

# MOTOR ENERGY

MOTORCYCLE, SCOOTER, SNOWMOBILE, ATV AND JET SKI BATTERY

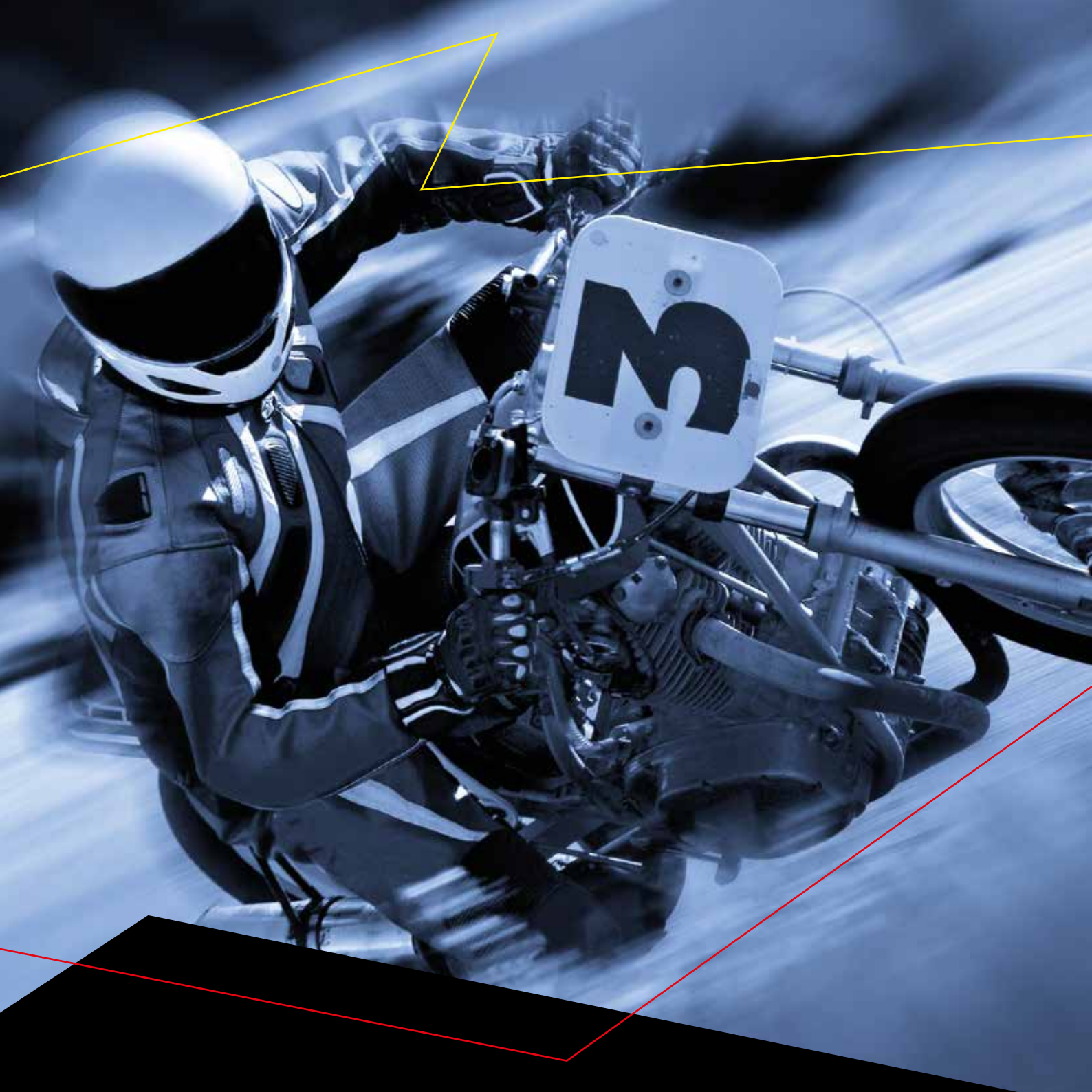
**NEW**

**FIAMM**  
+            -



The **new** Motor Energy starter battery **range** complies with **EU Regulation 2019/1148** on the marketing of explosive precursors.

Certain substances, including the sulphuric acid used to fill motorcycle Lead-Acid batteries, are subject to restrictions and limitations on sale to the public in order **to limit their availability to private individuals**, as their availability, introduction, possession and use could be misused for the **illicit manufacture of explosives**.



**MOTOR  
ENERGY**  
AGM TECHNOLOGY

**MOTOR  
ENERGY**  
FB TECHNOLOGY

In the world of two-wheelers, the application needs are manifold: **from the small scooter to the large motorcycle**, without forgetting niche applications such as those for jet skis and snowmobiles.

To provide effective solutions for all needs, FIAMM has created the new **Motor Energy** range, a concentrate of energy for engines.

# MOTOR ENERGY AGM TECHNOLOGY

The **new AGM technology range** for all motorbikes, the most modern, high-performance ones as well.

## SEALED VALVE-REGULATED GAS-RECOMBINATION BATTERY

**Absorbed Glass Mat (AGM) technology** thanks to a very fine fibreglass separator which absorbs the electrolyte withholding it inside the battery. No risk of acid leakage during installation or use.

## OUTSTANDING STARTING POWER

**Top power** for safe starts in all conditions. The starting efficiency (A)/weight (kg) ratio of AGM batteries is the highest available today.

## MAINTENANCE-FREE

The implemented technology cuts **water consumption virtually to zero**. No top-ups needed for the entire life of the battery.

## RESISTANCE TO VIBRATIONS

The plate-mats are compressed and construction is perfected to make the battery extremely resistant to vibrations for a **longer life**.

## GUARANTEED PERFORMANCE EVEN AFTER PROLONGED STORAGE

**The use of lead-calcium alloys in the grids** makes **self-discharging process much slower** than traditional batteries. Starting efficiency is maintained over time.






## AGM TECHNOLOGY

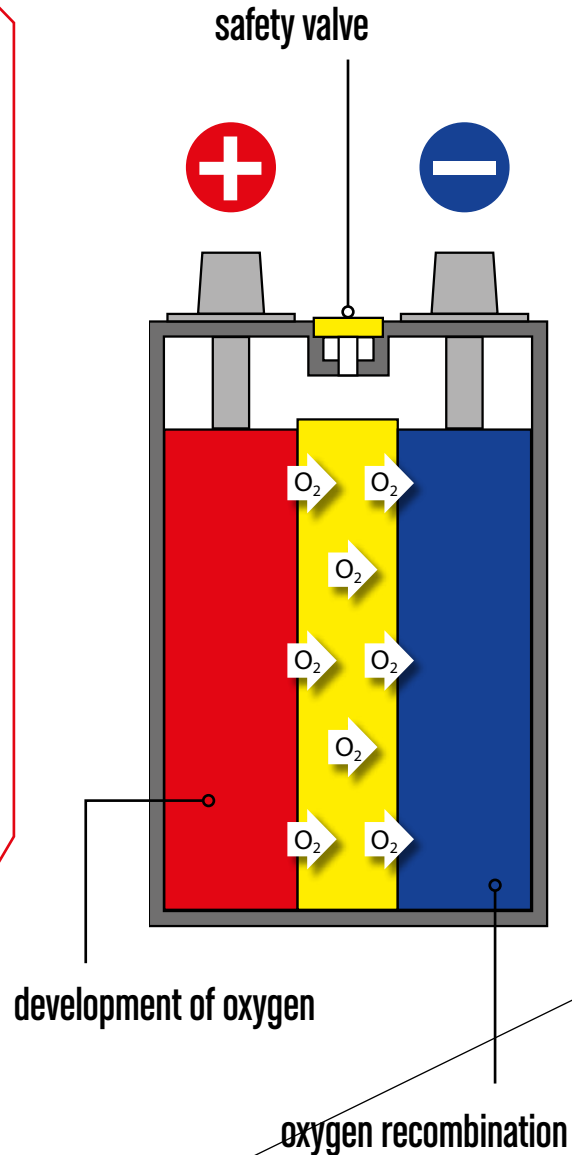
The key feature that sets this battery apart from a traditional one is AGM gas-recombination technology. Water dissociates into hydrogen and oxygen in a conventional flooded lead battery when it is recharged. The two gases are released through the caps and the level of electrolyte decreases in the battery.

AGM technology exploits the recombination principle, instead. By using a special, very fine separator (Absorbent Glass Mat) seeped in a controlled amount of electrolyte, the oxygen released from the positive plate due to the dissociation of water during recharging can migrate to the negative plate where it is fixed to then recombine with hydrogen and form water again. In principle, this establishes a closed electrochemical cycle without gas emissions outside and without consuming water.

It is a simple system that requires high constructive accuracy and careful selection of components in order to work perfectly. Crucial are the plate-mat system compression and the purity of components.

-  positive plate
-  negative plate
-  separator mat seeped in electrolyte

## SEALED GAS-RECOMBINATION BATTERY OPERATION





# MOTOR ENERGY AGM Technology

## CONTAINER

Oil and petrol-resistant lid and one-piece container.

## SAFETY VALVE

Reduces the risk of battery explosion in case of excessive gas build-up.

## FLAME ARRESTOR

To eliminate the risks caused by occasional sparks or naked flames outside the battery.

## SPECIAL CONNECTIONS

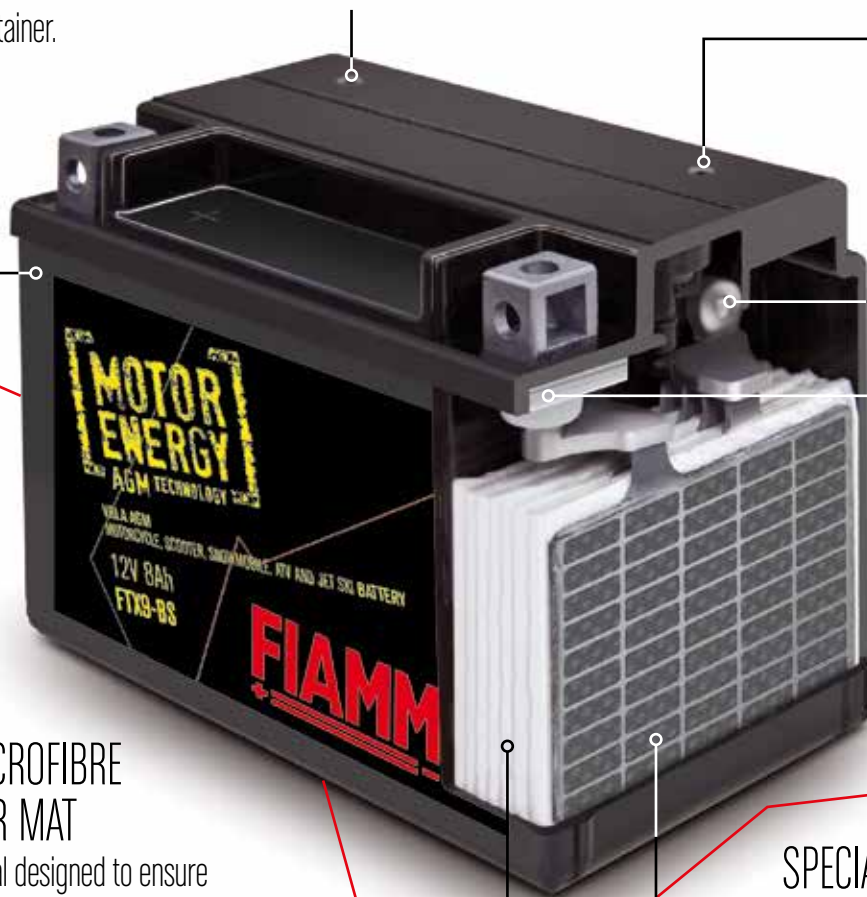
Reinforced cell-to-cell connections and plate-to-terminal connections for better current flow for starting the engine.

## GLASS MICROFIBRE SEPARATOR MAT

Porous material designed to ensure optimal electrolyte retention, which combined with the safety valve prevents leakage of liquid or gas.

## SPECIAL ACTIVE MASS FORMULA

Designed to increase battery life and reliability.





# MOTOR ENERGY

FB TECHNOLOGY

The new **FB technology range** for scooters and small motorcycles.

## BATTERIES IN DRY-CHARGED VERSION

The advantage is that the battery can be activated whenever it is needed. Batteries in dry-charged version can indeed be stored **for a long time**.

## FB TECHNOLOGY

**Top starting power, always.** Special additives specifically formulated to reduce damage caused by sulphation of plates during deep discharge of the battery, guaranteeing starting even in difficult conditions. (This technology is implemented in all FB models).

## LOW MAINTENANCE

A special lead alloy **reduces water consumption, the self-discharge** of the battery and need for maintenance, as a consequence.

## COMPLETE RANGE: 12 V & 6 V

More than 50 models of **batteries for all types of motorcycles**.



# MOTOR ENERGY FB Technology

## TERMINALS

Corrosion-resistant to guarantee longer battery life.

## REMOVABLE CAPS

For easy servicing.

## SPECIAL CONNECTIONS

Reinforced cell-to-cell connections to guarantee the best current flow for starting.

## CONTAINER

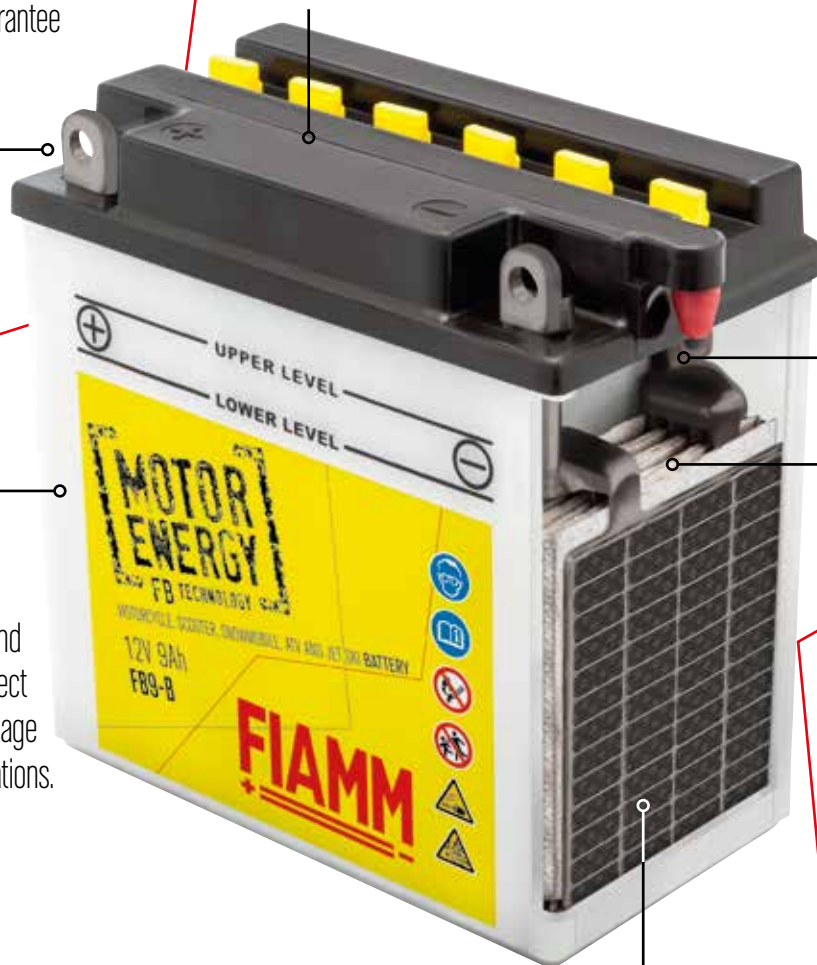
Oil and petrol-resistant lid and one-piece container to protect the battery plates from damage caused by collisions or vibrations.

## SEPARATOR MAT

Made of special material for boosted starting power.

## DRY CHARGE PLATES

Provide 70-80% of the charge state after initial activation by filling with acid.



**MOTOR ENERGY**  
AGM TECHNOLOGY

**MOTOR ENERGY**  
FB TECHNOLOGY

Find your MOTOR ENERGY.  
Choose the right battery for your needs here.



# MOTOR ENERGY starter battery range

**AGM** Technology (ready for use)

Item code	ID code	Nominal capacity Ah (10 h)	Peak current CCA A EN	Size LxDxH (mm)	Pole type
7907020	FTR4A-12B	2.3	30	113x48x85	14
7907021	FTX4L-12B	3	50	113x70x85	M04
7904470	FTZ7S-12B	6	100	113x70x105	M05
7907022	FTX7L-12B	6	100	113x70x130	M04
7907023	FTX7A-12B	6	105	150x87x93	M04
7907024	FT7-12B	6.5	110	150x65x93	M12
7906866	FTX9-12B	8	110	150x87x105	M05
7907025	FT9-12B	8	115	150x70x105	M12
7904471	FTZ10S-12B	8.6	150	150x87x93	M12
7907026	FTX9A-12B	9	120	135x75x139	M06
7906867	FTX12-12B	10	150	150x87x130	M04
7907027	FT12B-12B	10	150	150x70x130	M12
7907028	FT12A-12B	10	160	150x87x105	M12
7904472	FTZ14S-12B	11.2	200	150x87x110	M12
7907029	FTX12A-4A-12B	12	160	134x80x160	M06
7907030	FTX12A-3A-12B	12	160	134x80x160	M06
7906868	FTX14-12B	12	190	150x87x145	M04
7907031	FTX14AHL-12B	14	180	134x89x166	M08
7907032	FTX14AH-12B	14	180	134x89x166	M08
7907033	FTX16-12B	14	210	150x87x161	M12
7907034	FTX20HL-12B	18	250	175x87x155	M04
7907035	FTX20CH-12B	18	270	150x87x161	M12
7907036	FTX30L-12B	30	300	160x131x192	M12
7904473	FT19-12B	19 * 20 hr	200	181x76x167	M11

## FB Technology 12V (flooded dry charge)


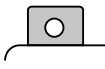
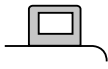

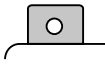
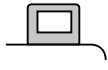
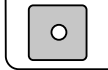
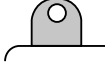
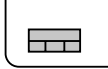
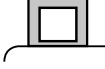
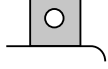
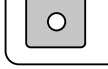
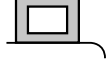
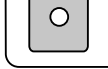
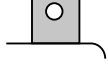
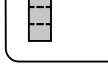
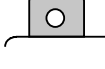
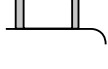


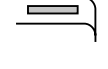

Item code	ID code	Nominal capacity Ah (10 h)	Peak current CCA A EN	Size LxDxH (mm)	Pole type
7907000	FB4L-B	4	50	120x70x92	M04
7907010	12N5-3B	5	45	120x60x130	M06
7907011	12N5.5-3B	5.5	45	135x60x130	M06
7907001	FB7B-B	7	80	150x60x130	M06
7907002	FB7L-B	8	110	135x75x133	M04
7907003	FB7-A	8	110	135x75x133	M06
7907012	12N9-3B	9	85	135x75x139	M06
7907004	FB9L-A2	9	120	135x75x139	M02
7907013	12N10-3A	10	100	135x90x145	M06
7907005	FB10L-B	11	140	135x90x145	M06
7907006	FB16B-A	16	200	160x90x161	M04
7907007	FB16AL-A2	16	200	205x70x162	M02
7907008	FB16-B	19	240	175x100x155	M06
7907009	FB16CL-B	19	240	175x100x175	M05
7907014	F50-N18L-A	20	260	205x90x162	M07
7904457	51814	19 * 20 hr	100	186x82x173	M11
7904461	F60-N24AL-B	24 * 20 hr	260	186x126x170	M11
7904462	53030	30 * 20 hr	300	186x130x171	M11
7904463	53211	32 * 20 hr	300	233x131x167	-

## FB Technology Flooded 6V (flooded dry charge)

Item code	ID code	Nominal capacity Ah (10 h)	Peak current CCA A EN	Size LxDxH (mm)	Pole type
7907015	6N6-3B	6	30	98x56x110	M06
7907016	B39-6	7	35	127x50x123	M06
7907017	B49-6	10	40	90x82x160	M06
7907018	6N11A-1B	11	80	120x60x130	M06
7907019	B38-6A	13	90	118x82x160	M06



# TERMINALS

TYPE	FRONT	SIDE	TOP	BATTERY TYPE					
M02				FB16AL-A2	FB9L-A2				
M04				FB16B-A FTX20HL-12B	FB4L-B FTX4L-12B	FB7L-B FTX7A-12B	FTX12-12B FTX7L-12B	FTX14-12B	
M05				FB16CL-B	FTX9-12B	FTZ7S-12B			
M06				12N10-3A 6N6-3B FB7B-B	12N5.5-3B B38-6A FTX12A-3A-12B	12N5-3B B39-6 FTX12A-4A-12B	12N9-3B FB10L-B FTX9A-12B	FB16-B FB7-A	6N11A-1B
M07				F50-N18L-A					
M08				FTX14AHL-12B	FTX14AH-12B				
M11				51814	53030	F60-N24AL-B	FT19-12B		
M12				FT12A-12B FTX20CH-12B	FT12B-12B FTX30L-12B	FT7-12B FTZ10S-12B	FT9-12B FTZ14S-12B	FTX16-12B	
14				FTR4A-12B					



**FIAMM for  
Team Prima Pramac Racing**



**FIAMM for  
Team Aruba.it Racing-Ducati**






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