

Controllers

Combines high performance, unprecedented reliability, a host of integrated features and simple operation all in a compact design. The enhanced CPU capacity allows for more accurate trajectory control and faster application program execution.



America		F60	E97	E01/02/03/04		E30/32/33/34	E35/37	E28	D60/61
Europe			E91			E40/42/43/44	E45/47		
Japan & Asia			E94			E10/12/13/14/20/22/23/24	E25/27		
Features		The F60 is the smallest and lightest controller in its class in the world. It can be carried by one person. The cabinet allows free setup, e.g. horizontal or vertical installation as well as multiple cabinet stacking. While compact in size, the F60 controller offers many options for expansion.	The E9X controllers are extremely compact, and specially designed for medium robot arms (Y-series, RS10L and RS20N). This compact size enables it to be installed vertically or horizontally in practically any location, such as under a conveyor or on an arm mount rack.	The E0X controllers are standard for world-wide use and available for multiple primary power supply voltages with a separate transformer unit. Achieve extremely compact design, compared to E2X/3X/4X controllers. The E03 controller, for use on palletizing robots, has an electricity regeneration function that reduces energy consumption.		These controllers are optimum controllers for each region's primary power supply voltage and have high expandability and maintainability.	These controllers are for explosion-proof painting robots with a new explosion-proof teach pendant featuring a color LCD. Programming and editing work can efficiently be carried out from inside the explosion-proof paint booth.	The E28 controller supports the ultra-heavy-payload models (MG series). Equipped with a transformer that supports a primary power supply voltage of 210/400/460V, this controller is for world-wide use.	The D60 controller is for a semiconductor robot with a single arm, while the D61 controller is for semiconductor robots with up to two arms and for the duAro.
Drive system		Full digital servo system	Full digital servo system	Full digital servo system		Full digital servo system	Full digital servo system	Full digital servo system	Full digital servo system
Teaching method		Easy operation teaching or AS language programming	Easy operation teaching or AS language programming	Easy operation teaching or AS language programming		Easy operation teaching or AS language programming	Easy operation teaching or AS language programming	Easy operation teaching or AS language programming	Manual, semi-automatic, full-automatic teaching
Teach pendant		Color LCD teach pendant	Color LCD teach pendant	Color LCD teach pendant		Color LCD teach pendant	Explosion-proof teach pendant Color LCD teach pendant	Color LCD teach pendant	Small teach pendant
Memory capacity (MB)		16	8	8		8	8	8	4
I/O signals	External operation	Emergency stop, Hold etc.	Emergency stop, Hold, etc.	Emergency stop, Hold, etc.		Emergency stop, Hold, etc.	Emergency stop, Hold, etc.	Emergency stop, Hold, etc.	Emergency stop, Hold, etc.
	Input (channels)	16 (max. 144)	32 (max. 96)	32 (max. 96)		32 (max. 128)	32 (max. 128)	32 (max. 128)	16/16 (max. 32)
	Output (channels)	16 (max. 144)	32 (max. 96)	32 (max. 96)		32 (max. 128)	32 (max. 128)	32 (max. 128)	8/8 (max. 16)
Structure		Open structure with direct cooling system Option: Enclosed structure	Open structure with direct cooling system Option: Enclosed structure *1	Enclosed structure with indirect cooling system		Enclosed structure with indirect cooling system	Enclosed structure with indirect cooling system	Enclosed structure with indirect cooling system	Open structure with direct cooling system
Mass (kg)	America	8.3	40	40/40/45/40		145/180/195/180 *2	170	280	14/20
	Europe				145/180/195/180 *2	170			
	Japan & Asia				120/120/135/120 *2/95/95/110/95 *2	120			

*1: Enclosed structure with indirect cooling system in the case of E91 *2: MX series

Teach pendant

Color LCD teach pendant for the E series controllers

The teach pendant boasts a significantly lighter body with an optimized weight balance that reduces the burden of teaching work. The operator can now switch on the motors and activate the cycle start all from the teach pendant. In addition, new features such as the easy-to-navigate screen and switch layout allow for a more convenient control system. Two information windows can be displayed simultaneously on the monitor screen, providing access to different types of information (e.g. positional information and signal information).



Explosion-proof teach pendant

The explosion-proof teach pendant features a color LCD with a large-sized touch screen that allows for teaching, editing, and monitoring of information such as current position and I/O signals in the painting area. It is possible to customize the interface panel according to user preference. The backlight provides a clear view of the screen in dark locations.

