

RACECARD

2018 MARRAKESH EPRIX



**SATURDAY
JANUARY 13
2018**

**2017-2018
ABB FIA FORMULA E
CHAMPIONSHIP
ROUND 3**

**MARRAKESH
MOROCCO**



THE 2018 MARRAKESH EPRIX

2nd edition

The Circuit International
Moulay El Hassan takes in
Avenue Mohammed VI

Semi-permanent circuit

Circuit designed by D3
Motorsport

1 race (33 laps)



Qualifying lap record:
1m21.509s
(Felix Rosenqvist, Mahindra
Racing/Michelin, 2016)

Race lap record: 1m20.599s
(Sébastien Buemi, Renault
e.dams/Michelin, 2016)

Track identical to 2016

THE CIRCUIT CIRCUIT INTERNATIONAL AUTOMOBILE MOULAY EL HASSAN



**2,97
KM**

**12
TURNS**

**ANTI-
CLOCKWISE**

TIMETABLE

SATURDAY, JANUARY 13

8:00am	45 minutes	Free Practice 1
10:30am	30 minutes	Free Practice 2
12:00 noon		Qualifying
12:45pm		Super Pole
4:00pm	33 laps	Race

CIRCUIT TIME (GMT+1) - INFORMATION SUBJECT TO CHANGE

FORMULA E NEWS

- » Michelin, which has been a partner of the FIA Formula E Championship since the very beginning, has extended its association with the series until the end of the 2020/2021 season.
- » A Rookie Test will be held at the Circuit El Hassen the day after the Marrakesh ePrix. Twenty drivers are expected to take part (Rossiter, Makowiecki, Di Resta, Muller, Paffett, etc.).
- » Neel Jani has been replaced by Jose Maria Lopez at Dragon Racing.



MICHELIN AND THE 2018 MARRAKESH EPRIX

- » Tyre: Michelin Pilot Sport EV2 (front: 245/40x18 / rear: 305/40x18)
- » Tyre allocation per driver: ten new tyres (five fronts, five rears)

MARRAKESH TRIVIA

- » Marrakech has hosted a round of the FIA World Touring Car Championship (WTCC) since 2009
- » The first Moroccan Grand Prix was held in Casablanca 60 years ago, in 1958 (winner: Stirling Moss)
- » Michelin has a successful winning motorsport record in Morocco in cross-country and world championship rallying
- » Renault and Peugeot both have production facilities in Morocco, and the Chinese electric vehicle maker BYD is poised to join them soon
- » The COP 22 world climate conference was held in Marrakech at the same time as the inaugural Marrakech ePrix in November 2016

TOURISM AND CULTURE IN MARRAKESH

- » The ancient imperial city of Marrakech is Morocco's fourth biggest city
- » Marrakech is situated at the foot of the Atlas Mountains
- » Marrakech is known as the Red City because of the colour of its ramparts which were built in 1123

THE 2016 MARRAKESH EPRIX

- » 1st Marrakech ePrix / Round 2 of the 2016/2017 Formula E Championship
- » 7,000 spectators
- » 1st Formula E race to be held in Africa
- » Race won by Sébastien Buemi (Renault e.dams/Michelin), despite a five-place grid penalty



« MARRAKESH IS A SEMI-PERMANENT TRACK BUT ITS PROFILE IS VERY MUCH THAT OF A STREET CIRCUIT. »

SERGE GRISIN

Formula E Championship Programme Manager, Michelin Motorsport

“Marrakech is a semi-permanent track but its profile is very much that of a street circuit. It is relatively narrow, so overtaking isn't easy. Turn 3 is very technical. There are two distinct types of asphalt: a new, smooth surface through the circuit portion, and a part that offers very little grip through the street section. The track tends to be dusty and, in 2016, the weather was quite chilly in the morning, with a track temperature of just 13°C, but the Michelin Pilot Sport EV2's warm-up performance was very good. Marrakech isn't really a hard-wearing venue.”

MICHELIN & THE MARRAKESH EPRIX

TECHNICAL DATA

PILOT SPORT EV2
FRONT: 245/40X18 &
REAR: 305/40X18

Developed specifically for the FIA Formula E Championship
The first 18-inch single-seater racing tyre

The first single-seater racing tyre capable of competing in dry and wet conditions

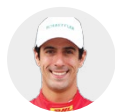
The first tyre capable of lasting an entire race meeting



Size (front/rear)	24/64-18 / 27/68-18
Width (front/rear)	245mm / 305mm
Tread width (front/rear)	240mm / 270mm
Side wall height (front/rear)	98mm / 122mm (i.e. 40 percent of tread width)
Exterior diameter	18 inches
Weight (front/rear)	8.8kg / 10.9kg
Type of tread pattern	Asymmetric, non-directional
Usage	Circuits, street circuits, asphalt, concrete, wet or dry weather
Number of tyres taken to each race	200 (160 new tyres + 40 from the previous race)
Weight saving (compared with the MICHELIN Pilot Sport EV)	1.1kg front 1.4kg rear
Weight saving per set of four tyres	5kg (11 percent)
Rolling resistance	Lowered by 16 percent (equivalent to more than 2km, or one lap)



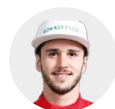
2017/2018 ENTRY LIST



AUDI SPORT ABT SCHAEFFLER

Lucas di Grassi (BRA)

Wins: 6
Podium: 20
Pole position: 3



Daniel Abt (DEU)

Wins: 0
Podium: 4
Pole position: 1



MS + ANDRETTI FORMULA E

Antonio Felix Da Costa (PRT)

Wins: 1
Podium: 1
Pole position: 0



Kamui Kobayashi (JPN)

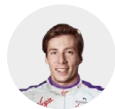
Wins: 0
Podium: 0
Pole position: 0



DS VIRGIN RACING

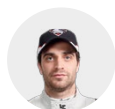
Sam Bird (GBR)

Wins: 5
Podium: 9
Pole position: 4



Alex Lynn (GBR)

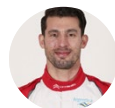
Wins: 0
Podium: 0
Pole position: 1



DRAGON

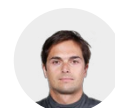
Jérôme d'Ambrosio (BEL)

Wins: 2
Podium: 6
Pole position: 2



José María López (ARG)

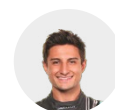
Wins: 0
Podium: 2
Pole position: 0



PANASONIC JAGUAR RACING

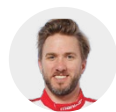
Nelson Piquet Jr (BRA)

Wins: 2
Podium: 5
Pole position: 1



Mitch Evans (NZL)

Wins: 0
Podium: 0
Pole position: 0



MAHINDRA RACING

Nick Heidfeld (DEU)

Wins: 1
Podium: 12
Pole position: 3



Felix Rosenqvist (SWE)

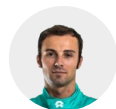
Wins: 1
Podium: 5
Pole position: 3



NIO FORMULA E TEAM

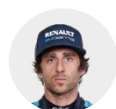
Oliver Turvey (GBR)

Wins: 0
Podium: 0
Pole position: 1



Luca Filippi (ITA)

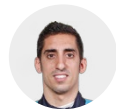
Wins: 0
Podium: 0
Pole position: 0



RENAULT E.DAMS

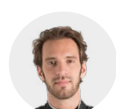
Nicolas Prost (FRA)

Wins: 3
Podium: 5
Pole position: 3



Sébastien Buemi (CHE)

Wins: 12
Podium: 17
Pole position: 8



TECHEETAH

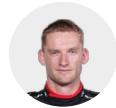
Jean-Eric Vergne (FRA)

Wins: 1
Podium: 9
Pole position: 4



André Lotterer (DEU)

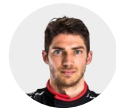
Wins: 0
Podium: 0
Pole position: 0



VENTURI FORMULA E

Maro Engel (DEU)

Wins: 0
Podium: 0
Pole position: 0



Edoardo Mortara (CHE)

Wins: 0
Podium: 0
Pole position: 0



FIA FORMULA E

DRIVERS STANDING

DRIVERS																TOT.
			HK	HK	MA	CL	MX	BR	IT	FR	DE	DE	CH	US	US	
1	BIRD S. (GBR) DS VIRGIN RACING SPARK-CITROËN - VIRGIN DSV-02		25	10												35
2	VERGNE J. (FRA) TECHEETAH SPARK-RENAULT - RENAULT Z.E 16		21	12												33
3	ROSENQVIST F. (SWE) MAHINDRA RACING SPARK-MAHINDRA - MAHINDRA M3ELECTRO		-	29												29
4	MORTARA E. (CHE) VENTURI FORMULA E SPARK-VENTURI - VENTURI VM200-FE-02		6	18												24
5	EVANS M. (NZL) PANASONIC JAGUAR RACING SPARK-JAGUAR - JAGUAR I-TYPE 1		-	15												15
5	HEIDFELD N. (DEU) MAHINDRA RACING SPARK-MAHINDRA - MAHINDRA M3ELECTRO		15	-												15
6	PIQUET JR. N. (BRA) PANASONIC JAGUAR RACING NIO FORMULA E TEAM FORMULAE 002		12	-												12
7	ABT D. (DEU) ABT SCHAEFFLER AUDI SPORT SPARK-ABT SPORTSLINE - ABT SCHAEFFLER FE02		11	-												11
8	FELIX DA COSTA A. (PRT) MS AMLIN ANDRETTI SPARK-ANDRETTI - ATEC-02		8	-												8
8	TURVEY O. (GBR) NEXTEV NIO SPARK-NEXTEV - NEXTEV TCR FORMULAE 002		-	8												8
9	ENGEL M. (DEU) VENTURI FORMULA E SPARK-VENTURI - VENTURI VM200-FE-02		-	6												6
9	LYNN A. (GBR) DS VIRGIN RACING SPARK-CITROËN - VIRGIN DSV-02		4	2												6
9	PROST N. (FRA) RENAULT E.DAMS SPARK-RENAULT - RENAULT Z.E 16		2	4												6
10	BUEMI S. (CHE) RENAULT E.DAMS SPARK-RENAULT - RENAULT Z.E 16		-	1												1
10	FILIPPI I. (ITA) NEXTEV NIO SPARK-NEXTEV - NEXTEV TCR FORMULAE 002		1	-												1
11	LOTTERER A. (DEU) TECHEETAH SPARK-RENAULT - RENAULT Z.E 16		-	-												0
11	DI GRASSI L. (BRA) ABT SCHAEFFLER AUDI SPORT SPARK-ABT SPORTSLINE - ABT SCHAEFFLER FE02		-	-												0
11	KOBAYASHI K. (JPN) MS AMLIN ANDRETTI SPARK-ANDRETTI - ATEC-02		-	-												0
11	D'AMBROSIO J. (BEL) DRAGON RACING SPARK-PENSKO - PENSKO 701-EV		-	-												0
11	JANI N. (CHE) DRAGON RACING SPARK-PENSKO - PENSKO 701-EV		-	-												0

RACE DAY FORMAT

Shakedown is held on Friday - the day before the main event - but this is dependent on the track being available. Drivers use this session to check the electronic systems and the reliability of the car, but not overall performance as the cars run at a reduced speed.

Power

The power is limited to 110kW. Practice - each event has two practice sessions - an opening 45-minute session followed by a further 30-minute session. This is reduced to only one 45-minute session on the second day of a double-header. Here the teams and drivers take to the track for the first time in earnest - allowing them to get a feel for the track and adapt to the car set-up.

Power

200kW is available throughout.

Qualifying and super pole shoot-out

Qualifying determines the starting grid for the race, with the fastest driver lining-up in first place. The session lasts one hour and sees drivers divided into groups, decided by a lottery conducted in the driver briefing. Each driver has six minutes to set their best time, with the top-five drivers proceeding to the Super Pole shoot-out in a bid to secure Julius Baer Pole Position and an additional three points. During the Super Pole shoot-out, the drivers go out one-by-one, with the fifth fastest driver from the group stages going out first. When he or she crosses the line to start their flying lap, the pitlane light turns green and the fourth fastest driver heads out. This is repeated until all five drivers have completed a lap. Power - 200kW is available throughout.

E-Prix

The E-Prix lasts for approximately 50-minutes with each driver making one mandatory stop to change cars. In race mode, the maximum power available is limited to 180kW - 10kW more than Season Three. The three drivers who receive the highly-acclaimed FANBOOST - as voted for by the fans - each have an extra 100kJ at their disposal.

Power

Limited to 180kW, with additional energy for the winners of the FANBOOST vote.

Double-header

The majority of races take place over a single day in order to minimise disruption to the host city. However, where possible some events stretch to two days with double the amount of action - these are referred to as double-headers. The schedules are mirrored from each day, with only one 45-minute practice session on the second day.

Pit stops and car changes

During each E-Prix, drivers must make one mandatory stop in order to change cars - jumping into a second, fully-charged car that's ready and waiting in the garage. This must take place in their allocated garage or dedicated slot in the pitlane (depending on the location of the pitlane and garages) and be observed by an FIA steward to ensure all safety equipment and belts are correctly fastened. A minimum time is also enforced to prevent rushing and provide enough time to complete necessary checks. Tyre changes, unless caused by a puncture or other damage, are not permitted during this pit stop phase.

Tyres and allocation

The bespoke 18-inch treaded all-weather tyres are supplied by Michelin - official tyre supplier of the FIA Formula E Championship. For each event, every driver is supplied with a new set of tyres - two new front tyres and two new rear tyres. In addition to the new set, drivers also carry over one front tyre and one rear tyre from the previous event. This same rule is also applied for double-headers.

Per driver - two new front tyres and two new rear tyres (plus one front and rear tyre from the previous event).

Charging times

Charging the car is forbidden during both qualifying and the race, as well as throughout parc ferme and scrutineering. Teams can charge the cars in-between sessions and during practice.

FANBOOST

FANBOOST is a fan interaction system, where fans vote to give a driver an extra energy boost during the race - to be used for attack or defence. Making a passing move on your nearest rival, or fending off an attempt to overtake. Therefore, fans can actively influence the outcome of the race - something unique to the world of competitive sport.

The voting window opens on the Monday of the week of the race, five days before the event. Fans can vote once per day on each eligible platform - via social media or the official Formula E website. Voting closes six minutes into the race, therefore the top-three drivers with the highest percentage of votes receive and additional 100kJ of energy in their second car only. When using FANBOOST, it can only be deployed once - not in a series of short bursts.

POINTS SYSTEM

Formula E follows a standard points system, used in other FIA-sanctioned series - awarding points to the top-10 finishers

- 1st - 25 points
- 2nd - 18 points
- 3rd - 15 points
- 4th - 12 points
- 5th - 10 points
- 6th - 8 points
- 7th - 6 points
- 8th - 4 points
- 9th - 2 points
- 10th - 1 point

Julius Baer pole position - 3 points

Visa fastest lap - 1 point (if in a top-10 finishing position)

