

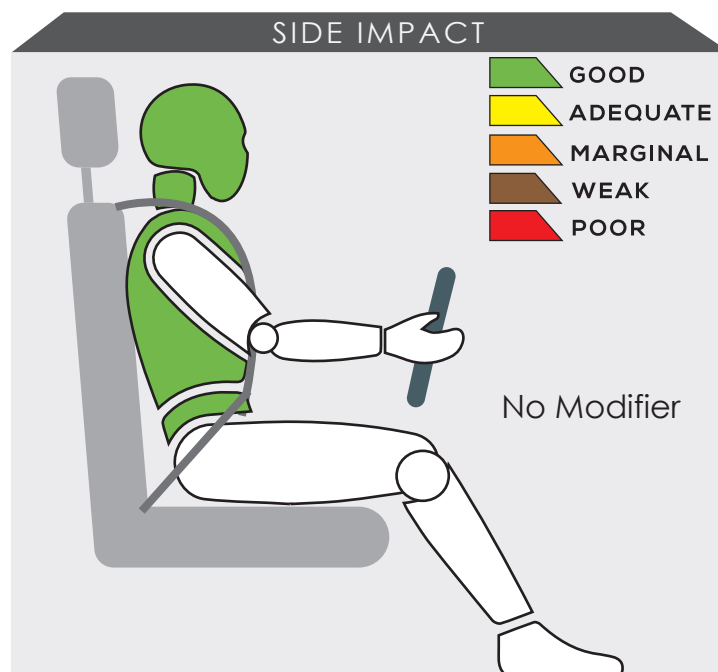
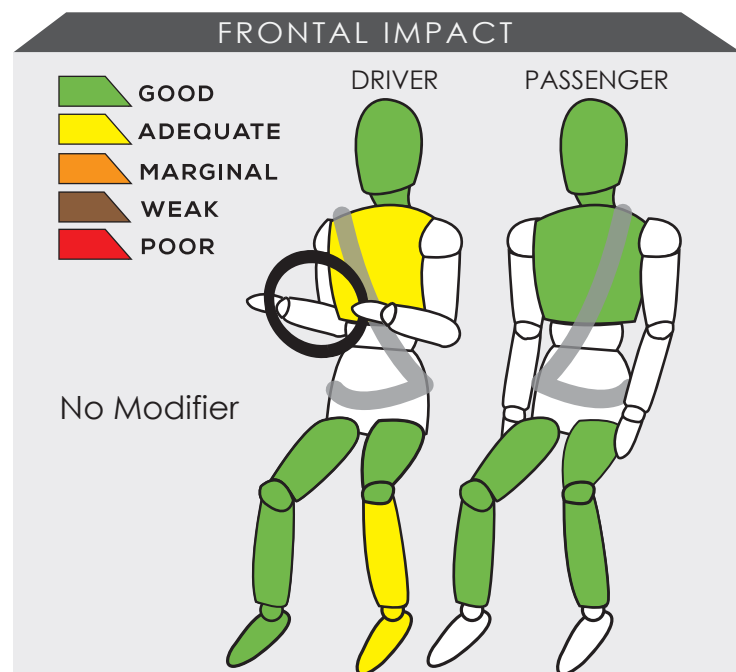
# PROTON X90



|                                                                                                                          |                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|  <b>Variant</b><br><b>STANDARD</b>      |  <b>Year Built</b><br><b>2023</b>      |
|  <b>Model Year</b><br><b>2023</b>       |  <b>Vehicle Category</b><br><b>SUV</b> |
|  <b>Engine Capacity</b><br><b>1.5 L</b> |  <b>Kerb Mass</b><br><b>1730 kg</b>    |
|  <b>No. of Airbags</b><br><b>6</b>      |  <b>Test Lab</b><br><b>CETRAC</b>      |

|                                       |                 |     |                 |
|---------------------------------------|-----------------|-----|-----------------|
| TESTED VARIANT ORIGIN                 | <b>MALAYSIA</b> | FOR | <b>MALAYSIA</b> |
| OTHER ASEAN PRODUCTION (ALL VARIANTS) | —               | FOR | —               |

|                                                                                     |                       |                    |                                   |              |
|-------------------------------------------------------------------------------------|-----------------------|--------------------|-----------------------------------|--------------|
| <b>ADULT OCCUPANT PROTECTION</b>                                                    | <b>FRONTAL IMPACT</b> | <b>SIDE IMPACT</b> | <b>HEAD PROTECTION TECHNOLOGY</b> | <b>TOTAL</b> |
|  | <b>14.20</b>          | <b>8.00</b>        | <b>8.00</b>                       | <b>30.20</b> |



The vehicle's occupant compartment remained stable during the frontal offset test. Data obtained from the assessment showed there was adequate protection given to the driver's chest and lower leg.

The performance of HPT was confirmed with additional deployment test and its score was determined by Fitment Rating System (FRS).

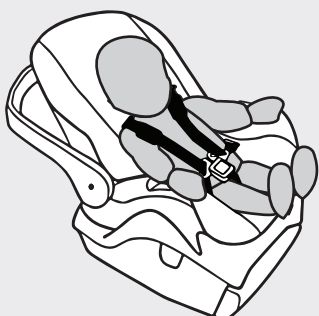
## SAFETY ITEMS (PASSIVE)

| ITEMS     |                                                      | REGION | ASEAN                    |
|-----------|------------------------------------------------------|--------|--------------------------|
| Airbags   | Driver                                               |        | Standard on all variants |
|           | Passenger                                            |        | Standard on all variants |
|           | Side (2)                                             |        | Standard on all variants |
|           | Curtain (2)                                          |        | Standard on all variants |
|           | Knee                                                 |        | Not available            |
| Seatbelts | Retractor Pre-tensioner & Load Limiter for Driver    |        | Standard on all variants |
|           | Retractor Pre-tensioner & Load Limiter for Passenger |        | Standard on all variants |

|                                                                                   |              |               |              |                 |       |
|-----------------------------------------------------------------------------------|--------------|---------------|--------------|-----------------|-------|
| CHILD OCCUPANT PROTECTION                                                         | DYNAMIC TEST | VEHICLE BASED | INSTALLATION | CHILD DETECTION | TOTAL |
|  | 24.00        | 9.00          | 11.37        | 1.00            | 45.37 |

### DYNAMIC TEST ASSESSMENT



| 18-MONTH-OLD CHILD                                                                  |                         | 3-YEAR-OLD CHILD                                                                      |                       |
|-------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------|-----------------------|
| <b>Restraint</b>                                                                    | : Britax Baby Safe Plus | <b>Restraint</b>                                                                      | : Joie Stages Isofix  |
| <b>Facing</b>                                                                       | : Rearward Facing       | <b>Facing</b>                                                                         | : Rearward Facing     |
| <b>Installation</b>                                                                 | : ISOFIX & Supportleg   | <b>Installation</b>                                                                   | : ISOFIX & Supportleg |
|  |                         |  |                       |
| Frontal Impact : 8.00                                                               |                         | Frontal Impact : 8.00                                                                 |                       |
| Side Impact : 4.00                                                                  |                         | Side Impact : 4.00                                                                    |                       |
| Total Performance : 12.00                                                           |                         | Total Performance : 12.00                                                             |                       |

### CRS INSTALLATION ASSESSMENT

| CRS                                | DIRECTION | SEAT POSITION |         |        |       |         |        |        |
|------------------------------------|-----------|---------------|---------|--------|-------|---------|--------|--------|
|                                    |           | FRONT         | 2ND ROW |        |       | 3RD ROW |        |        |
|                                    |           | PASSENGER     | LEFT    | CENTRE | RIGHT | LEFT    | CENTRE | RIGHT  |
| Peg-Perego Primo Viaggio SL        | Rwd       | EXEMPT        | PASS    | PASS   | PASS  | PASS    | N/A    | PASS   |
| Joie Stages                        | Rwd       | EXEMPT        | PASS    | FAIL   | PASS  | PASS    | N/A    | PASS   |
| Joie Stages                        | Fwd       | PASS          | PASS    | PASS   | PASS  | PASS    | N/A    | PASS   |
| Combi Buon Junior Air              | Fwd       | PASS          | PASS    | PASS   | PASS  | PASS    | N/A    | PASS   |
| Maxi Cosi Cabriofix + Family Fix   | Rwd       | EXEMPT        | PASS    | EXEMPT | PASS  | EXEMPT  | N/A    | EXEMPT |
| Joie Every Stage Fx                | Fwd       | EXEMPT        | PASS    | EXEMPT | PASS  | EXEMPT  | N/A    | EXEMPT |
| Joie Every Stage Fx                | Rwd       | EXEMPT        | PASS    | FAIL   | PASS  | PASS    | N/A    | PASS   |
| Maxi Cosi Titan Pro                | Fwd       | EXEMPT        | PASS    | EXEMPT | PASS  | EXEMPT  | N/A    | EXEMPT |
| Britax KidFix 2 R                  | Fwd       | PASS          | PASS    | FAIL   | PASS  | PASS    | N/A    | PASS   |
| Britax Baby Safe Plus ISOFIX Base* | Rwd       | EXEMPT        | PASS    | EXEMPT | PASS  | EXEMPT  | N/A    | EXEMPT |
| Joie Stages ISOFIX*                | Rwd       | EXEMPT        | PASS    | EXEMPT | PASS  | EXEMPT  | N/A    | EXEMPT |

PASS : Install without problem, FAIL : Safety critical problem, EXEMPT : Installation not allowed, N/A : Not available

\*Manufacturer's selection

|                      |                                                                                  |                                                  |                                   |                                             |                              |                       |
|----------------------|----------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------|---------------------------------------------|------------------------------|-----------------------|
| <b>SAFETY ASSIST</b> |  | <b>EFFECTIVE BRAKING &amp; AVOIDANCE</b><br>6.00 | <b>SEATBELT REMINDERS</b><br>4.50 | <b>AUTONOMOUS EMERGENCY BRAKING</b><br>3.00 | <b>ADVANCED SATs</b><br>3.00 | <b>TOTAL</b><br>16.50 |
|----------------------|----------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------|---------------------------------------------|------------------------------|-----------------------|

|              |              |
|--------------|--------------|
| <b>ITEMS</b> | <b>ASEAN</b> |
|--------------|--------------|

|                                          |
|------------------------------------------|
| <b>Effective Braking &amp; Avoidance</b> |
|------------------------------------------|

|                              |                          |
|------------------------------|--------------------------|
| Anti-lock Braking System     | Standard on all variants |
| Electronic Stability Control | Standard on all variants |

|                           |
|---------------------------|
| <b>Seatbelt Reminders</b> |
|---------------------------|

|                              |                          |
|------------------------------|--------------------------|
| Driver                       | Standard on all variants |
| Front Passengers             | Standard on all variants |
| Rear Passengers              | Standard on all variants |
| Rear Seat Occupant Detection | Not available            |

|                                     |
|-------------------------------------|
| <b>Autonomous Emergency Braking</b> |
|-------------------------------------|

|             |                       |
|-------------|-----------------------|
| City        | Available as optional |
| Inter-Urban | Available as optional |
| Pedestrian  | Available as optional |

|                                            |
|--------------------------------------------|
| <b>Advanced Safety Assist Technologies</b> |
|--------------------------------------------|

|                                  |                       |
|----------------------------------|-----------------------|
| Lane Departure Warning System    | Available as optional |
| Forward Collision Warning System | Available as optional |
| Lane Keep Assist                 | Available as optional |
| Rear Cross Traffic Alert         | Available as optional |
| Emergency Lane Keep Assist       | Available as optional |
| Traffic Sign Information         | Available as optional |
| Rear Collision Warning           | Available as optional |

|                                                |
|------------------------------------------------|
| <b>AUTONOMOUS EMERGENCY BRAKING ASSESSMENT</b> |
|------------------------------------------------|

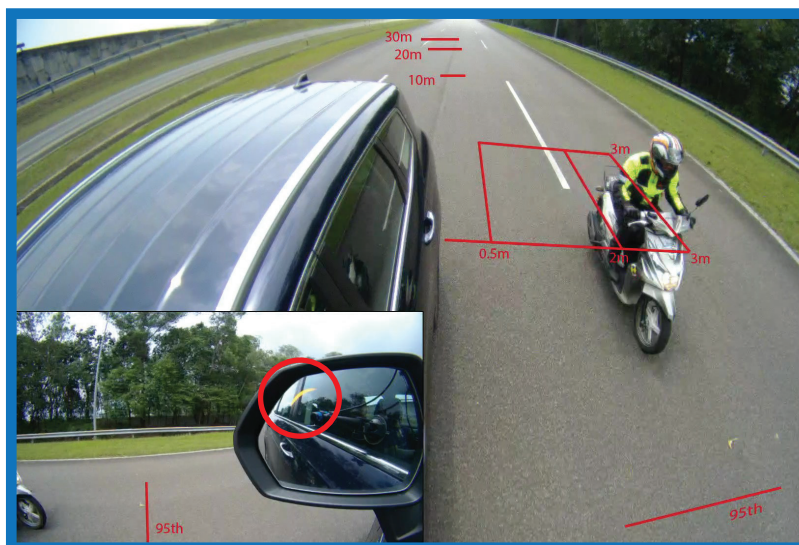


ASEAN NCAP is introducing the Autonomous Emergency Braking (AEB) system functionality assessment in its new 2021-2025 protocol. In the protocol, ASEAN NCAP assessed the functionality and effectiveness of AEB City (C2C rear stationary) and AEB Inter-Urban (C2C rear moving) systems fitted inside the vehicle in performing emergency braking at several speeds against another preceeding vehicle. The new PROTON X90 offers both the AEB City and Inter-Urban systems as optional across all its variants. In this assessment ASEAN NCAP confirms that the technologies have functioned according to the ASEAN NCAP requirements.

| MOTORCYCLIST SAFETY | BLIND SPOT DETECTION | REAR VISUALIZATION | HEADLIGHT | PEDESTRIAN | ADVANCED MST | TOTAL |
|---------------------|----------------------|--------------------|-----------|------------|--------------|-------|
|                     | 8.00                 | 0.00               | 0.00      | 2.00       | 0.00         | 10.00 |

| ITEMS                                   |         | ASEAN                    |
|-----------------------------------------|---------|--------------------------|
| Blind Spot Detection                    |         |                          |
| Nearside                                |         | Standard on all variants |
|                                         | Offside | Standard on all variants |
| Rear Visualization                      |         |                          |
| Advanced Rear Visualization             |         | Not available            |
| Headlight                               |         |                          |
| Auto High Beam                          |         | Not available            |
| Pedestrian                              |         |                          |
| Pedestrian Protection                   |         | Standard on all variants |
| Advanced Motorcyclist Safety Technology |         |                          |
| Nil                                     |         | —                        |

## BLIND SPOT DETECTION ASSESSMENT



Starting from the 2017-2020 protocol, ASEAN NCAP had introduced assessment on the functionality of Blind Spot Technology fitted inside the assessed vehicle. ASEAN NCAP continues the assessment under the new Motorcyclist Safety pillar for the 2021-2025 protocol. The newly assessed PROTON X90 is equipped with Blind Spot Detection (BSD) on the driver and passenger sides of the vehicle as standard fitment across all its variants. In this assessment, ASEAN NCAP confirms that the technology has functioned according to the ASEAN NCAP requirements on both sides of the vehicle.





## OVERALL RATING

The new PROTON X90 is the tenth model under the PROTON's brand that underwent ASEAN NCAP assessment. The 7-seater SUV is equipped with a standard fitment of 6 airbags, Electronic Stability Control (ESC), Anti-lock Braking System (ABS), Seatbelt Reminder System (SBR) for frontal and rear seats occupant, Blind Spot Detection (BSD) for both the driver and passenger sides, Child Presence Detection (CPD) and Pedestrian Protection technology in all its variants. In addition, the X90 offers advanced safety assist technologies as optional fitment across its variants that consist of Autonomous Emergency Braking (AEB) City, AEB Inter-Urban, AEB Pedestrian, Lane Departure Warning (LDW), Forward Collision Warning (FCW), Lane Keep Assist (LKA), Rear Cross Traffic Alert (RCTA), Emergency Lane Keep Assist (ELKA), Traffic Sign Information (TSI) and Rear Collision Warning (RSW). The PROTON X90 has performed exceptionally well in the assessment with an overall score of 83.75 points. The score has made the model to be eligible to be awarded with 5-Star ASEAN NCAP rating.

|  | AOP            |       |       | COP               |       |       | SAFETY ASSIST   |       |       | MS              |       |       | 2021 - 2025<br>ASEAN NCAP<br>RATING |
|------------------------------------------------------------------------------------|----------------|-------|-------|-------------------|-------|-------|-----------------|-------|-------|-----------------|-------|-------|-------------------------------------|
|                                                                                    | Item           | Point | Max   | Item              | Point | Max   | Item            | Point | Max   | Item            | Point | Max   |                                     |
|                                                                                    | ODB            | 14.20 | 16.00 | FRONTAL           | 16.00 | 16.00 | EBA             | 6.00  | 6.00  | BSD/BSV         | 8.00  | 8.00  | <div>5</div>                        |
|                                                                                    | SIDE           | 8.00  | 8.00  | SIDE              | 8.00  | 8.00  | SBR             | 4.50  | 6.00  | ARV             | -     | 4.00  |                                     |
|                                                                                    | HPT Evaluation | 8.00  | 8.00  | Installation      | 11.37 | 12.00 | AEB City        | 1.25  | 2.50  | AHB             | -     | 2.00  |                                     |
|                                                                                    |                |       |       | Vehicle Based CPD | 9.00  | 13.00 | AEB Inter-Urban | 1.75  | 3.50  | Ped. Protection | 2.00  | 2.00  |                                     |
|                                                                                    |                |       |       |                   | 1.00  | 2.00  | Advanced SATs   | 3.00  | 3.00  | Advanced MST*   | -     | 2.00  |                                     |
| Score                                                                              |                | 30.20 | 32.00 |                   | 45.37 | 51.00 |                 | 16.50 | 21.00 |                 | 10.00 | 16.00 | OVERALL SCORE                       |
| Normalized Score                                                                   |                | 0.94  |       |                   | 0.89  |       |                 | 0.79  |       |                 | 0.625 |       |                                     |
| Weighting                                                                          |                | 40%   |       |                   | 20%   |       |                 | 20%   |       |                 | 20%   |       |                                     |
| Weighted Score                                                                     |                | 37.75 |       |                   | 17.79 |       |                 | 15.71 |       |                 | 12.50 |       |                                     |
| Maximum Star Rating                                                                |                | 5     |       |                   | 5     |       |                 | 5     |       |                 | 5     |       | 5                                   |

\*Bonus Point