

EN

COMAU

Racer-5

COBOT



Racer5
COBOT

Comau HUMANufacturing

Collaboration is the new automation

Industry 4.0. The factory is changing to become a network of flexible, modular and scalable automation systems that are capable of operating autonomously or in a secure synergistic way with operators, always connected and under control.

As a world leader in advanced automation solutions, Comau has always improved manufacturing scenarios through up-to-date and human-centric technologies, capable of enhancing the social and environmental sustainability of the workplaces.

Automation is no longer confined within barriers, but it collaborates with human beings: this is what we like to call Comau HUMANufacturing, the new concept of human-machine collaboration.



Discover Racer-5-0.80 COBOT

Features

- 5 Kg payload
- 0.809 m reach
- 0.03 mm repeatability
- Cobot SAFE version controller
- Up to 6 m/s cartesian speed in non-collaborative mode
- Safe Collision Detection function - PL d CAT. 3 certified by TÜV Süd

Benefits

- High repeatability and accuracy
- Racer-5 Industrial robot speed when no human operator near by for an increased productivity
- Electrical and air connections near the wrist avoiding external harness
- Immediate awareness of cobot status due to LED stripe
- Efficiency and flexibility of the cycle
- Reduction of spaces for automation
- Simplified process inspection and quality control

Racer-5-0.80 COBOT supports humans as they perform manual operations, by optimizing the work process.



LED strip for COBOT status

GREEN: collaborative mode
Blinking Green: manual guidance mode or programming mode.

BLUE: manual restart after collision
Blinking BLUE: automatic restart after collision.

RED: System alarm

NO LED: full speed mode



Full speed mode is dynamically managed, when collaboration is not required

FULL - COLLABORATIVE SPEED SWITCH (Controller option + Safety device installed)

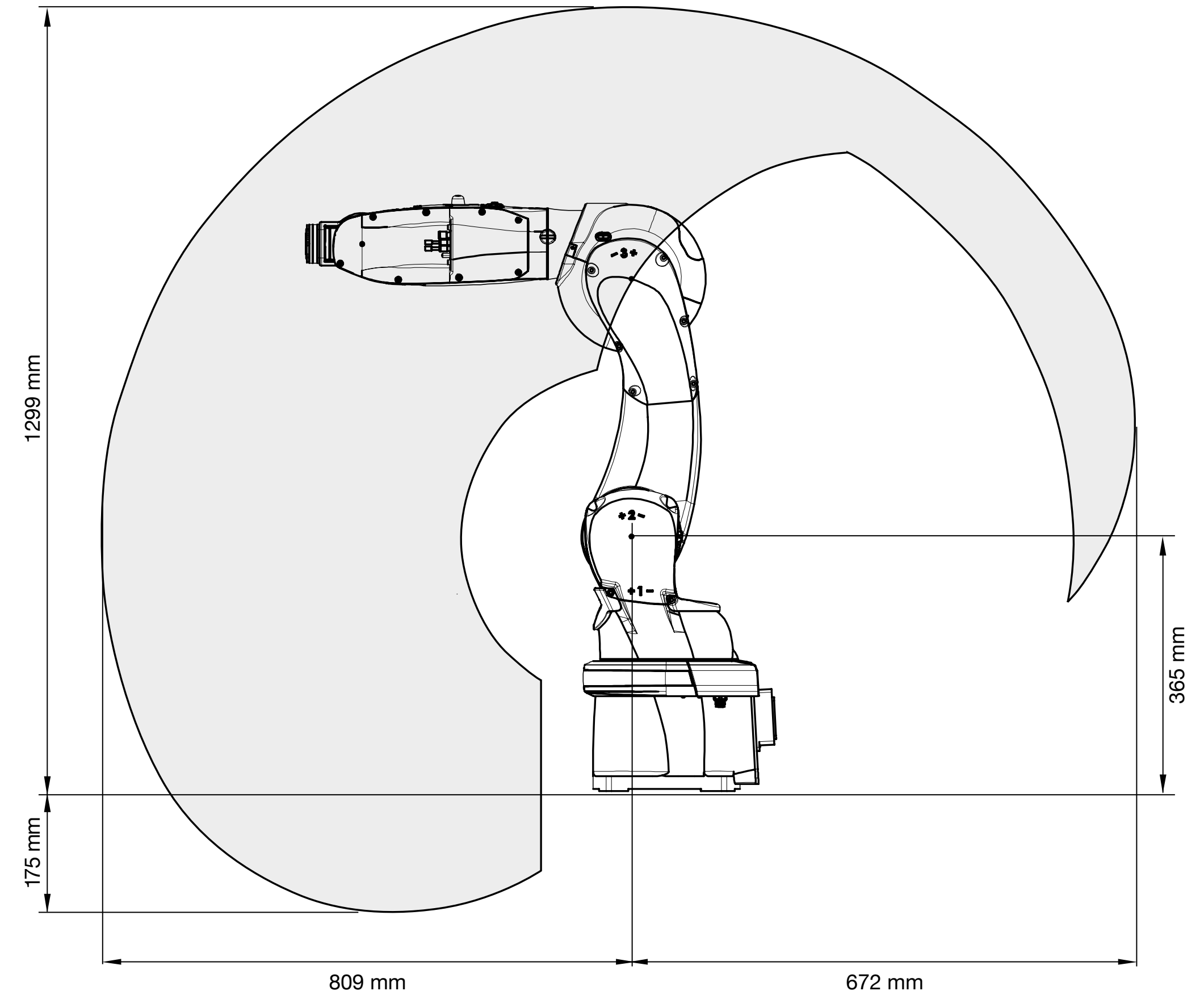
- Collaborative speed: up to 500 mm/s (Compliant to ISO/TS 15066 - Tested by Tuv Rheinland)
- Full Speed: like a standard Racer-5 robot



Technical features

VERSION		Racer-5-0.80 COBOT
Structure / No. of axes		Anthropomorphic / 6 axes
Maximum wrist load		5 kg
Nominal wrist load		1 kg
Axis 4 torque		8,83 Nm
Axis 5 torque		8,83 Nm
Axis 6 torque		4,91 Nm
Admissible inertia on axis 4*		0,42 kg x m ²
Admissible inertia on axis 5*		0,42 kg x m ²
Admissible inertia on axis 6*		0,18 kg x m ²
Stroke /(Max Speed)	Axis 1	+/- 170° (360 °/s) **
	Axis 2	-64° / +114° (300 °/s) **
	Axis 3	-150° / +60° (330 °/s) **
	Axis 4	+/- 200° (500 °/s) **
	Axis 5	- 105°/ +100° (500 °/s) **
	Axis 6	+/- 2700° (800 °/s) **
Max horizontal reach		809 mm
Repeatability		+/- 0,03 mm
Robot weight		34 kg
Features of the tool coupling Robot wrist		ISO 9409 - 1 - A 25
Motors		AC Brushless
Position measurement system		Encoder
Protection degree		IP54
Mounting position		Floor
Operating environment temperature		5°C / +40°C
Storage temperature		-10°C / 55°C
Relative humidity		from 5% to 95% without condensation
Maximum temperature gradient		1,5 °C/min

* Not allowed with maximum load
 ** Maximum speed
 *** Base vertical cable output available (option)





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