## BRAKES EFFORT VERY HARD

TIME SPENT BRAKING 17\%


CIRCUIT DATA
Length: 4,361 m - Number of laps: 70
Number of brake zones/lap: O7

IMPORTANT
*TURN 13 is considered the most demanding for the braking system.

BRAKE CIRCUIT IDENTITY CARDS 09-11 JUN 2017

## (5) brembo DATA

Montreal is without a shadow of a doubt the most demanding test bench for the single-seater braking systems.
It is a "stop and go" type circuit characterised by sudden braking sections and acceleration. The braking sections, all hard and very close together, determine an extremely high operating temperature for the discs and pads which do not have time to cool sufficiently in the short straight stretches. These characteristics, combined with a significantly high percentage of time spent on the brakes, determine a very hard mix for the braking systems, also due to the fact that the aerodynamic load (in other words, the resistance to forward progress) is not one of the highest.The scenario can get even worse when there is a tail wind on the two main straight stretches which can significantly increase the straight line speed, putting the brakes to an even more severe test. A critical point is the chicane before the famous "wall of champions" where control going into the turn is fundamental to avoid hopping the kerb. On this turn an excellent feeling with the brakes can make the difference between a good time and retiring with a crash!

Should you publish any of the data contained here please quote Brembo as source used.

| O1 |  |  |
| :--- | ---: | ---: |
| Initial speed | 307 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 151 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 44 | $(\mathrm{~m})$ |
| Braking time | 1.71 | $(\mathrm{sec})$ |
| Maximum deceleration | 4.8 | $(\mathrm{~g})$ |
| Maximum pedal load | 155 | $(\mathrm{Kg})$ |
| Braking power | 2371 | $(\mathrm{Kw})$ |
|  |  |  |
| O6 |  |  |
| Initial speed | 280 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 108 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 49 | $(\mathrm{~m})$ |
| Braking time | 1.89 | $(\mathrm{sec})$ |
| Maximum deceleration | 4.6 | $(\mathrm{~g})$ |
| Maximum pedal load | 158 | $(\mathrm{Kg})$ |
| Braking power | 2109 | $(\mathrm{Kw})$ |
|  |  |  |


| 13* |  |  |
| :--- | ---: | ---: |
| Initial speed | 322 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 148 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 49 | $(\mathrm{~m})$ |
| Braking time | 1.60 | $(\mathrm{sec})$ |
| Maximum deceleration | 4.7 | $(\mathrm{~g})$ |
| Maximum pedal load | 161 | $(\mathrm{Kg})$ |
| Braking power | 2379 | $(\mathrm{Kw})$ |


| O2 | 152 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | ---: | ---: |
| Initial speed | 83 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 20 | $(\mathrm{~m})$ |
| Stopping distance | 1.18 | $(\mathrm{sec})$ |
| Braking time | 2.6 | $(\mathrm{~g})$ |
| Maximum deceleration | 91 | $(\mathrm{Kg})$ |
| Maximum pedal load | 620 | $(\mathrm{Kw})$ |
| Braking power |  |  |


| O8 |  |  |
| :--- | ---: | ---: |
| Initial speed | 297 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 130 | $(\mathrm{Km} / \mathrm{h})$ |
| Stopping distance | 47 | $(\mathrm{~m})$ |
| Braking time | 1.62 | $(\mathrm{sec})$ |
| Maximum deceleration | 4.8 | $(\mathrm{~g})$ |
| Maximum pedal load | 160 | $(\mathrm{Kg})$ |
| Braking power | 2319 | $(\mathrm{Kw})$ |


| O3 | 266 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | ---: | ---: |
| Initial speed | 150 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 34 | $(\mathrm{~m})$ |
| Stopping distance | 1.30 | $(\mathrm{sec})$ |
| Braking time | 4.5 | $(\mathrm{~g})$ |
| Maximum deceleration | 155 | $(\mathrm{Kg})$ |
| Maximum pedal load | 2046 | $(\mathrm{Kw})$ |
| Braking power |  |  |


| 10 | 292 | $(\mathrm{Km} / \mathrm{h})$ |
| :--- | ---: | ---: |
| Initial speed | 68 | $(\mathrm{Km} / \mathrm{h})$ |
| Final speed | 63 | $(\mathrm{~m})$ |
| Stopping distance | 2.44 | $(\mathrm{sec})$ |
| Braking time | 4.5 | $(\mathrm{~g})$ |
| Maximum deceleration | 154 | $(\mathrm{Kg})$ |
| Maximum pedal load | 2140 | $(\mathrm{Kw})$ |
| Braking power |  |  |

