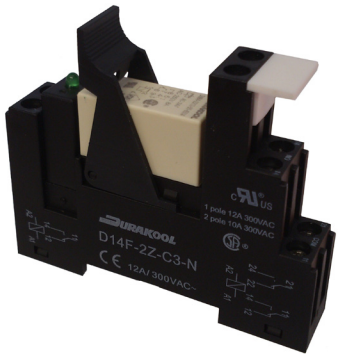
DI8 series
interface relays



- miniature DIN rail power relay
- up to 16A /230V AC rating
- industry standard style
- cost effective
- RoHS Compliant

Contacts

Contact number & 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		≤ 1000MΩ at 500VDC, 50%RH
Dielectric strength		
	coil to contact	5000Vrms, 1min
	contact to contact	1000Vrms, 1min
General Data		
Operating time (typical)	mS	≤ 7ms
Release time (typical)	mS	≤ 3ms
Electrical Life	ops	≥ 0.7 x 10^5 (16A), ≥ 1.0 x 10^5 (10A, 12A)
Mechanical life	ops	≥ 3 x 10^7
Dimensions	L x W x H	75.8 x 15.7 x 67 mm (depends on socket and clip choice)
Weight		approx 62g with module
Ambient temperature	storage	-40 to 85°C
	operating	-40 to 85°C (DC coil) / -40 to 70°C (AC coil)
Shock resistance		30g
Vibration resistance		10g 10...150Hz

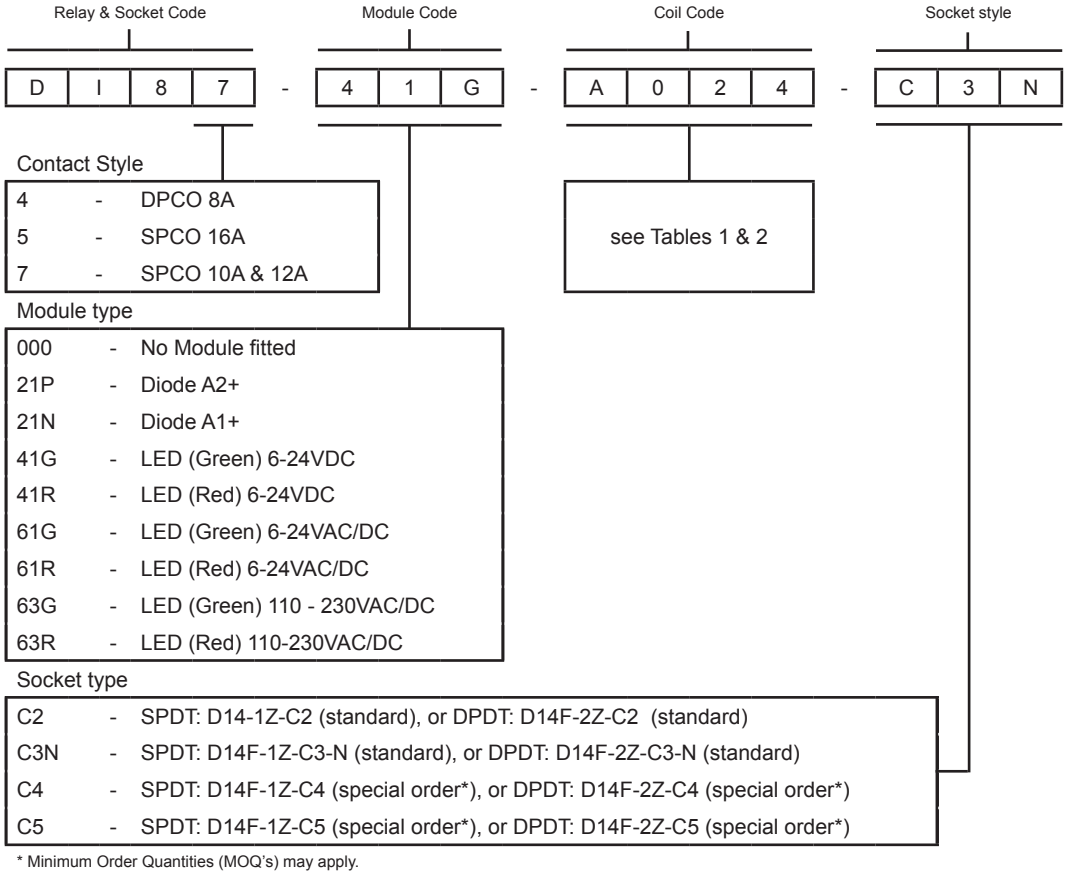
Coil Data (standard coil)					Table 1
Coil Voltage Code	Nominal Voltage	Coil Resistance (Ω) ±10%	Operate voltage max.	Must operate voltage max.	Must release voltage min.
D012	12VDC	360	18.0VDC	8.4VDC	1.2VDC
D024	24VDC	1440	36.0VDC	16.8VDC	2.4VDC
A024	24VAC	400	28.8VAC	19.2VAC	3.6VAC
A110	110VAC	8900	132.0VAC	88.0VAC	16.5VAC
A230	230VAC	38500	276.0VAC	184.0VAC	34.5VAC

Coil Data (12VDC sensitive coil)					Table 2
Coil Voltage Code	Nominal Voltage	Coil Resistance (Ω) ±10%	Operate voltage max.	Must operate voltage max.	Must release voltage min.
S012	12VDC	576	15.6VDC	9.00VDC	1.2VDC

Coil specifications at 20°C. AC coils are suitable for 50HZ or 60Hz operation

Operating relays below or above the nominal voltage may prove detrimental to performance.

Ordering codes — Table 2



* Minimum Order Quantities (MOQ's) may apply.

DI8 series
interface relays

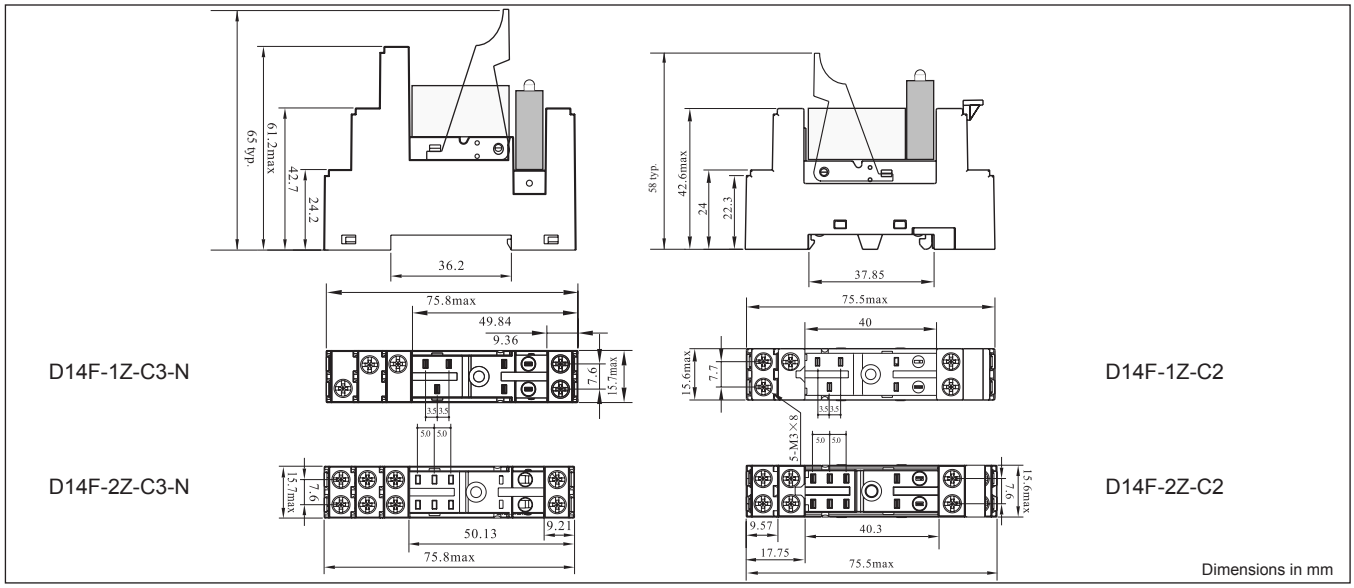
DURAKOOL

Interface Relay construction — Table 3

	Relay type		Socket type (refer to Ordering 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	+	D14F-1Z-???	+		+	DM???-BK
DI87	DX87N (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.							

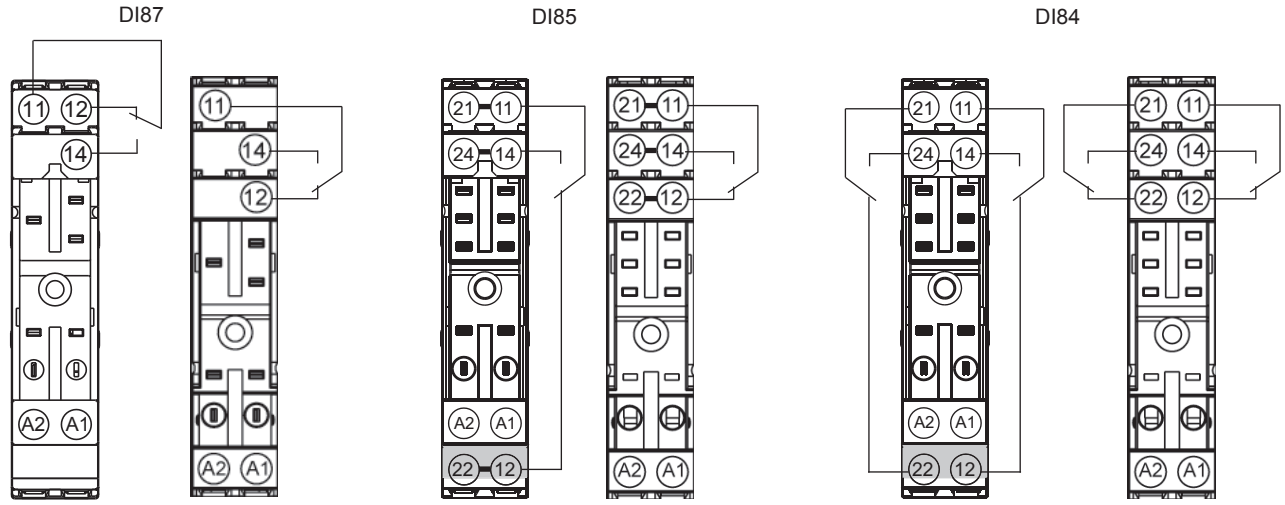
??? See Ordering Codes (Table 2, Page 2) for details.

Overall Dimensions — Fig. 1



Dimensions in mm

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).

Willow Technologies Ltd, Unit 3 Borers Yard, Borers Arms Road, Copthorne, W.Sx, RH10 3LH, England
www.willow.co.uk Sales Department Tel: +44 1342 717102