

## Controller

Introducing the intelligent robot controller based on Windows.  
Robots and additional axis are easy to operate by using the teach pendant.  
Vision and force sensors, as well as networks, are managed in one place.

### CONTROLLER FD11



#### Basic specifications for controller

Item	Specifications
Controllable axes	6
Maximum controllable axes	8
External dimensions [mm]	580 (W) × 542 (D) × 1180 (H)
Max. I/O	2048
Maximum programmes	9999
Position reader	Absolute encoder
Protection rating	IP54
Power supply	three-phase 400 V, AC
Ambient temperature/humidity	0 to 40°C/20 to 85% (without condensation)
Robot monitoring function	PL d (Cat. 3), optional: PL e

## CONTROLLER FD20



### Basic specifications for controller

Item	Specifications
Controllable axes	6
Maximum controllable axes	8
External dimensions [mm]	580(W)×532(D)×490(H)
Max. I/O	2048
Maximum programmes	9999
Position reader	Absolute encoder
Protection rating	IP54 equivalent
Power supply	three-phase 400 V, AC
for Robots	MZ25, MZ35S, MZ35F, MZ50F, MZ50LF, MZ70F, SRA series, MC series, LP series

**CONTROLLER CFD (FOR MZ-SERIES ONLY)**

## Basic specifications for controller

Item	Specifications
Controllable axes	6
Maximum controllable axes	7
External dimensions [mm]	369 (W) × 490 (D) × 250 (H)
Max. I/O	2048
Maximum programmes	9999
Protection rating	IP20
Power supply	one-phase 230 V, AC
Ambient temperature/humidity	0 bis 40°C/20 bis 85% (without condensation)
Robot monitoring function	PL d (Cat. 3), optional: PL e

## CONTROLLER CFDs



### Basic specifications for controller

Item	Specifications
Controllable axes	6
Maximum controllable axes	8
External dimensions [mm]	310(W)×250(D)×160(H)
Max. I/O	2048
Maximum programmes	9999
Position reader	Absolute encoder
Protection rating	IP20 equivalent
Power supply	Single phase 200V – 230V, AC
for Robots	MZ01, MZ04D, MZ07F, MZ07LF, MZ10LF, MZ12, MZ12H, MZ15H, EZ series, EC series