

DATA SHEET

Formerly
DEUTSCH LTD
RELAY

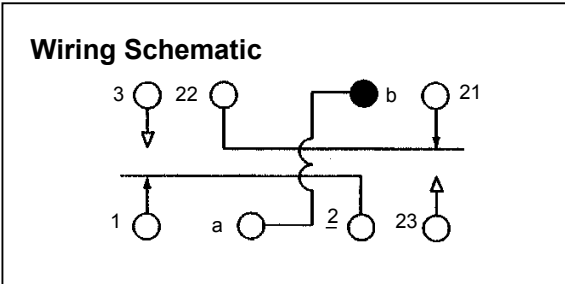
XA
2PDT 10 AMP BALANCED
ARMATURE RELAY



TYPE XA

Key Features

- Hermetically Sealed
- Miniature Power Relay
- Crystal Can Case



Specifications

General

Contact Arrangement
Weight
Mating Bases

2 Pole changeover (2PDT) break before make.
42 gm (mounting variant 01)
Crimp Contacts – Order Part No. 603983

Performance

Contact Rating/Life

10A resistive, 10^5 operations at 28 VDC
5A resistive, 10^5 operations at 240 VRMS 400 Hz

Mean Mechanical Life

5×10^6 operations

Operate Time

7 ms max,

Release Time

7 ms max.

Bounce Time

5 ms max.

All measurements at 25°C and nominal voltage

Environmental

Temperature Range

-65°C to +125°C

Shock

490 m/s² (50g) for 11 ms

Vibration

60 to 1500 Hz at 294 m/s² (30g) acceleration
10 to 60 Hz at 2mm amplitude
(Applies to mounting variant 01)

Linear Acceleration

490 m/s² (50g)

Bump

4000 bumps at 390 m/s² (40g), 6ms duration

Climatic

BS 2011 test Z/ABDM procedure 1

Salt Mist

BS 2011 part 2.1 Kb severity 2

Data Sheet No
DSDXA –
1201

SHEET 1 OF 4

Ordering Information

See sheet 4

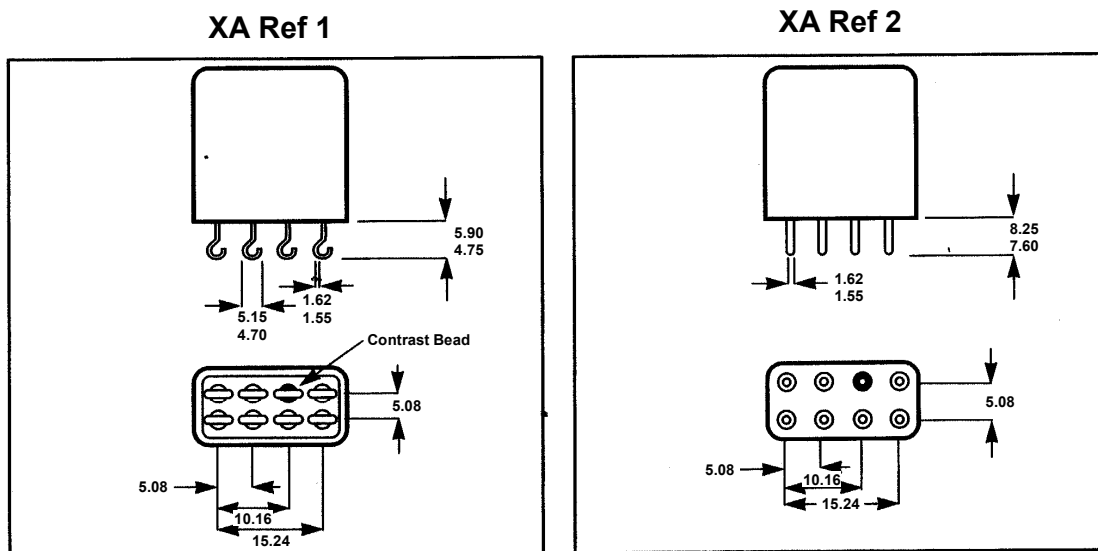
Design authority and manufacture by Barnbrook Systems Limited
Barnbrook Systems reserves the right to alter specifications and design without notice



Electrical

Contact Resistance	30 milliohms max measured at open circuit voltage of 5V and current of 100 mA
Insulation Resistance	1000 MΩ min at +25°C between any two isolated terminals and between terminals and case.
Dielectric Strength	1000 V rms, 50 Hz at sea level, between terminals and case, between the two sets of contacts and between open contacts of a set. 350 V rms at 50 Hz, at 20 mbar air pressure (87,000ft) between the points specified above.
Coil Dissipation	The maximum operate power that can be applied to the coil is 3 watts at +25°C. linearly de-rated to 2 watts at +125°C

TERMINATION VARIANTS



All dimensions are millimetres.
Tolerances ± 0.25 unless otherwise stated

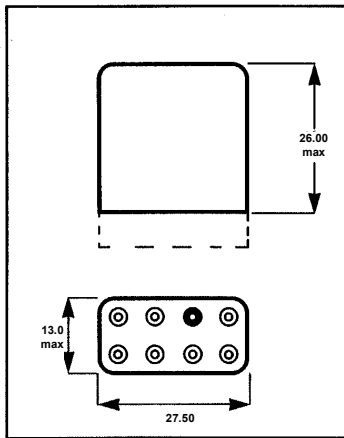
Data Sheet No
**DSDXA –
1201**
SHEET 2 OF 4

MOUNTING VARIANTS

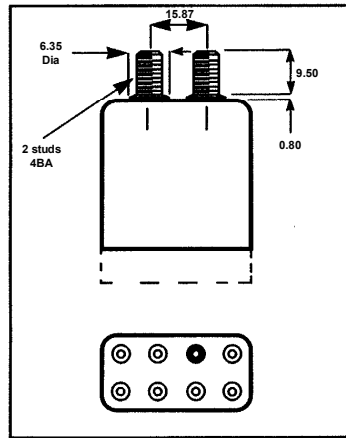
Mounting Variant	01	31	02	41	22	29
Vibration level m/s ²	294*	147	196	245	245	196

* Body of relay must be rigidly mounted by epoxy cement

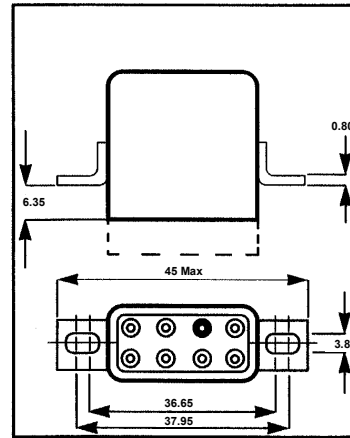
XA Ref 01



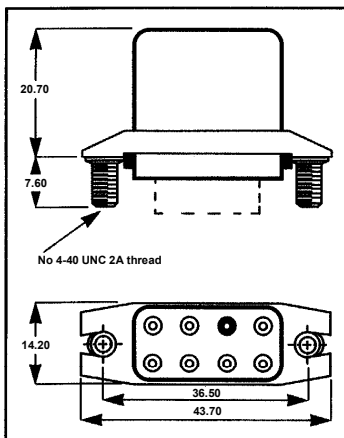
XA Ref 31



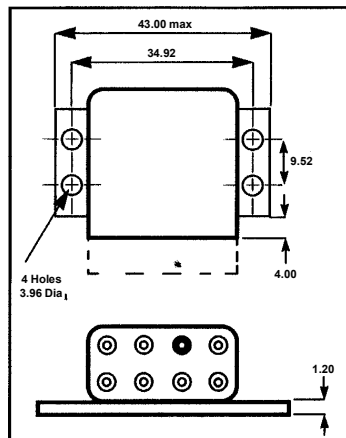
XA Ref 02



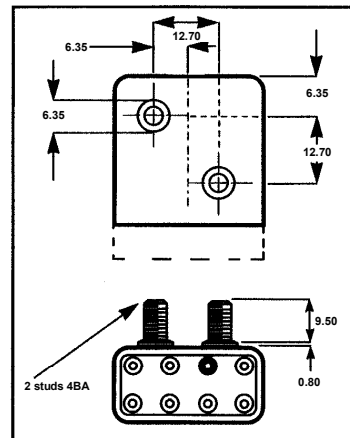
XA Ref 41



XA Ref 22



XA Ref 29

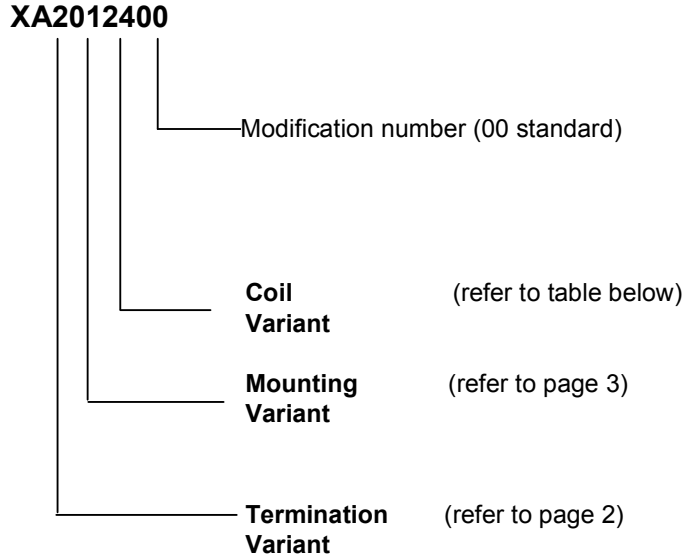


Note ● Denotes Contrast Bead

All dimensions are in millimetres. Tolerances ± 0.25 unless otherwise stated
 Can dimensions shown in Ref 01 apply to all variations. Fixing holes are clearance for 6-32 UNC and 4BA screws.
 NOTE: Terminations variant Ref 1 not applicable to Ref 41

Data Sheet No
DSDXA - 1201
SHEET 3 OF 4

ORDERING INFORMATION



COIL VARIANTS AND OPERATING CHARACTERISTICS

XA Coil Ref	Resistance Ohms \pm 10%	Must Operate Volts DC	Must release Volts DC	Maximum Volts DC	Nominal Volts DC	Approximate inductance (milliHenrys)
6	25	3.6	0.30	7.2	6	25
12	100	7.2	0.60	14.4	12	100
24	440	14.4	1.20	32.0	24-28	400
48	1760	28.8	2.40	57.6	48	1600
110	9000	60.0	6.00	121.0	110	N / A

All values measured at +25°C

Data Sheet No
**DSDXA –
1201**
SHEET 4 OF 4