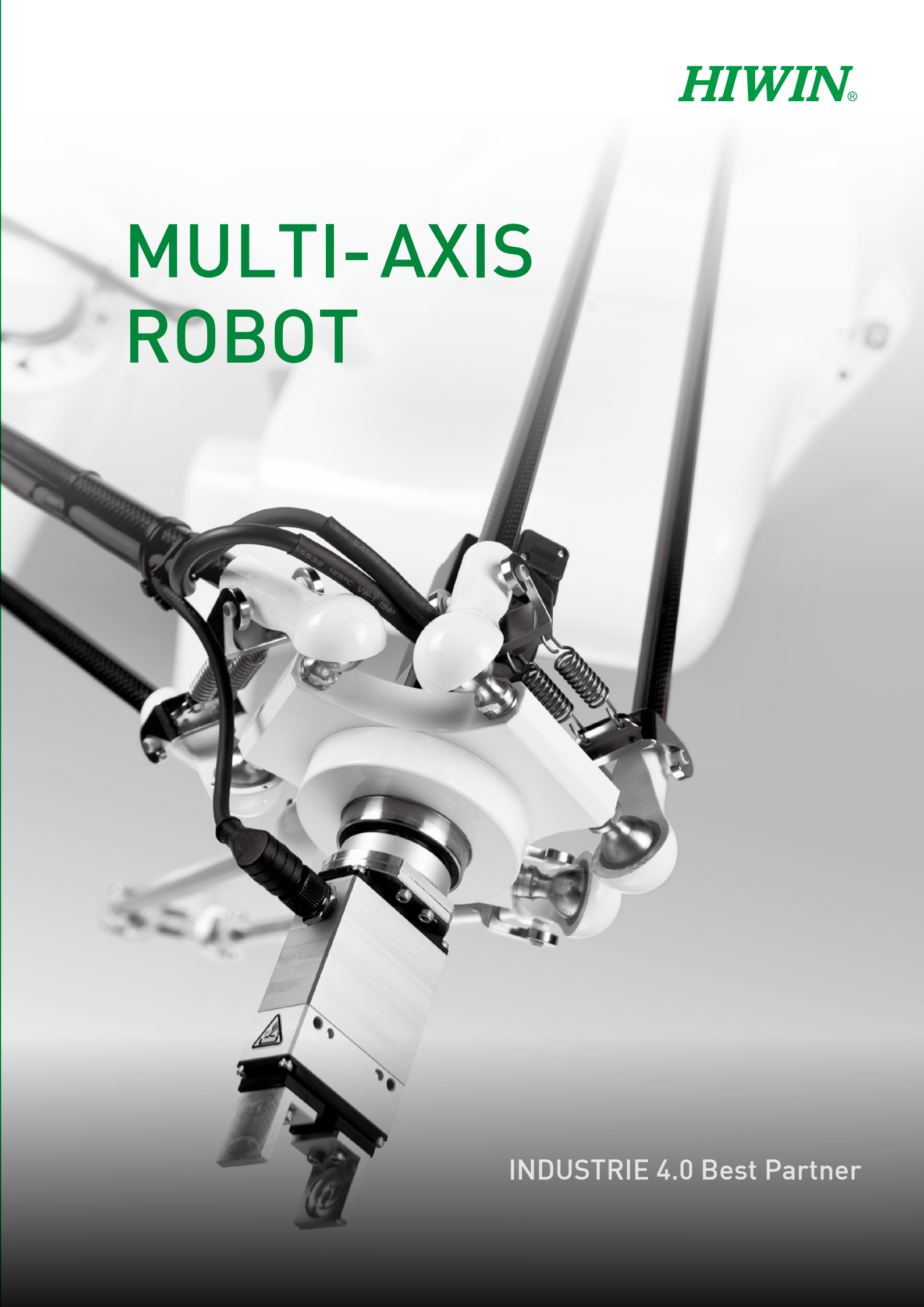


HIWIN®

MULTI-AXIS ROBOT



INDUSTRIE 4.0 Best Partner

Articulated Robot

RA 605

RT 605



RT605

RA605

Features

- Possessing a high degree of freedom and flexibility, this light weight, articulated robot can automate highly complex manual tasks in unfriendly and unsafe work environments.

Application

- Loading/unloading, packaging, aligning, assembly, deburring, polishing, dispensing, stacking and inspection.

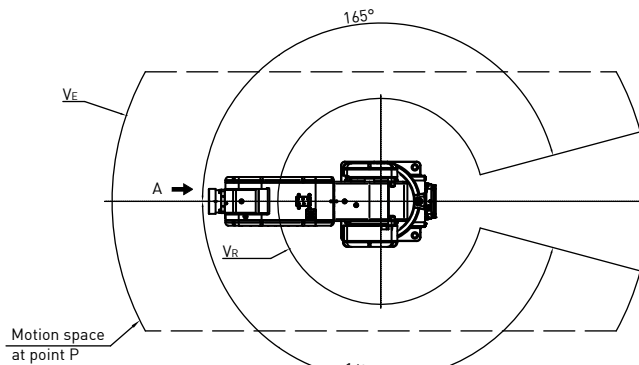
| Model | RA605-GB | RT605-GB | |
|------------------------|-----------|------------|--------|
| Degrees of freedom | 6 | | |
| Rated payload [kg] | 5 | | |
| Max. reach radius [mm] | 710 | 710 | 909 |
| Working range [°] | J1 | ± 165 | |
| | J2 | +85 ~ -125 | |
| | J3 | +185 ~ -55 | |
| | J4 | ± 190 | |
| | J5 | ± 115 | |
| | J6 | ± 360 | |
| Repeatability [mm] | ± 0.02 | ± 0.03 | ± 0.04 |
| Cycle time [s]*Note 1 | 0.5 | | |
| Weight [kg] | 40 | 40 | 45 |
| Protection rating | IP65 | IP32 | |
| Controller | RCA605-GB | RCT605-GB | |

* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

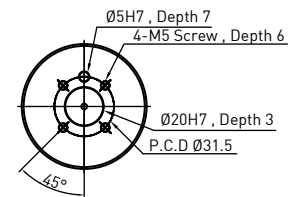
Dimensions

| Model / Dimensions | V _A | V _B | V _C | V _D | V _E | V _F | V _G | V _H | V _I | V _J | V _K | V _L | V _M | V _N | V _O | V _P | V _Q | V _R | V _S |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| RA605-710-GB | 710 | 649 | 281 | 434 | 309 | 269 | R340 | 160 | 1055 | R680 | 211 | R429.3 | 101.7° | 67 | 138.3° | R242 | 338 | R272 | 812 |
| RT605-710-GB | 710 | 649 | 281 | 434 | 309 | 269 | R340 | 160 | 1055 | R680 | 211 | R429.3 | 101.7° | 67 | 138.3° | R242 | 338 | R272 | 812 |
| RT605-909-GB | 909.8 | 848.1 | 363.3 | 451.7 | 408.3 | 368.5 | R439.8 | 317.2 | 1254.8 | R879.8 | 292.9 | R564.3 | 100.2° | 24.7 | 139.8° | R302.5 | 438 | R332.5 | 911.75 |

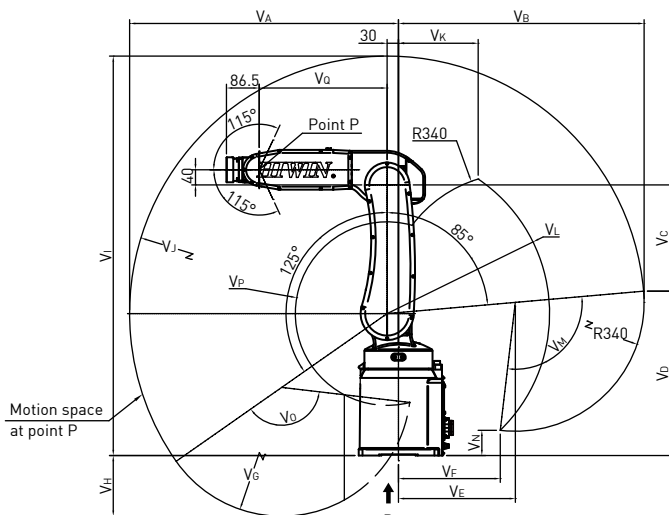
Unit:mm



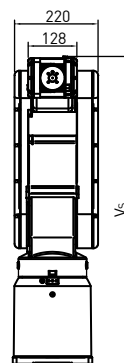
Top View



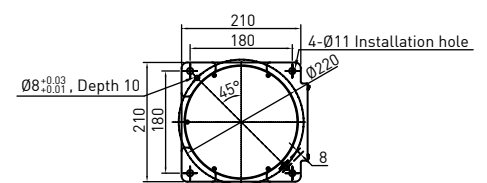
VIEW A
Mechanical Interface Detail



Side View



Front View



VIEW B
Installation Dimension Detail

Articulated Robot

RA 610

RT 610



RT610-1476-GB

RA610-1476-GB

Features

- Possessing a high degree of freedom and high load capacity with multiple reach radius and end effector options for integration into a variety of automation applications.

Application

- Loading/unloading, palletizing, assembly, polishing, dispensing, packaging, aligning and inspection.

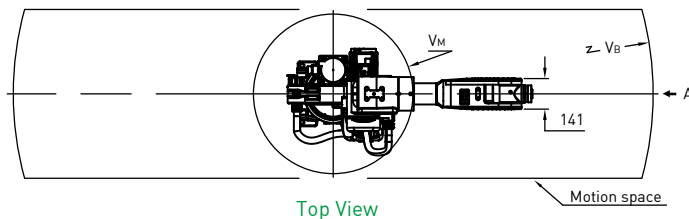
| Model | RA610-GB | | | | RT610-GB | | | |
|------------------------|------------------|------------|-------|------|-----------|------|-------|------|
| Degrees of freedom | 6 | | | | | | | |
| Rated payload [kg] | 12 | 10 | 10 | 7 | 12 | 10 | 10 | 7 |
| Max. reach radius [mm] | 1355 | 1476 | 1672 | 1869 | 1355 | 1476 | 1672 | 1869 |
| Working range [°] | J1 | ±170 | | | | | | |
| | J2 | +95 ~ -150 | | | | | | |
| | J3 | +185 ~ -85 | | | | | | |
| | J4 | ±190 | | | | | | |
| | J5 | ±135 | | | | | | |
| | J6 | ±360 | | | | | | |
| Repeatability [mm] | ±0.05 | | ±0.06 | | ±0.05 | | ±0.06 | |
| Cycle time [s]*Note 1 | 1 | | | | | | | |
| Weight [kg] | 143 | 147 | 150 | 152 | 143 | 147 | 150 | 152 |
| Protection rating | IP54(Wrist:IP65) | | | | IP32 | | | |
| Controller | RCA610-GB | | | | RCT610-GB | | | |

* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

Dimensions

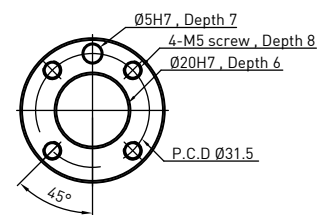
| Model / Dimensions | V _A | V _B | V _C | V _D | V _E | V _F | V _G | V _H | V _I | V _J | V _K | V _L | V _M |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| RA610-1355-GB RT610-1355-GB | 1075 | 1355 | 1663 | 680 | R575 | 182 | 552 | R1215 | R232.5 | R688 | 159° | 111.2° | R372.5 |
| RA610-1476-GB RT610-1476-GB | 1196 | 1476 | 1785 | 802 | R697 | 304 | 678 | R1336 | R228 | R904 | 161° | 95° | R368 |
| RA610-1672-GB RT610-1672-GB | 1392 | 1672 | 1981 | 998 | R892 | 500 | 878 | R1532 | R323 | R951 | 164.7° | 105.3° | R463 |
| RA610-1869-GB RT610-1869-GB | 1589 | 1869 | 2178 | 1196 | R1089 | 697 | 1078 | R1729 | R490 | R1129 | 166.6° | 103.4° | R630 |

Unit:mm

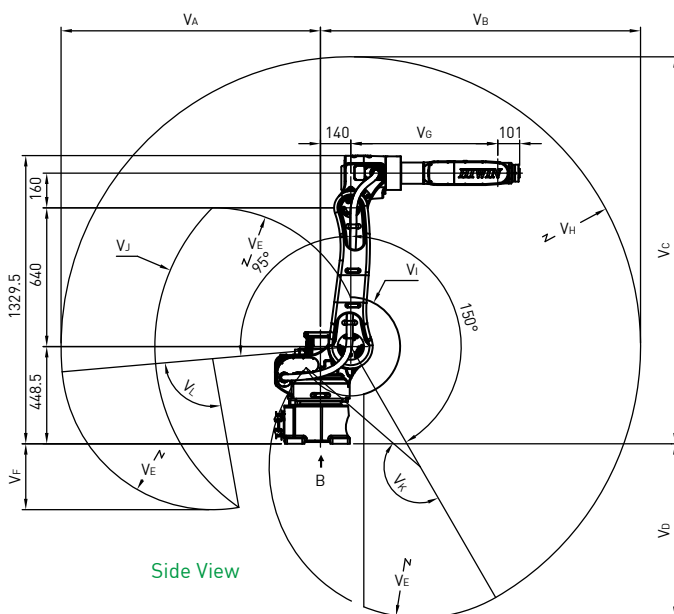


Top View

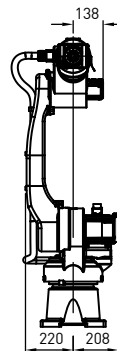
Motion space



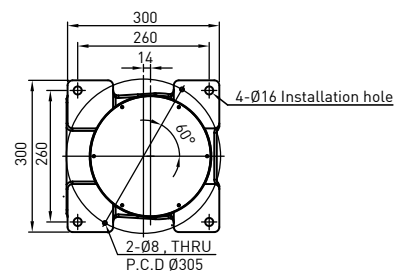
VIEW A
Mechanical Interface Detail



Side View



Front View



VIEW B
Installation Dimension Detail

Articulated Robot

RA 620



RA620-1739

Features

- Possessing a high degree of freedom and high load capacity with multiple reach radius and end effector options for integration into a variety of automation applications.

Application

- Loading/unloading, palletizing, assembly and polishing.

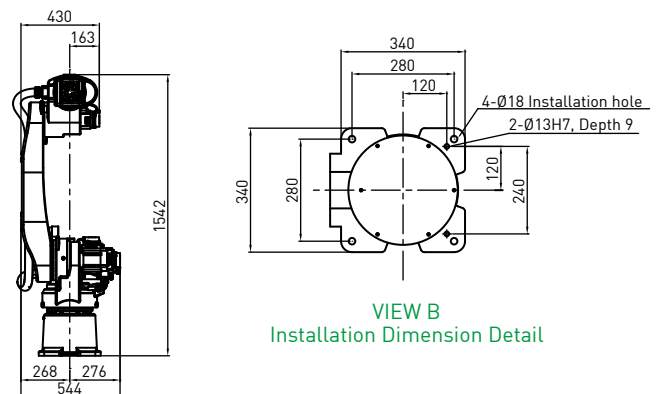
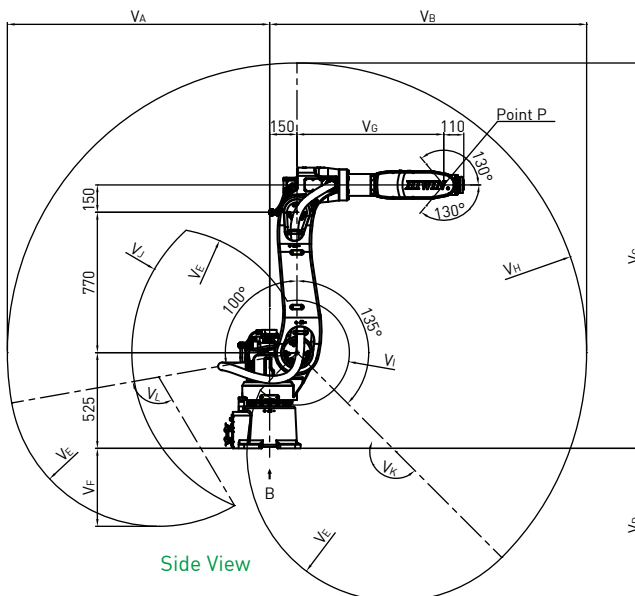
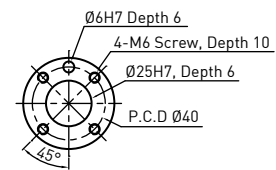
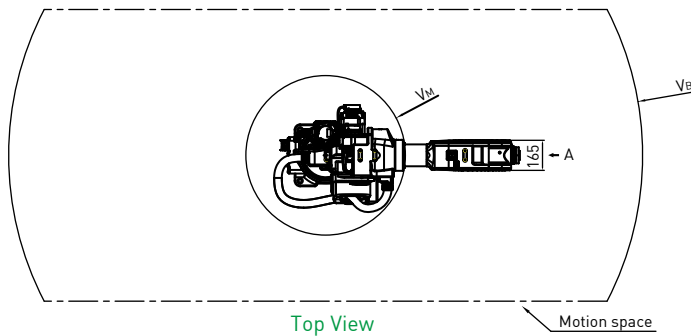
| | | |
|------------------------|------------------|-------------|
| Degrees of freedom | 6 | |
| Rated payload [kg] | 30 | 20 |
| Max. reach radius [mm] | 1621 | 1739 |
| Working range [°] | J1 | ± 180 |
| | J2 | +100 ~ -135 |
| | J3 | +190 ~ -80 |
| | J4 | ± 200 |
| | J5 | ± 130 |
| | J6 | ± 360 |
| Repeatability [mm] | ± 0.06 | |
| Cycle time [s]*Note 1 | 0.9 | |
| Weight [kg] | 226 | 230 |
| Protection rating | IP54(Wrist:IP65) | |
| Controller | RCA620 | |

* Note 1: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

Dimensions

| Model / Dimensions | V _A | V _B | V _C | V _D | V _E | V _F | V _G | V _H | V _I | V _J | V _K | V _L | V _M |
|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| RA620-1621 | 1321 | 1621 | 1996 | 721 | R701 | 310 | 685 | R1471 | R293 | R821 | 158° | 112° | R443 |
| RA620-1739 | 1439 | 1739 | 2114 | 838 | R819 | 428 | 805 | R1589 | R288 | R906 | 159° | 111° | R438 |

Unit:mm



SCARA Robot RS Series



RS406

RS403

Features

- Possessing high precision and flexibility. A rotary axis can be added to the joint-end to increase the degree of freedom. Different end-effectors can be incorporated to achieve high precision assembly or rapid planar machining.

Application

- Loading/unloading, packaging, arranging, assembly, dispensing, stacking and inspection.

| Model | | RS403 | RS406 |
|--------------------------|-----------|----------|------------|
| Degrees of freedom | | 4 | |
| Rated/Max. payload [kg] | | 1/3 | 2/6 |
| Max. working radius [mm] | | 400 | 600 |
| Working range | J1[°] | ± 128 | ± 130 |
| | J2[°] | ± 130 | ± 150 |
| | J3[°] | ± 360 | |
| | J4[mm] | 150 | 200*Note 1 |
| Repeatability | J1-J2[mm] | ± 0.01 | ± 0.02 |
| | J3[°] | ± 0.01 | ± 0.01 |
| | J4[mm] | ± 0.01 | ± 0.01 |
| Cycle time [s]*Note 2 | | 0.42 | 0.45 |
| Weight [kg] | | 16 | 22 |
| Protection rating | | IP20 | |
| Controller | | HRC-S410 | |

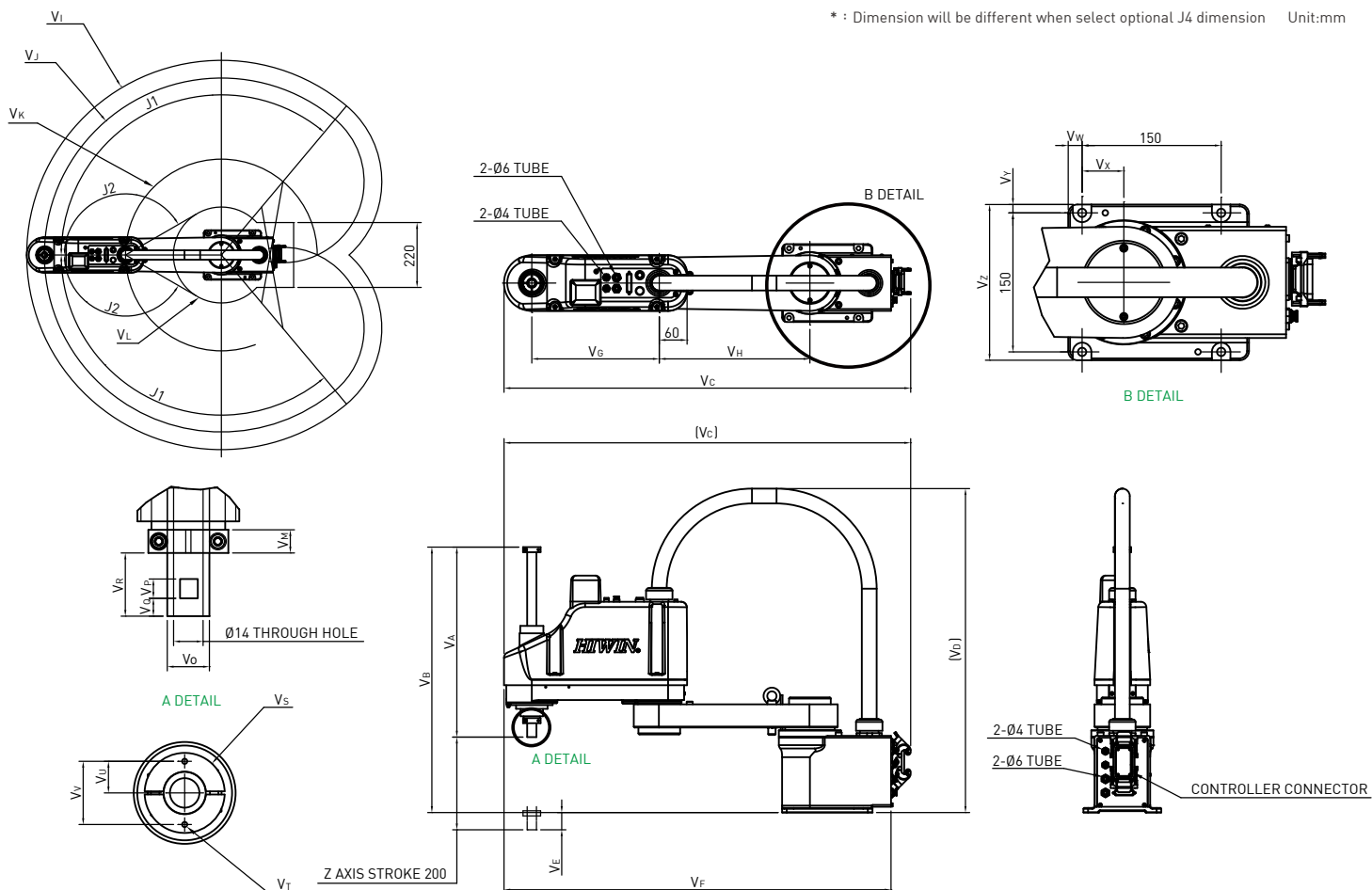
* Note 1: 300mm and 400mm length of J4-axis is optional.

Note 2: Based on a back-and-forth movement over a vertical distance of 25mm and a horizontal distance of 300mm.

Dimensions

| Model / Dimensions | V _A * | V _B * | V _C | V _D | V _E * | V _F | V _G | V _H | V _I | V _J | V _K | V _L | V _M | V _N | V _O | V _P | V _Q | V _R | V _S | V _T | V _U | V _V | V _W | V _X | V _Y | V _Z |
|--------------------|------------------|------------------|----------------|----------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| RS403 | 330 | 494 | 649.1 | 677.3 | -15.2 | 606 | 175 | 225 | R457 | R400 | R225 | R176.5 | 10 | Ø11 | Ø16 | 10 | 10 | 30 | R17.5 | 2-M4X0.7P | 12 | 24 | 45 | 30 | 11 | 172 |
| RS406 | 410 | 572.8 | 878.4 | 720.8 | 37.2 | 835 | 275 | 325 | R660 | R600 | R325 | R162.6 | 11 | Ø14 | Ø20 | - | - | 30 | R19 | 2-M3X0.5P | 15 | 30 | 15 | 45 | 9 | 168 |

* : Dimension will be different when select optional J4 dimension Unit:mm



Controller Series

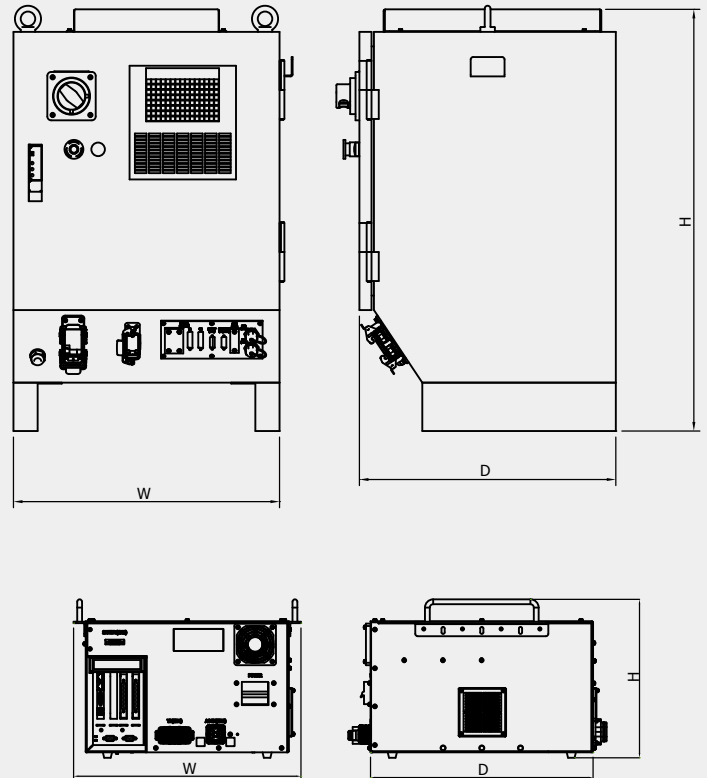


RCA620



RCA605-GB

Dimension



Specifications

| Model | | RCA605-GB, RCT605-GB | RCA610-GB, RCT610-GB | RCA620 | RCD403-GB | HRC-S410 |
|-------------------------------|---------------------------|---------------------------|---------------------------|-------------------------------|-------------------------------|---------------------------|
| Control number of Axes | | 6 | 6 | 6 | 4 | 4 |
| Weight [kg] | | 34 | 43 | 80 | 34 | 35 |
| Power | Input voltage / frequency | 1Ø200~240V 50/60Hz | 1Ø200~240V 50/60Hz | 3Ø200~240V *Note 1 50/60Hz | 3Ø200~240V *Note 2 50/60Hz | 1Ø220~240V 50/60Hz |
| | Max. current[A] | 8A | 18A | 22A | 4.5A | 10A |
| ◆ Input/Output *Note 3 | Function I/O | 8in/8out | 8in/8out | 8in/8out | 8in/8out | 11in/11out |
| | Digital I/O | 24in/24out | 24in/24out | 16in/16out | 24in/24out | - |
| ◆ Communication Interface | RS232 | ✓ | ✓ | - | ✓ | - |
| | Ethernet | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Modbus | - | - | - | - | ✓ |
| | USB | ✓ | ✓ | ✓ | ✓ | ✓ |
| ★ Encoder Capture | | - | - | - | ◆ 4ch | - |
| Ambient temperature [°C] | | 0~45 | 0~45 | 0~40 | 0~45 | 0~40 |
| Ambient humidity [%] | | 20~75 (Non-condensing) | 20~75 (Non-condensing) | 45~85 (Non-condensing) | 20~75 (Non-condensing) | 20~80 (Non-condensing) |
| Protection rating | | IP20 | IP20 | IP54 | IP20 | IP20 |
| Dimensions [D x W x H]*Note 4 | | 460 x 420 x 271 | 554 x 420 x 271 | 530 x 550 x 872 | 460 x 420 x 271 | 459 x 460 x 284 |

◆ Standard

★ Optional

Unit:mm

* Note 1: If the regional power source is 3Ø 380V, an additional transformer(3Ø 380V to 220V, 5KVA) should be applied.

Note 2: If the regional power source is 3Ø 380V, an additional transformer(3Ø 380V to 220V, 2KVA) should be applied.

Note 3: I/O can be expanded, but RCD403-GB is not included.

Note 4: Dimensions needed for cable installation is not included in the drawing.

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