

NOT FOR NEW DESIGNS

- Miniature DIN rail power relay
- Up to 16A /230V AC rating
- Industry standard style
- Cost effective



Contacts

Contact arrangement	SPDT (1 C/O), DPDT (2 C/O)
Contact material	AgNi 90/10
Max. switching voltage	AC/DC 440VAC / 125VDC
Min. switching current / voltage	5mA / 5VDC
Rated load	AC1 SPDT: 10A, 250VAC (Sensitive Coil)/ 12A, 250VAC 16A, 250VAC : DPDT: 8A, 250VAC
	DC1 SPDT: 10A, 30VDC (Sensitive Coil)/ 12A, 30VDC 16A, 24VDC : DPDT: 8A, 250VAC
Max. inrush current	30A
Initial resistance	100mΩ, max. at 0.1A/6VDC

Coil

Rated voltage	DC	12, 24V
	AC	24, 110, 230V
Must release voltage	DC	≥ 0.1Un
	AC	≥ 0.15Un
Operating range of supply voltage	See coil tables 1 and 2	
Rated power consumption	DC	250mW (10A, Sensitive Coil) / 400mW (standard)
	AC	0.75VA

Insulation

Insulation resistance	100MΩ at 500VDC, 50%RH	
Dielectric strength	coil to contact	5000Vrms, 1min
	contact to contact	1000Vrms, 1min

General Data

Operating time	typ.	≤ 7ms
Release time	typ.	≤ 3ms
Electrical life	ops.	≥ 0.7 x 10 ⁵ (16A), ≥ 1.0 x 10 ⁵ (10A, 12A)
Mechanical life	ops.	≥ 3 x 10 ⁷

Environmental

Ambient temperature	operating	-40 to 85°C (DC coil) / -40 to 70°C (AC coil)
	storage	-40 to +85°C
Shock resistance	30g	
Vibration resistance	10g 10...150Hz	
Dimensions	L x W x H	75.8 x 15.7 x 67 mm (depends on socket & clip choice)
Weight	approx.	62g with module

Ordering Code

D I 8 7 - 4 1 G - A 0 2 4 - C 3 N

Contact arrangement

- 4: DPCO 8A
- 5: SPCO 16A
- 7: SPCO 10A & 12A

Module type

- 000: No module fitted
- 21P: Diode A2+
- 21N: Diode A1+
- 41G: LED (Green) 6-24VDC
- 41R: LED (Red) 6-24VDC
- 61G: LED (Green) 6-24VAC/DC
- 63R: LED (Red) 6-24VAC/DC
- 63G: LED (Green) 110-230VAC/DC
- 63R: LED (Red) 110-230VAC/DC

Socket type

- C2: SPDT: D14-1Z-C2 or DPDT: D14-2Z-C2 (standard)
- C3N: SPDT: D14F-1Z-C3N or DPDT: D14F-2Z-C3-N (standard)
- C4: *SPDT: D14F-1Z-C4 or DPDT: D14F-2Z-C4 (Special order)
- C5: *SPDT: D14F-1Z-C5 or DPDT: D14F-2Z-C5 (Special order)

* (minimum order quantities (MOQs) may apply)

Coil Data (standard coil)

Table 1

Coil code	Nominal voltage	Coil resistance (Ω) ±10%	Operate voltage max.	Must operate voltage max.	Must release voltage min.
D012	12VDC	360	18.0VDC	8.4VDC	1.2VDC
D024	24VDC	1440	36.0VDC	16.8VDC	2.4VDC
A024	24VAC	400	28.8VAC	19.2VAC	3.6VAC
A110	110VAC	8900	132.0VAC	88.0VAC	16.5VAC
A230	230VAC	38500	276.0VAC	184.0VAC	34.5VAC
12VDC (sensitive coil)					
S012	12VDC	576	15.6VDC	9.0VDC	1.2V

Coil specifications at 20°C. AC coils are suitable for 50HZ or 60HZ operation.
Operating relays below or above nominal voltage may prove detrimental to performance.

Interface Relay Construction

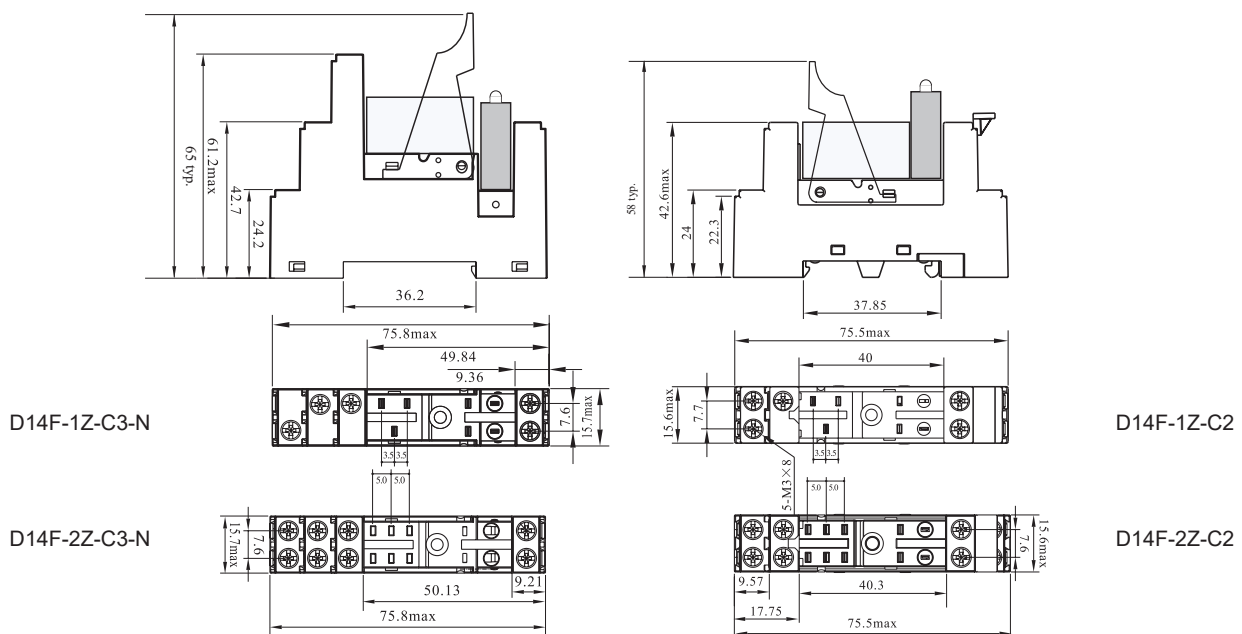
Table 2

Relay type			Socket type (See order codes for full number)	Ejector clip		Module
DI84	DM84 Series	+	D14F-2Z-???	+	JH-15PS	DM???-BK
DI85	DM85 Series	+	D14F-2Z-???	+		DM???-BK
DI87	DM87N Series	+	D14F-1Z-???	+		DM???-BK
DI87	DX87N Series (Sensitive coil)	+	D14F-1Z-???	+		DM???-BK

* For loads above 12A, terminals must be bridged in pairs, 11 with 21, 12 with 22, 14 with 24 - see connection diagrams (fig. 2).
All sockets are supplied with a blank, white, description plate/tab.
See ordering codes (Page 1) for details.

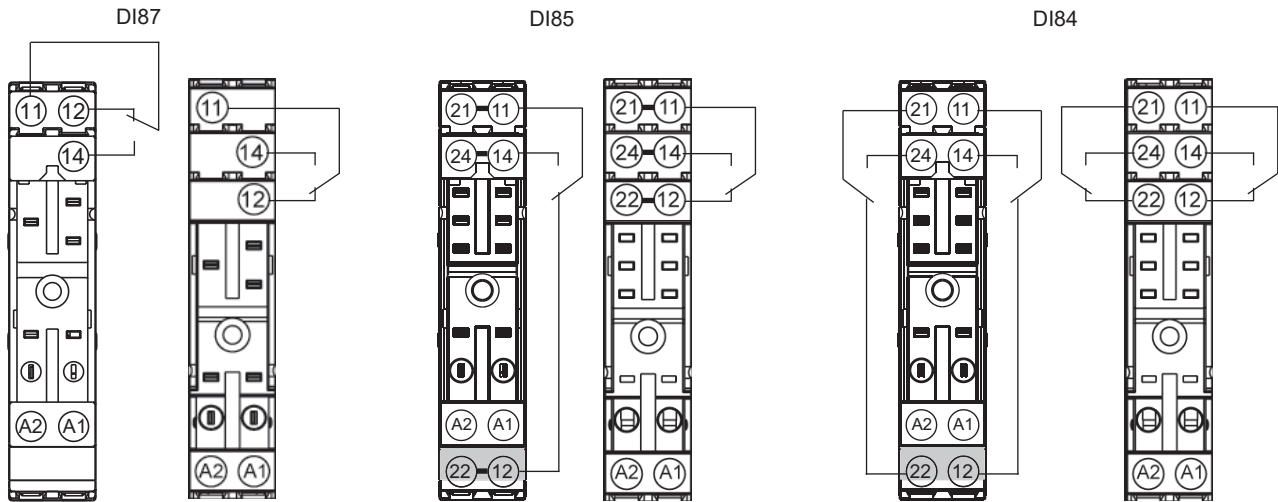
Overall Dimensions mm

Fig.1



Connection Diagrams

Fig.2



Notes:

- 1) For DI85 for loads above 12A, contact terminals must be bridged in pairs, 11 with 21, 12 with 22, 14 with 24.
- 2) Coil polarity (A1/A2) will depend upon module (if fitted).