

# RACECARD

**2019** HKT HONG KONG **E-PRIX**



**SUNDAY,  
MARCH 10  
2019**

**ROUND 5**  
2018/2019 ABB  
FIA FORMULA E  
CHAMPIONSHIP

**ROUND 3**  
JAGUAR I-PACE eTROPHY

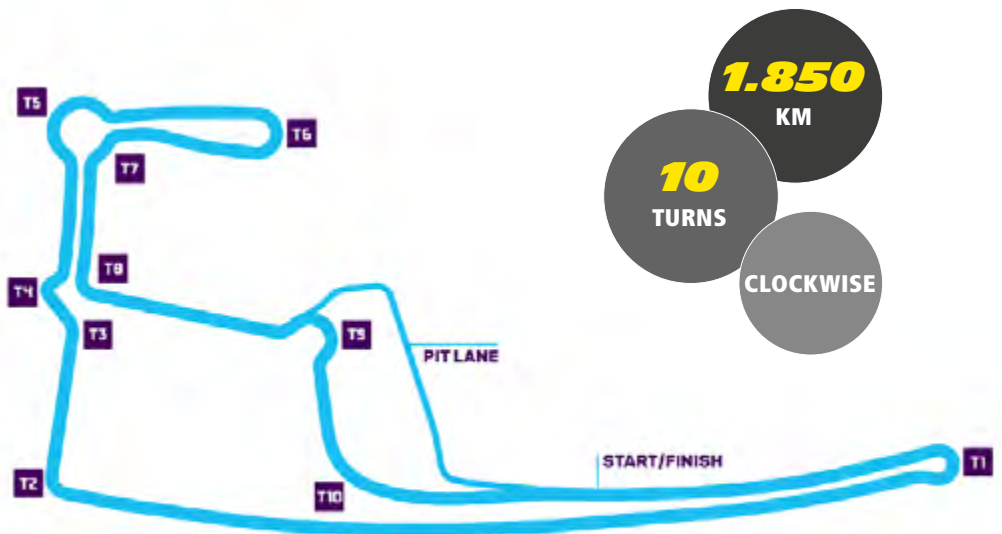
**3<sup>RD</sup> RUNNING**

HONG KONG  
CHINA



## THE CIRCUIT

**HONG KONG CENTRAL HARBOURFRONT CIRCUIT**



**1.850**  
KM

**10**  
TURNS

CLOCKWISE

**2017**  
HONG KONG  
E-PRIX

**RACE 1**

**WINNER:**

Sam Bird (DS Virgin Racing), 43 laps

**POLE POSITION:**

Jean-Eric Vergne (Techeetah), 1m3.568s

**FASTEST RACE LAP:**

Jérôme d'Ambrosio (Dragon Racing),  
1m4.297s

**RACE 2**

**WINNER:**

Felix Rosenqvist (Mahindra Racing),  
45 laps

**POLE POSITION:**

Felix Rosenqvist (Mahindra Racing),  
1m2.836s

**FASTEST RACE LAP:**

Lucas di Grassi (Audi Sport Abt  
Schaeffler), 1m3.928s



The first two races of Season 4 were quite dramatic

Sam Bird came out on top in his Race-1 scrap with Sébastien Buemi

Race-2 winner Daniel Abt was afterwards disqualified for a technical infringement



**HONG KONG  
E-PRIX  
WINNERS**

2016/2017

**SÉBASTIEN BUEMI**  
(RENAULT E.DAMS)

2017/2018

**SAM BIRD**  
(DS VIRGIN RACING)  
**FELIX ROSENQVIST**  
(MAHINDRA RACING)



One of the shortest tracks visited by Formula E  
Located in Hong Kong's Victoria Bay district, near Financial Tower and Tamar Park

### TIMETABLE

**SUNDAY, MARCH 10**

Time	Duration	Event
7:30am	45 minutes	Free Practice 1 (FE)
8:35am	30 minutes	Qualifying (I-PACE eTROPHY)
10:00am	30 minutes	Free Practice 2 (FE)
11:45am	4 groups, 6 minutes	Qualifying (FE)
12:30pm		Super Pole (FE)
2:00pm	25 minutes + 1 lap	Race (I-PACE eTROPHY)
4:00pm	45 minutes + 1 lap	Race (FE)
5:00pm		Podium ceremony

LOCAL TIME



## HONG KONG AND MOTORSPORT

- » Hong Kong was considered as a venue for an F1 grand prix in the 1990s
- » In the 2000s, Hong Kong organised a touring car championship at Zhuhai and Macau
- » The Hong Kong-Beijing Rally (1985-1996) was won by Michelin with stars of the day like Vatanen, Blomqvist and Mikkola
- » The 2016 Hong Kong E-Prix was the first motor race to be held in Hong Kong



## THE HONG KONG E-PRIX AND SUSTAINABLE ENERGY

- » 80% of the electric cars on the road in Hong Kong are Teslas
- » There are 11,000 electric vehicles registered in Hong Kong
- » The proportion of electric vehicles on the road in Hong Kong is 10 times that of Germany
- » Hong Kong's steep roads and humid climate are a challenge for electric-vehicle batteries
- » Studies suggest that fitting solar panels on Hong Kong's skyscrapers could cover 14% of its electricity needs

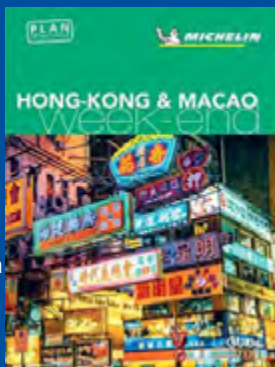
## HONG KONG

- » Like Macau, Hong Kong is a Special Administrative Region of the People's Republic of China
- » For 155 years, until 1997, Hong Kong was a British colony
- » Hong Kong is nicknamed Skyscraper City
- » Hong Kong is the world's third-biggest financial hub, after New York and London
- » Hong Kong district Mong Kok is the most densely populated location on the planet (density: 130,000 people/sq.km)



## MICHELIN GREEN GUIDE

The Michelin Green Guide to Hong Kong and Macau is the ideal companion to discover these two Chinese administrative regions. Meanwhile, two new restaurants have been awarded three stars in the Michelin Guide Hong Kong Macau 2019



## SERGE GRISIN

Formula E Championship Programme Manager, Michelin Motorsport

"Hong Kong is narrow and tricky, and the surface features a mix of asphalt and concrete.

Although it is one of the shortest tracks

**"IT IS CONSEQUENTLY QUITE HARD ON TYRES"**

of the championship, it is consequently quite hard on tyres and, this year, the new Michelin Pilot Sport will have to cover the entire race."

## MICHELIN AND THE 2019 HONG KONG E-PRIX

### TECHNICAL DATA

#### MICHELIN PILOT SPORT

FRONT: 245/40R18  
REAR: 305/40R18

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 the full race distance



<b>Size (front/rear)</b>	24/64-18 / 27/68-18
<b>Width (front/rear)</b>	245mm / 305mm
<b>Tread width (front/rear)</b>	240mm / 270mm
<b>Side wall height (front/rear)</b>	98mm / 122mm (i.e. 40 percent of tread width)
<b>Rim diameter</b>	18 inches
<b>Weight (front/rear)</b>	8kg / 9.9kg
<b>Type of tread pattern</b>	Asymmetric, non-directional
<b>Usage</b>	Circuits, street circuits, asphalt, concrete, wet or dry weather
<b>Number of tyres taken to each race</b>	176 (22 cars x 8 tyres)
<b>Weight saving (compared with the MICHELIN Pilot Sport EV)</b>	Front: 2kg Rear: 2.5kg





# MICHELIN PILOT SPORT

THE REVOLUTIONARY NEW  
MICHELIN PILOT SPORT:  
LIGHTER AND MORE ENERGY-  
EFFICIENT THAN EVER

## A REVOLUTIONARY RACING TYRE, IN MORE WAYS THAN ONE!

Developed specifically for the world's first all-electric single-seater motor racing championship, the new MICHELIN Pilot Sport is an exceptionally versatile tyre that was designed by Michelin Motorsport's engineers to cover the entire race day (free practice, qualifying, race), whatever the weather, as required by the technical regulations that govern the series.

**Another exceptional characteristic of the tyre is its size.** The MICHELIN Pilot Sport was effectively the first ever single-seater tyre to feature an interior diameter of 18 inches, a disruptive concept put forward by Michelin Motorsport and approved by the FIA (Fédération Internationale Automobile). The fact that 18-inch wheels have become a common

feature of road cars enables Michelin Motorsport's engineers and chemists to **carry over the lessons they learn on the racetrack to everyday tyres, in keeping with the firm's 'track to street' policy.**

The MICHELIN Pilot Sport (front: 245/40 R 18 / rear: 305/40 R 18) is tall and narrow in the interests of energy efficiency, which equates to longer range. Its low sidewalls also flex less, resulting in the generation of less heat, which **in turn means reduced energy consumption**, a valuable benefit for Formula E's latest-generation 'Gen2' Spark SRT 05Es.

**The MICHELIN Pilot Sport is a connected tyre, too**, thanks to an embedded RFID chip which facilitates tracking, from production through to recycling.



### FRONT

#### Size

24/64-18 equivalent to 245/40R18

#### Side wall height

40% - 98mm



### Usage

Wet or dry weather

### Type of tread pattern

Asymmetric, non-directional

### Rim diameter

18 inches



### REAR

#### Size

27/68-18 equivalent to 305/40R18

#### Side wall height

40% - 122mm



# ENTRY LIST

## 2019 HONG KONG E-PRIX

### ENVISION VIRGIN RACING AUDI E-TRON FE05



**N°2 SAM BIRD** (GBR)

Victory: 8      Fastest race laps: 5  
Pole position: 5      Podium: 17



**N°4 ROBIN FRIJNS** (NLD)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 2

### PANASONIC JAGUAR RACING JAGUAR I – TYPE III



**N°3 NELSON PIQUET JR** (BRA)

Victory: 2      Fastest race laps: 5  
Pole position: 1      Podium: 5



**N°20 MITCH EVANS** (NZL)

Victory: 0      Fastest race laps: 1  
Pole position: 1      Podium: 1

### HWA RACELAB VENTURI VFE05

ROOKIE



**N°5 STOFFEL VANDOORNE** (BEL)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0

ROOKIE



**N°17 GARY PAFFETT** (GBR)

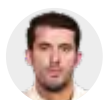
Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0

### GEOX DRAGON PENSKE EV-3



**N°6 FELIPE NASR** (BRA)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



**N°7 JOSE-MARIA LOPEZ** (ARG)

Victory: 0      Fastest race laps: 1  
Pole position: 0      Podium: 2

### NIO FORMULA E TEAM NIO SPORT 004



**N°8 TOM DILLMANN** (FRA)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



**N°16 OLIVER TURVEY** (GBR)

Victory: 0      Fastest race laps: 0  
Pole position: 1      Podium: 1

### VENTURI FORMULA E TEAM VENTURI FVE05

ROOKIE



**N°19 FELIPE MASSA** (BRA)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



**N°48 EDOARDO MORTARA** (CHE)

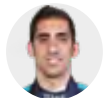
Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 2

### NISSAN E.DAMS NISSAN IM01



**N°22 OLIVER ROWLAND** (GBR)

Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



**N°23 SÉBASTIEN BUEMI** (CHE)

Victory: 12      Fastest race laps: 9  
Pole position: 12      Podium: 21

### DS TECHEETAH DS E-TENSE FE19



**N°25 JEAN-ERIC VERGNE** (FRA)

Victory: 5      Fastest race laps: 1  
Pole position: 8      Podium: 15



**N°36 ANDRÉ LOTTERER** (DEU)

Victory: 0      Fastest race laps: 2  
Pole position: 0      Podium: 2

### BMW I ANDRETTI MOTORSPORT BMW IFE.18

ROOKIE



**N°27 ALEXANDER SIMS** (GBR)

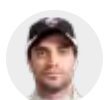
Victory: 0      Fastest race laps: 0  
Pole position: 0      Podium: 0



**N°28 ANTONIO FELIX DA COSTA** (PRT)

Victory: 2      Fastest race laps: 0  
Pole position: 1      Podium: 3

### MAHINDRA RACING MAHINDRA M5ELECTRO



**N°64 JÉRÔME D'AMBROSIO** (BEL)

Victory: 3      Fastest race laps: 1  
Pole position: 2      Podium: 8

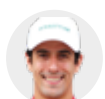


ROOKIE

**N°94 PASCAL WEHRLEIN** (DEU)

Victory: 0      Fastest race laps: 1  
Pole position: 1      Podium: 1

### AUDI SPORT ABT SCHAEFFLER FORMULA E TEAM AUDI E-TRON FE05



**N°11 LUCAS DI GRASSI** (BRA)

Victory: 9      Fastest race laps: 4  
Pole position: 3      Podium: 28



**N°66 DANIEL ABT** (DEU)

Victory: 2      Fastest race laps: 6  
Pole position: 2      Podium: 9





# FIA FORMULA E

## DRIVERS STANDINGS

															TOT.
		SA 15/12	MA 12/01	CL 26/01	MX 16/02	HK 10/03	CN 23/03	IT 13/04	FR 27/04	MC 11/05	DE 25/05	CH 22/06	US 13/07	US 14/07	
1	 <b>64 J. D'AMBROSIO (BEL)</b> MAHINDRA RACING	15	25	1	12	-	-	-	-	-	-	-	-	-	53
2	 <b>28 A. DA COSTA (PRT)</b> BMW I ANDRETTI MOTORSPORT	28	0	0	18	-	-	-	-	-	-	-	-	-	46
3	 <b>2 S. BIRD (GBR)</b> ENVISION VIRGIN RACING	0	18	25	2	-	-	-	-	-	-	-	-	-	45
4	 <b>11 L. DI GRASSI (BRA)</b> AUDI SPORT ABT SCHAEFFLER	2	7	0	25	-	-	-	-	-	-	-	-	-	34
5	 <b>94 P. WEHRLEIN (DEU)</b> MAHINDRA RACING	-	18	12	-	-	-	-	-	-	-	-	-	-	30
6	 <b>36 A. LOTTERER (DEU)</b> DS TECHEETAH FORMULA E TEAM	11	8	0	10	-	-	-	-	-	-	-	-	-	29
7	 <b>4 R. FRIJNS (NLD)</b> ENVISION VIRGIN RACING	0	18	10	0	-	-	-	-	-	-	-	-	-	28
8	 <b>25 J.E. VERGNE (FRA)</b> DS TECHEETAH FORMULA E TEAM	18	10	0	0	-	-	-	-	-	-	-	-	-	28
9	 <b>20 M. EVANS (GBR)</b> PANASONIC JAGUAR RACING	12	2	8	6	-	-	-	-	-	-	-	-	-	28
10	 <b>48 E. MORTARA (CHE)</b> VENTURI FORMULA E TEAM	0	0	12	15	-	-	-	-	-	-	-	-	-	27
11	 <b>66 D. ABT (DEU)</b> AUDI SPORT ABT SCHAEFFLER	4	1	16	1	-	-	-	-	-	-	-	-	-	22
12	 <b>27 A. SIMS (GBR)</b> BMW I ANDRETTI MOTORSPORT	0	12	6	0	-	-	-	-	-	-	-	-	-	18
13	 <b>23 S. BUEMI (CHE)</b> NISSAN E.DAMS	8	4	3	0	-	-	-	-	-	-	-	-	-	15
14	 <b>22 O. ROWLAND (GBR)</b> NISSAN E.DAMS	6	0	0	0	-	-	-	-	-	-	-	-	-	6
15	 <b>16 O. TURVEY (GBR)</b> NIO FORMULA E TEAM	0	0	4	0	-	-	-	-	-	-	-	-	-	4
16	 <b>19 F. MASSA (BRA)</b> VENTURI FORMULA E TEAM	0	0	0	4	-	-	-	-	-	-	-	-	-	4
17	 <b>7 J.M. LÓPEZ (ARG)</b> GEOX DRAGON	0	0	2	0	-	-	-	-	-	-	-	-	-	2
18	 <b>3 N. PIQUET JR. (BRA)</b> PANASONIC JAGUAR RACING	1	0	0	0	-	-	-	-	-	-	-	-	-	1
19	 <b>6 M. GÜNTHER (DEU)</b> GEOX DRAGON	0	0	0	-	-	-	-	-	-	-	-	-	-	0
20	 <b>8 T. DILLMANN (FRA)</b> NIO FORMULA E TEAM	0	0	0	0	-	-	-	-	-	-	-	-	-	0
21	 <b>17 G. PAFFETT (GBR)</b> WA RACELAB	0	0	0	0	-	-	-	-	-	-	-	-	-	0
22	 <b>5 S. VANDOORNE (BEL)</b> HWA RACELAB	0	0	0	0	-	-	-	-	-	-	-	-	-	0
23	 <b>6 F. NASR (BRA)</b> GEOX DRAGON	-	-	-	0	-	-	-	-	-	-	-	-	-	0
24	 <b>94 F. ROSENQVIST (SWE)</b> MAHINDRA RACING	0	-	-	-	-	-	-	-	-	-	-	-	-	0

# FIA FORMULA E

## TEAMS STANDINGS

		SA 15/12	MA 12/01	CL 26/01	MX 16/02	HK 10/03	CN 23/03	IT 13/04	FR 27/04	MC 11/05	DE 25/05	CH 22/06	US 13/07	US 14/07	TOT.
1	▲ MAHINDRA RACING	15	25	19	24	-	-	-	-	-	-	-	-	-	83
2	▼ ENVISION VIRGIN RACING	0	36	35	2	-	-	-	-	-	-	-	-	-	73
3	▲ BMW I ANDRETTI MOTORSPORT	28	12	6	18	-	-	-	-	-	-	-	-	-	64
4	▼ DS TECHEETAH FORMULA E TEAM	29	18	0	10	-	-	-	-	-	-	-	-	-	57
5	● AUDI SPORT ABT SCHAEFFLER	6	8	16	26	-	-	-	-	-	-	-	-	-	56
6	▲ VENTURI FORMULA E TEAM	0	0	12	19	-	-	-	-	-	-	-	-	-	31
7	▼ PANASONIC JAGUAR RACING	13	2	8	6	-	-	-	-	-	-	-	-	-	29
8	▼ NISSAN E.DAMS	14	4	3	0	-	-	-	-	-	-	-	-	-	21
9	● NIO FORMULA E TEAM	0	0	4	0	-	-	-	-	-	-	-	-	-	4
10	● GEOX DRAGON	0	0	2	0	-	-	-	-	-	-	-	-	-	2
11	● HWA RACELAB	0	0	0	0	-	-	-	-	-	-	-	-	-	0

# REGULATIONS

## 2018/2019 ABB FIA FORMULA E CHAMPIONSHIP

### CARS (SINGLE-SEATERS)

- » **Spark STR-05e / chassis:** Dallara / battery: McLaren Applied Technologies
- » **Maximum length:** 5,200mm,
- » **Maximum width:** 1,800mm,
- » **Maximum height:** 1,250mm
- » **Minimum weight:** 900kg, including driver and battery/capacitor (385kg)
- » **Maximum power, electric powertrain:** 250kW (335hp) for free practice and qualifying, 200kW (270hp) during races.
- » 2 MGUs can be used
- » **Allocation per race number:** 2 electric motors, 2 gearboxes, 2 inverters and 1 battery pack for the season

### TYRES

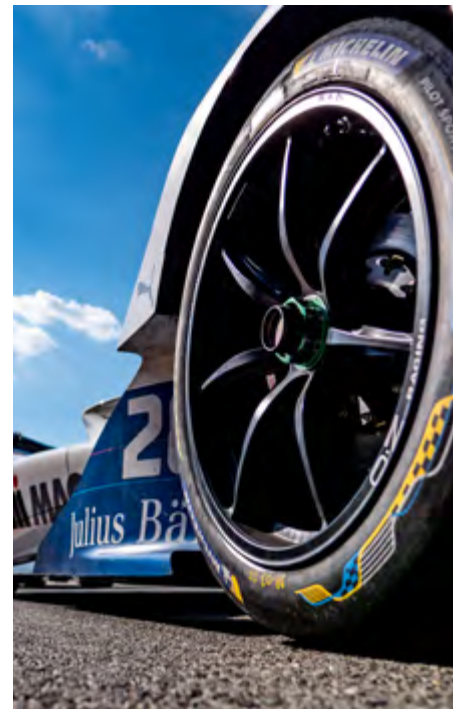
- » A single type of tyre (pattern and construction)
- » No mid-race tyre changes
- » 4 new front tyres and 4 new rear tyres per driver per event
- » Can be inflated using air only
- » Minimum tyre pressure: 1.3 & 1.6 bar (measured at the end of races)
- » Tyre warmers not authorised

### EVENT FORMATS

- » A **Shakedown** session of a maximum duration of 30 minutes may be organised the day before the race. Power is restricted to 110kW. A maximum of six laps per car.
- » **Practice:** Two practice sessions (45 and 30 minutes) in the course of the morning of Race Day. Maximum power: 250kW.
- » **Qualifying:** The drivers are divided into four

groups as a function of their championship positions (or of the previous championship order in the case of the season's first race). Each driver has six minutes and up to two flying laps to post a qualifying time. The six fastest drivers go on to take part in the Super Pole shootout. Maximum power: 250kW.

- » **Super Pole:** Start order is based on the times posted in qualifying, with the 'slowest driver' to lap first, etc. One flying lap only.
- » **Grid:** The six places at the front of the grid are reserved for the drivers who take part in the Super Pole session.
- » **Race:** Standing start. Maximum duration: 45 minutes + 1 lap. Use of two power outputs mandatory: Normal Mode (200kW / regeneration: 250kW) and Attack Mode (225 kW / regeneration: 250kW) which must be activated twice per race, for a period of four minutes. The car's halo head protection device lights up (Blue) when the Attack Mode is activated.
- » **Attack Mode:** For the 2018/2019 season, drivers have two power options during the race: Normal Mode (200kW) and Attack Mode (250kW). Attack Mode must be activated twice per race. To trigger it, the driver must run off the ideal racing line through the corner specified for this purpose by the race organiser, a little like in Mario Kart. Attack Mode is activated for four minutes. The car's halo head protection device lights up when it is activated.
- » **FanBoost:** A temporary 100kJ power boost (240kW-250kW) for five drivers chosen by a fan vote. To be activated once when in Attack Mode. The car's halo head protection device lights up (Magenta).



### POINTS-SCORING SYSTEM RACE

1<sup>st</sup>: 25 points / 2<sup>nd</sup>: 18 points / 3<sup>rd</sup>: 15 points  
 4<sup>th</sup>: 12 points / 5<sup>th</sup>: 10 points / 6<sup>th</sup>: 8 points  
 7<sup>th</sup>: 6 points / 8<sup>th</sup>: 4 points / 9<sup>th</sup>: 2 points  
 10<sup>th</sup>: 1 point  
**POLE POSITION** 3 points  
**FASTEST RACE LAP** 1 point  
 (if a top-10 finisher)

