



- PCB Mounting high current bistable relay
- Auxiliary monitoring contact
- Contact gap $\geq 1.5\text{mm}$

RoHS
Compliant ✓

Contacts

Contact arrangement	SPST-NO (1 Form A) as delivered
Contact material	AgCuO
Max. switching voltage	DC 24V
Max. switching current	80A
Max. switching power	1920W
Main contact rated load	DC1 80A @ 24VDC
Initial contact resistance	max. 0.8m Ω @ 6VDC 20A
Auxiliary contact	DC1 1A @ 80VDC

Coil

Rated voltage	DC 12 to 60VDC See table 1
Must operate voltage	max. 70% of nominal
Must release voltage	max. 70% of nominal

Insulation

Insulation resistance	1000M Ω (at 500VDC)
Dielectric strength	coil to main contact 3000VAC, 50/60Hz, (1 min)
	coil to aux. contact 2000VAC, 50/60Hz, (1 min)
open main contacts	3000VAC, 50/60Hz, (1 min)
	open auxiliary contacts 1000VAC, 50/60Hz, (1 min)
main contacts to aux. contacts	3000VAC, 50/60Hz, (1 min)
	live parts and ground 3000VAC, 50/60Hz, (1 min)
Impulse withstand voltage	coil to contacts 6000V (1.2/50us)

General Data

Operate / Release time	max. $\leq 30\text{ms}$ (at nominal voltage)
Operate bounce time	$\leq 3\text{ms}$ (at nominal voltage)
Electrical life	ops. 1×10^4
Mechanical life	ops. 1×10^5 Min. (no load)

Environmental

Ambient temperature	operating	-40 ~ +85°C (no icing or condensation)
	storage	-40 ~ +75°C (no icing or condensation)
Relative humidity		5% to 85% RH at 20°C
Shock resistance	functional	5G min.
	destructive	30G min.
Vibration resistance	functional	10 ~ 55Hz: $\leq 2\text{G}$
	destructive	10 ~ 55Hz: $\leq 5\text{G}$
Dimensions	L x W x H	39.2 x 22 x 27.5
Weight	approx.	49g

Ordering Code

D X 7 1 F - 4 0 2 1 - 2 5 - S L 1 2

Series

DC Rating

F: 80A / 24V

Contact material

40: AgCuO

Contact arrangement

21: SPST-NO (as delivered)

Environmental protection

2: In cover, dust protected. IP60

Termination

5: PCB Mounting

Coil codes
See tables
1 & 2

Coil Data DX71F (7.7W - Sensitive)

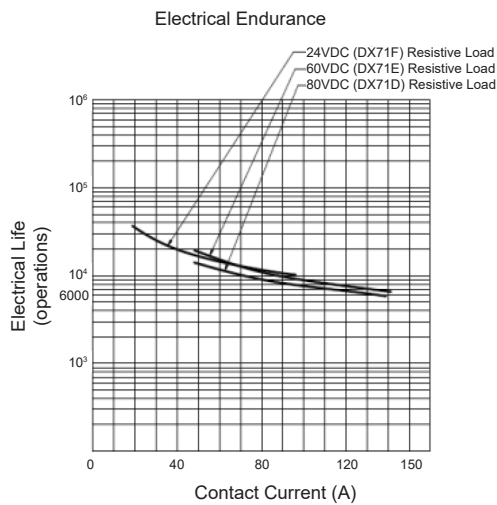
Table 1

Coil code	Nominal voltage (VDC)	Coil resistance (Ω) ±10%	Nominal current (A)	Must operate voltage min. (VDC)	Must release voltage min. (VDC)
SL12	12	18.7	0.6	8.4	8.4
SL24	24	75.0	0.3	16.8	16.8
SL48	48	299.0	0.2	33.6	33.6
SL60	60	467.0	0.1	42.0	42.0

Coil energised for 0.2s

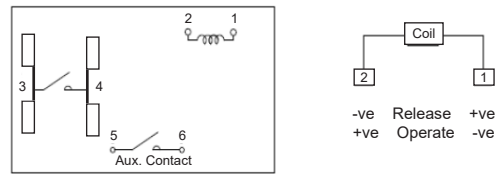
Performance

Fig.1



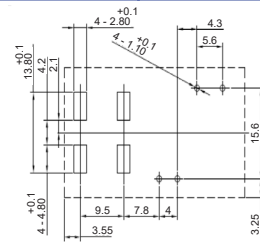
Circuit Diagram

Fig. 2



PC Board Layout

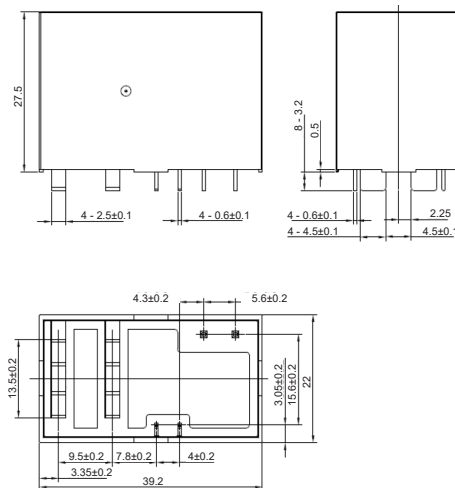
Fig. 3



Dimensions in mm

Dimensions

Fig. 4



Dimensions in mm