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MTA WORLD

MTA Brasil: the “number one” turns 25

COVER STORY

48 V electrical distribution centers for Maserati Ghibli Hybrid



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A very difficult year is about to end.

The year of pain and mourning for many of us, the year of fear and uncertainty for everyone.

The difficulties that MTA had to face are the difficulties that everyone knows very well.

We have told you about them in the last issue, also through the testimonies of our foreign plant managers and some heads of functions that have been most affected by organizational difficulties.

But now let's focus on our work, on the progress of our sites, on the important collaborations with our customers, prestigious brands of car, truck and construction equipment manufacturers, and on some developments with important partners in the automotive landscape.

Leafing through the pages of this 22nd edition of the Journal you will be able to see the many projects we can talk about today and we assure you that we have many more in store for the future. We will tell you about them in the next Journals.

艰难的一年即将结束。

对于许多人来说这是充满痛苦和哀悼的一年，也是恐惧和不确定的一年。

MTA 必须面临的困境正是众所周知的。

我们已经在上一期中向您讲述了这些困境，我们海外工厂经理和一些受公司困难影响最大的职能部门的负责人的证言也证实了这一点。

但现在，我们要专注于工作，专注于我们网站的进展，专注于与客户、知名汽车、卡车和建筑设备制造品牌商的重要合作，以及专注于与汽车领域重要合作伙伴的关系发展。

翻阅杂志第 22 期，您将看到我们如今谈到的许多项目，我们向您保证，未来还有更多项目即将在后续的杂志中介绍详情。

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MTA Brasil: the “number one” turns 25

MTA 巴西：开拓者迎来 25 周年庆

It was 1995 when MTA felt the need to invest abroad to be present in other key automotive markets and be close to overseas customers. The first foreign site was then founded in São Paulo: MTA Brasil. After 25 years we see, as we knew from the beginning, that the Brazilian market presents uncommon peculiarities and difficulties, but also great opportunities. It is the country with a market accustomed to sudden downs but also to unexpected ups, where *Ordem e Progresso*, words written on the flag band, can appear an oxymoron.

The *Annus horribilis*, now almost completed, has reserved for MTA Brasil all the difficulties we know, but also many positive surprises for our factory. The important development plan already activated for MTA Brasil for 2020 envisaged a series of renovations to make the site more welcoming and functional, such as the creation of a new molding area, the improvement of the production layout, the creation of a laboratory for the autonomous execution of qualification tests and the extension of the warehouse.

Thanks to the intelligent and flexible operation by the management, these activities did not suffer major delays: the forced lockdown period was used to start and complete all the planned renovations.

1995 年，MTA 觉得需要进行海外投资，打入其他关键汽车市场，并拉近与海外客户的距离。随后在圣保罗建立了第一个海外生产基地：MTA 巴西。25 年后可以看到，正如我们从一开始就知道的那样，巴西市场表现出不同寻常的特性和困难，但也潜藏着巨大的机遇。这个国家的市场已经习惯了突然的起起落落，现实可能会与国旗上的标语 *Ordem e Progresso* (秩序与进步) 矛盾。

现在，糟糕的一年即将结束，这为 MTA 巴西留下了众所周知的各种困难，但也为我们的工厂留下了许多积极的惊喜。已经启动的 MTA 巴西 2020 年重要发展计划预想了一系列革新措施，致力于使该工厂更受欢迎、功能更佳，例如打造一个新的成型加工区、改进生产布局、创建自主合格性检测实验室以及扩建仓库。

多亏了管理层的灵活智能运营，这些活动没有遭遇重大延误：我们利用强制封锁期开始和完成了所有计划的革新。

Returning to work, around mid-June, everybody was really happy to see that MTA Brasil presented itself with a new molding unit and two new presses, respectively of 300 and 450 tons and an overhead crane for large molds; a laboratory equipped with two climatic chambers, one for thermal shocks the other for salt spray tests, and a set of electrical and electronic devices; a revised area outside the warehouse to improve the flow of goods and increase the capacity of the warehouse itself.

In these months the turnover, as expected, undergoes a total collapse: employment contracts are suspended or reduced according to legislation and operational needs. The collapse spans all sectors and ours is no exception.

However, around July, a small attempt at recovery can be seen, aided decisively by the launch of the new Fiat Strada. Volumes are higher than expected and the month ends with a 25% higher turnover compared to the pre-Covid period. Production resumes 100%, with 17 new hires.

For FCA Latam, MTA has developed a new power distribution unit which is supplied in different configurations, wired or with PCB. For this product, the assembly line and the press-fit assembly line are delivered and started up.

Renault also extends the application of the BFT HJD distribution unit, already supplied in Europe for the Renault Captur and Dacia Duster, to its production in Brazil. MTA Brasil is also equipped with the assembly line for supplies to Renault.

[Read more about the power distribution unit for FCA Latam at page 10](#)

大约 6 月中旬，重返工作岗位时，所有人都非常高兴 MTA 巴西推出了一个新的成型单元和添加了两台新的压铸机，分别为 300 吨和 450 吨，以及一台用于大型模具的桥式起重机；一个配备两间人工气候室（分别用于热冲击和盐雾试验）的实验室，以及一套电气和电子设备；仓库外新设修正区域，用于改善货物流转和增加仓库本身的容量。

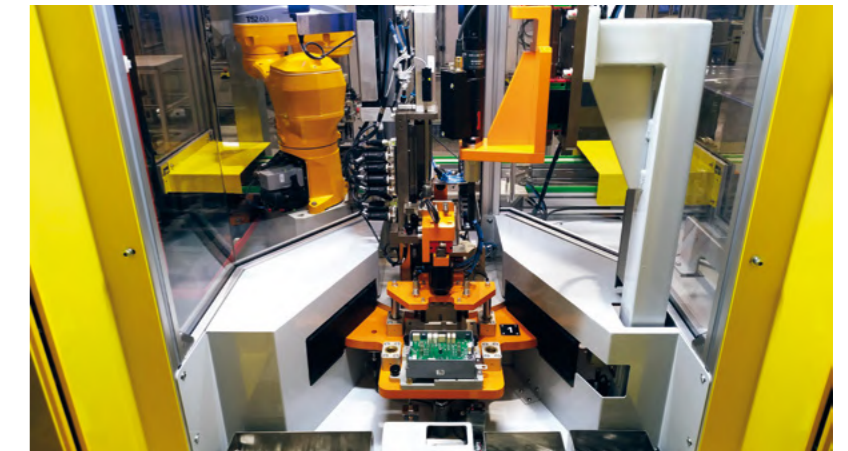
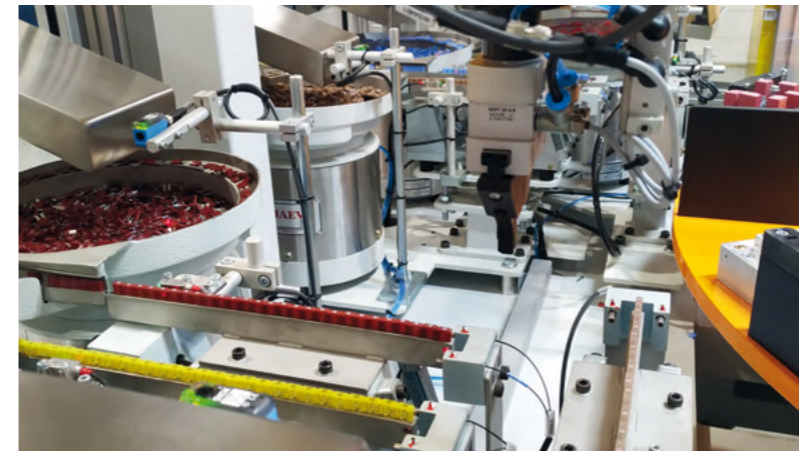
这几个月里，人员流动正如预期那样完全崩溃：根据立法和业务需要，雇用合同都被暂停或减少，因为这场崩溃波及各行各业，我们也未能例外。

然而，7 月份左右，在新款菲亚特 Strada 的决定性帮助下，我们进行了一个小的复工尝试，生产量高于预期，当月结束时的生产量较疫情前时期高出 25%。我们雇用了 17 名新员工，100% 恢复生产。

对于新款 FCA Latam，MTA 开发了一个新的配电单元，具有不同的配置，有线或 PCB。对于该产品，装配线和压配装配线已交付并启动。

雷诺还将 BFT HJD 控制单元的应用扩大到其在巴西的生产，将其用于欧洲的 Renault Captur 和 Dacia Duster。MTA 巴西还设立了雷诺产品装配线。

[翻阅第十页来了解更多关于 FCA Latam 配电单元的信息](#)



The infotainment gets onboard 机载信息娱乐



The infotainment system developed jointly by MTA and Italdesign stands out for its great modularity and scalability. It is in fact made up of identical control units communicating with each other, thanks also to the connection via Ethernet, with the aim of ensuring maximum computational capacity. The number of control units used for each system depends on the number of displays that the customer wishes to pilot: we can therefore speak of an adaptable and customizable system.

Each control unit uses a latest generation multicore microprocessor by Texas Instruments, which stands out for its high computational power, and is based on an open-source Android platform.

One of the great advantages of this system is its ability to host third party software.

The application software and user experience integrated into the system are the result of the work of Italdesign, which has established

a real competence center dedicated to infotainment, the Concept Lab: a multidisciplinary environment in which analyses and studies focused on the human-machine interface are carried out. Various software applications for the system have been developed in the center, for example the one that can recognize the user thanks to a camera, thus ensuring a personalized driving experience. In the software, Italdesign has also implemented a version of Alexa Auto, the Amazon service that allows the presence of functions related to voice commands too.

Italdesign has created a demo to show to potential customers. The demo hosts three 12.1" full TFT multi-touch displays produced by MTA and used as dashboard, central and passenger side displays.

The speed and effectiveness of the project confirm the will of the two companies to continue the collaboration on other future developments.

MTA 和 Italdesign 联合开发的信息娱乐系统具有极高的模块性和可扩展性。事实上，它由多个相同的控制单元组成，控制单元之间可以相互通信，这也得益于以太网连接，目的是确保获得最大的计算能力。每个系统使用的控制单元数量取决于客户希望引导的显示器数量：因此，我们可以说这是一个适应性很强的可定制系统。

每个控制单元都采用了 Texas Instruments 的新一代多核微处理器，该公司以其高计算能力而闻名，并基于开源 Android 平台。

该系统的一大优势在于它能够托管第三方软件。

整合到该系统中的应用程序软件和用户体验则要归功于 Italdesign 的付出，Italdesign 建立了一个专门负责信息娱乐的真功能中心，Concept Lab：这是一个多学科环境，用于进行关于人机界面的分析和研究。该中心针对该系统开发了各种软件应用程序，例如能够通过摄像头识别用户的应用程序，从而确保提供个性化的驾

驶体验。在该软件中，Italdesign 还采用了 Alexa Auto 的一个版本，这是一项 Amazon 服务，可以实现语音命令相关的功能。

Italdesign 还创建了一个用来向潜在客户展示的演示机。演示机配备三个 MTA 生产的 12.1 英寸全 TFT 多点触控显示屏，用作仪表盘、中央显示屏和乘客侧显示屏。

该项目的速度和成效证实了两家公司在其他未来发展方面继续合作的意愿。

Maserati with MTA

48 V electrical distribution centers for Ghibli Hybrid

玛莎拉蒂和 MTA

适用于 Ghibli Hybrid 的 48 V 配电中心



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For the first hybrid in its history, the Ghibli Hybrid, Maserati has created an innovative powertrain that combines a combustion engine, a 4-cylinder 2.0 turbo, with a 48 V alternator and an additional eBooster. Ghibli Hybrid represents the first step on a path that will lead to the electrification of all new Maserati models, and it is immediately recognizable for the new design that involves both internal and external details. The common denominator is the blue color, chosen to connote the details of the cars affected by hybrid technology and to identify this new world.

Ghibli Hybrid therefore represents a unique solution in its segment, for which the house of the trident has decided to rely on our company. We have in fact developed two 48 V electrical distribution centers, intended for the protection of some of the main appliances.

玛莎拉蒂在其有史以来的第一辆混合动力车 Ghibli Hybrid 上打造了一套创新动力系统，该动力系统包含内燃机、4 缸 2.0 涡轮增压发动机、48 V 交流发电机外加一个电控助力器。Ghibli Hybrid 代表了通往玛莎拉蒂新车型电气化道路的第一步，其内部和外部细节让这种新设计具有极高的辨识度。共同点在于颜色，选择蓝色是为了暗示受混合动力技术影响的汽车的细节，以及认识这个新世界。

因此，Ghibli Hybrid 代表了其所属领域的一种独特解决方案，玛莎拉蒂决定依靠我们公司来实现这一目标。

The first unit, placed in the trunk compartment, houses MTA 48 V fuses to protect the cable connected to the DC-DC converter and the power cable of the second unit. It is also equipped with external pins, one of which is used for connecting the system to the 48 V battery.

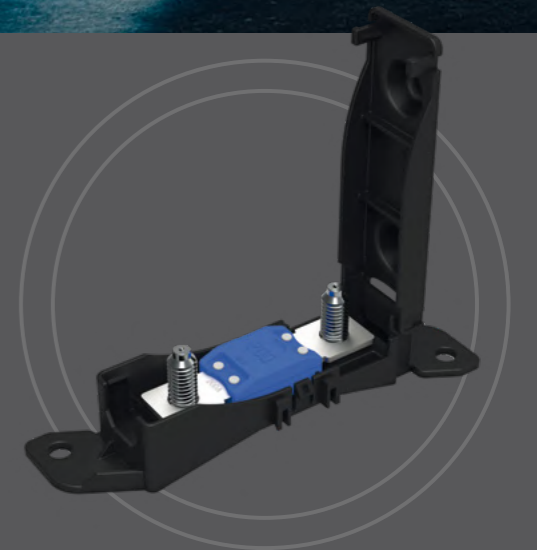
事实上，我们已经开发了两个 48 V 配电中心，致力保护一些主要电器。第一个单元放在行李箱中，装有 MTA 48 V 保险丝，用于保护连接到直流转直流转换器的线缆和第二个单元的电力电缆。此外，它还配有外部引脚，其中一个用于将系统连接到 48 V 电池。

The second unit, located in the engine compartment, is equipped with MTA 48 V fuses too. It protects the 48 V eBooster and the system to be connected to the BSG (Belt Driven Starter Generator), which is responsible for recharging the system.

位于发动机舱中的第二个单元还配备了 MTA 48 V MidiVal 保险丝。它保护 48 V 电控助力器和连接到 BSG (皮带驱动启动发电机) 的系统，BSG 负责给系统充电。

The supply is completed by a fuse holder, with 250 A MegaVal, to protect the connection cable of the traditional 12 V battery to the DC-DC converter.

电源还配有一个保险丝座和 250 A MegaVal，用于保护传统 12 V 电池到直流转直流转换器的连接线缆。



HMPDC

A versatile electric distribution center for FCA Latam

HMPDC

面向 FCA 拉丁美洲的多功能配电中心

The collaboration between FCA Latam and MTA has been active for several years. In particular, in the last four, we have worked closely to bring a new product to the market: the HMPDC, a modular and hybrid power distribution unit mounted on the Fiat Strada, the all-Brazilian pick-up that has experienced a boom in sales exceeding all expectations.

The HMPDC is a scalable solution composed of a pre-fuses box with power busbar and of hard-wired or PCB modules allowing flexible and versatile combinations according to different architectures.

Smaller space available and high temperatures in the engine compartment made it necessary to develop new technologies in order to get benefits in terms of price/cost reduction and fuel efficiency. From this need comes the use of a new family of fuses (Compact fuses developed and homologated by MTA) and electronic integration.

The result is a new PDC smaller than the current ones.

FCA 拉丁美洲 与 MTA 的积极合作已持续数年。特别是过去的四年，我们密切合作，推出了一款新产品：HMPDC，这是一款安装在菲亚特 Strada 上的模块化混合配电单元。菲亚特 Strada 是一款完全巴西产的皮卡，销量超出了所有人的预期。

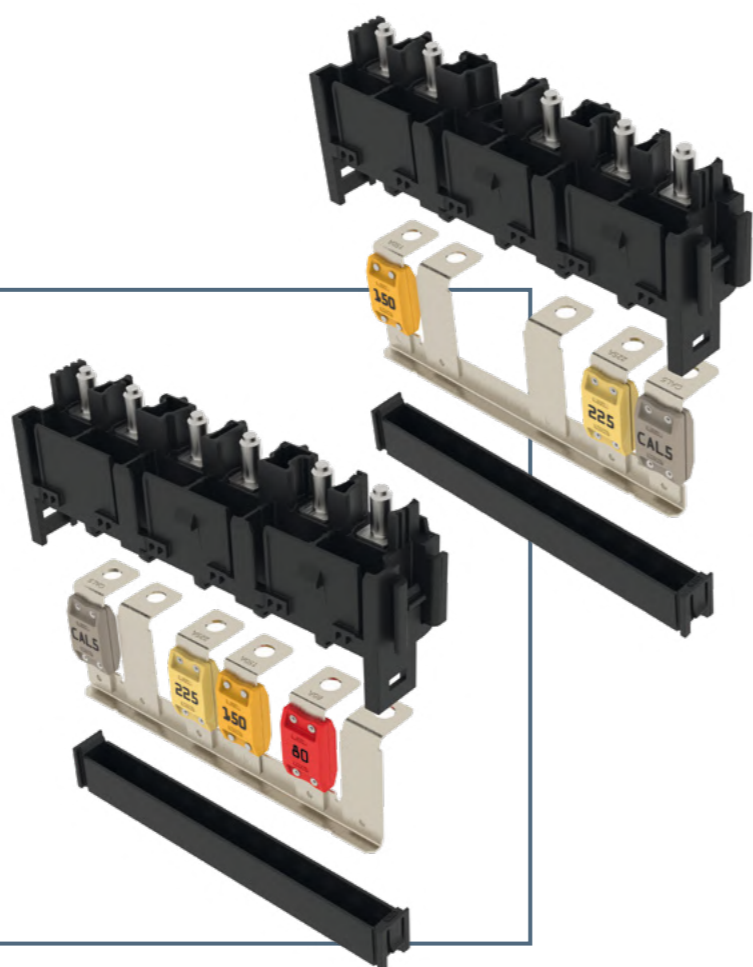
HMPDC是一种可扩展的解决方案，由带有电源母线的预备保险丝和硬接线或PCB模块组成，可根据不同架构灵活灵活地进行组合

引擎舱可用空间较小、温度较高，因此有必要开发新技术，以降低价格/成本并提高燃油效率。出于这种需求，一种新的保险丝系列（由 MTA 开发的紧凑型保险丝）和电子集成应运而生。

结果开发了一款比当前 PDC 更小的全新 PDC。



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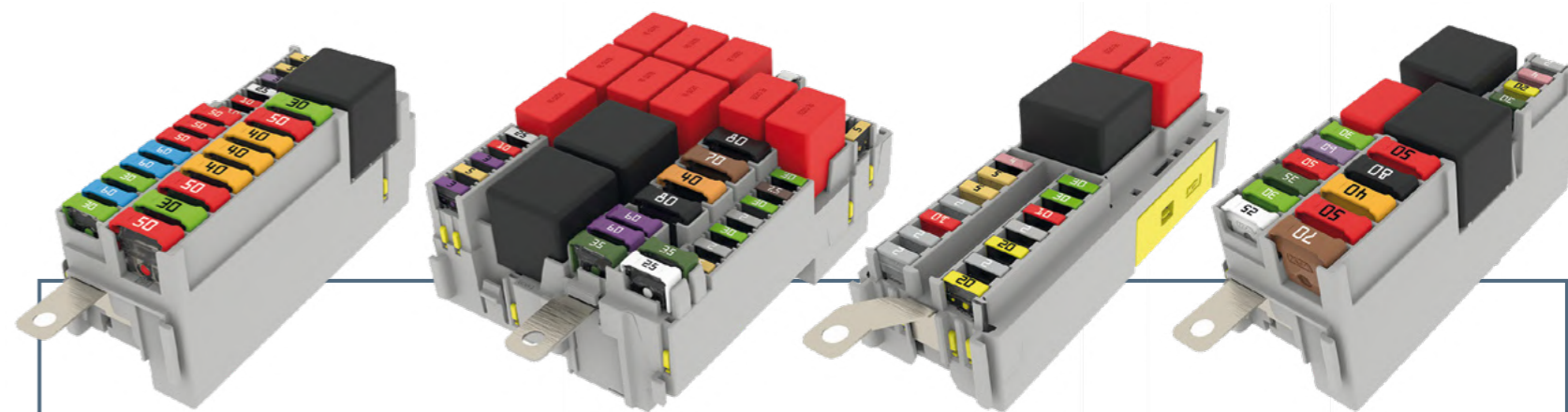


PRE-FUSE BOXES

The pre-fuse boxes house last generation clinched fuses: the MegaCompact. According to the configuration needed in the vehicle, the quantity and the amperages change. MTA also developed a new series of power ring terminals with mechanical polarization to prevent mismatching problems. Fuse, shunt and busbar are handled individually and this allows to industrialize a large number of combinations of multi fuses that can be matched with the new product developments.

预备保险丝盒

预备保险丝盒中装有上一代紧箱保险丝：MegaCompact。根据车辆所需的配置，具体的数量和安培数会有所不同。MTA 还开发了一系列全新带机械式极化功能的电源环形终端，用于防止误操作问题。保险丝、分流器和母线单独处理，这使得大量多保险丝组合可以实现工业化，并与新产品开发相匹配。



MODULES

There are four different hard-wired modules fed from the pre-fuse box through a busbar. All of these modules house MTA MaxiCompact and M8Compact fuses. Each module is provided with a secondary lock and terminals manufactured by MTA.

模块

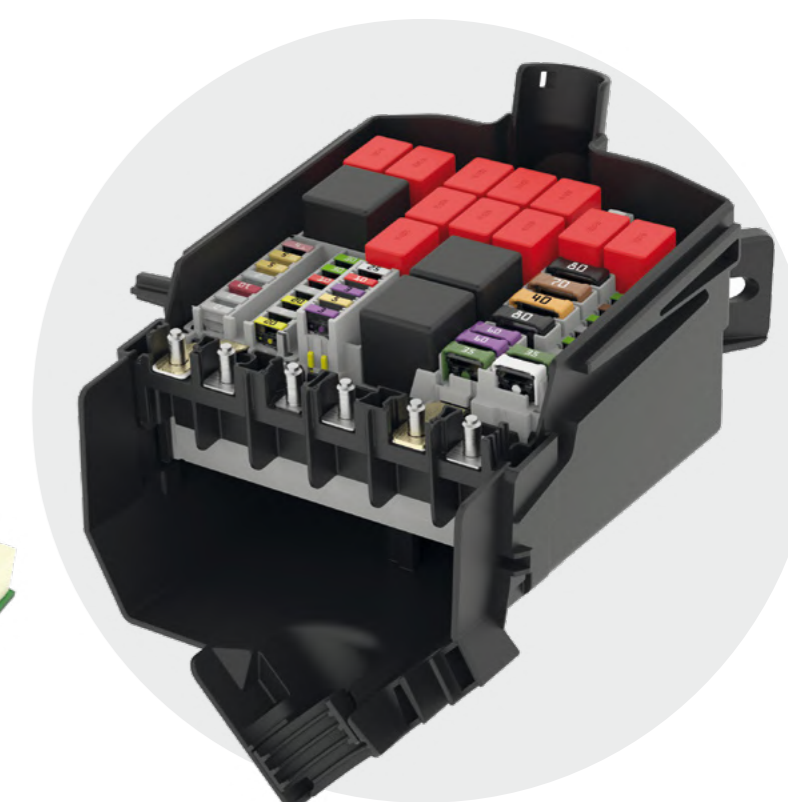
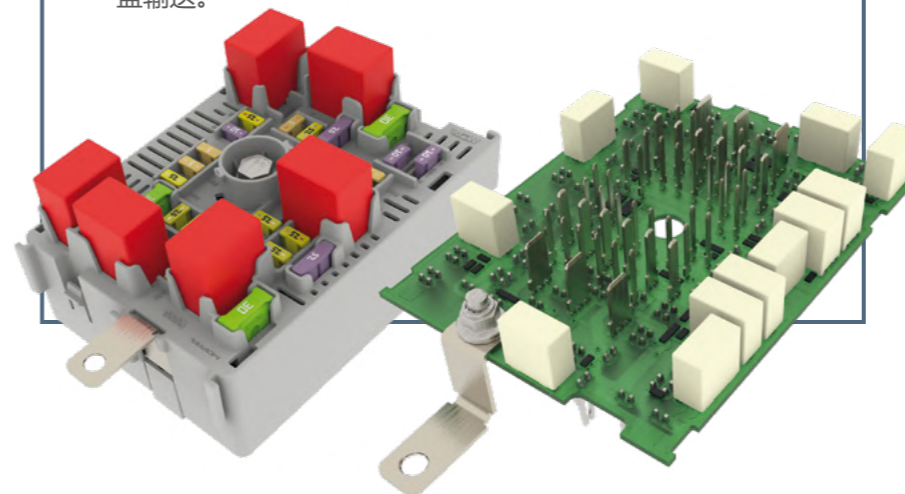
有四个不同的硬接线模块通过母线从预备保险丝盒供电。所有这些模块都装有 MTA MaxiCompact 和 M8Compact 保险丝。每个模块都配有一个辅助锁，所有终端也都由 MTA 提供。

PCB WITH SOLDERED RELAYS AND PINS

A module with PCB technology has been developed for more extended architectures. The PCB houses contacts assembled with press-fit technology and is populated with plug-in fuses, relays and SMT components. The power is fed from the prefuse box through the busbar.

带焊接继电器和引脚的印刷电路板

我们针对扩展性更强的架构开发了采用 PCB 技术的模块。PCB 上配有采用压配技术组装的触点，并装有插入式保险丝、继电器和 SMT 组件。电力通过母线从预备保险丝盒输送。



R&D AND PRODUCTION IN BRAZIL

Research & Development of all HMPDC components was implemented in MTA Brasil. The entire production process also takes place in Brazil where the molding of plastics, the blanking of metals and the assembly of components are carried out. The same is true for press-fit and SMT processes for PCB modules. On-site production makes it possible to react quickly and easily to any customer request.

巴西的研发与生产

所有 HMPDC 组件的研发和整个生产流程均在 MTA 巴西进行，还有塑料成型、金属下料和部件组装也都在巴西完成。PCB 模块的压配和 SMT 流程也是如此。现场生产使我们可以快速、轻松地对任何客户要求做出反应。

ANNUAL SUPPLIER CONFERENCE & AWARDS

FCA Latam has awarded its best suppliers to incentivize the local production of auto components. MTA Brasil won the award in the "Innovation" category thanks to the HMPDC electric distribution center.

年度供应商大会及奖项

FCA 拉丁美洲对最佳供应商授予奖项，以鼓励汽车零部件的本地生产。MTA 巴西凭借其 HMPDC 解决方案赢得了创新类奖项。



500 Full Electric here we are!

500 Full Electric, 我们来了!

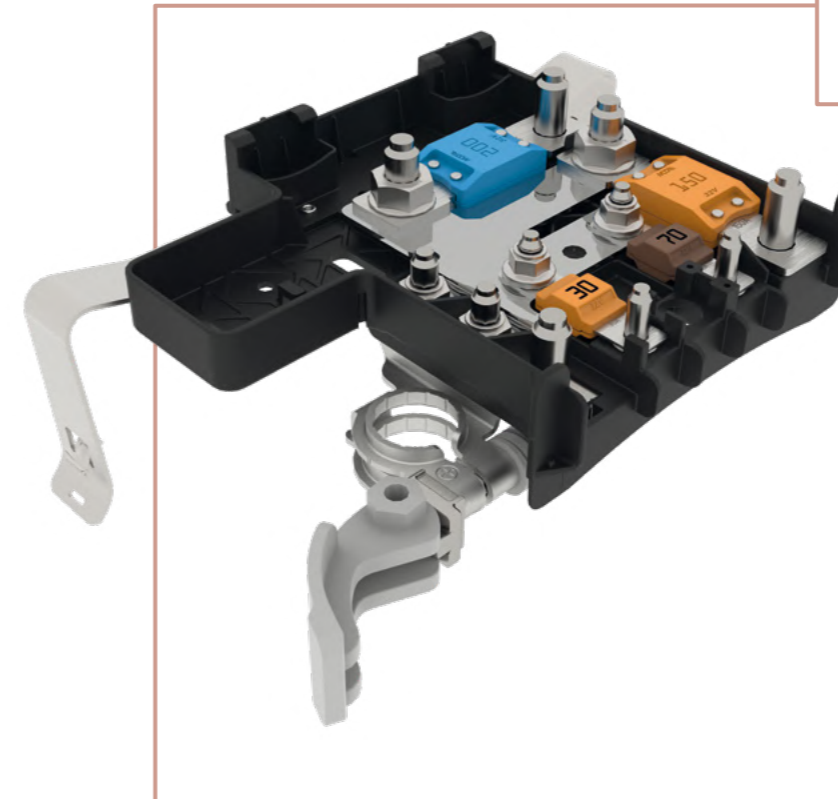
The new electric 500 made its debut in October, the first of a series of 12 electrified models that FCA plans to launch on the market soon. A city car powered by a 118 HP engine and 220 Nm torque, with a long range (over 340 km). For the distribution of energy from the battery and the protection of some utilities, the 500 Full Electric mounts several of our electrical products, some of which have been developed specifically for this new green icon.

全新 Electric 500 于 10 月首次亮相，这是 FCA 计划很快在市场上推出的 12 款电动系列车型中的第一款。这款城市汽车由 118 HP 发动机和 220 Nm 扭矩驱动，续航里程超过 340 公里。为了配送电池电能和保护部分设施，500 Full Electric 装有一些电气产品，其中一些是专门为这款绿色汽车标杆而开发的。



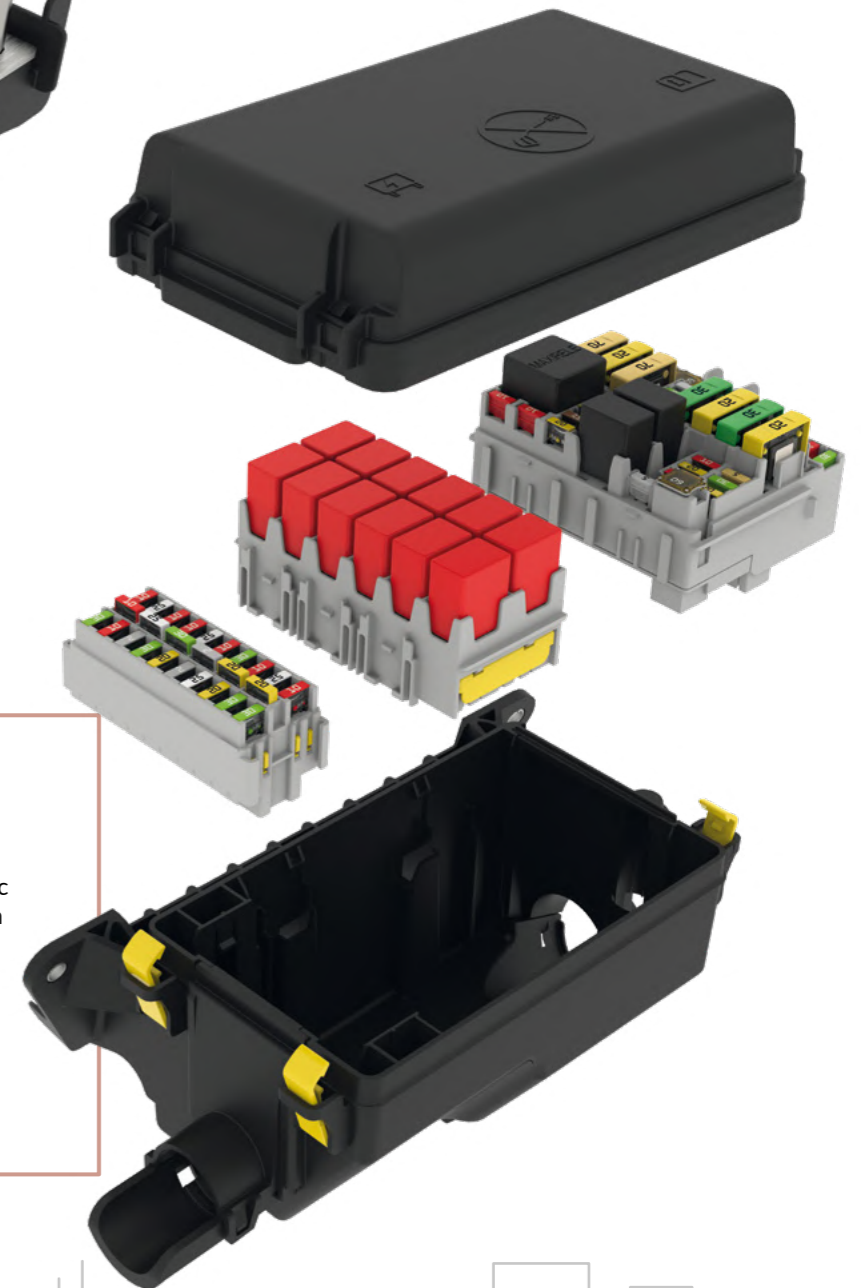
CBA STRONG
The proven battery distribution unit, in its new Strong version, is equipped with a metal bracket, a quick lever clamping system and four fuses, two MidiVal (30 and 70 A) and two MegaVal (150 and 200 A), all manufactured by MTA.

CBA 强化
久经验证的电池配电单元在其全新强化版本中配备了一个金属支架、一套快速杠杆夹紧系统和 4 根保险丝、2 根 MidiVal (30 A 和 70 A) 和 2 根 MegaVal (150 A 和 200 A)，所有这些组件均由 MTA 制造。



ENGINE COMPARTMENT DISTRIBUTION UNITS, FUSE HOLDER MODULE AND SPLASH SHIELD
The FRB engine compartment unit, the RB relay unit and the fuse holder module that houses 20 MiniVal are all contained in a plastic support made specifically for this project, equipped with a lid with snap closure that avoids the use of tools.

发动机舱配电单元、保险丝座模块和防溅板
FRB 发动机舱单元、RB 继电器单元和容纳 20 根 MiniVal 的保险丝座模块都装在专为该项目制造的塑料支架中，并配有带按扣的盖子，无需使用工具。



Sealed junction node for the new FCA Mild Hybrid models

面向全新 FCA 轻度混合动力车型的密封结节点



The city cars most loved by Italians, Fiat 500, Lancia Ypsilon and Fiat Panda, starting this year have a hybrid alter ego: three models on which the Mild Hybrid petrol technology debuted, able to reduce emissions and consumption compared to traditional engines. That is, the three cars adopt a system based on a motor-generator capable of recovering energy in the deceleration and braking phases and storing it in a special auxiliary battery. The energy will then be released in the acceleration phases.

For this system, MTA has developed a specific junction node, equipped with a cover. The node is screwed under the car floor, outside the vehicle and, thanks to the presence of silicone gaskets, it is watertight, with IP69K degree of protection. Connected via a threaded pin directly to the auxiliary battery (located inside the passenger compartment), it powers the electric motor and the charging system.

The goodness of this project led FCA to decide to adopt the node also for the new Jeep Renegade and Jeep Compass, in their Mild Hybrid version too, soon to be introduced on the market.

意大利人最爱的城市汽车，Fiat 500、Lancia Ypsilon 和 Fiat Panda，从今年开始将推出混合动力车型：这是轻度混合动力汽油技术首次亮相的三款车型，与传统发动机相比，能够减少排放和消耗。也就是说，这三款车型采用了基于电动发电机的系统，能够在减速和制动阶段回收能量，并将其储存在一个特殊的辅助电池中，此能量将在加速阶段释放。

MTA 为这套系统开发了一个特殊节点，并配备了一个盖子。该节点用螺钉固定在车外的汽车底板下，加上硅垫圈，它具有防水特性，可提供 IP69K 防护等级。它通过螺纹销直接连接到辅助电池（位于车厢内部），为电机和充电系统供电。

这个项目带来的好处使 FCA 决定也对全新 Jeep Renegade 和 Jeep Compass 的轻度混合动力车型采用该节点，新车型将很快上市。



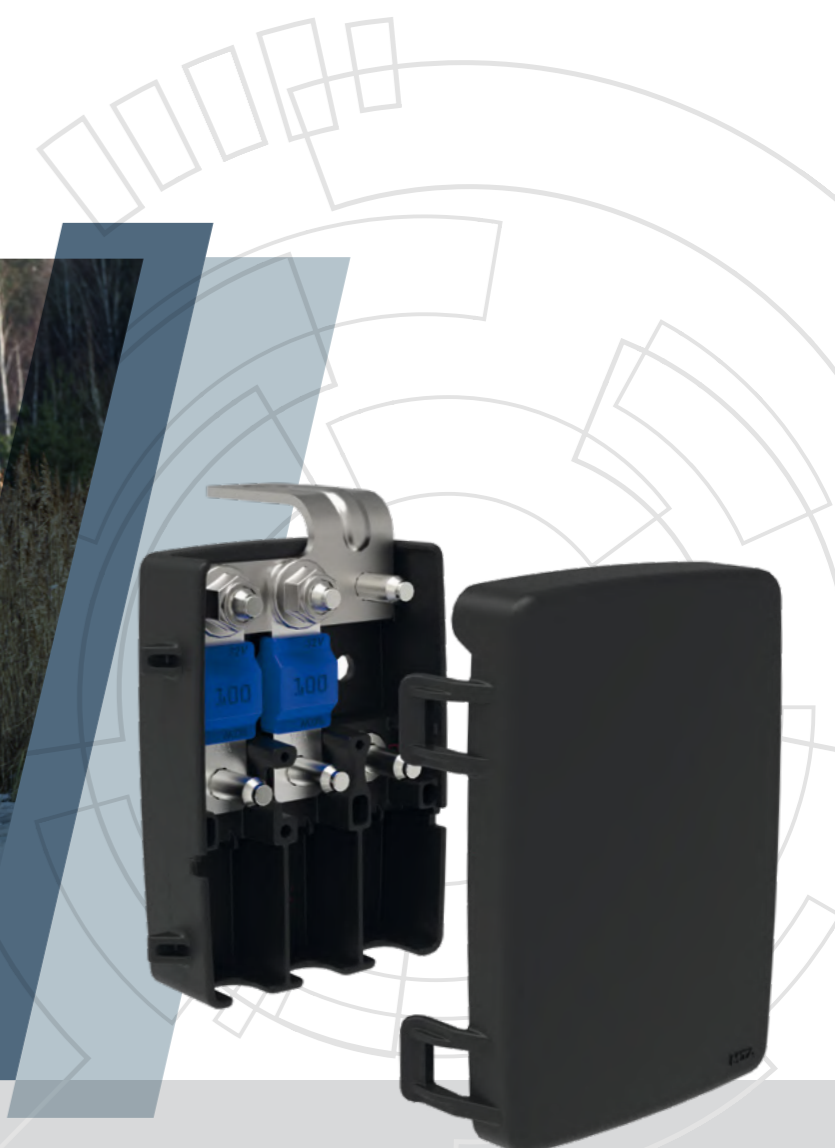
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A power distribution unit for UAZ

面向 UAZ 的配电单元



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MTA has recently signed an agreement with a new customer, the Russian manufacturer UAZ, for the supply of an electric unit for power distribution and the protection of electrical appliances. The product, belonging to MTA's off-the-shelf range and called CFO, is mounted on the Patriot, a modern car that combines the off-road soul with the maximum features of a modern SUV.

The CFO, supplied to UAZ, is mounted under the bonnet of the car, more precisely on the battery, using a terminal produced by MTA. It has the function of protecting utilities such as lights, fan, dashboard, just to name a few.

The CFO has proved to be very reliable and UAZ is considering the possibility of extending the collaboration with MTA for other electric products.

MTA 最近与一位新客户、俄罗斯制造商 UAZ 签署了一份协议，为其提供配电和电器保护电力设备。该产品属于 MTA 的现成产品，名为 CFO，装在 Patriot 上，这是一款将越野精神与现代 SUV 的最大特色相结合的现代汽车。

提供给 UAZ 的 CFO 采用 MTA 生产的终端安装在汽车发动机盖下，更准确地说是安装在电池上。它可以保护诸多设施，例如灯、风扇、仪表板等。

事实证明，CFO 非常可靠，UAZ 正在考虑与 MTA 在其他电气产品方面扩大合作的可能性。

The unit is supplied directly from MTA's Indian plant located in Pune, where molding and assembly take place. A modern site, characterized by the same high standards of the other ones around the world, which serves both local manufacturers and OEMs operating in that geographical area.

该装置由 MTA 位于浦那的印度工厂直接供应，成型和组装流程都在该工厂完成。这是一个现代化工厂，以全球所有 MTA 工厂都秉持的高标准为特征，为当地制造商和在该地区运营的 OEM 提供服务。

MTA and Tata Motors An ever-closer collaboration

MTA 和 Tata Motors 合作日益密切

MTA has been in long-term business association with Tata Motors supporting the company for both passenger car and commercial vehicle business units. In fact, the plant set up in Pune in 2009 was born to serve Tata as major customer. During this last decade, MTA developed many different products thanks to the work done by our sales people in India always in close cooperation with Tata Motors Research & Development team.

In 2005 Tata pioneered the small commercial vehicle industry with the launch of Tata Ace and is now the leader in this category with 2.2 million commercial vehicles rolled out so far. To Tata Ace BS6 MTA is supplying 3, 4 and 5-way modular fuse boxes in six different configurations with MegaVal and MidiVal fuses. These versatile and easy to be mounted modular fuse boxes give the customer an important help to solve any problem linked to allocation inside the vehicle.

MTA 已与 Tata Motors 建立了长期业务联系，为该公司的乘用车和商用车业务部门提供支持。事实上，2009 年在浦那建立的工厂就是为了服务重要客户 TATA 而诞生的。过去十年里，我们在印度的销售人员一直与 Tata Motors 研发团队密切合作，MTA 也因此开发了许多不同的产品。

2005 年，随着 Tata Ace 的推出，Tata 开创了小型商用车行业，现在仍是这一领域的领导者，迄今已推出 220 万辆商用车。MTA 为 Tata Ace BS6 提供 6 种不同配置的 3 路、4 路和 5 路模块化保险丝盒，其中配有 MegaVal 和 MidiVal 保险丝。这些易于安装的多功能模块化保险丝盒为客户提供了重要帮助，可帮助其解决与车内配置相关的任何问题。



Tata Prima

Tata Starbus Ultra

Tata Ace BS6

Tata is a leader in the light commercial vehicle and medium & heavy commercial vehicle markets too. For these two vehicle groups, and particularly for Ultra and Prima models, MTA R&D has worked to adapt its 4, 5 and 12-way frames to be mounted horizontal in various platforms of BS6+ trucks and buses. Together with the frames, MTA is delivering six different types of fuse-relay modules and related terminals.

In the near future, for its bus platform, Tata will use MTA battery unit, both in its right and left version, with battery terminals in Z axis. This battery distribution unit has compact dimensions which make it versatile and easy to be placed.

Tata 在轻型商用车和中重型商用车领域也处于市场领先地位。对于这两种车型，尤其是 Ultra 和 Prima 车型，MTA 研发部门致力于将其 4 路、5 路和 12 路框架水平安装在 BS6+ 卡车和公共汽车的各种平台上。与这些框架一起，MTA 正在交付 6 种不同类型的保险丝继电器模块和相关终端。

在不久的将来，Tata 将在其公共汽车平台上使用 MTA 电池单元，右侧版和左侧版都将使用，其中电池端子位于 Z 轴。这种电池配电单元尺寸小巧紧凑、功能多样、方便安放。

Configurable and programmable electronics for the latest generation MST machines

为MST公司最新车型研发的可配置和可编程电子产品

The cooperation with MST, began in 2017 with the supply of the Revo Plus dashboard to a backhoe loader of the leading Turkish group ASKO Holding operating in the industrial, agricultural and construction sectors.

The range of different off-the-shelf dashboards, displays and ECUs MTA is able to offer; the software tools MTA Studio and MTA Speedy Creator which enable the customers to create a product responding to their specific needs and especially the excellent support of MTA local people, have strengthened the cooperation with this important customer.

Today we have in fact five different MTA products mounted in three different machines: backhoe loader, telehandler and crawler excavator.

And more in detail, the Revo Plus dashboard is mounted in the new M642-644 Plus Stage V series backhoe loaders and recently the Smart display has been adopted by the new generation of M5 series backhoe loaders. The first is used as a side display and the second as a dashboard at the front.

For the telehandler equipped with Tier 3A engines MTA supplies Actua ECU, a universal vehicle movement controller particularly suitable for agricultural or off-highway vehicles, while in the telehandler equipped with Stage V engines we find the Dyna ECU together with the Revo Plus. Actua and Dyna are used to control some important functionalities of the vehicle including steering system.

For the crawler excavator, MST has chosen Giotto, a high-performance 8" display. Giotto is customizable with Android Studio for evolved and user-friendly graphical interfaces and it mounts a processor that can ensure quick power-up times. The display is optically bonded with an anti-reflective glass on the screen minimizing light reflection. In this crawler excavator Actua ECU is also mounted.

与MST的合作始于2017年，是为了向主营工业、农业和建筑业务的土耳其领先集团ASKO Holding的一款反铲装载机供应Revo Plus仪表盘。

MTA能够提供各种不同的现货仪表盘、显示屏和ECU；软件工具MTA Studio和MTA Speedy Creator让客户可以打造应对其特定需求的产品，特别是还有MTA当地人员的大力支持，巩固了与这一重要客户的合作。

今天，我们实际上已经在3种不同的机器上安装了5种不同的MTA产品：反铲装载机、伸缩臂叉装车和履带式挖掘机。

具体而言，全新M642-644 Plus Stage V系列反铲装载机上装有Revo Plus仪表盘，新一代M5系列反铲装载机采用了最新版的Smart显示屏。前者用作侧面显示屏，后者用作正面仪表盘。

对于配备Tier 3A发动机的伸缩臂叉装车，MTA提供Actua ECU，这是一款通用车辆运动控制器，特别适合农用车或越野车；而配备Stage V发动机的伸缩臂叉装车上则同时装有Dyna ECU和Revo Plus。Actua和Dyna用于控制包括转向系统在内的部分重要车辆功能。

对于履带式挖掘机，MST选择了高性能8英寸显示屏Giotto。Giotto可通过Android Studio进行定制，实现改进并获得对用户友好的图形界面，并且它还搭载了一个处理器，可以确保快速通电。显示屏与屏幕上的防眩光玻璃搭配，可以最大限度地减少光反射。

此外，这台履带式挖掘机中还装有Actua ECU。



Smart



MST Backhoe Loader



Giotto



MST Crawler Excavator



MST Telehandler



Actua



Dyna



Revo Plus



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