

- SPST-NO. Rated 20A / 450VDC.
- Will carry 40A / 450VDC for 20 mins (Fig.1).
- Miniature case size.
- PCB mounting & chassis mounting.
- Fits Mini-ISO footprint.
- Pre-charge or discharge relay.

ROHS
Compliant ✓

Contacts

Contact arrangement	SPST-NO-DM (1 Form X)
Contact material	AgCu10 (Silver alloy)
Rated current	DC1 20A / 450VDC (25A PCB Version)
Max. switching voltage	450VDC
Max. breaking current	35A (450VDC>1cycle)
Max. switching power	9kW
Current carrying capacity	See Fig 1, 20A continuously. Up to 200A 0.6s
Initial contact resistance	≤ 10mΩ at 20A
Max. operating frequency	rated load 360 cycles/hour

Coil

Operating range	DC	12 ~ 60V See Table 1
Rated power consumption		Approx. 3W

Insulation

Coil insulation system		IEC 31, CLASS F 155°C
	Insulation resistance	>100 MΩ at 500VDC, 50%RH
Dielectric strength	coil to contact	3000V _{rms} (50/60Hz, 1min, <1mA leakage)
	open contacts	2000V _{rms} (50/60Hz, 1min, <1mA leakage)

General Data

Electrical life at full rated load	cycles	1 x 10 ⁴ 20A 450VDC
		5 x 10 ⁴ 10A 450VDC
		1 x 10 ⁵ 20A 72VDC

Mechanical life	cycles	>3 x 10 ⁵
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Environmental

Environmental protection		IP67
Ambient temperature	operating	-40 to +85°C
	storage	-40 to +125°C
Mechanical shock		20g, 11ms Functional, 50g Destructive
Vibration resistance		5g (10 ~ 500Hz)
Relative Humidity	RH	20% ~ 90%
Dimensions	L x W x H	29.6 x 29.2 x 30mm approx.(excluding flanges)
Weight	approx.	55g (flange mounting type), 52g (PCB type)

Ordering Code

DC20 - 40 21 - 35 - 1012

Series

Coil code:
see Table 1

Contact material

40: AgCu10

Contact arrangement

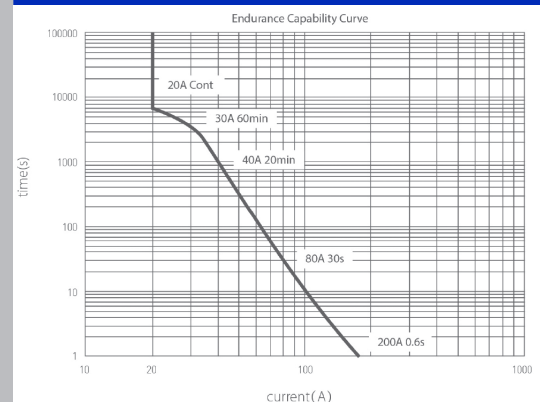
21: SPST-NO-DM



Mounting and terminal style

- 35: PCB Mounting
- 46: Chassis Mounting
- 76: Plug-in

Fig.1



DC20 series

20A 450VDC power relays

DURAKOOL

A WT/AEC Brand

DC Coil Data

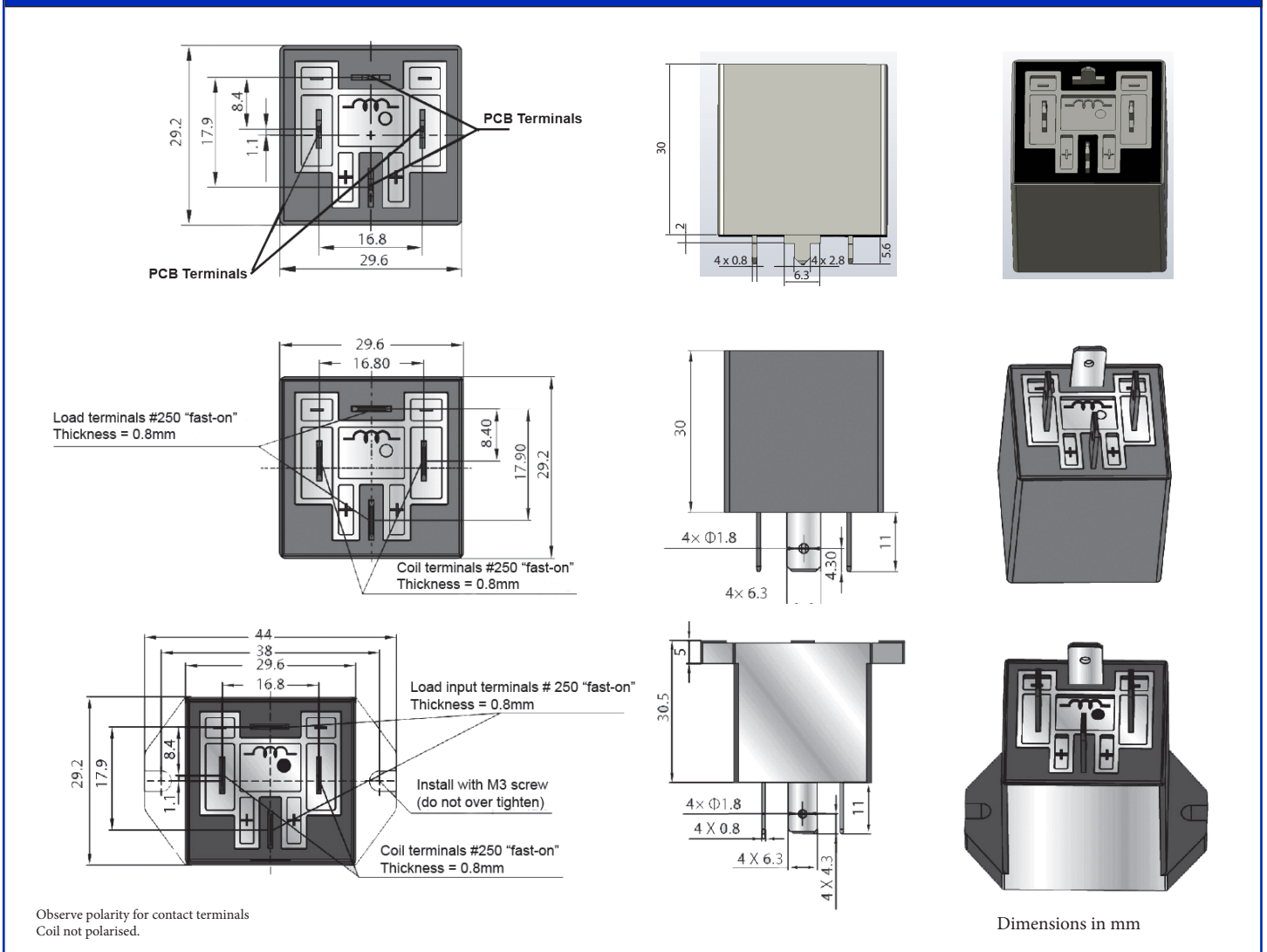
Table 1

Coil code	Nominal voltage (VDC)	Must operate voltage Max. (VDC@ 20°C)	Must release voltage min. (VDC)	Coil resistance $\Omega \pm 10\%$ (at 20°C)	Coil Current (mA)
1012	12	9.00	1.0	46.5	258
1024	24	18.0	2.0	186	129
1048	48	36.0	4.0	743	65
1060	60	45.0	5.0	1230	49

Operate time (at nominal voltage)	max.	30ms
Release time	max.	10ms

Dimensions

Fig 2



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Specifications are liable to change without notice. E&OE.