

FANUC

Large Size Robot

R-2000

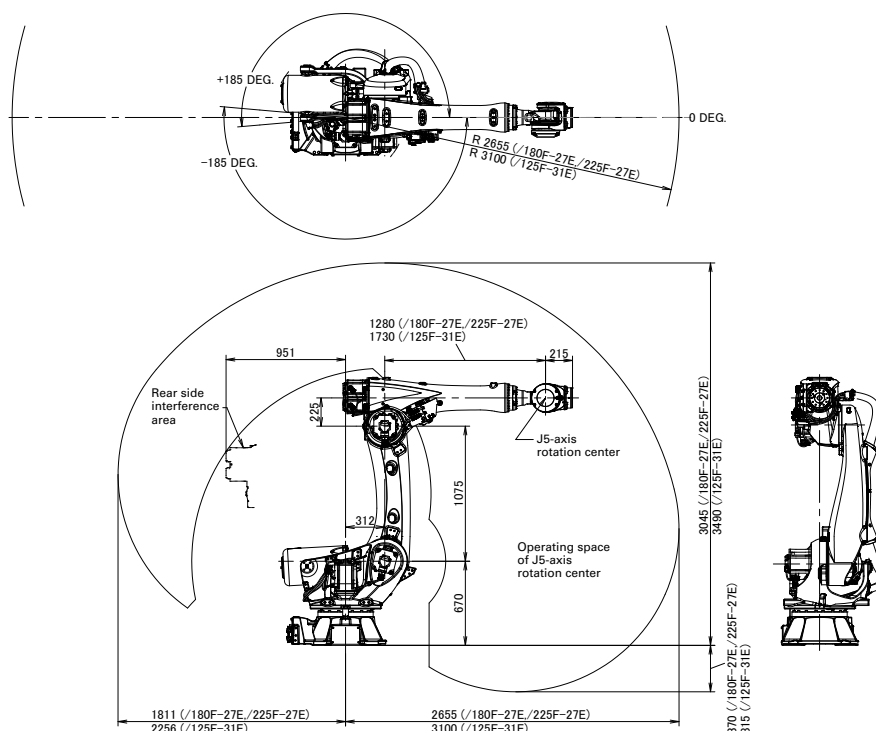
Powering Productivity. Advancing Sustainability.

More Speed. More Payload. More Potential.

Proven Reliability. Maximum Uptime. Minimal Maintenance.



Operating space R-2000/180F-27E,/225F-27E,/125F-31E



Specifications

Model		R-2000/180F-27E	R-2000/225F-27E	R-2000/125F-31E
Type		Articulated Type		
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)		
Reach		2655 mm		3100 mm
Installation		Floor		
Motion range (Maximum speed) Note 1)	J1 axis rotation	370° (130°/s)	370° (120°/s)	370° (130°/s)
	J2 axis rotation	136° (120°/s)	136° (110°/s)	136° (120°/s)
	J3 axis rotation	357° (130°/s)	357° (115°/s)	346° (140°/s)
	J4 axis wrist rotation	720° (180°/s)	720° (145°/s)	720° (220°/s)
	J5 axis wrist swing	250° (180°/s)	250° (145°/s)	250° (220°/s)
	J6 axis wrist rotation	720° (290°/s)	720° (240°/s)	720° (300°/s)
Max. load capacity at wrist		180 kg	225 kg / 240kg (Note 4)	125 kg
Max. load capacity at J2 base		550 kg	550 kg	550 kg
Max. load capacity on J3 arm 1		25 kg (A)	25 kg (A)	25 kg (A)
Max. load capacity on J3 arm 2		50 kg (B)	50 kg (B)	50 kg (B)
		(A) + (B) ≤ 50kg		(A) + (B) ≤ 50kg
Allowable load moment at wrist	J4 axis	1160 N·m	1590 N·m / 1400 N·m (Note 4)	760 N·m
	J5 axis	1160 N·m	1590 N·m / 1400 N·m (Note 4)	760 N·m
	J6 axis	570 N·m	800 N·m	415 N·m
Allowable load inertia at wrist	J4 axis	170 kg·m ²	250 kg·m ²	100 kg·m ²
	J5 axis	170 kg·m ²	250 kg·m ²	100 kg·m ²
	J6 axis	140 kg·m ²	200 kg·m ²	75 kg·m ²
Drive method		Electric servo drive by servo motor		
Repeatability Note 2)		± 0.05 mm		
Mass Note 3)		1105 kg	1105 kg	1125 kg
Installation environment		Ambient temperature : 0 to 45°C Ambient humidity : Normally 75%RH or less (No condensation allowed) Short term (Within one month) 95%RH or less (No condensation allowed) Vibration acceleration : 4.9m/s ² (0.5G) or less		

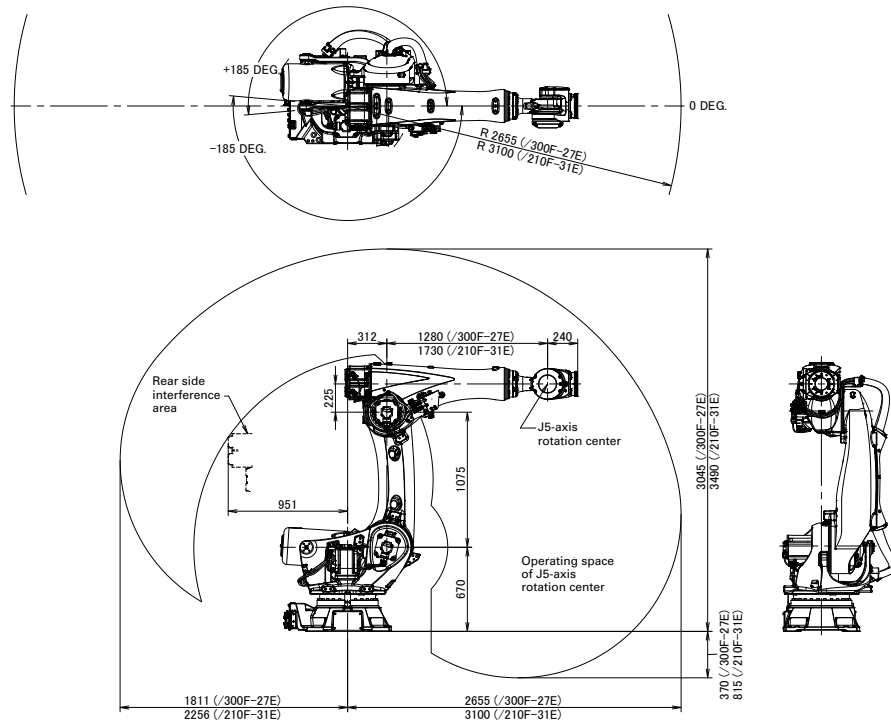
Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) Compliant with ISO 9283.

Note 3) Without controller.

Note 4) When the 240 kg option is specified.

Operating space R-2000/300F-27E,/210F-31E



Specifications

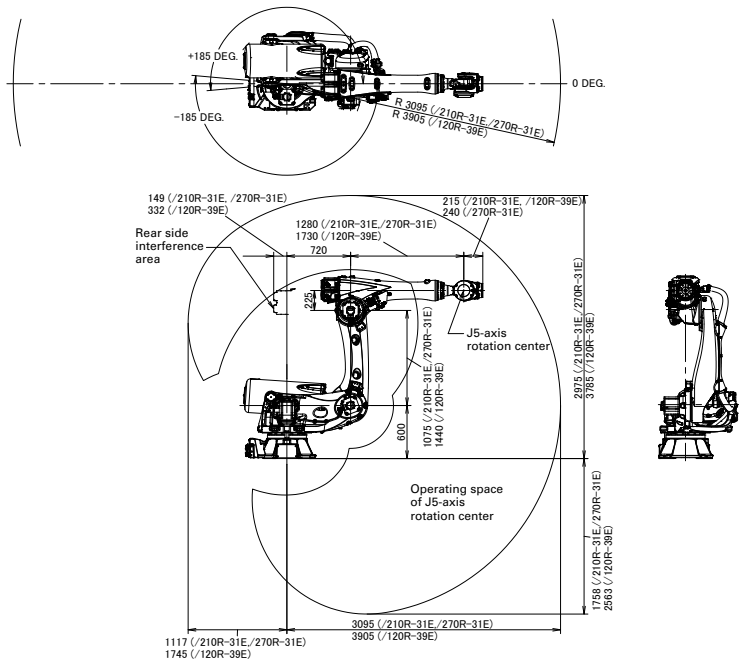
Model		R-2000/300F-27E		R-2000/210F-31E	
Type		Articulated Type			
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)			
Reach		2655 mm		3100 mm	
Installation		Floor			
Motion range (Maximum speed) Note 1)	J1 axis rotation	370° (110°/s)		370° (110°/s)	
	J2 axis rotation	136° (95°/s)		136° (95°/s)	
	J3 axis rotation	362° (90°/s)		351° (90°/s)	
	J4 axis wrist rotation	720° (130°/s)		720° (130°/s)	
	J5 axis wrist swing	250° (130°/s)		250° (130°/s)	
	J6 axis wrist rotation	720° (210°/s)		720° (210°/s)	
Max. load capacity at wrist		300 kg		210 kg	
Max. load capacity at J2 base		550 kg		550 kg	
Max. load capacity on J3 arm 1		40 kg (A)	(A)×5/4 + (B) ≤ 50kg	20 kg (A)	(A)×5/2 + (B) ≤ 50kg
Max. load capacity on J3 arm 2		50 kg (B)		50 kg (B)	
Allowable load moment at wrist	J4 axis	1770 N·m		1700 N·m	
	J5 axis	1770 N·m		1700 N·m	
	J6 axis	1020 N·m		900 N·m	
Allowable load inertia at wrist	J4 axis	320 kg·m²		320 kg·m²	
	J5 axis	320 kg·m²		320 kg·m²	
	J6 axis	230 kg·m²		230 kg·m²	
Drive method		Electric servo drive by servo motor			
Repeatability Note 2)		± 0.05 mm			
Mass Note 3)		1365 kg		1390 kg	
Installation environment		Ambient temperature : 0 to 45℃			
		Ambient humidity : Normally 75%RH or less (No condensation allowed) Short term (Within one month) 95%RH or less (No condensation allowed)			
		Vibration acceleration : 4.9m/s² (0.5G) or less			

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

Note 2) Compliant with ISO 9283.

Note 3) Without controller.

Operating space R-2000/210R-31E,/270R-31E,/120R-39E



Specifications

Model		R-2000/210R-31E		R-2000/270R-31E		R-2000/120R-39E	
Type		Articulated Type					
Controlled axes		6 axes (J1, J2, J3, J4, J5, J6)					
Reach		3095 mm				3905 mm	
Installation		Rack mount					
Motion range (Maximum speed) Note 1)	J1 axis rotation	370° (110°/s)		370° (110°/s)		370° (110°/s)	
	J2 axis rotation	200° (105°/s)		200° (90°/s)		200° (101°/s)	
	J3 axis rotation	395° (115°/s)		395° (90°/s)		405° (130°/s)	
	J4 axis wrist rotation	720° (145°/s)		720° (130°/s)		720° (190°/s)	
	J5 axis wrist swing	250° (145°/s)		250° (130°/s)		250° (180°/s)	
	J6 axis wrist rotation	720° (240°/s)		720° (210°/s)		720° (290°/s)	
Max. load capacity at wrist		210 kg		270 kg		120 kg	
Max. load capacity at J2 base		550 kg		550 kg		550 kg	
Max. load capacity on J3 arm 1		32 kg (A)	(A)×5/4 + (B) ≤ 40kg	32 kg (A)	(A)×5/4 + (B) ≤ 40kg	45 kg (A)	(A)×10/9 + (B) ≤ 50kg
Max. load capacity on J3 arm 2		40 kg (B)		40 kg (B)		50 kg (B)	
Allowable load moment at wrist	J4 axis	1590 N·m		1770 N·m		1000 N·m	
	J5 axis	1590 N·m		1770 N·m		1000 N·m	
	J6 axis	800 N·m		1020 N·m		570 N·m	
Allowable load inertia at wrist	J4 axis	250 kg·m ²		320 kg·m ²		132 kg·m ²	
	J5 axis	250 kg·m ²		320 kg·m ²		132 kg·m ²	
	J6 axis	200 kg·m ²		230 kg·m ²		110 kg·m ²	
Drive method		Electric servo drive by servo motor					
Repeatability Note 2)		± 0.05 mm					
Mass Note 3)		1335 kg		1570 kg		1540 kg	
Installation environment		Ambient temperature : 0 to 45℃ Ambient humidity : Normally 75%RH or less (No condensation allowed) Short term (Within one month) 95%RH or less (No condensation allowed) Vibration acceleration : 4.9m/s ² (0.5G) or less					

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.
Note 2) Compliant with ISO 9283.
Note 3) Without controller.

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