38, 14x51, 22x58 and DIN 00.









<u>U607</u>





P053 Bipolar 90A







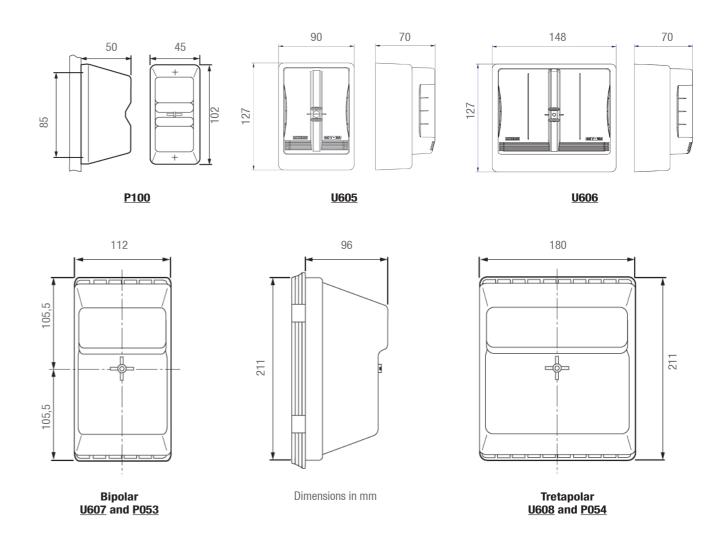


Tetrapolar 60A (90A admitted)

Description

- The cover is equipped with ventilations and a huge air volume restricting warming.
- The sealing is performed with two 90° notches in the cover and a hole in the tightening screw indexed in the crack for U607, U608, P053, P054, U605 and U606.
- Terminal screws are in stainless steel. They allow an important durability in harsh atmosphere.
- Fuses extraction is performed thanks to a standard handling removable handle.
- Cabinet's cage terminals of the board P100 can receive cable sections from 1.5mm2 up to 10mm2.
- Cutout terminals, size 14x51, can receive cable sections from 6mm² up to 25mm².
- Cutout terminals, size 22x58 and DIN 00, can receive copper or aluminium cable sections from 6mm² up to 35mm².
- The cabinet P100 is delivered equipped with a neutral tube. The other ones are delivered empty.

The synthetic materials that are used meet the criteria of the HN 60-E-02 and HN 60-S-02 specification.



Code	Designation	Weight (kg)	Sales unit
SIZE 10.3	3x38		
P100	CUTOUT CABINET 2A NEUTRAL TUBE	0.170	1
SIZE 14x	x51	'	
U605	CUTOUT CABINET 30A BIPOLAR	0.230	1
U606	CUTOUT CABINET 30A TETRAPOLAR	0.350	1
SIZE 22x	x58		
U607	CUTOUT CABINET 60A BIPOLAR	0.510	30
U608	CUTOUT CABINET 60A TETRAPOLAR	0.780	18
SIZE 00		'	
P053	CUTOUT CABINET BIPOLAR 90A	0.600	1
P054	CUTOUT CABINET TETRAPOLAR 60A	0.944	1

Devices are delivered without fuse cartridges.

Option:

Fuses 10.3x38, 14x51, 22x58 and size 00 are available.









Smart Meter Equipment

Seal

Numbered seal with wire



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Application

This seal is designed with a rotary closing system to wound manually. It is ideal for sealing electrical equipment, water meters, gas meters, etc. The breakage of this element highlights possible fraud.

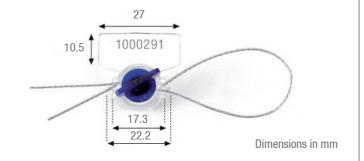
Description

- It comprises two parts in which the wire is wound manually using a wing nut.
- Unique clockwise rotation way is to be considered.
- It is implemented manually without using particular tools.
- Wire features:
- Stainless steel type,
- Section approximately 0.35mm² (diameter ~ 0.65mm),
- $\bullet \ \text{Tensile strength} > 30 \\ \text{daN at ambient temperature,}$
- · Pre-mounted on the seal,
- The length can be defined on request.
- The rotation mechanism is available in several colours.
- Materials resistant to UV, bad weather and various temperatures.
- The cable is delivered assembled (or separately on request).

Possible customization

The seal flag can include standard marking:

- xxx_xxx (customer marking)
- 1234567 (7 digits consecutive numbering).



Code	Designation	Length (mm)	Weight (kg)	Sales unit
F009	NUMBERED SEAL WITH WIRE (100 pieces)	300	0.420	1

Note:

- Preparation and packaging on request.
- Available colours: red, blue, yellow.
- Available cable lengths: 200mm and 400mm.

Please enquire for any other length.

Plastic seal



MICHAUD

Application

This seal is designed with a tail to run through a locking hole.

It is used to seal electrical equipment, water meters, gas meters, etc.

The breakage of this element highlights possible fraud.

Description

- These seals are made of UV resistant synthetic materials.
- The seal identification is made through:
- A 1234567 marking type (7 digits consecutive numbering) for F010
- A permanent marker inscription for K910
- They are implemented manually without using particular tools.

Code	Designation	Length (mm)	Weight (kg)	Sales unit
K910	WHITE SEAL (BOX OF 100 PIECES)	130	0.240	1
F010	PLASTIC SEAL WITH UNIQUE NUMBER (1000 PIECES)	115	1	1

Sealable screw cover



MICHAUD

Application

When installing the meter, the anti-fraud system may need to be modified. This sealable screw cover is designed to seal a screw.

Code	Designation	Weight (kg)	Sales unit
P641	SEALABLE SCREW COVER (2mm diameter)	0.002	100
P642	SEALABLE SCREW COVER + 5x30 VBA SCREW	0.006	100

Universal flexible linking cable

Insulation piercing end connector EBCP 6-35



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Application

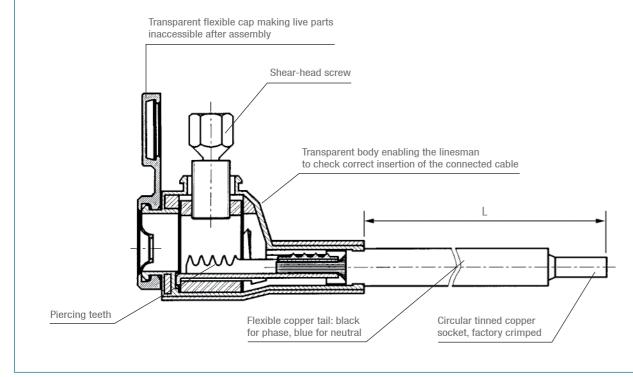
This end connector is used for the connection of leading in cables to electrical equipment terminals (cutouts, electronic meters, ect). It is a universal solution to connect the connection cable and the meter terminals no matter what is the metal or the block nature. It can be fitted on copper or aluminum

stranded or solid core conductors.

Description

- The end connector uses the insulation piecing technology (6-35mm²).
- The protection degree is IP2X when it is implemented.
- The maximum power running through the insulation piercing end connector is 63A for 16mm² and 90A for 25mm².
- Low dimensions enable to easily fit the end connector behind the panel in a restricted space.
- Solid teeth ensure connection in extreme environments even under low temperatures.
- The robust material constituting the cover enables it to be held with a pair of pliers during the installation, facilitating

This end connector meets the criteria of the **H-M24-2011-02598-FR** specification.



Code	Designation	Out of box length: L (mm)	Capacities (mm²)	Weight (kg)	Sales unit
P446	EBCP 6-35/16 BLACK L235	235		0.090	10
P447	EBCP 6-35/16 BLUE L235	235		0.090	10
P648	SET OF 2 EBCP 6-35/16 (1 BLACK + 1 BLUE) L235	235	6-35	0.190	1
P651	SET OF 4 EBCP 6-35/16 (3 BLACK + 1 BLUE) L235	235	0-33	0.370	1
P222	EBCP 6-35/16 BLACK L500	500		0.140	1
P223	EBCP 6-35/16 BLUE L500	500		0.140	1
P448	EBCP 10-35/25 BLACK L190	185		0.100	10
P449	EBCP 10-35/25 BLUE L190	185	10.05	0.100	10
P649	SET OF 2 EBCP 10-35/25 (1 BLACK + 1 BLUE) L190	185	10-35	0.210	1
P650	SET OF 4 EBCP 10-35/25 (3 BLACK + 1 BLUE) L190	185		0.420	1





Universal flexible linking cable

Insulation piercing end connector EBCP 16-50 Class II



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Application

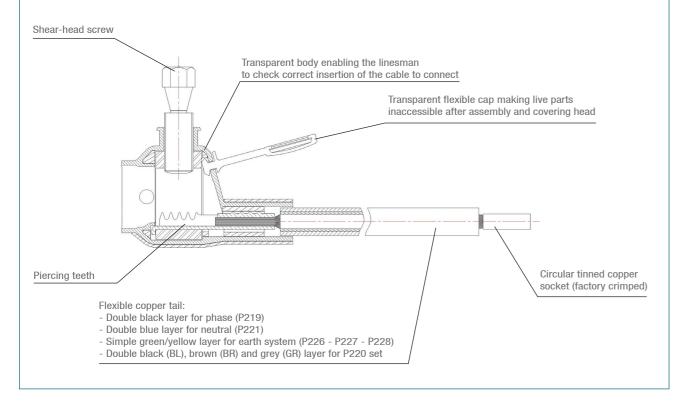
This end connectors range is used for the connection of leading in cables to electrical equipment terminals (cutouts, electronic meters, ect). It is a universal solution to connect the connection cable and the meter terminals no matter what is the metal or the block nature.

The end connector can be fitted on sectoral or circular-shaped copper or aluminum stranded or solid core conductors.

It provides class II protection using the double insulated colored tail, when equipped with the cover.

Description

- The end connector uses the insulation piecing technology (16-50mm²).
- The protection degree is IP2X when it is implemented.
- The maximum power running through the insulation piercing end connector is 80A.
- Low dimensions enable to easily fit the end connector behind the panel in a restricted space.
- Solid teeth ensure connection in extreme environments even under low temperatures.
- The robust material constituting the cover enables it to be held with a pair of pliers during installation, facilitating holding.
- The synthetic cover ensures a protection class II of the connector body and can be sealed.
- The reference P220 comprises a kit of 3 colored end connectors with black, brown or grey tail.



Option: Class II Setting-up

The cover (L220) enables to establish a class II installation.



Code	Designation	Out of box length: L (mm)	Capacities (mm²)	Weight (kg)	Sales unit
P219	EBCP 50 SECT-16 BLACK L700 CLASS II	700		0.190	9
P220	SET OF 3 EBCP 50 SECT-16 BL/BR/GR L375	375	16-50	0.390	1
P221	EBCP 50 SECT-16 BLUE L375 CLASS II	375		0.130	9
P731	EBCP 50 SECT-16 BLACK L375 CLASS II	375		0.390	100
P732	EBCP 50 SECT-16 GREY L375 CLASS II	375		0.390	100
P733	EBCP 50 SECT-16 BROWN L375 CLASS II	375		0.390	100
L220	EBCPAU COVER CLASS II			0.020	12

Option:

Insulation piercing end connector for earth systems.



A wide range of insulation piercing end connectors has been designed for earth system:

- P 227 and P 226 with two tails (yellow/green and blue) for connecting and earth system the neutral at the same time,
- P228 with one tail (yellow/green) for the earth conductor. The neutral conductor (blue) has double insulation whereas the earth conductor (yellow/green) has single insulation as it is not considered as a live element (class II not required).

Code	Designation	Out of box length: L (mm) tail	Out of box length: L (mm) earth system	Capacities (mm²)	Weight (kg)	Sales unit
P226	EBCP P221 + YELLOW/GREEN EARTH SYSTEM L345	375	345		0.220	9
P227	EBCP P221 + YELLOW/GREEN EARTH SYSTEM L800	375	800	16-50	0.330	9
P228	EBCP 50 SECT-16 YELLOW/GREEN L800		800		0.200	9

Universal flexible linking cable

Reversible stripping end connector EBCD 6-35



MICHAUD

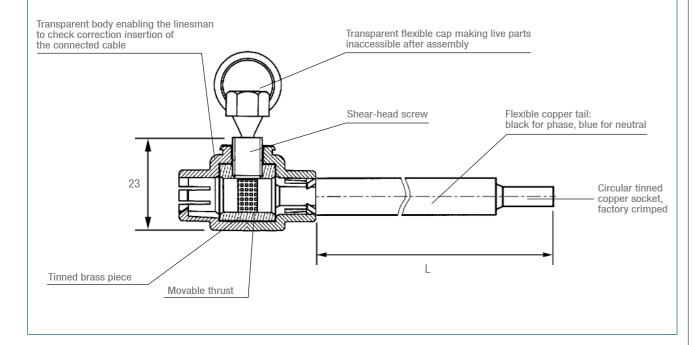
Application

This end connectors range is used for the connection of leading in cables to electrical equipment terminals (cutouts, electronic meters, ect). It is a universal solution to connect the connection cable and the meter terminals no matter what is the metal or the block nature.

They can be fitted on copper or aluminum stranded or solid core conductors.

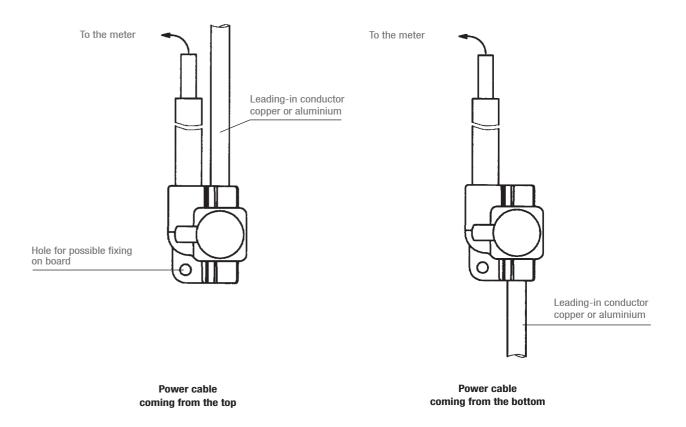
Description

- The end connector uses the stripping technology (6-35mm²).
- The protection degree is IP2X when it is implemented.
- The maximum power running through the stripping end connector is 90A.
- The end connector can be connected in two opposite directions, which overcomes bulky loops in the event of insertion of the power cable from the top.
- Low dimensions enable to easily fit the end connector behind the panel in a restricted space.
- Solid teeth ensure connection in extreme environments even under low temperatures.
- The robust material constituting the cover enables it to be held with a pair of pliers during the installation facilitating the holding.



The benefits:

- + Connection possible from the top or bottom
- + A flexible cap enables to make the tightening screw inaccessible
- + The reversible end connector can either remain floating or be fixed using a 4mm diameter screw

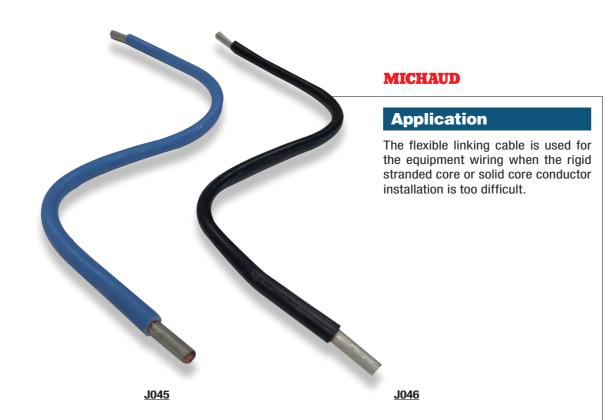


Code	Designation	Out of box length: L (mm)	Capacities (mm²)	Weight (kg)	Sales unit
P620	SET OF 2 EBCD 35-25 (1 BLACK + 1 BLUE)	185	6-35	0.220	1
P621	SET OF 4 EBCD 35-25 (3 BLACK + 1 BLUE)	100	6-33	0.440	1

Nota: please enquire for any other length

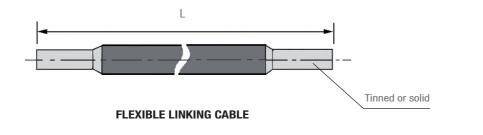
Low Voltage Energy Universal flexible linking cable

Flexible linking cable



Description

- The linking cable is a 16mm² or 25mm² flexible copper conductor, multi-stranded of H07 VK type.
- Each end is factory crimped with a tinned copper-bonded socket or a stripped and tinned socket for J412 and J413. The socket is designed for connection to a plate or tunnel terminal, or to an insulation piercing terminal.



- The length L of the link is stated on the right-hand page.

Code	Designation	Conducteur (mm)	Length (mm)	Weight (kg)	Sales unit
J045	1 BLUE 16mm² LINKING CABLE L560	16	560	0.100	10
J046	1 BLACK 16mm² LINKING CABLE L530	16	530	0.090	10
J047	1 BLUE 16mm² LINKING CABLE L700	16	700	0.135	10
J048	1 BLACK 16mm² LINKING CABLE L700	16	700	0.135	10
J041	1 BLUE 16mm² LINKING CABLE L1200	16	1 200	0.200	10
J042	1 BLACK 16mm² LINKING CABLE L1200	16	1 200	0.210	10
J808	SET OF 2 16mm² LINKING CABLES (1 BLUE + 1 BLACK)	16	560+530	0.215	1
J809	SET OF 4 16mm² LINKING CABLES (1 BLUE + 3 BLACK)	16	560+3x440	0.370	1
J412	BLUE CABLE 16VK L500	16	500	0.085	200
J413	BLUE CABLE 16VK L500	16	500	0.085	200
J132	1 BLUE 25mm² LINKING CABLE L700	25	700	0.185	5
J133	1 BLACK 25mm² LINKING CABLE L700	25	700	0.180	5

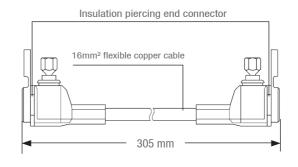
Variants:

Two insulation piercing end connectors can be connected to the ends of the flexible linking cable for connection to other conductors.

Possible sections for conductors to be connected:

- Aluminium solid core conductors: 16M, 25M, 35M, 50M *,
- Aluminium or copper rigid stranded core conductors: 10mm², 16mm², 25mm²,
- Copper multi-stranded conductors: 10mm², 16mm², 25mm² (in this case, the connection must be carried out only if the end of the conductor has been compressed).

^{*} M means that the conductor is solid.



Code	Designation	Weight (kg)	Sales unit
P660	SET OF 2 16mm² EBCPAU LINKING CABLE SINGLE 2 PIERCINGS	0.260	1
P662	SET OF 4 16mm² EBCPAU LINKING CABLE THREE-PHASE 2 PIERCINGS	0.505	1

MICHAUD

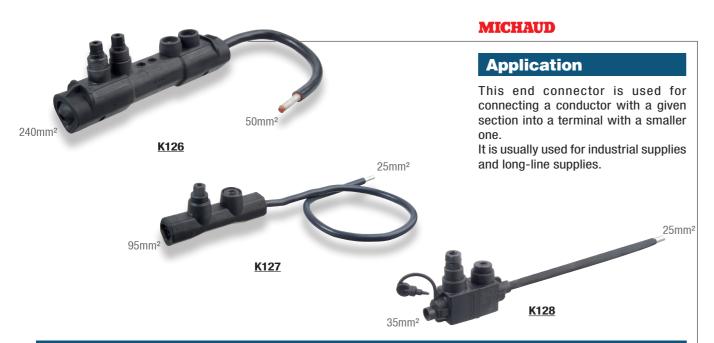
equipment terminal.

MICHAUD

Low Voltage EnergyUniversal flexible linking cable

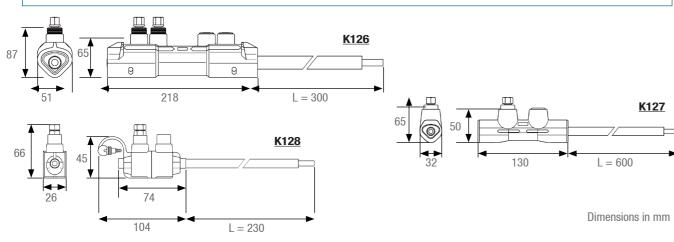
Reducing end connector

Service



Description

- The dielectric strength in water is greater than 6kV.
- The flexible copper tails enable direct connection to the equipment.
- The conductor connection terminal is of insulation stripping type.
- This end connector can be used on aluminium or copper conductors.



Code	Designation	Tail length (mm)	Leading-in capacities Al-Cu (mm²)	Tail section (mm²)	Weight (kg)	Sales unit
K126	STRIPPING REDUCING END CONNECTOR 95-240	300	Round 95-150 Sectoral 95-240	50	0.780	4
K127	STRIPPING REDUCING END CONNECTOR 25-95	600	Round 25-95 Sectoral 50-95	25	0.330	2
K128	STRIPPING REDUCING END CONNECTOR 6-50M	230	Round 6-35 Round 16M-50M	25	0.170	2

Note: For other adaptations, please contact us.

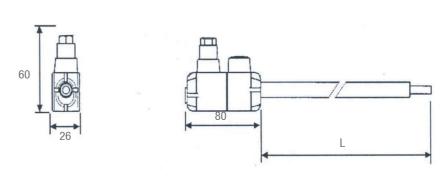
Fraud-preventing service connection





Description

- The dielectric strength of the end connector in water is greater than 6kV.
- The service end connector is designed for connection to 6-35mm² section copper or aluminium conductors.
- A 16mm² insulated flexible copper tail enables connection to equipment terminals (meter circuit-breaker).
- The conductor connection terminal is of insulation piercing type. The shear head ensures tightening efficiency.
 Note: to prevent dismantling of the end connector with risk of fraud, none of the permanent screw heads is accessible.



*Dimensions in mm L= 220 (K131 and K132) L= 520 (K129 and K130)

Code	Designation	Tail length (mm)	Leading-in capacities Al-Cu (mm²)	Tail section (mm²)	Weight (kg)	Sales unit
K131	PIERCING REDUCING END CONNECTOR 6-50M PHASE L300	220	6-35 16-50M	16	0.150	16
K132	PIERCING REDUCING END CONNECTOR 6-50M NEUTRAL L300	220	6-35 16-50M	16	0.150	16
K129	PIERCING REDUCING END CONNECTOR 6-50M PHASE L600	520	6-35 16-50M	16	0.190	12
K130	PIERCING REDUCING END CONNECTOR 6-50M NEUTRAL L600	520	6-35 16-50M	16	0.190	12



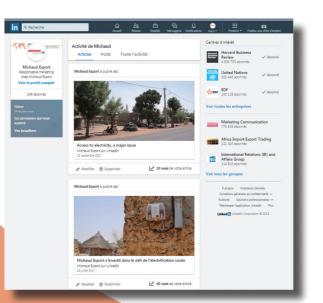


Web site

Discover our latest news, catalogues, products range as well as information mediums to assist you in the use of our products.

www.michaud-export.com





LinkedIn

Join us on Michaud Export's LinkedIn network to follow the company's development and to share with us.

YouTube

Follow our YouTube channel in order to discover products implementation videos and this way facilite your installations on the field.



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Recommendations for products use

(C) Implementation

These products must be implemented and used in **compliance with the applicable regulations** with a skilled, qualified professional undertaking to do so following the generally accepted rules of the trade.

For **live-line** implementation or handling, the electrician must comply with the requirements for live-line work conditions and must be equipped with the necessary personal protection equipment. The implementation temperature limits are: -10°C to +40°C.

Live-line work is carried out under the responsibility of the ordering customer in compliance with the applicable rules.

Before powering up the equipment, all the required verifications must be carried out.



The product should be installed and used with **suitable tools**.

The screw heads should be tightened with the appropriate tool: **Spanner** for hexagonal cap screws, **flat screwdriver** for slotted screw heads of the right size, **Phillips screwdriver** for cruciform screw heads, **HSHC screw head (awls)** for hollow hexagonal screw heads, etc. The screw heads with no torque-limiting device must be tightened to the recommended torque and must not be tightened again.



Recommendations for use

The installation instructions must be read carefully before using the product.

The product must be used and implemented in compliance with these recommendations for use and installation instructions. It must be used for the applications for which it was defined by the operator/manager of the network and on an electrical installation that is compliant and compatible with the product.

Never exceed the capacities indicated on the device and in the instructions sheet.

Unless explicitly indicated, products are designed for no-load connection.



Please group your waste together and follow the recycling and destruction instructions before leaving the worksite.

For further information: www.michaud-export.com



General Selling Conditions

1. APPLICATION OF CONDITIONS:

Purchaser make himself acquainted with these general selling conditions which shall lay down the Parties law, except purchaser's written denunciation ratified by MICHAUD EXPORT and despite opposite clauses that could be included in the purchaser's general conditions. Possible renunciation of one or few clauses herein does not interfere with the validity of the other clauses.

Except any formal and express derogation made by MICHAUD EXPORT, all purchaser's orders carry off his full and entire consent to the present General Selling Conditions which prevail over any Purchasing Conditions. All particular purchasing clauses or conditions aiming to modify the present conditions must not be contrary to the seller's ones

2. ORDER:

Any order shall not constitute a contract unless accepted in writing by MICHAUD EXPORT

3. PRICE LIST:

- .1 Unless otherwise stated by MICHAUD EXPORT, price lists and commercial offers are established in Euro €, excluding any other currency, even Euro indexed currencies, and is governed by Incoterms 2010 to be defined with the purchaser in the particular conditions.
- 3.2 The price list is established for standard items with specific given technical characteristics. Any technical changes on products to adapt them to other specifications or standards may lead to extra unit costs and price revision.
- 3.3 Unless otherwise stated by MICHAUD EXPORT,MICHAUD EXPORT reserves the right to gather purchaser's orders and to deal with according to a minimum invoice amount of 800 € excluding tax and freight charges (according to general price list in due force on the order date). Any order which amount is lower than 1 500 € shall result in the invoicing of a fixed sum of 150 € meant to cover administrative fees.
- .4 Unless otherwise stated and written by MICHAUD EXPORT, validity of the price list is one month starting when given to the purchaser.
- 3.5 The price list is subject to alteration without notice.

4. DELIVERY TIME:

- 4.1 The delivery time is defined as the case may be according to the commercial relationships established with the purchaser. MICHAUD EXPORT use their best endeavours to deliver the goods by the time fixed for delivery, however, in case of delay, they will not be responsible for any loss or damage thereby caused to the purchaser unless expressly accepted in writing by MICHAUD EXPORT.
- 2 Should partial or delayed deliveries occur, it does not justify any cancellation of purchaser's orders, and MICHAUD EXPORT shall not be liable and responsible for any actual or potential, direct or indirect, or consequential damages caused to the purchaser through delay or by failing on deliveries.

5. DISPATCH:

- 5.1 MICHAUD EXPORT use their best endeavours to select appropriate method of delivery with no responsibility on it. Choice shall be made freely unless purchaser's contrary notice who then support following additional cost that may follow.
- 5.2 Ex-works delivery is considered as an effective delivery, notably regarding modalities and payment terms.
- 5.3 Partial loss or damage during in transit must be reported to the carrier and to MICHAUD EXPORT in writing by registered letter with proof of delivery within three days after receipt of the goods by the purchaser. If these conditions are not complied with, the purchaser will be responsible for any loss or damage that may occur during transit.

The purchaser commits to return to MICHAUD EXPORT at his own costs and risks the products he rejected during his check-up for due investigation. The purchaser agrees that MICHAUD EXPORT shall return the products at the purchaser's cost and risks after examination or any possible repair or replacement.

6. USE OF THE PRODUCTS:

The purchaser has to follow imperatively the laws, current prescriptions in due force and custom rules regarding instruction procedures and use of the products. MICHAUD EXPORT shall not be responsible in case of wrong use of the products according to the specifications and prescriptions of use advised by MICHAUD EXPORT.

7. TESTING AND INSPECTION:

When testing and/or inspection is required by the purchaser, tests shall be carried out at MICHAUD SA's facilities, and relevant costs shall be covered by the purchaser, unless any exemption agreed and approved by MICHAUD EXPORT.

8. WARRANTY:

8.1 MICHAUD EXPORT guarantees the purchaser against latent defect of the goods according to the conditions driven by the law.

Once a guaranteed shortcoming is stated by the buyer, it is up to him to send his reclamation to MICHAUD EXPORT with a registered letter with proof of delivery within a time limit of three months starting from the fault's appearance.

This reclamation has to be accompanied by a detailed description of the fault's

nature.

After this period of time the goods delivered shall be deemed as in good condition and the purchaser is no longer entitled to make a complaint about any defect on the

 MICHAUD EXPORT guarantees its products for a period of one year after delivery or shifting from our facilities.

In case of fault, defect, non-conformity proved or admitted by MICHAUD EXPORT, MICHAUD EXPORT undertakes to replace the products admitted defective in reasonable time. In order to be replaced, rejected products shall be returned. No other prejudice of damage shall be required by the purchaser.

8.3 The guarantee is excluding the followings:

- If the product has been repaired or modified by the buyer or by third parties chosen by him; or
- If it concerns items that have been made by sub-contractors or MICHAUD EXPORT

suppliers to whom the normal producer or Subcontractor quaranty applies : or

- If the defect is coming from the buyer's negligence, or recklessness; or
- If the defect is the result of a force majeure or of an external event

9. TAKING BACK OF THE PRODUCTS:

In case the purchaser renounces to the ordered and delivered products, no taking back will be considered unless expressly accepted in writing by MICHAUD EXPORT. Rejected goods shall be sent back to the French plant defined by MICHAUD EXPORT. Credit of the sent back goods will be registered after receipt in the warehouse. Taking back value will systematically take into consideration a reduction to be defined for administrative and check-up cost as well as a reduction for restoration of the product and packaging if necessary.

10. PAYMENT:

- 1 Payment terms are defined with the purchaser in the particular conditions. All goods shall be paid to the MICHAUD EXPORT head office located in Viriat France whatever the payment terms used. Invoice date shall be the starting point of the settlement period.
- 10.2 Legal property transfer of the goods shall be retained until full payment of the whole sold goods. MICHAUD EXPORT keep the property of the goods until full payment of their price, sending bank drafts or any other bond notes building payment obligation not constituting a payment.
- 10.3 Any unpaid draft or invoice being at maturity will produce due interest, without giving notice. Applicable penalties shall be equivalent to three times the legal interest rate at the payment date located on the invoice. Payment of any other sums owed by the failing debtor shall be immediately payable, even if they are accepted draft. Any full or partial non-execution by the Customer of the payment obligations or any delay in payment shall, without prejudice to any damages and interests, lead to the payment of fees of 40 € for collection charges set down by decreet made pursuant to the section 121 of this act. Moreover, MICHAUD EXPORT keep the right, in that case, to suspend or cancel fulfilment of the contracts and pending orders and demand cash in advance payment of any other delivery, whatsoever past conditions agreed for such delivery.
- 10.4 Any change in the purchaser situation regarding sale or other party's investment in the business, decease, incompetence, suspension of payment, official recovery, official receivership, temporary proceedings suspension, dissolution or form modification, even after partial fulfilment of the contracts or pending orders entails application of the same conditions as the ones described in case of unpaid invoice.

11. FORCE MAJEURE:

Neither MICHAUD EXPORT nor the buyer can be held responsible for a possible delay or lack in their obligations' execution, if this delay or lack is the result of a force majeure. A force majeure exists notably in the following situations, if they present certain characteristics of a force majeure, this means if the event was irresistible, unforeseeable, and externally provoked. This non-exhaustive list enumerates some situations which constitute a force majeure: explosions, fires, incidents, destruction of machinery, factories and equipment, natural disasters, acts by governmental authorities (refusing or cancellation of a license ...), wars, or any acts of war, flooding, riots, or social conflicts.

The party that faces such a circumstance which responds to the above given definition must immediately inform in writing the other party of this intervention and when this circumstance possibly ends. In the case of absence of information, the concerned party can not prevail over, unless in the case of intervening circumstances, which also prevent any communication.

Where a force majeure case which responds to the above definition intervenes, the time for the contract's execution is prolonged for a period of time corresponding to the event's duration. This does not include any payment of damages and interest or a penalty for the delay.

However if the above mentioned circumstances do persist for a period of time of 6 months, each party can cancel the contract without any payment of damages and interest.

12. CANCELLATION:

The contract is cancelled by law, without the need of any judicial formality where there are serious shortcomings by one of the parties concerning essential obligations. Cancellation would become effective within one month after the mailing of a registered letter with proof of delivery of an earlier made formal notice which stayed unfruitful.

The essential obligations, which the parties have to fulfill, notably consist of the due payment by the buyer or the merchandise's non-delivery by MICHAUD EXPORT. In case of a serious shortcoming to the contract's essential obligations, the sale will be cancelled in good law without prejudice of damages and interest that can be claimed.

Any tolerance that one party allows the other not to prevail immediately over one of its rights, will not prejudice the party's rights to prevail over them later, except in case of a contrary convention or stipulation to the present conditions.

13. JURISDICTION ATTRIBUTION:

These General Selling Conditions shall be ruled and governed by the French Law as followed by the courts. Any dispute deriving from these General Selling Conditions, after failure of a previous conciliation procedure shall be of the exclusive French jurisdiction of the competent Commercial Court of Lyon located in France. Each party accepts to bear any costs and expenses it would have exposed.

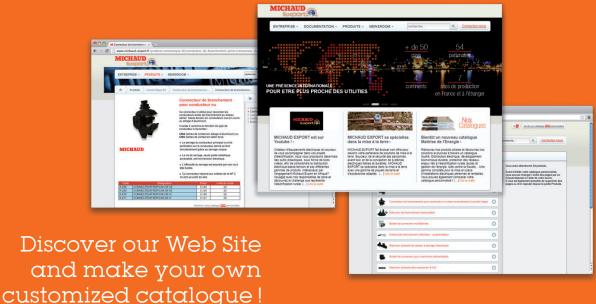
14. OFFICIAL LANGUAGE:

The French version of these general selling conditions, available upon enquiry, is the only legally acceptable version.

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Creator of electrical equipment



International expert in electrical distribution, **Michaud Export** designs, develops and implements reliable systems reducing maintenance operations on distribution networks.

As the architect of your solution, the company focuses on on-going innovation and leverages on the worldwide renowned expertise of the 250 employees at **Michaud Group**, leader in the industry for systems and connection fittings for electrical installations.

Michaud Export

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