

DM85 inrush

pcb power relay

DURAKOOL



- miniature pcb power relay
- Up to 80A inrush (20ms)
- AgSnO₂ contacts
- RoHS Compliant



Contacts

Contact number & arrangement	SPST-NO (1 N/O)	
Contact material	AgSnO ₂	
Max. switching voltage	AC/DC	440VAC
Max. breaking capacity	AC1	4000VA
Min. switching current / voltage	10mA/10VDC	
Max. inrush current	80A (20ms)	
Rated load	AC1	16A, 250VAC (600 ops/hr)
	AC15	3A, 120V / 1.5A, 240V (B300)
	AC3	750W (single phase motor)
	DC1	16A, 24VDC
	DC13	0.22A, 120V / 0.1A, 250V (R300)
Initial resistance	≤ 100mΩ, max. at 0.1A/24VDC	

Coil

Rated voltage	DC	3...110V
Must release voltage	DC	≥ 0.1Un
Operating range of supply voltage	See coil table 1	
Rated power consumption	DC	0.4...0.48mW

Insulation (EN 60664-1)

Insulation rated voltage	AC	400VAC
Rated surge voltage	4000V _{1.2 / 50 μs}	
Overvoltage category	III	
Insulation pollution degree	3	
Dielectric strength	coil to contact	5000Vrms, 1min
	contact to contact	1000Vrms, 1min
Contact - coil distance	clearance	≥10mm
	creepage	≥10mm

General Data

Operating/release time (typical)	mS	≤ 8ms/3ms
Electrical Life	ops	>10 ⁵ (16A 250VAC) (AC1 / DC1 @ 600 ops/hr)
Mechanical life	ops	≥ 3 x 10 ⁷ (72000 ops/hr)
Dimensions	L x W x H	29 x 12.7 x 15.7mm
Weight	14g	
Ambient temperature	storage	-40 to 85°C
	operating	-40 to 85°C
Shock resistance	30g	
Vibration resistance	10g 10~150Hz	

DM85 inrush pcb power relay



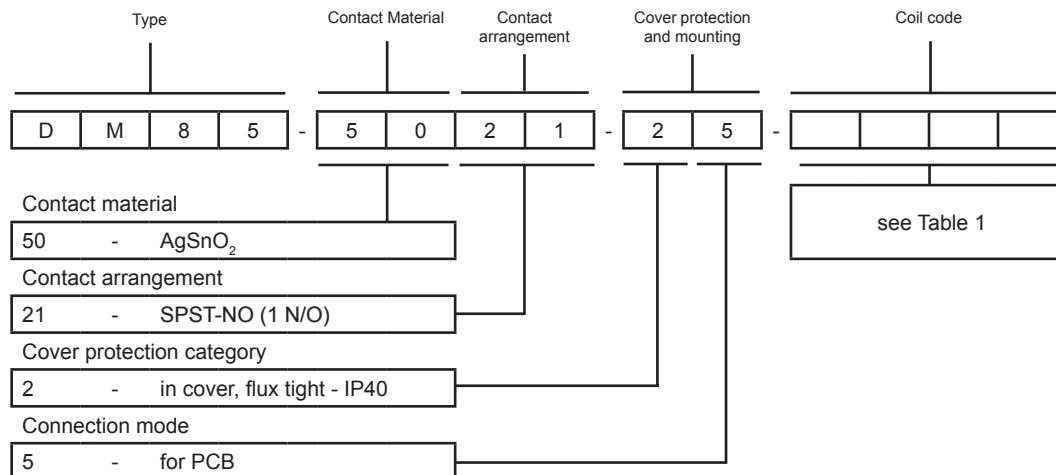
Coil Data (DC voltage 400 ...480mW)

Table 1

Coil Voltage Code	Nominal Voltage (VDC)	Coil Resistance (Ω) $\pm 10\%$	Must release voltage min. (VDC)	Max. operating voltage (VDC)
1003	3	22	2.1	7.6
1005	5	60	3.5	12.7
1006	6	90	4.2	15.3
1009	9	200	6.3	22.9
1012	12	360	8.4	30.6
1018	18	710	12.6	45.9
1024	24	1440	16.8	61.2
1036	36	3140	25.2	91.8
1048	48	5700	33.6	122.4
1060	60	7500	42.0	153.0
1110	110	25200	77.0	280.0

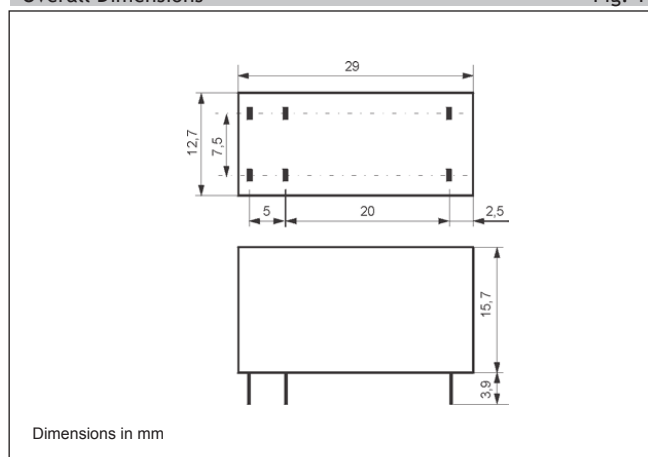
Note: Parameters at 20°C

Ordering codes



Overall Dimensions

Fig. 1



Connection diagram

Fig. 2

