



Power relay series pursuing reliability and safety









MC1U (flange-mounting type)



MC1U (plug-in type)



MC2U (flange-mounting type)



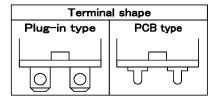
MC2U (plug-in type)

- Currently it is used for such purposes
- Factory automation equipment, For control of automation equipment
- Control panel, Power supply equipment, Molding equipment, Machine tools,
 Welding machines, Machinery for agriculture
- Commercial equipment, Vending machines, Telecommunications equipment,
 Disaster prevention equipment, Copiers, Measuring instruments,
 Medical devices, Amusement devices
- Various household appliances

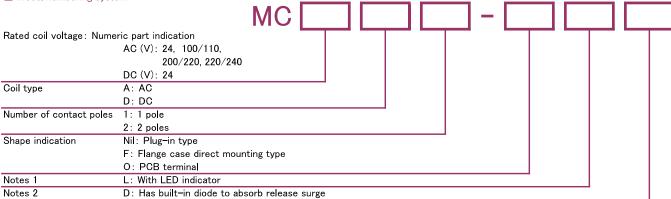
DEC is a professional manufacturer of relays

■ Features

- O Boasting high reliability and achievements, it is a power relay that can control 1c 15A, 2c 10A.
- O Terminal shape suitable for the application is standard (plug-in terminal and PCB terminal). The terminal conforms to tab terminal #187 series.
- O Standard line up with flanged case.
- O LED and diode built-in type are available upon request.
- O Conforms to the various safety standards.



■ Model numbering system



Safety standards

	Contact rating					
	MC1U	MC2U				
UL (C-UL)	15A 250V AC 15A 24V DC	10A 120V AC 10A 30V DC				
VDE	15A 250V AC 15A 30V DC	10A 250V AC 10A 30V DC				
CQC	15A 250V AC	10A 250V AC				
Electrical Appliances and Materials Safety Act	Confo	ormable				

■ Coil ratings

Item		Rated current (mA)		Coil resistance (Ω)	Operate voltage (V)	Release voltage (V)	Maximum voltage (V)	Power consumption
AC/DC	AC/DC Voltage 50Hz 60Hz		(36 /	Ratio to rated voltage			Consumption	
AC	24	53.8	46	180	80% max.	30% min.	110%	0.9VA to 1.2VA
	100/110	11.7/12.9	10/11	3750				
	200/220	6.2/6.8	5.3/5.8	12 950				
	220/240	4.8/5.3	4.2/4.6	18 790				
DC	24	36.9		650	80% max.	10% min.	110%	0.9W

- Notes: 1. Rated current and coil resistance are values at coil temperature of 20°C, with tolerance of +15%/−20% for AC rated current.
 Tolerance is ±10% for DC coil resistance.
 - 2. Operate voltage and release voltage are values at coil temperature of 20°C.
 - 3. Maximum voltage is the maximum value of the allowable voltage fluctuation range of the relay coil operating power supply with the ambient temperature at 20°C.
 - 4. $^{\prime\prime}/^{\prime\prime}$ (for example, AC100/110) of the rated voltage indicates multiple ratings (AC100V 50Hz/60Hz, AC 110V 50Hz/60Hz).

■ Ratings • Performance

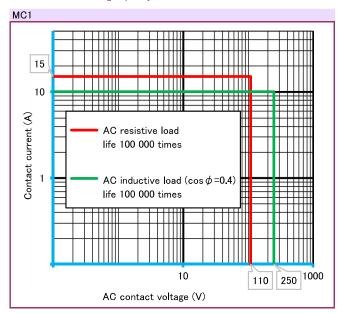
Specifications		Item	Performance		
Contact specification	Contact confi	guration	1c	2c	
	Contact resis	tance	50mΩ max. (at DC6V 1A)		
	Contact mate	rial	Ag alloy		
Ratings	Rated load (re	esistive load)	AC110V 15A	AC110V 10A	
	Max. switchin	g capacity (resistive load)	1650VA	1100VA	
	Max. switchin	g voltage	250V		
	Max. switchin	g current	15A	10A	
Electrical	Insulation res	istance	100MΩ min. (at DC500V)		
	Dielectric strength	Between coil and contacts	AC2000V 1 min		
		Between open contacts	AC1000V 1 min		
capability		Between opposite polarity contacts	_	AC2000V 1 min	
	Operate time	(at rated voltage on, at 20°C)	25ms max. (excluding contact bounce time)		
	Release time	(at rated voltage off, at 20°C)	25ms max. (excluding contact bounce time)		
Mechanical capability	VIBIACION	Malfunction	10 to 55 to 10Hz (double amplitude 1.0mm)		
		Destruction	10 to 55 to 10Hz (double amplitude 1.0mm)		
	OHOUR	Malfunction	200m/s ²		
		Destruction	1000m/s ²		
Life	Mechanical er	ndurance (at 18 000 times/h)	10 000 000 times min.		
	Electrical end	urance (resistive load) s/h)	100 000 times min. (AC: 110V 15A) 100 000 times min. (DC: 24V 15A)	100 000 times min. (AC: 110V 10A) 100 000 times min. (DC: 24V 10A)	
Conditions for	Ambient temp	perature	-25°C to +55°C (no freezing and condensing at low temperature)		
operation	Ambient humi	dity	5% to 85%RH		
Mass			approx, 33g		

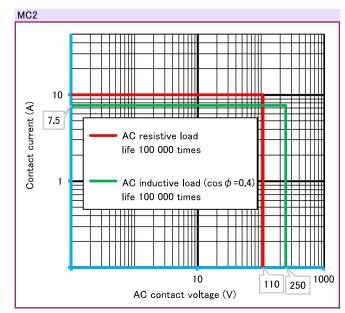
• Notes: The above is the initial value.

Dimensions Unit: mm 28 max. 17. 75 TOLERANCES <5mm: ± 0.2 <u>≧5mm:</u> ±0.3 Flange mounting type 38 PCB terminal type Plug-in type 38 36 28 max 28 max 13.15 13.15 Schematics [1c] [2c] ■ PCB mounting holes (tolerances ± 0.1) ■ Mounting holes (tolerances ± 0.1) 17. 75 Flange mounting type PCB terminal type (1c, <u>2c)</u> 13. 15 (1c, 2c) $2-\phi 3.5$ (2-M3) 38 Unit: mm

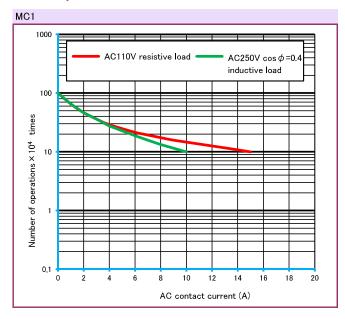
Reference data

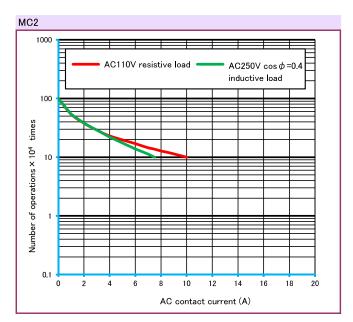
■ Maximum switching capacity





■ Durability curve





Please understand that specifications may be changed without notice due to product improvement etc. Dimensions and specifications indicate only major points. Please contact our sales representatives for details.

DEC is a professional manufacturer of relays

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