

Skills Canada Alberta Mobile Robotics

Competitor Questions and Responses Document

February

Feb.Q1:

Q: Are motors that go above 24V in their internal circuitry legal? Ex: KV Model airplane motors.

R: The circuit branch must meet the requirements. The internal components are not our concern.

The relevant sections in the scope are worded as such:

Section 9.5.7. The maximum continuous power rating allowed in any circuit branch is 256 Watts, which will be limited by voltage and fuse selection. Power will be calculated using the formula $\text{Power} = \text{Voltage} \times \text{Current}$

Section 9.5.7.1. The total voltage in any circuit cannot exceed 24 Volts.

This comes down to the voltage supplied and current, either input or output. If it is run, in all the branches, at or below the 256W limit, then there are no issues with it. If it goes above that, then we have an issue.

Feb.Q2:

Q: Can drivers lean over the fence to get a better view of the snowballs against the back wall?

R: Drivers are permitted to lean over the back wall of the court for viewing purposes.

They are not permitted to lean on the back wall, nor are they permitted to reach over the back wall or into the court.

Feb.Q3:

Q: The file (Contest Description) says, " Autonomous Kits (SCC will provide to the Member Organizations by March 15, 2024", but it also says that the competitor needs to provide a robot and accessories, and I was just confused on if you provide the robot, or if we do, and if so what brand of robot is needed.

R: The teams are responsible for providing their own robots for the Main Game Challenge each year. This year, that is the Snowball fight. These robots are built by the teams and can be composed of any materials, provided they are within the requirements described in the Project Document. There is no "brand" required for this, they can be anything!



There is a second part of the competition at Provincials/Nationals: The Build On-Site Autonomous Challenge.

For this part of the competition, competitors will need to provide their own autonomous kit to participate at the provincial competition. For the national competition, the provincial winning team will be provided a kit to be used at the national competition.

Should you have any other questions, please feel free to contact your Provincial or Territorial member of the National Technical Committee.

Feb.Q4:

Q: What happens if balls bounce off of a driver/judge and then back into the court?

R: This question has 2 considerations: First, how did the ball come into contact with the exterior individual. Second: Did the action affect the result of the game?

First: If the snowball was intentionally removed from the court it is considered a violation. This means if a team intentionally shoots a ball over the back wall (or side wall) then they are in violation of the rules and will be treated as described in Section 3.3.3.2.1.

If the snowball was not intentionally removed from the court, such as from an unintentional bounce, then there is no existing violation of the rule, and we move into the second consideration.

Second: If the ball is unintentionally removed from the court, hits an individual unintentionally, and bounces back into the court, the judges will assess the result of the match. If the judges determine the result of the match was affected, the match may be replayed. If the judges determine the result of the match was not affected, the match will not be replayed.

If the judges determine the unintentionally removed ball is intentionally returned to the court by an outside party, that will be deemed a violation and treated as such. An example of this would be a competitor purposefully and intentionally hitting the snowball back into the court.